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Fort Langley: An Overview of the Operations of A Diversified Fur Trade Post 1848 to 1858 and The Physical Context in 1858

by J. Morton

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Introduction

Fort Langley National Historic Park is currently in a state of uncompleted development. The process began with a joint agreement between the provincial and federal governments, which resulted in the partial reconstruction of the 1858 period Fort Langley. An interim development plan drawn up in the late 1970s presented difficulties in implementation due to the lack of historical information concerning activities, structures, and social history, all of which would be required for effective development.

The target date established for the reconstruction and development of Fort Langley is clearly stated in the joint agreement signed November 20, 1956, to be "the 19th day of November, 1858". Although this date was chosen to commemorate the proclamation of the Colony of British Columbia, 1858 was also an effective choice from a broader historical perspective. It was the final year that Fort Langley played an integral role in the transportation system of the Hudson's Bay Company, and if not typical of the decade preceding, was at least representative. It was, due to the influence of the gold rush, the year of maximum elaboration of the physical facilities at Fort Langley. By the next year, material from buildings inside the fort was being salvaged and reused, and by the mid-1860s most of the fort was gone.

This report attempts to define the operations of Fort Langley during its most active decade, and to place them in a physical context, specific to the year identified for reconstruction, 1858.

In the absence of journals or other sources directly applicable to Fort Langley in this period, much of the history of the operation of the post has been synthesized by examination of comparative sources. This is made possible through the observed conventions followed by the Hudson's Bay Company in the Western Department. Isolated references to activities taking place at Fort Langley may be fleshed out through reference to the more complete records from other posts.

This work is not a narrative history of Fort Langley; that has already been written by Mary K. Cullen in "The History of Fort Langley, 1827-96" (Canadian Historic Sites, Occasional Papers in Archaeology and History No. 20, Ottawa, Parks Canada, 1979). Extensive use was made of this work, and the accompanying "Appendices to 'The History of Fort Langley, 1827-96'", Parks Canada M.R.S. #222 in preparing this report. Ms. Cullen's books provided much of the basis for the definition of the operations of Fort Langley, and their relative importance.

By extending on the narrative framework, the current work is intended to provide the more specific information required for park development.

Acknowledgements

The author expresses his appreciation to all those numerous people who have assisted on this project in one way or another, particularly the staff of all the repositories listed in the bibliography. Special thanks go to the Hudson's Bay Company Archives, and the Provincial Archives of British Columbia, the two sources of most of the information.

Thanks particularly are owed to Dr. Richard Stuart, the Western Regional Historian of Environment Canada, Parks, and Mr. Wayne Crossen, the superintendent of Fort Langley National Historic Park. Their continued support allowed this project to develop into its present form, over a much longer period than originally anticipated.

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Development of Fort Langley to 1858

Fort Langley was initially established in 1827 as a furtrading post on Derby Reach of the Fraser River. However, in a very short time it became evident that the role of this post would be much more diversified than this initial function. Both the teeming salmon of the Fraser River, and the nearby natural prairies which could be easily exploited for agriculture, presented opportunities which the profit-minded Hudson's Bay Company could not ignore.

This diversification was difficult to accommodate within a physical layout and geographic placement designed with the requirements of the "traditional" fur trade in mind. By June of 1839 the functional requirements of the post, combined with the dilapidated state of the old fort, resulted in a relocation to a new fort, which had been built some 4.0 kilometres (2.5 miles) upstream, in the location of the contemporary National Historic Park. This new site was selected as being "fully as convenient for the fur and Salmon trade, as the former site and, moreover, possesses the important and desirable advantage of being much nearer the farm."[1]

However, this second fort lasted less than one year. On April 11, 1840, the fort was destroyed by a fire which was started in the blacksmith shop due to the carelessness of an employee in quenching a cooking fire.

The building of a third Fort Langley was well underway within a month of the fire. By May 1, 1840, James Douglas noted that "Mr. Yale has already erected a stockade, enclosing a space of 100 feet by 70".[2] Three days later, the combined complements of Fort Langley and the "Beaver" had "finished a bastion, and squared the wood of a building of 48 x 26 feet."[3]

Apparently construction proceeded rapidly; towards the end of 1841, Governor Simpson noted "The establishment was destroyed by fire about 18 months ago, but has since then been built on a larger scale."[4]

By the beginning of 1844, Yale, writing to Simpson, hinted at a substantial establishment: "That part of the Establishment constituting the Fort with the outdoor buildings for curing Salmon etc. affords every desirable convenience."[5]

This initial period of construction coincided with the large-scale development of agriculture and salmon packing at Fort Langley. The emphasis

on agriculture was due to an 1839 agreement with the Russian American Company, by which the Hudson's Bay Company arranged to sell the Russians large quantities of foodstuffs. As well as development of the Puget's Sound Agricultural Company and its various farms, this resulted in new development of the established farms at Forts Vancouver and Langley.[6] At Fort Langley this involved the establishment of two dairies, primarily for the production of the salt butter required by the Russian contract, further cultivation for cereal and vegetable crops, and construction of buildings to support these activites.[7]

Due to the climate at Fort Langley, particularly heavy spring and fall rains and resultant flooding of the low-lying fields, this first large-scale development of the farm was largely over by the mid-1840s.[8] The dairies and other stockraising activities seem to have been more successful over a period of time; in outfit 1840 there were 4 bulls, 17 cows, 26 oxen, 1 heifer, 5 calves, 9 horses and 1 colt; by outfit 1848 (the last listing of livestock), there were 3 bulls, 108 cows, 23 heifers, 111 oxen, 41 steers, 80 calves, 16 horses, 5 mares, 2 colts, 250 pigs and 40 fowl.[9] Substantial amounts of salt butter were still being produced at Fort Langley and exported as late as 1856, when a half ton was shipped to Victoria in June and July alone.[10] Beef and pork were produced consistently at Fort Langley on a less intensive level, intended primarily for country supplies.[11]

Salmon curing had also been aimed at meeting local requirements until the 1840s, but concurrently with the realization that cultivation was an uncertain thing at Fort Langley came the awareness of a substantial export market for Fraser River salmon, primarily in the Hawaiian Islands.[12] As this activity required intensive labour at the same time as the harvest, and offered more certain returns, it ws to a large extent responsible for the phasing out of large scale cultivation. The salmon trade expanded to such an extent that "By 1848, salmon had surpassed furs on the positive side of the Fort Langley ledger and the post launched into a career as the single largest exporter of salmon on the Pacific Coast."[13]

The fur trade at Fort Langley continued on much the scale of the preceding decade in the 1840s, serving as a secure backdrop for the other more volatile economic activities.[14]

The final major development of this decade was the decision for political and other reasons to establish a supply route to the inland posts which was not subject to possible American interference. This meant that in 1845 the idea of Fort Langley serving as the depot for the interior brigades was revived. The onus for much of the exploration and development of this all-British route fell upon the staff of Fort Langley. By 1848, and the first use of Fort Langley as the inland depot, a whole new range of responsibilities arose, which remained consistent through the next ten years.[15]

The economic pattern set in the first decade of the third Fort Langley remained fairly stable through the 1850s. The local fur trade actually grew through to 1857, and was apparently much more active than it had been during the 1840s.[16] The retail element was heavily augmented in 1858 at the time of the influx of gold-seekers, and the resulting explosion in demand for Euro-American goods and provisions.

The depot function, solidly established by 1850, meant that Fort Langley would have been extremely busy each summer, with the arrival of the yearly outfits in preparation for the inland brigades. There would also have been major requirements for areas for both storage and repackaging of incoming and outgoing goods. Fort Langley also had a role to play in maintaining lines of transportation. This largely entailed water travel, and so boat building and repair were ongoing activities at Fort Langley.[17]

Cultivation was reintroduced in 1850, after a lapse of a few years, due to the colonization of Vancouver Island and other pressures. However, the intensity of cultivation never reached the levels of the first half of the 1840s.[18] As mentioned above, dairying seems to have continued at a relatively high level through the 1850s. Salmon packing and export continued apace through the first half of the decade, but seems to have decreased somewhat thereafter.[19] A new food export product, aimed at the San Francisco market, was cranberries. Although only commercially pursued for a few years, this proved a lucrative commodity in the mid-1850s.[20]

In support of the above economic pursuits, several trades were actively followed at Fort Langley. Boat building has already been mentioned in connection with transportation. Coopering was an important adjunct to the various food exports; barrels were the standard containers of the period.

Blacksmithing became more important after the assumption of the depot role, and in the 1850s the Fort Langley blacksmiths were apparently producing most of the iron goods for the inland posts.[21]

Fort Langley in 1858 had developed on its site for nearly twenty years within the framework of the above activities. As emphases changed in terms of economic pursuits, it would be expected that these changes would be reflected in the physical organization of the structures at Fort Langley. It would therefore seem reasonable to approach the definition of Fort Langley and its structures on the assumption that they were intended solely to enable the Hudson's Bay Company to implement its intended commercial strategy, and as such would have been no more than a reflection of the economic directions of the past.

Retail Function

The retail function at Fort Langley encompassed two discrete elements; first, and primarily, the Indian trade; and secondly the Euro-American sale shop. Historically, the Hudson's Bay Company had pushed across North America in pursuit of furs. Although some of these furs were supplied by employed hunters, in general they were traded from local natives in exchange for European manufactured goods imported by the Hudson's Bay Company. This exchange of the resources of the country for manufactured goods was very much a part of the economic round at Fort Langley in 1858. However, at Fort Langley, the Company exchanged imported goods not only for furs, but for a wide range of other items including salmon, other provisions, as well as the natives' labour.

The sale shop function at Fort Langley showed consistent elaboration and increasing emphasis from 1840 to 1858. Initially, the only Euro-American customers were Fort Langley employees and their families. This market enlarged radically in 1848 when Fort Langley became the interior depot. The instructions to James Murray Yale, the chief trader at that time, were to install his clerk, H.N. Peers, in "the equipment shop to make up the orders and supply the men of the brigade."[1] This meant that the Euro-Americian retail clientele had now expanded to take in the servants of New Caledonia, Thompson's River and Fort Colvile as well as Fort Langley.

The next major expansion came with the arrival of the gold-seekers in 1858. Through the spring and early summer of 1858 many thousands of men passed through Fort Langley on their way up the Fraser. This group required specific goods; primarily flour, bacon, beans and mining tools imported from San Francisco, and blankets and woolen clothing from the stock of English goods.[2] In anticipation of this enormous new market, the company fitted out another structure as a sale shop in May, 1858, but apparently never used it for the purpose.[3] In 1860 the retail functions at Fort Langley were consolidated; the Indian trade shop was phased out and its role was assumed by the sale shop.[4]

Retail structures such as these had specific functional requirements. Once the basic shelter needs were met to protect the stock-in-trade, the next criterion was security. Locked doors, shutters, wickets, counters, and separate areas for staff and customers all reflected this need. In a situation where a relatively small quantity of goods of high perceived value was the life-blood of the trade, this emphasis was natural.

Some method of organizing goods for display was also typical. Unlike a storehouse, in a shop it was desirable for the customer to be able to see the product, so shelves, racks and other systems of displaying wares were used. To the same end, higher light levels were desirable in a retail structure than in a storehouse. This, in the Hudson's Bay Company context, meant using more and/or larger windows than would be found in a storehouse.

Finally, a somewhat higher level of finish was normal in a retail shop as compared to a structure such as a storehouse. The former would be primarily a public area, used on a more regular basis and for longer periods. A more "finished" building would not only provide a comfortable work environment, but would effectively present the goods being sold.

Indian Trade Shop Structure

Identification

The first identification of the Fort Langley Indian trade shop in the location of Structure H comes from Jason Allard's accounts recorded in the 1920s.[5] The earliest of these sources, a plan drawn by Judge F.W. Howay, "Fort Langley as Jason Allard remembers it June 15/20" (figure 2) showed the Indian trade shop in the northeast section of the fort, adjacent to a bastion and the blacksmith shop.

The next plan, drawn by Allard in September 1920, complete with "references", is the most comprehensive and accurate of the materials attributed to him (figure 3). His structure B was on the north palisade, to the west side, and extending at least partially through the palisade. The "references" identify this structure as being the "Indian Trade Shop-Upper Story here men could be placed in case they were attacked." These Jason Allard plans, and the later derivative material, consistently identified the building in the location of Structure H as the Indian trade shop, sometimes inside the palisade and sometimes (figure 3) part of it.

There is no other documentary evidence relating to the function of Structure H. However, indirect evidence was provided by the very location of the structure, as shown in the 1862 plan of Fort Langley drawn by Sergeant William McColl of the Royal Engineers (figure 4). The placement of this building as a component of the north palisade, towards the river, would have provided both security for the H.B.C. as well as ease of access for the native traders. The nature of the other activities carried out by the H.B.C. makes it unlikely that any other building, except bastions, would have been located in this site.

The evidence above points towards Structure H having been the Indian trade shop. Granted the unsuitability of the building's situation for other functions, it is likely that it served this role until the elimination of the Indian trade shop in 1860. This of course, would mean that Structure H was the Indian trade shop in 1858.

Direct Evidence

The earliest icongraphic source showing Structure H is the Mallandaine watercolour sketch "Fort Langley - N. View Fraser River" of January 7, 1859 (figure 5). This source yields only general information on the structure. It is shown to have been a third, central, bastion-like building in the north palisade, substantially larger than the two north bastions, but with the same sort of pyramid roof and finial as the smaller structures.

The partial building shown in the watercolour (figure 6), "Fraser's River view from the gallery Fort Langley looking up 1858" (likely by James-Alden) is probably Structure H. There are anomalies in terms of known Fort Langley bastion configuration, such as the second-storey overhang, which supports this identification. The length of gallery shown in the foreground would also correspond better to that between Structures F and H rather than the much shorter stretch between Structures H and I. Assuming the above to be a correct identification, Structure H is shown to have been of post-on-sill construction, with a second-storey overhang, a bark roof, and access from the gallery through a wide doorway. The second floor appears to have been on much the same level as the gallery, with the floor planks laid on the north-south axis of the building.

The peak of the roof of Structure H is shown in an 1862 photograph (figure 7) of Fort Langley. This confirms the bark roof covering (probably cedar bark) and shows the finial to have been of a somewhat different configuration to that of Structure F, the bastion to the left. This photograph also indicates in general terms the overall height of Structure H relative to Structure F.

Structure H was plotted on the William McColl plan of Fort Langley in September of 1862 (figure 4), some two years after it ceased functioning as the Indian trade shop. This source shows Structure H to have scaled about 7.6 metres (25'1") square, and located 31.2 metres (102'4") to 38.8 metres (127'5") north of the north wall of Structure K, and some 3.6 metres (11'11") to 11.2 metres (37') west of the west wall of Structure K.

There is no reference made to the construction of the Indian trade shop in the contemporary sources except that of Charles Wilson who mentioned "the usual precautions to prevent a surprise from the Indians, only a limited number being admitted at one time."[7] This implies only some mechanism of spatial control, rather than any details of configuration.

The Jason Allard based material in the 1920s offered a little more detail. In his September 1920 "Plan and References" (figure 3) Allard referred to an "upper story where men could be placed - in case they were attacked."

In a guidebook published in 1925 to accompany the Worral model of Fort Langley, with information attributed to Jason Allard, it was stated that "trading was done through a wicket with the Indians" and further that "The upper part of this building was the observation post of James M. Yale."[8] This idea was repeated by Denys Nelson in describing the "Trader's Shop, where trade was carried on with the Indians through a wicket (an armed guard was maintained on an upper floor, commanding the wicket during trading operations)".[9] This concept of the wicket and an observation or guard post over it seems fairly consistent in these secondary sources from the twenties and thirties.

Chronology

Structure H of course postdates the 1840 reconstruction of Fort Langley. Because of its central importance to the Indian trade, the raison d'etre of the post, and its location at the earlier developed north end of the fort, an early construction date may be assumed.[10] However, "another small building" was burned in 1852 with the coopers' shop and "a part of the stockade on the north side of the Fort."[11] The two small buildings shown to have been roughly equidistant from Structure G, the coopers' shop, on the McColl plan (figure 1) were a bastion (Structure F) and Structure H. It is therefore possible that the first Indian trade shop burned in 1852, and Structure H may have been a replacement dating from that year.

Iconographic sources show that Structure H was present from 1858 to 1862. The Frederick Dally photograph of 1867 or 1868 (figure 8) shows it to have been gone by that time. Combined with a secondary reference to the "front and part of the stockade" having been "taken down by degrees between 1861 and 1864", this would suggest a demolition date in the mid 1860s.[12] However, Structure H was present and presumably functioning as the Indian trade shop in 1858.

Indirect Evidence

Descriptions of the construction and configuration of Indian trade shops in the Western Department are nearly non-existent. The primary thrust of the Company's activities was economic, so descriptions of the Indian trade deal almost exclusively with types and numbers of goods paid and received. However, some small clues may be found by examining comparative material.

A consistent element was some response to the security problem. This was noted at Fort Langley by Charles Wilson, as "the usual precautions", which meant admitting a limited number of Indians at one time.[13] Many of the Indian trade shops in the west were within the palisade, usually to the left of the "front" gate on entering.[14] Apparently the natives were primarily controlled at this gate. "There was a watchman always at the gate to admit Indians" at Fort Simpson, where "a Rail and palings" was erected between the "Indian Shop & Indian Traders house" in 1855, to control further access.[15] At Fort McLoughlin, John Dunn described the process a little more fully:

> On the inside of the gate, on entering the fort, stands the Indian hall. A certain number of Indians are only allowed to enter for trade at a time; this hall is intended for them to wait in until they trade. Another man is constantly kept at the gate to let the Indians in and out... On the left, on entering the fort, is the Indian shop and store, for the Indians to trade, and the trader's outfit. The Indians are all kept near the gate and Indian hall; they are not allowed to enter the fort square, with the exception of the chiefs".[16]

This description did not specify whether the "Indian hall" and "Indian shop and store" were the same facility, separate rooms in the same building, or separate structures altogether.

The situation at Fort Colvile was also unclear. A "list of Posts and Establishments" prepared in the late 1860s noted "1 house, Indian hall, 16 x 16 feet."[17] However, one of the witnesses before the Commission that this list was prepared for remembered Fort Colvile c. 1860 to have had "two storehouses with

furs. In each one they had a store where they sold goods to the Indians."[18] This would suggest that at Fort Colvile the Indian hall and actual trading room were probably separate. At the first Fort Langley, a reference was made to "Squaring wood (for an Indian House outside)", perhaps indicating the presence of a holding facility outside the palisade.[19]

Reference to construction details were infrequent, mostly pertaining to interior layout. There was a reference at the first Fort Langley to "fixing up a Counter & Shelves in the Indian Shop."[20] A number of references to the construction of a "trade shop" come from the earliest Fort Rupert journal. In late August of 1849 this building had shutters hung,[21] and the next day the men were "putting on Locks of Doors and bench for Trade Shop."[22] By March of the next year, two inch cedar plank was installed in the building as "upper flooring" to replace the "Indian boards" previously used. [23] When the flooring was done, they "rearranged all the goods."[24] The following month new hinges and doors were made for the "Lucerne shutters" of the trade shop, and the "top part" of the building was fitted up.[25]

Some references to the "Indian Shop" may also be found in the Fort Simpson journals. This building was fairly well finished, with clapboards and "mouldings on door lining and window linings", and shutters again noted.[26] A "passage way" was mentioned, but whether it was inside or outside is not clear; trading was on at least one occasion carried on "from <u>two</u> doors", requiring four servants.[27] Finishing the interior of the building involved "planing grooving partitions and lining", as well as building a desk, counter, and a locker for tools.[28] There was also a cellar under this shop.[29]

At Fort Shepherd a counter was also present in the Indian Shop. Jason Allard was surprised at that post by the Indians coming "inside" the counter, contrary to H.B.C. convention.[30] The Bullock-Webster watercolour sketches of the Indian trade shop at Fort Connolly in New Caledonia provide more information. These sketches show the interior of the trade shop from the traders' side (figure 9) and from the natives' side (figure 10). They show in some detail the arrangement of the interior, with a solid wall separating the two parties, and the trade carried on over a counter through a wicket. The main problem with this material is that it dates from the mid-1870s. However, given the isolated location of Fort Connolly, it was probably not unrepresentative of general practices in the Western Department fifteen years earlier.

A settler's description of the "office" at Fort Vancouver in 1842 is most interesting in light of the above sketches:

> At the office there was a little entrance, about eight feet square, and a little window into the store, where the goods were passed out. The clerk... knew me, and at once opened the door inside and asked me in.[31]

The exact nature of the building is not clear, but it seems to describe an environment similar to that at Fort Connolly.

A good description of the Indian trade shop at York Factory, with accompanying artwork, is provided by Robert Ballantyne. Although close chronologically to the Fort Langley case (1840s) it must be noted that this source describes a post far to the east of Western Department, operating under radically different conditions. However, in many respects it relates well to western sources so is worthy of note. Ballantyne describes a "trading room, or.. Indian Shop" with shelves, "smaller divisions", and drawers in the counter, the whole full of goods, including kettles and such strewn on the floor.[32] Ballantyne's illustration of "the trading-store" (figure 11) shows some similarities but many differences to the Bullock-Webster sketches (figures 8 and 10), mostly as a function of shop size.

More detail on actual shelf and counter construction may be found below, in the "Specifications" for the new sale shop built in Structure B in 1858. An example of a reconstructed Columbia Department Indian trade shop may be seen at Fort Vancouver National Historic Site (figure 88).

Conclusion

With Structure H there is little basis for conclusions concerning configuration, at least in relation to the primary function of the structure. It is safe to state that Structure H was a two-storey, post-on-sill building, incorporated into the north palisade, and with a cedar bark roof. The two contemporary iconographic sources, the Mallandaine and (probable) Alden watercolour sketches (figures 5 and 6) give conflicting information. The Mallandaine sketch shows Structure H from a distance, but seems to show a straight sided building, while figure 6 shows

a definite second storey overhang. As both artists are generally accurate, and there is no third source, the problem of conflicting evidence is difficult to resolve. The presence of an overhang would also modify the size of the structure shown in the McColl plan (figure 4) either up or down, depending on whether foundation or overall size was plotted.

The iconographic sources show the height of Structure H from ground to plate bottom to have been roughly the same as that of Structure F, the northwest bastion (see chapter 9). It may also be assumed that the second floors of the two buildings would have been at the same level, as they were connected by a gallery. This would mean that the overall height to the top of the plate was about 5.5 metres (18'), and the second storey joists were located at a height of 2.9 metres (9'6") to 3.2 metres (10'6"), and ran on an east-west axis. This would explain the north-south orientation of the second storey flooring in figure 6. The structure presumably would have been divided into two bays on each side, given its size.

Flooring was shown on the second storey, as noted above, and presumably was also present on the ground floor, on the same axis as the other. From the evidence of Structure F the joist system on both floors was probably on roughly 1.2 metre (4') centres. The flooring itself, as noted at Fort Rupert and all other posts on the coast, would have been 5 centimetre (2") pitsawn fir or cedar.

The roof was bark-covered; its peak height, based on the same pitch (4 in 5) observed for Structure F, and confirmed by figure 7, would have been 3.1 to 3.4 metres (10' to 11') above the bottom of the plate. The finial would add another 1.8 metres (6'), for a total building height of 10.4 to 10.7 metres (34' to 35'). The roof presumably had four rows of battens holding down the bark rather than the three of the smaller bastion, as the faces were proportionately longer.

The layout of the building is nearly impossible to determine from available resources. Figure 6 shows a large open doorway to the gallery on the west wall of the second storey, with a unobstructed floor inside. This corresponds well with descriptions such as those of Jason Allard which stated that a gallery ran across the full width of the north palisade (figure 3). It would also suggest a similar opening on the east side of the building. This gallery would probably not have been more than 1.2-1.5 metres (4'-5') wide, so assuming doorways and passage to have been this full width, a considerable amount of clear space would

still be left on the second floor. The McColl plan, for example, indicates some 1.8 metres (6') of Structure H to have been outside the palisade and hence the path of the gallery. There also would have been an area of more than 4 metres (13') by 7 metres (23') clear south of the gallery. Other second storey door and window configurations are not shown in any of the available iconographic sources.

The ground floor layout is not as well documented as that of the second floor and roof. The twentieth century sources (above p. 9) refer to trade being carried out through a wicket with armed guards above, which would support an exterior wicket, presumably in the north wall of the structure. This also provides a possible explanation for the second storey overhang shown in figure 6. However, Charles Wilson's statement concerning "only a limited number (of Indians) being admitted at one time", implies entrance into either the palisade and/or the building.[34] This relates more closely to the descriptions of the trade at Fort Simpson or Fort McLoughlin. The physical layout of Fort Langley, with the trade shop located to the left of the "front" gate entrance, also corresponded well to these posts. Often the small, one-man gates in the large leaves of main fort gates were referred to as "wickets".[35] Dunn described the Indians being admitted a few at a time under the eye of a watchman, probably through a wicket gate. If the Indians at Fort Langley also entered the fort through a wicket gate to trade, this would fit both the descriptions of Wilson and the secondary sources.

After admission into the fort, probably into a fenced holding area, the Indians were likely admitted to Structure H, although the Fort Simpson reference to trading through two doors would seem to obviate that need. The most probable interior layout would have had both partitions and counters, as noted at Fort Simpson, Fort Connolly, and Fort Shepherd. A counter separating the H.B.C. servants and trade goods from the Indians was noted at all these posts, as well as the first Fort Langley, and a partition appeared at Fort Simpson and Fort Connolly. The separation of interior spaces would suggest at least two exterior doors, one into the Indian holding area and the other into the main palisaded area. The numbers, sizes, and locations of windows are impossible to estimate, but must have been fairly generous to provide sufficient illumination for the function.

The interior finish of this building would probably have been on a level with that of the trade shops at Fort Simpson and Fort Connolly, with a lining and partitions of planed, tongue and groove, random width 2.5 centimetre (one inch) planks. The partitions would have defined areas for customers, traders, and storage. Some form of doors would have connected the areas, as seen at Fort Connolly, and hinted at in the Fort Shepherd shop, where the Indians got "inside the counter". The scope of the native trade at Fort Langley would not have required a great deal of floor space for the customers, or for the traders. It is likely that more space was devoted to storage than anything else, both for trade goods and for incoming articles, particularly furs.

Specific details of the configuration of Structure H cannot be established; some aspects of retail structure construction conventions will be more fully examined in the second part of this chapter. The general elements noted provide at least some idea of how the building was organized in the absence of specific information. Unfortunately, the former site of this building has been cut away by twentieth century road and railway development, so little hope exists of answering any remaining questions through archaeology.

Indian Trade Shop Operations

Structure H, and perhaps an earlier building on the same site, served as the Indian trade shop at Fort Langley from the beginning of the 1840s to 1860. Its primary role was to house the native trading activity, and its secondary to store the trade goods, furs, and other products used in the native trade.

Fort Langley was responsible for native trade over a broad geographic area; according to Roderick Finlayson, from "Whidby Island to Millbank Sound".[36] The influence of Fort Langley and its subsidiary posts of Fort Hope and Fort Yale also extended well up the Fraser River, and prior to the construction of Ft. Victoria in 1843 took in much of Vancouver Island:

> Latterly Victoria interfered a good deal with some of these, -Langley for example. The Indians not knowing the several divisions of the district, and because time was to them no object, came to Victoria to trade, where there was a larger quantity and a greater variety of goods from whence to choose.[37]

By the 1850s, this was definitely an issue; Yale complained to Simpson in 1852 of the effect of Victoria on the native trade at Fort Langley:

> The natives of these quarters are not habituated to the pursuit of the chase, and when they can get all their wants and even a superfluity by a course congenial to them, it would be erroneous to suppose that they may be easily persuaded to follow an occupation they dislike and which is less renumerative, merely to gratify our will. A great part of the furs procured by the Natives of the Interior within the Langley precincts are taken to Fort Victoria. The Indian traders here are glad to get a few furs to secure an ostentatious reception at the great emporium, for, while they are negotiating a higher price than could consistently be offered here, and which they seldom be offered here, and which they seldom or never fail to obtain, their wives and daughters are disposing of their rather more smutty commodities to still greater advantage, and after seeing the World and tasting of its sweets into the bargain, they come home loaded with goods.[38]

Yale went on to describe the competition for the salmon trade as well, with American traders at the mouth of the Fraser and Company traders on "Belveu Island" (San Juan Island) paying the Indians 3 times the value in "choicest goods" for their salmon.[39]

The natives with whom Fort Langley was trading, although belonging to many local groups or bands, were all Salishan speakers, and generally of the same cultural group. Their independence, as noted by Yale, was a function of the abundant natural resources available in the area, particularly the salmon which was their dietary staple. In his 1830 "Report of Fort Langley", Archibald McDonald included a census of the natives in Fort Langley's district, and arrived at a figure of 4160 individuals (Appendix A).[40] He also mentioned that some of them did not actually come to Fort Langley, but that their furs were delivered through "the medium of Traders; or Indian middlemen".[41] By the 1850s, patterns would have changed, after the construction of Fort Victoria, Fort Rupert, and Nanaimo on Vancouver Island, and Fort Nisqually and American settlements on Puget Sound, but many of the same groups still would have been dealing with Fort Langley. As a result of the presence of the H.B.C. on the Fraser River, a number of the bands had settled around Fort Langley. Cowichans around Fort Langley, for instance, were noted in 1839 to have been planting potatoes in the vicinity of the fort.[42] This would indicate some degree of permanent settlement in the area by this nominally Vancouver Island group. Sources from the 1850s, including the Alden watercolour (figure 8) confirm the presence of a large village on the island opposite the site of Fort Langley. As these Indians would have moved to this village, following the H.B.C., some 12 or 13 years after the establishment of the first fort, it is likely that the village was comprised of a mix of various Salish bands, with the unifying factor being Fort Langley.

The Hudson's Bay Company desired a wide range of commodities. Although furs, salmon, and labour were pre-eminent, the company also sought everything from swan skins to dugout canoes. An overview of these goods and their relative values to the Hudson's Bay Company is provided by the following table, which is from the Nisqually collection, entitled "Tariff for furs and Provisions at Fort Albert, Ot '43 and '44", and has a notation stating that it was "copied from that of Fort Langley". The prices are expressed in terms of large beaver skins, or "made beaver".

				Plus Furs	Plus Provns.
Baize per fm 6 feet furs (?), 5-1/2 feet Salmon				1/2	1
Blankets	Green	3 points		2	1
Do	plain	2-1/2 points		1	1
Do	plain	2 points		7/8	1
Do	plain	1-1/2 points		3/4	1
Do	plain	1 point		1/2	
Buttons	metal	Coat	6 doz.	1/2	1
Do	Ball	Vest	6 doz.	1/2	1
Capots	com	cloth 4 & 3-1/2 Ells	ea.	2	1
Capots	com	cloth 2-1/2&1-1/2 Ells	ea.	1	1
Caps	Milld		ea.	1/4	1/3
Combs	Large	Storn	doz	(0)	1
Cotton	com	Stripes	3 yds.	3/5	1
Do		printed	3-1/2 yds.	7/16	1
Dags	Stand	7 ins	ea.	1/2	1/2
Duffle	Blue		yd.	3/4	1/2
Do	Red	com	2 yds.	3/4	1/2
Files	flat	Bastd 7 & 8 ins	ea.	1/4	1/4
Glasses	Looking	metal frame		1/3	1/2
Do	Looking	paper cased		1/4	1/4
Guns	Com	Indian		4	1/4
Guns	Flint		2 doz.	1	1
Guns	Worms		2 doz.	1	1
Hats	com	Wool		1/2	1
Hooks	Large	cod	2 doz.	1	1
Do	Small	cod	2-1/2 doz.	1	1
Do	Small	Trout	5 doz.	1	1
Powder & Shot		30 Loads		30/40	2
Horns, Powder			ea.	1/2	2
Kettles	Covd	tin #1		1	1-1/2
Knives	Scalping		ea.	1/4	1/4
Needles	Darning		5 doz.	1	1
Pipes	clay		2 doz.	1	1
Rings	Brass	finger	5 doz.	1/2	1
Shirts	Striped	cotton	ea.	1/2	1
Soap	Yellow		3 lbs.	1/2	1
Stroud	com		yd.	3/4	1
Thimbles	com	brass	doz.	1/4	1/4
Tobacco	Twist		lb.	1/3	1
Do	Leaf		lb.	1/3	1
Trowsers	com	cloth	pair	1	
Do	Corduroy		pair	1	
Vests of all kinds			ea.	3/4	
Vermilion			lb.	4	4
Wire	Brass	collar	lb.	1/2	1

			Plus Furs	Plus Provns.
Bears, generally in ammunition, Cotton or Tobo		ea.	1/3	1
Beaver	Large	ea.	1	
Do	Small	ea.	1/2	
Do	pup	ea.	1/8	
Fishers		ea.	1/5	
Foxes	cross	ea.	1/2	
Do	Red	ea.	1/4	
Isinglass		lbs	1/4	
Lynx	Grey	ea.	1/2	
Lynx	Red	ea.	1/3	
Martens		ea.	1/5	
Minks		ea.	1/15	
Muskrats		ea.	1/15	
Otter	Land		1/2	
Raccoons			1/10	
Wolves			1/4	
Wolvereins (sic)			1/4	

			Provns.
Red Deer Skins paid principally in ammunition, baize, Shirts			1
Chevreiul Do paid Baize, Tobo, ammunition			1/4
Venison	180 lbs.		1
Sturgeon	200 lbs.		1
Salmon fresh Large 20			1-1/4
Salmon fresh Small 60			1-15/60
Salmon Dried 120			1
Ducks	30		1
Geese	15		1
Swans	5		1
Cod Fish	30		1
Trout small 80			1
Grease	hard	10 lbs.	1
Oil		3 Gns	1
Baskets	Corn	10	1
Do	(illeg.)	5	1
Mats	Large	3	1
Do	Small	8	1
Bark	Cedar	50 pieces 7 feet by 1-1/2	1
Sticks for Hoops		250 pieces	1
Canoes	Large		4
Do	Small		2

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"Made Beaver", the standard of exchange for the Hudson's Bay Company, theoretically represented the worth of one prime large winter beaver skin in good condition and properly prepared.

Actual quantities of trade goods and furs exchanged are difficult to establish in the absence of Fort Langley Indian trade books from the 1850s. However, some estimates may be made. The level of the fur trade at Fort Langley in the 1850s was roughly comparable to that at Fort Stikine, on the Alaska panhandle, in the late 1840s.[44] Fortunately a "Trade Journal", or Indian book does exist from Stikine for the period 1846-1849, and this provides comparative information on the daily trade at a coastal fort. At this post, in the late 1840s, October seemed to be the peak month for quantities of goods traded, with the slack time being from January through June.[45] During the quiet periods, it was sometimes two weeks between entries, but trading took place throughout the year, and substantial quantities were traded at all times. A "typical" busy day for trading was October 25, 1847, when the following items were exchanged; some of the abreviations have been annotated in long form:

1	Otter	1 -2-1/2 best (blanket)
2	Beaver	16 - f(atho)ms grey Cott(on)
1	Marten	1 - HKF (handkerchief)
2	Bear	2 - fms grey Cotton
2	Beaver	16 - Hkfs
3	do	8 - fms tartan 1 fm baize
10	Martens	2 - fms Baize
2	Bearskins	2 - fms grey Cott
2	Beaver	2 -2-1/2 best 8 h(ea)ds tob(acco)
1	do	18 - 18 ins Scarlet
4	Martens	30 - ins duffle
1	Marten	1 - Hkf
3	Beaver	10 - do
1	do	1 -2-1/2 best hds tob
2	Land offer	2 -2-1/2 best
3	Martens	1 - Ver(Vermilion) 2 Hkfs
12	do	2 - 2-1/2 best

12	do	2 - 2-1/2 best
1	Beaver	2 - fms Tartan
4	Martens	4 - Hkfs
2	do	1 - sm(all) Belt
1	Beaver	1 - 2-1/2 BB inf (blue bar inferior blanket)
1	Marten	1 - " "
2	Beaver	4 - fms grey Cott
3	Martens	3 - Hkfs
1	Beaver	3 - fms Tartan
1	Lynx 1 Marl	- 1/2 fms Prin Cott
1	Beaver	1 - fm Baize
1	do	1 - 2-1/2 best & tob
6	Martens	2 - 1-1/2 ell capots
2	Beaver	10 - Hkfs
1	do	4 - do
2	Martens	1 - do 1 Verm
1	Bearskin	1 - Hkf
8	Martens	2 - Shawls [46]

Although other articles, particularly metal goods, looking glasses, guns and ammunition and clothing were also regularly traded, most of the trade at Stikine was in textiles and related goods.

As well as the quantities and types of goods exchanged on this day, several other H.B.C. Indian trade conventions are illustrated in the above excerpt. The trade on the coast was normally carried on in this immediate fashion, with furs directly exchanged for trade goods. There was, therefore, one less stage to go through, and the whole token system used in some areas was not required. There was also a range of tariffs. For instance 2 beaver were worth from 4 to 16 fathoms of grey cotton, or 10 to 16 handkerchiefs. Clearly, around the specified rates of exchange there was a fair bit of leeway for bargaining.

On only one occasion was an individual Indian customer named, when "Joe" brought in a large quantity of furs in October of 1846.[47] The company also used names to keep track of debts, goods advanced, and the later payment of these debts in furs.[48] Beyond these instances, however, no personal accounts were kept, showing that generally a large number of natives brought in furs on a casual basis, rather than a limited number of specialized hunters or traders providing large quantities at one time. Those few natives allowed to incur debts were probably known to be good suppliers of furs, so were given some special privileges. Presents were also sometimes given to the natives; in September 1847 these included powder, shot, flints, tobacco, needles, and soap.[49]

As noted there were variations in rates in exchange, and sometimes the tariff itself was unilaterally changed by the Company. At Fort Stikine it "changed or altered the Tariff to 1 2-1/2 pt best Blkt pr Beaver" on August 26, 1847.[50] At Fort Victoria the tariff had changed two months earlier:

> We now sell the 2-1/2 pt best blanket for two Beavers instead of one as formerly... Consequently some Kawitchen (sic) who came here to dispose of their Beaver, took them away, intending to trade them at Langley.[51]

The intention of the Board of Management in formulating such tariff changes was to encourage the Indians to trade at their local posts rather than saving furs for Victoria. In the short term the strategy worked. It was five months until any beaver was traded at Fort Victoria at the new tariff.[52] However, the problem returned, not only for Fort Langley but all the coastal posts. In 1860 Hamilton Moffat, at Fort Simpson noted that trade was "almost at a standstill, partly owing to the Indians being away, and also to their hoarding for Victoria".[53]

The records of transactions in the surviving fur trade journals, or trade blotters from the west coast show that the practices used at Fort Stikine were generally followed. The fur trade journals of the Company ships "Lama" and "Beaver" from the 1830s and 1840s list by day the furs received and the goods expended as simple transactions, without any mention of individuals.[54] At Fort Rupert, where even in the 1870s almost all the trade was with natives, the same practice was observed, long after the arrival of a cash economy. The entries in the trade blotter from that post in 1876-1881 are listed by day in the same format, with furs exchanged in individual transactions for equivalent goods, and with proper names only rarely mentioned.[55]

At Fort Nisqually the entries in the Indian shop blotters also were made on the basis of individual transactions, but proper names were more commonly used.[56] One fur or group of furs was exchanged for one item or group of items, under daily headings, but often with the individuals participating in the transactions named. This use of names may have been an indication of a more stable market, where the individual natives were better known to the H.B.C. traders. To some extent this is substantiated by later entries in the blotter. On January 9 1846 a three point blanket was given to one of the natives; he was to pay for half, but the other half was a New Year's gift.[57] The same individual and another Indian were trusted with tools a few days later:

> 2 axes lent to Sahalet and Tuanisapum to be returned when the weather becomes mild. Ret. June.[58]

Some hints also appear in this blotter of Indian traders becoming heavily capitalized, and acquiring a substantial stock of trade goods. In February 1846 a native was trading 6 plain and 1 scarlet 2-1/2 point blankets back to the Company in exchange for 2 horses and some fabrics.[59] The blotter also contains records of some of the Indian labour performed around the fort, and the goods paid out in exchange. This labour varied from "ferryage across Nisqually River" to "picking wheat" to "Sheepwashers &c".[60] For casual labour wages were paid in consumable goods, such as tobacco, ammunition and fishhooks, but for more regular work, such as the sheepwashing, more durable goods, like fabric, handkerchiefs, and knives were used as payment.

The Indian trade at Fort Langley probably followed the conventions seen in the comparative sources, with the trade conducted on an item by item basis. The scope and nature of the trade would have been similar to that at Stikine in terms of the fur trade itself, but would have been modified by the many commodities beside furs, as well as labour, which were supplied by the natives on the Fraser River. Although much of the trade at Fort Langley was done in Structure H, some aspects, such as the salmon trade, were undertaken exclusively outside the fort. The Fort Nisqually case of established Indian traders or middleman providing many of the commodities to the Company was probably also seen at Fort Langley. In the 1827-30 period covered by the Fort Langley journal, there is evidence of this situation establishing itself. It would have strengthened by the 1850s, with the experience of a whole generation growing up in the trading environment.[61]

It is only possible to speculate on the seasonal nature of the Fort Langley Indian trade. Some obvious times when Indian labour was in demand were the spring planting and fall harvest, and the period from July through September when most of the salmon trade took place. With the Indians' subsistence fishery occurring at the same time, it is likely that the peak of the trade was later than October. With the varied nature of goods and services supplied by the natives at Fort Langley, trade would have taken place throughout the year.

The process of the Indian trade in Structure H involved an Indian or small group of Indians granted admission to the customer area of the shop, and then bargaining on the basis illustrated in the trade journals and blotters. Although the concept of Made Beaver was observed in the tariffs, there would have been no need for tokens, as exchanges would have been direct.

The major commodity traded for durable goods was fur. Although in the accounts of Fort Langley in the 1850s the returns of the fur trade were often less than those of the fishery or the farm, it was Company policy to pay for furs in durable goods, and for provisions or labour in consumables. Textiles of one sort or another, particularly woolens, (including point blankets) comprised the largest quantity of trade goods exchanged for fur. An indication of the range of goods traded to the natives at Fort Langley appears in the inventory of trade goods from the spring of 1852. The types of goods on hand would have remained the same as this throughout the decade in question, although quantities would always be in flux. It depended on the time of year, when the last shipment of goods from Victoria had arrived, and how much trading had been done:

Fort Langley Inventory, Spring 1852

1 gross	Indian Awls
14 yds.	blue Baize
290 yds.	green Baize
470 yds.	red Baize
90 yds.	scarlet Baize
5 Buns.	White cut glass Beads
2 bls.	com. round Beads
11	narrow Worsted Belts
3	Mid. scarlet Belts

2	green Blankets - 3 point
70	plain Blankets - 3-1/2 points - Blue Bar
9	plain Blankets - 3 points - Blue Bar
5	plain Blankets - 1-1/2 points - Blue Bar
4	plain Blankets - 1 point - Blue Bar
35	Scotch Bonnets
4	Jappaned tobacco boxes
17 doz.	W. & Y. metal coat Buttons
2 gross	gilt ball Vest Buttons
6 gross	plated ball Vest Buttons
15	com. cloth Capots 3-1/2 ells
4	com. cloth Capots - 3 ells
3	com. cloth Capots - 2-1/2 ells
12 doz.	large horn combs
6 doz.	fine combs
2/3 doz.	Ivory dandriff combs
60 yds.	fine printed cotton
57 yds.	Navy blue cotton
8 yds.	3 inch grey cotton
19-1/2 yds.	blue duffle
2 5/6 doz.	flat bastard files 8 inches
7 1/3 doz.	flar bastard files 10 inches
10	com. Indian Guns
4 cts.	Gunflints
160 lbs.	Gunpowder
1 2/3 gross	Gun worms
5 cts.	large cod Hooks
1-1/2 M	large cod Hooks
7-1/2 M	Kirby Trout hooks
16	fancy lustre jugs
3 nests	covered tin Kettles
1 doz.	scalping Knives
10 cts.	Queen's needles
2	oval tin Pans #1

5	oval tin Pans #2
3	oval tin Pans #3
1	oval tin Pans #4
6	oval tin Pans #5
2	oval tin Pans #6
2	oval tin Pans #7
4	oval tin Pans #8
1/3 gross	Clay Pipes
21	Jappaned tin pint Pots
24	half pint Pots
4	plain Pint Pots
387	com. cotton shirts
156 lbs.	Ball Shot
90 lbs.	Beaver Shot
120 lbs.	Buck Shot
180 lbs.	Yellow soap
68 yds.	com. blue Strouds
2 yds.	com. green Strouds
8 yds.	com. scarlet Strouds
6 lbs.	colored Thread
280 lbs.	Canada Roll Tobacco
12 pr.	Corduory Trousers
7-1/2 lbs.	Chinese Vermilion [62]

These goods would have been stored and displayed in Structure H, forming the major part of the visible contents of that building. Perhaps the best representation of the interior of an Indian trade shop appears in the Bullock-Webster sketches of the shop at Fort Connolly (figure 9 and 10). These illustrations give a good idea of how such materials would have been arranged. Most of the goods were traded in natural units, but some, such as castoreum and isinglass, and trade goods such as beads, ammunition, and tobacco were traded by weight, so some sort of scale was required. At Fort Simpson the journal noted the blacksmith "making Brass weights to complete a Set for Trade Shop".[63]

The operation of a trade shop seems to have required two men. For the 1858 period it is not clear who was actually running the Indian trade. When Gavin Hamilton came to Fort Langley as an apprentice clerk in January 1853, he was apparently one of the men assigned to the trade shop. Besides learning the H.B.C. accounting practices generally, Douglas instructed Yale to place him in the Indian shop:

> ...giving him a chance of learning how to deal with and manage Indians as well as to acquire their language, a practice that is unfortunately too much neglected by young men who join the service.[64]

When Hamilton left Fort Langley in 1857, and was replaced as clerk by William H. Newton, the duties apparently changed as well. Douglas instructed Yale in the spring of 1858 that "Mr. Newton may be continued in charge of the Sale Shop".[65] This would mean that it was unlikely that he was also working in the Indian trade shop.

The need to "acquire their language" to be able to deal effectively with the natives suggests that the native trade was conducted in that language. There were men designated as "interpreters" at Fort Langley in both Outfits 1857 and 1858. In Outfit 1857, from June 1, 1857 to May 31, 1858, Augustin Willing served in that capacity, and the following year, Joseph Bonin.[66] Aurelia Manson remembered Ovid Allard doing all the trading with the natives for their salmon at the dock, and prior to his leaving Fort Langley, in Outfit 1850, he was also referred to as the Interpreter.[67] Allard was replaced by Willing in December 1852.[68] It is probable that if a clerk was not serving in the Indian shop, the interpreter would have been in charge. As noted at Fort Simpson, and at Fort Connolly (figures 9 and 10), two employees were assigned to each point of trade. As Bonin assumed the role of interpreter in June 1858, it is probable that he was Willing's assistant until that date. Through the last half of 1858, the most likely assistant to Bonin was William Emptage, who two years earlier was the "Jack Tar with one arm", who had served temporarily as interpreter when Willing deserted.[69] George Simpson, in writing to the Columbia Board of Management in 1852, stated that for the fur trade at Fort Victoria, "all that can be required are the services of a postmaster and an assistant and a supply of goods".[70]

Nine years earlier, Simpson described the trading process aboard the steamer "Beaver" as he observed it in McNeill's Harbour in the fall of 1841:

> The standard of prices being fixed after two hours of higgling, the business then went on briskly. To avoid the inconvenience and danger of a crowd, half a dozen only of the savages were to be admitted on deck at once; and, in order to enforce the regulation, five sentinels were stationed...
>
> Stationing himself at the steerage hatchway, Captain McNeill threw down each skin, as he examined it, with its price chalked on it - the equivalents being handed up from below by the two or three men that were in charge of the store.[71]

Berthold Seemann, who visited Fort Victoria in July 1846, on the H.M.S. "Herald", noted the importance of establishing and scrupulously observing a tariff:

> Mr. Finlayson, the gentleman in charge of the establishment appears to be an intelligent man, who by perserverance and a uniform system of adhering to his work and offering stated prices in barter, never receiving or offering less, seems to have succeeded in impressing the natives with a considerable degree of respect for himself and the fort.[72]

It is possible that at Fort Langley, as on the "Beaver" and at Fort Victoria, James Yale (the man in charge of the post) was responsible for setting the basic parameters of the trade before the actual exchange of goods could begin.

This process of agreeing on the tariff or value of the furs and goods in terms of made beaver, and then trading individual lots at the agreed-upon rates, was certainly the one followed at Fort Langley as well. Records would have been kept in a similar fashion to those of the other posts. The critical element was the total expenditure of trade goods relative to products coming in.

Other than the trade itself and associated record keeping, the activity in Structure H would have related to maintenance of the goods in storage in the building. This would have included taking inventories of trade goods, preparing requisitions based on these inventories, sorting trade goods and furs, and general house cleaning. A reference to such activity is found in the Fort Simpson journal from 1857:

> Mr. Weynton with two men cleaning Indian Shop and overhauling furs in do. and found all in good order.[73]

The Indian trade at Fort Langley continued at a high level throughout the decade 1848-1858. In the latter year, 1858, the gold rush had a sudden and disruptive effect on the trade. Donald Fraser, the London Times correspondent wrote in the fall of 1858:

> The discovery of gold is fast corrupting the river Indians. They neither have caught sufficient salmon this season for their own winter supply nor have they worked as heretofore for the Company.[74]

Sale Shop Structure

Identification

This structure was one of the few at Fort Langley which had its function identified in the target year of 1858. In the fall of that year the editor of the Alta California described in Harper's Weekly "the sales room... in the loft next to the northeastward of the chief traders residence."[75] This means that the second storey of Structure O was serving as the sale shop in the latter part of 1858. This second storey arrangement proved inconvenient during the gold rush, and the main floor of another structure was fitted out as a sale shop (Structure B) in May of 1858.[76] However, this new facility was never used for the purpose, and Structure O was still identified as the "Sale Room" by McColl in 1862 (figure 4).[77] Apparently only the upper floor of Structure O was used for retailing; the main floor will be discussed in the next chapter.

Direct Evidence

Substantial information on the appearance of Structure O may be found in the two E. Mallandaine sketches of December 1858 (figures 12 and 13).

It was a large post on sill structure, five bays long by two bays wide, two full storeys high, and with a hipped roof, apparently shake covered (compare to the bark roof of Structure M, to the left in figure 12). Assuming roughly 2.4 metres (8') in height for the arched doorway, the overall height of the building at that point was 9.8 - 10.4 metres (32'-34') divided approximately into halves at the top plate. The north end of the building, due to the slope of the land, would have been 1.2 - 1.5 metres (4'-5') taller. Figure 12 shows a facade which had a second storey window centred in each bay, and four ground floor windows centred in the four outer bays. The windows on both floors were of equal size. There was a large central doorway with an arched top in the centre bay, with ground level access. The north elevation had only one opening, a first storey door in the west bay, about 1.2 to 1.5 metres (4' to 5') above the ground, reached by a simple stairway. The doors themselves are shown to have been of vertical plank construction.

Figure 13 shows only part of the south and east roof faces, and a little of the second storey on the same sides. It shows no openings in the south wall, and the east wall is too indistinctly shown to draw any conclusions. Neither of the sketches show any evidence of chimneys.

Although the Harper's Weekly article was more concerned with the business than the building, some general hints of appearance were given:

> The door of the sales-room is opened, in the loft.. The door is scarcely opened when the small space allotted to customers inside the building is filled with people.. (at noon) Everybody leaves the storehouse, the doors are closed...[78]

The building was further described in the article as a "trading warehouse".[79]

Structure O was plotted on the McColl plan of September 1862 (figure 3). It had a porch or landing across the south end, reached by a short stairway. Scaling from this plan, Structure O was roughly 18.9 metres (62') long by 8.7 metres (28'5") wide. The width of the porch was about 2.0 metres (6'7"). The building was plotted 68.4 to 87.3 metres (224'5" to 286'5") south of the south wall of Structure K, exclusive of the porch, and 0.6 metres (2') west to 8.1 metres (26'5") east of the west wall of Structure K, following the axes of the latter building.

Chronology

The construction date of Structure "O" is unknown, but it was probably built in the second or third phase of development of the third Fort Langley. Based on palisade trenches found archaeologically, Steer et. al hypothesized that the fort enclosure developed from the north to the south ends.[80]

Figure 1 shows that Structure O lay south of a jog in the palisade. Structures A, B, and O, the three major buildings in the south end of the palisade were all large, two-storey structures with hipped, shake-covered roofs. This pattern differed from that in the north section of the fort, which contained one or one and one-half storey buildings, generally with gable roofs covered by cedar bark.

This pattern of elaboration in one section of the fort points to an unknown, but post-1840 construction date. Jason Allard referred in his "Reminiscences" to the "Old Officers Quarters (Big House - Structure A) built in the early forties."[81]

Due to the similarities of construction it is reasonable to assume that the three buildings in the south end of the fort were built concurrently, so Structure O probably also dated from this period.

By early 1859 the Structure O sale shop required some work. In that year A.G. Dallas wrote to Yale "I think you might with advantage use the fittings of the new sale shop to repair the old one."[82] The Indian trade function was assumed by the sale shop in the fall of 1860, and this building was identified as having served the dual retail role through at least 1862, when McColl drew his plan.

Structure O was still standing, and probably still serving as the sale shop, in 1867 or 1868, when the Dally photograph was taken (figure 8, 8b). However, it was being phased out as a sale shop by 1872, when Structure K was being outfitted:

> The sale shop is finished all but putting up the shelves, and counter and hanging the door, which I will take from the old shop; but I don't intend removing the goods into the new shop until I get up my house.[83]

Presumably Structure O was demolished at some point shortly after this retreat into fewer and smaller buildings which was brought about by the diminishing level of activity at Fort Langley.

Indirect Evidence

A major source of comparative material for Structure O is found in the directions and specifications for setting up the new sale shop in Structure B in the spring of 1858. As this new sale shop was on the ground floor of a building much wider than Structure O, rather than the second floor, some allowances must be made. The layout in Structure B must also have been more efficient than the older sale shop, as it was the inconvenience of the latter which led to the change. The directions from Douglas to Yale are included in a letter of April 27, 1858:

> As the building containing the present Sale Shop is too small, and inconvenient for that purpose, we have resolved to transfer that highly important department, to the building on the left hand side of the big house where Mr. Manson was living last winter. The plan of the counter and interior arrangements of the shop is sent herewith. I was not sure of the exact breadth of the building, but we assumed it to be about 40 feet, and made the internal arrangements accordingly. Should the breadth be less than 40 feet, the stalls must be contracted to suit the dimensions of the house, but the counter and passage must remain the same. We propose replacing the present windows by the large sashes now forwarded per Otter. The shop door will have to be cut, about the centre of the building in the end next the kitchen, say (Fallerdeau's House), and that hereafter will be the shop front; - at the other end of the shop we shall have a small baling room partitioned off, for packing Servants orders and other purposes. The shop and Baling room will therefore occupy the whole of the lower part of that building...[84]

The specifications enclosed with the above letter are as follow:

Specification of Work to be done at Fort Langley Sale Shop by Daniel Fowler Adams

I, Daniel Fowler Adams hereby agree and Contract in consideration of the sum of Four Hundred and Forty dollars to be paid on the faithful Completion of the Contract to perform all the Work mentioned in the Specification in a Workmanlike manner that is to say

Windows To be fitted with outside facings hinges etc. complete. Twelve in all.

Shutters To be made in halves and properly hung and planed tongued and grooved with an iron bar to secure the same when closed.

Door 4'0" wide to be made in two halves and properly hung - to be double formed of 7/8" or 1" Stuff planed, tongued and grooved the inner lining or thickness to be put on in the opposite direction to the Outside and fitted with locks etc. Complete.

Counter To be in all 90 lineal feet with two openings as shown on plan - 3'4" high -2'6" wide distance between Counters 5'0" rounded at the ends instead of square as shown on plan. Outside all Round to be panelled and properly framed planed and Dressed and fitted with Drawers 3 ft. wide and 6 in. deep. Inside the Counter to be a shelf rough but properly fitted - The openings mentioned above to be formed with panel doors like Counter facing itself.

Stalls Eight in number. Lower Shelfs to be of same height as Counter. Three shelves 2 ft. apart. These stalls 11'0" Long 4 ft. wide planed tongued and grooved and properly framed joined into uprights which are to be 6 in number.

Gun Racks Over the Window right up to the Ceiling 1'6" deep and 1'0"wide and 1'6" apart to extend to shelves height of Stalls
At the End of the building to be three rows of Shelves 2'6" deep and of same height as Stalls.

The whole of the Work to be faithfully performed in a substantial and Workmanlike manner and to the Entire Satisfaction of the Officer in charge of the Fort. All Materials to be found and delivered on the Spot. The Entire Work to be completed in six weeks from the time of Arrival at the Fort.

Dated this 26th day of April 1858.

Signed in the presence of D.W. Pearce, C.E.

(Signed) Daniel F. Adams.
(Signed) J. M. McKay.
On Behalf of the Honourable Hudson's Bay Company.[85]

The Fort Victoria journal for 1848 also gives some information on sale shop construction at that post. In general, this corresponds well with the configuration of the Indian trade shop already discussed. A "Sale Shop" partition was built of eighty ten foot boards which were planed and grooved.[86] The lining of the building was made of planed one inch boards, and a counter and shelving were installed.[87] The second floor was built of tongued and grooved planks.[88]

A common element in the layout of many of the H.B.C. retail facilities, both Indian trade shops and sale shops, was the relatively small area allotted to customers. For instance, there was the description of the Fort Vancouver "office" quoted above, with "a little entrance, about eight feet square, and a little window into the store, where the goods were passed out."[89]

Descriptions of sale shops in the Northern Department, although geographically unrelated, demonstrate the same convention. In a novel, Robert Ballantyne described the shop at Upper Fort Garry in the 1840s: "A counter encloses a space sufficiently wide to admit a dozen men, and serves to keep back those who are more eager than the rest."[90] H.M. Robinson described in some detail the sale shop at Lower Fort Garry thirty years later:

> The sales-room is a square apartment, with no attempt at ornament, no plaster, the ceiling merely the joists and flooring of the second flat, thickly studded with nails and hooks, from which are suspended various articles of trade. Along the side walls are box shelves, nearly two feet deep. On the floor within the counter are piled bales of goods, bundles of prints, hardware, etc; and this space within the counter comprises almost the entire room. A small area is railed off near the door sufficiently large to hold twenty standing customers.[91]

Conclusion

The overall configuration of Structure O is shown in the iconographic sources. Some added information, however, may be found in the comparative material.

In form, the building was basically a warehouse and was referred to in the Harper's Weekly article as a "trading warehouse."[92] However, the window size illustrated in figure 12 was substantially larger than that in Structure M, the storehouse to the left, and nearly as large as that of the second storey windows in the Big House, to the far right. The need for larger windows in a sale shop was supported by the reference to "replacing the present windows by the large sashes now forwarded" in the directions for the 1858 sale shop conversion cited

above. The convention of different window sizes was shown again in an 1860 photograph of Fort Vancouver (figure 14) with a storehouse and the sale shop side by side to the left of the image. The two structures are of essentially the same form, but the sale shop had much larger windows (as well as a higher level of finish).

It is clear that a building used for retailing required substantially higher light levels than a storehouse. The sash installed in Structure O may have been of the configuration of that on the second storey of the Fort Vancouver sale shop; that is, four by four light, side opening single sash. Assuming glass sizes of 9" x 7", 9" x 8", or 8½" x 7½", (those most evident in period inventories), this would have required window openings of about 1.1 metres (3'7") by 0.9 metres (3'), close to the window size shown in figure 12. The presence of shutters cannot be determined from figure 12. They were referred to in the "Specification" for Structure B, so would not have been inappropriate, but with the window size in Structure O, single rather than double shutters would have been more likely. The door described in the "Specification" provides a good prototype for those on Structure O.

The means of access to the second storey sale shop remains problematic. Two doors were shown in figure 12. However, it may also be observed that the clearly represented paths in the courtyard all run towards the south (far) end of the building. The sale shop was the most heavily utilized facility at Fort Langley in 1858, and given the softness of the ground in December, it would seem that neither of the doors illustrated served as the sale shop entrance. The paths leading to the south end in figure 12, combined with the substantial porch and stairway shown in the McColl plan, (figure 4), drawn in 1862 when the structure still served as the sale shop, would suggest that the shop entrance was at that end of the building. It may also be noted that in the directions for the conversion of Structure B to a sale shop, the entrance was to be cut in the south wall of the building ("in the end next the kitchen"), suggesting that some convention was being followed.

Whether this entrance was on the first or second floor is not clear. However, it is doubtful that stairs and porch would have been required for first storey access if the ground level was as high relative to the first floor as shown

in figure 12. A second floor entrance to a two storey building was present on the west side of Structure B (figure 8c). It is likely that there was a door leading directly off a second storey landing like this to provide access to the second storey sale shop in Structure O.

The Dally photograph (figure 8b) shows that Structure O was unpainted as late as 1867 or 1868, making it highly unlikely that it was painted in 1858. Structure A, (the Big House) and its kitchen were apparently the only buildings so treated. Trim elements such as door and window facings and the doors, shutters, and sash would have been painted; white was often used on sash, but as at Fort Victoria and other posts, "Spanish Brown" was probably the trim colour of choice.[93]

The interior of the second storey sale shop was not highly finished judging by the reference to a "trading warehouse". It is difficult to determine if ceilings were present but "lining" probably was. Sale shops, including that at Fort Victoria and the Fort Simpson trade shop, were often lined, but there is no direct evidence for this practise at Fort Langley. However, when Ovid Allard was consolidating the buildings at Fort Langley on a smaller scale in 1871-1872, preceding the apparent demolition of Structures A, B, and O, he refers to "the lining that is in <u>these old Houses</u>" (author's emphasis).[94] As Structure A was lined, the use of the plural would indicate that one or both of Structures B and O were also lined. Granted their probable concurrent construction dates and similar functions, it would seem likely that Structure O was lined. Following the Fort Victoria example, one would expect one inch tongue and groove, random width fir or cedar planks, perhaps with a beaded detail. It is probably also appropriate to follow the Fort Victoria evidence concerning flooring; two inch tongue and groove fir or cedar planking (see chapter 3 also).

The presence or absence of a ceiling on the second storey cannot be ascertained. John Hussey, in researching the two-storey sale shop and storehouse structures at Fort Vancouver, concluded that normal H.B.C. practice was not to install ceilings in this type of building.[95] In the absence of any evidence to the contrary, this may also apply to Structure O, supporting the "trading warehouse" description. The interior layout of the sale shop was described only to the extent of noting the "small space allotted to customers", which has been seen to have been typical of H.B.C. retail practice. The space

allotted in the examples cited ranged from "eight feet square" to "sufficiently large to hold twenty standing customers." Allowing about six square feet per standing customer, this would mean roughly one hundred twenty square feet in the latter case as opposed to sixty four square feet in the former.

In Structure O, a large area would not have been required to meet the requirements of the Hudson's Bay Company employees. The peak load, from the time the depot function was assumed in 1848 until the gold rush, would have been a maximum of sixty customers spread over the three weeks to one month which the brigade men spent at Langley.[96] This level of activity would have required no more than eighty to one hundred square feet. Support is found in the new design in the 1858 "Specifications" above; with a five foot passage surrounded by ninety lineal feet of counter, this would have given some two hundred square feet of customer space. This was obviously considered a major improvement in terms of room and convenience, compared to the Structure O sale shop.

The configuration of this space cannot be determined but could have been either rectangular or square. It is probable that it was separated from the rest of the sale shop by a counter, probably like that described in the "Specifications" above. There was almost certainly some form of shelving behind the counter; probably not as elaborate as that in the "Specifications". The description of "trading warehouse" suggests a simple retailing system.

It is unknown if the whole second floor was taken up by the goods for the sale shop. It is likely that there was a "baling room... for packing servants orders and other purposes" in close association with the shop proper.[97] This selling and packing of goods for the employees from the inland posts would have been a major aspect of the sale shop function prior to the gold rush. In 1848, the first year of the depot activity at Fort Langley, it was suggested that "Mr. Peers... being well acquainted with store work will be placed in the equipment shop to make up the orders and supply the men".[98]

At Fort Victoria in a six week period from February 12 to March 25 1848, a "sale shop partition" was put in, and then the rest of the interior finishing was done.[99] This section of the journal seems to describe work on only one structure in the Fort; the entries for two days in the same week described "fitting up the Sale Shop",[100] and in the weekly summary, "shelves put up in the Equipment Shop."[101] These references do not make it clear if "sale shop" and "equipment shop" were synonomous. However, the areas were fitted out in the same fashion, and almost certainly were in the same structure.

A later reference is also found in the Fort Victoria journal to "the Servants' Equipment Shop."[102] The inventories for the equipment shop and the sale shop at Fort Langley contain exactly the same type and mix of goods.[103]

The conclusion is that the equipment shop was either part of, or an adjunct to, the sale shop proper. It apparently dealt primarily with the inland employees, and part of its function involved baling and packaging. Whether a separate baling room was provided is not certain, but was possible. The whole second floor may not have been taken up by sale shop/equipment shop activities; whatever space remained would probably have been used for general storage or depot purposes.

Sale Shop Operations

By 1858 the sale shop was serving three different markets, Fort Langley employees, inland H.B.C. employees, and gold miners. On an occasional basis that year there was also some provisioning of colonial functionaries, including the military. Until 1848, and the assumption of the depot role, the sale shop would have been for the supply of Euro-American goods to Fort Langley employees, over and above what they received as part of their terms of engagement. The size of this market was determined by the number of men employed at the post, which in the 1850s ranged from 20 to 25 individuals.[104] As part of the depot role which began in 1848, Fort Langley also became responsible for supplying the needs of all the inland employees of the Company as well. The exact basis of the transactions is unknown, but it is possible that the servants were only allowed to order goods once a year, and the gentlemen whenever they pleased. Edward Huggins, who was a clerk at Fort Nisqually in the 1850s, described the distribution of goods to servants fifty years later:

> In relation to the supplies to servants; Each man made known the kind of goods he wanted, and the quantity, which, if within the amount to his credit in the books of the company, was supplied him at an

> advance price of 50 per cent upon prime cost, and they were packed with the company's goods, and freighted to their destination free of cost, but if the servant wished for more goods before the expiration of the year, he had to pay the company 100 per cent upon prime cost for them.[105]

This policy, which Huggins seems to have regarded as a universal one, would have provided a great incentive to order only once a year. In his discussion of the Fort Vancouver sale shop John Hussey examined practices of servants purchasing goods:

> Generally the servants at the subsidiary establishments were allowed to buy only once a year, through written orders sent to the Fort Vancouver sale shop. Perhaps this same rule held also for the lower ranks at the headquarters itself, since the common labourers and trademen certainly had little time for shopping. But clerk and commissioned officers seem to have been permitted to drop into the shop whenever convenient.[106]

The stated policy on pricing in the sale shops was given for Northern department in Rule 1 of the "Standing Rules and Regularions", enacted in 1843:

> Commissioned Gentlemen - The Depot Inventory Tariff for all Goods supplied to them during the Summer and 25 per cent there on for all subsequent supplies, without distinction whether taken at the Depot or Inland, Wines and Spirits excepted, to be at 100 per cent on the Depot Inventory Tariff or actual cost throughout the year.
>
> Clerks and Servants - 50 per cent on the prime cost of all imported goods, and 12 1/2 per cent on the Depot Cost of all country made articles, supplied during the Summer at the Depot, Wines and Spirits excepted... and all subsequent supplies without distinction of articles, whether taken at the Depot or Inland to be charged 50 per cent on the Depot Inventory Tariff, with the exception of Wines and Spirits, to be sold at 50 per cent on the Depot Summer Sale Tariff of Servants, all Country Produce to be sold throughout the year at 50 per cent; and Red River or Colonial Produce at 12 1/2 per cent on Inventory Prices.[107]

These arrangements were modified by the Council of the Northern Department in its resolutions of 1845 specifically for the Columbia District; Fort Langley fell into this area at that time:

> In order to simplify the Sale Tariffs in the Columbia District
>
> It is
>
> Resolved 76th that they be determined as follows vizt Commissioned Gentlemen, Clerks and Servants as p. 1st Standing Rule of 1843, the Summer Tariff at the Depot, commencing on the 1st March and ending on the 31st October each year. Sandwich Islanders on wages exceeding the Standard of the District 200 per cent or upwards on prime cost, Settlers and Missionaries of all denominations and strangers 100 per cent on prime cost for cash or approved Bills, Dollars being valued at 4/6 each. Settlers in payment of Furs or wheat to receive goods at 50 per cent on prime cost.[108]

It is unknown if this pricing policy was consistent through the 1850s, but Fort Langley sale shop records from Outfits 1855 and 1856 demonstrated the different pricing structures in application. In July 1855 Richard Bailey, a servant at Fort Langley paid 3/5, or 60% of the price that Patrick McKenzie, an outsider, or "stranger" paid the following year for the same goods. Another aspect of the two transactions is that although Bailey's account was debited in pounds, shillings, pence, McKenzie's purchase was recorded in American currency, and he was given six months to pay.[109]

The list of Bailey's purchases is worth presenting in its entirety; it was a good representation of the goods purchased by the employees. Bailey was assistant blacksmith, a sort of "middle" position, and the 12 pounds he spent in the sale shop would have represented about half his yearly income:

Fort Langley Ot. 1855 Dr
Supplies to Richard Bailey

1855
July
16

1	pln	Blanket 3-1/2 pts bb		"	13	10
2	"	do 2-1/2 pts bb	9/18	"	19	4
1	pr	Pilot Clo Trousers	18/5	"	18	5
1	Com	Clo Capot 3-1/2 Ell	15/6	"	15	6
1	pr	Bluchers Shoes	11/8	"	11	8
3	pr	1/2 wor Hose	1/9	"	5	3
1	pr	long Wor Do	3/	"	3	3
12	Yds	Com White Flannel	1/8	1	3	3
8	Yds	Grey Cotton	5d	"	3	4
6	Yds	6/4 Str Do	1/2	"	7	4
18-2/3	"	Navy Blue Do	6d	"	9	4
9-1/3	"	Printed Do	8d	"	6	3
3	Yds	Moleskin	1/6	"	4	6
4	Yds	Green Baize	2/7	"	10	4
4	bars	Soap	1/6	"	6	4
25	lbs	Plug Tobacco	9d	"	18	9
50	lbs	Brown Sugar	6d	1	5	9
12	lbs	Coffee	9D	"	9	9
4	lbs	Tea	1/9	"	7	9
3	Com.	Cot Handkfs	9d	"	2	3
1	Black	Silk Do	5/9	"	5	9
1	Bandana	Do	3/-	"	3	9
1	Paper	Glovers Needles		"	3	6
1/2	lb	Thread		"	2	3
1	Ivory	Comb		"	1	5
1	Horn	Do		"	1	3
4	Com	Cot Shirts		"	10	3

Sundries		"	1	1
	L	12	1	1
E.E.				
Ft. Langley				
16th July 1855	110			

This variety of goods was typical of that desired by the H.B.C. servants, with an emphasis on clothing, textiles, and "luxury" provisions, such as sugar, tea and coffee. Occassionally higher ranking servants, such as the tradesmen, would try to negotiate some of these items as part of their contracts. In 1851 Mitchell, the blacksmith at Fort Langley "held out for allowances of tea, and sugar, and firewood", which was denied him, to avoid jealousies. In its place, he was given a credit note for £2/10/0 on the Fort Victoria sale shop, so he could provide the luxuries himself.[111]

Dealing with the Fort Victoria rather than the Fort Langley sale shop was a fairly common occurrence. In the one surviving district account book, from 1852, debts were broken down into nine classifications; Fort Victoria sale shop, Fort Langley sale shop, Fort Langley, Fort Simpson, Fort Rupert, Advances in England, Advances at Oahu, Bills on London, and Total Advances in the Country.[112] It may be noted that the only sale shops were those of Fort Victoria and Fort Langley. All employees in the district, gentlemen and servants, had debts in the Fort Victoria sale shop, all inland and Fort Langley employees had debts in the Fort Langley sales shop, and Fort Langley employees had "Fort Langley" debts. Those gentlemen who visited Fort Langley from Fort Victoria , such as Douglas himself, also had debts in the Fort Langley sale shop.[113]

The evidence from this account book makes it clear that the Fort Langley sale shop served the local and inland employees, in conjunction with the Fort Victoria sale shop. Fort Langley, as opposed to Fort Langley sale shop, debts were only incurred by Fort Langley employees. While the major orders, such as Bailey's, were purchased in the summer, it seems likely that the Fort Langley employees had some recourse to goods throughout the year. Although debited through another account, it is likely that these goods were also being supplied by the sale shop/equipment shop, perhaps at the extra markup noted by Huggins for additional orders.

The gentlemen had recourse to ordering directly from England for some of their purchases. Yale ordered this way for the first time in March 1850, and received 3 packages from W.G. Smith in November. They contained dyed cotton, tartan, bombazette and woolen clothing superior to the normal H.B.C. supplies, and of the quality sent to other gentlemen "in the Country". Yale was debited £ 130.4/3 for this order.[114]

By the latter part of the decade, some of the servants also ordered goods this way. Douglas forwarded a letter from Samuel Robertson, the Langley boat builder to W.G. Smith:

> I herewith forward a letter and order for supplies from Samuel Robinson (sic) Fort Langley which I think you may safely forward, and charge the amount to his prime account.[115]

This prerogative probably only applied to the most senior servants, and tradesmen such as Robertson, as well as the gentlemen. Everyone else would have purchased through the local sale shops. The inland gentlemen could also purchase this way, although most of their goods were bought from the Langley sale shop, and their accounts debited in the same way as the servants':

> The Interior Gentlemen have applied for copies of their accounts with the Langley Sale Shop. Pray get them made out by Mr. Hamilton and forward them without delay, particularly the accounts of the New Caledonia Gentlemen.[116]

Limits were set on what employees could purchase, based on their ability to pay. Rule 27 of the 1843 "Standing Rules and Regulations" allowed servants to have advances up to three fourths of their yearly salary, half at the depot, and a quarter inland.[117] This rule was modified somewhat by Rule 119, in 1855:

> 72nd Resolve - That the advances at the established sale Tariffs be restricted to one hundred pounds to Commissioned Gentlemen, and to two thirds of their salary to clerks and servants in any one year. That servants at wages above usual standard in the Service and Officers on retirement be charged the same prices as strangers, and that this regulation apply to the Northern, Western and Oregon Departments.[118]

Although the limits of the purchases of the Fort Langley gentlemen and servants would have been determined by their available credit, there were definite limits on what could be purchased by the inland servants. Douglas stated these in 1851:

> As a general rule the Inland labouring servants orders, ought not to exceed one third of a piece each in weight to be allowed on their orders.[119]

In the 1850s it was a clerk from Victoria, George Simpson, the son of Sir George, who was responsible for "packing the Outfits for the Interior and putting up the Servants orders".[120] The resident clerk at Fort Langley and as many men as required assisted Simpson. J.R. Anderson recalled the packing of these personal orders as he observed it in 1850 at Fort Langley:

> ...The men belonging to the different interior stations selected for themselves, their friends and for their wives or sweethearts such articles of use and finery as they could afford and restricted in all cases to the exigencies of the Company's regulations, altogether a heterogeneous collection of odds and ends which required no little skill to apportion properly to each separate interest.[121]

Edward Huggins described the packing of servants' orders at Fort Nisqually in 1855 under the tutelage of Henry Peers, Yale's son-in-law and formerly clerk at Fort Langley. It was not a very successful effort, as Peers told Huggins to put soap in the bales, along with the other goods asked for. Huggins described the outcome:

> This I did, and I afterwards wedged up the bale as tight as possible, the soap being in the middle, and when the bale was opened, the soap was found to be pressed as flat as a pancake, and mixed in with the other goods.[122]

Huggins' description had the servants' private orders put up simultaneously with the Company Outfits, and in the same fashion, either packed in bales or wooden cases.

Through most of the 1850s, the returns of the sale shop were modest, with some decline evident from a high of £484/7/4 in 1850 to a low of £88/5/4 in Outfit 1856.[123]

The decline in the returns of the sale shop was reversed by the Fraser River gold rush, beginning in Outfit 1857. Although the traditional market of H.B.C. employees still existed, the gold rush created a whole new demand at Fort Langley. Registered departures from San Francisco to British Columbia numbered almost thirty thousand, and the actual number of adventurers may have been much greater.[124] This influx began in the early spring of 1858, and continued through the fall, when many disappointed miners left the Fraser. Fort Langley became one of the main supply points for this transient population, along with Victoria, Fort Hope and Fort Yale, and Whatcom on the American side of the border. Prior to this, even sales to strangers were conducted on a debit basis, with a line of credit established, as with McKenzie (above). Sales to the gold miners were on a "prompt sales", or cash basis, with the media of exchange either gold or American cash. The change took place as early as April 1858 when Douglas reported to W.G. Smith in London:

> Chief Trader Yale reports that parties are proceeding up Frasers River towards the gold diggings almost every day. A brisk trade is therefore springing up at Fort Langley where our sales for Cash and Gold dust valued at 16 dollars an ounce, have produced a sum of 4353-1/2 dollars since the 15th of February last. The arrival of so many strangers is unpleasant but until Her Majesty's Government authorizes me to prevent their entrance into the country we are obliged to make a virtue of necessity and to turn them to advantage especially as they do not interfere with the Fur Trade and we wish to make Frasers River the avenue to the gold districts and to secure if possible the whole of their trade.[125]

At the same time the report above was written, plans were going ahead for the development of a new sale shop to accommodate the anticipated demand. On April 27, 1858, along with the materials and contractor to complete the new shop, Douglas forwarded 1,000 2-1/2 point and 1,000 3 point blankets "to meet contingent demands."[126] In the two months ending May 10, 1858, the sale shop had taken in 336 ounces of gold dust and $5,000 in cash.[127]

The new, specialized clientele required some different stock in the sale shop. This had been anticipated to an extent by the goods requested by Donald McLean at Thompson's River the summer before. McLean's order presented an

opportunity for the Langley sale shop to rid itself of a stock of sea boots, along with various types of trousers and shirts.[128] In June and July 1858, Douglas ordered from his San Francisco suppliers, Allan, Lowe & Co., goods intended for the mining market. The "standing monthly order", based on estimated sales per month was:

1,000 barrels flour in 50 lb. sacks
75,000 lbs. bacon
10,000 lbs. navy bread
4,000 lbs. pilot bread
2,000 lbs. butter
100 doz. ale & porter
10 hogsheads ditto
20,000 lbs. China suger
10,000 lbs. coffee
200 lbs. black tea
100 tin coffee pots
24 doz. dippers
2,000 lbs. cheese
100 tom irons
50 coffee mills
4 cases 10 oz. tacks
24 doz. miners' picks
24 doz. miners' shovels
24 doz. wooden pails
24 doz. camp kettles
24 doz. tin plates
24 doz. knives & forks
24 doz. hatchets
24 doz. frying pans
200 rocker irons [129]

This quantity of goods was for distribution at Fort Victoria, Fort Langley, and Forts Hope and Yale; probably about a quarter of the goods would have been sold at Fort Langley. The demand soon waned; all the items below the coffee pots on the list were deleted from the order at the end of July and beginning of August.

These goods would have made up a substantial portion of those sold through the Fort Langley sale shop. On July 23, 1858, Douglas wrote to Smith again:

> A considerable cash business is now carried on at Fort Langley. The sales are averaging about $1500 a day. The articles sold are principally Flour, Bacon, Beans and Mining Tools which we import from San Francisco, together with blankets and woolen clothing, from our stock of English goods.[130]

A shipload of goods sent to Fort Langley on the "Otter" the previous month had not been priced at a flat percentage over prime cost, but was invoiced at "the Victoria Sales Shop prices to which you are at liberty to add as large a percentage as you may consider necessary to cover the expense of transport from this place and landing the goods at Fort Langley".[131] The mark up over London prime cost noted the following April on sundries and goods for the sale shop was 43-1/3% added on goods and $12 per ton for freight from Victoria. Yale was directed to try for any price over that minimum, the additional profit to appear on Fort Langley's account.[132] Prices fluctuated at Fort Langley more in 1858 than was normal for the Company, due to changes in supply and demand. In April flour was to be raised to $9 per sack, and suger to something comparable to the 16¢ a pound charged at Victoria.[133] By November cash or "prompt" sales had decreased to average only about $230 per day.[134] Dugald McTavish advised Yale to drop his prices, again in line with those at Victoria:

> As business appears to be dull with you I think it would be as well for you to reduce somewhat that price of provisions such as Flour, Bacon, etc. at Langley in order to induce parties to purchase from you in place of coming to this place for that purpose.[135]

The value of gold and coin was less flexible, with gold, as already noted, worth $16.00 an ounce. Douglas reiterated to Yale in October, for the benefit of Newton who was running the sale shop, the value of coins:

> You will please explain to Mr. Newton that all gold pieces about the size and weight of the American ten dollars or Eagle as it is called of all Countries are only worth 8 dollars and we trust that no more mistakes will occur on this head.[136]

The prompt sales records of the Fort Langley sale shop exist for November 1858, and illustrate the types of goods sold and their prices at that time. The

complete records and accounts are printed in Parks Canada Manuscript Report Series No. 222, Appendix M, p. 262, but an example is given by the busiest day for sales that month, November 22:

1858		$	Cts
Nov. 22	1 Blue Serge Shirt	2.00	
	1 Tweed Vest	2.50	
	1 Thread	0.25	
	1/2 lb. Plug Tobacco	0.25	
	1 doz. Yeast	4.00	
	1 pr. 1/2 Wor. Hose	0.75	
	1 pr. small Scissors	0.75	
	200 lbs. Beans	12.00	
	42 lbs. brown Sugar	5.88	
	1 lb. Tea	0.75	
	5 Blue Serge Shirts	7.00	
	3 pr Com Clo Trousers	12.00	
	1 Scotch Cap	1.00	
	50 lbs. Bacon	20.00	
	500 lbs. Flour	45.00	
	50 lbs. Sugar	8.00	
	50 lbs. Beans	3.00	
	1100 lbs. Flour	99.00	
	200 lbs. Bacon	80.00	
	150 lbs. Bacon	60.00	
	1500 lbs. Flour	135.00	
	150 lbs. Chinese Sugar	24.00	
	150 lbs. Beans	9.00	
	300 lbs. Flour	27.00	
	50 lbs. Beans	3.00	
	50 lbs. Pork	15.00	
	25 lbs. Sugar	4.00	
	2 lbs. Hyson Tea	1.50	
	50 lbs. Salt Pork	15.00	
	350 lbs. Flour	31.50	

1858		$ Cts
Nov. 22	80 lbs. Beans	4.80
	25 lbs. Sugar	4.00
	12 lbs. Coffee	3.00
	2 lbs. Tea	1.50
	300 lbs. Flour	27.00
	100 lbs. Pork	30.00
	10 lbs. Beans	6.00
	25 lbs. Sugar	4.00
	40 lbs. Sugar	9.40
	1 Skein Twine	0.50
	40 yds. Drill	5.60
	1 pr. Brogans	2.50
	5 lbs. T. Tobacco	2.50
	2 prs. 1/2 Wor. Hose	1.50
	1 pr. 1/2 Long Hose	1.50
	3 prs. Serge Drawers	4.50
	2 plain Blankets 4 pts.	13.50
	2 plain Blankets 3-1/2 pts.	12.00
	10 lbs. Bacon	4.00
	1/2 Gallon Whiskey	2.50
		$ 774.93

By Gold Dust 37-1/2 ozs. $600.00

Cash 114.93

$774.93 137

Although prices had dropped by this time from their levels of the summer of 1858, they were still substantially higher than the prices charged to "strangers" two years before.

The sale shop was also supplying goods and provisions to colonial functionaries by the fall of 1858, in particular to the British contingent of the North American Boundary Commission, under the command of Captain Haig, based at Sumas. These goods were sold more in the fashion of traditional H.B.C. retailing; a credit was established with the depot in Victoria, and the requisitions of the military were debited against it. In some cases extra goods over and above those available at Fort Langley were sent in from Victoria.[138]

The day to day operations of the sale shop in 1858 are not well documented. Thus it is not known whether the employees of the Company were allowed to browse and select goods as described by Anderson, or simply make up a year's requisition, which would then be filled for them, as described by Huggins. Clearly with the internal debit system, it would be necessary to establish the individual's available credit before any purchases were made. The situation at Fort Vancouver observed by F.X. Matthieu in 1842 involved the establishment of credit in one building and the distribution of goods requested from another.[139] A hypothetically comparable situation at Fort Langley would have involved an employee going to the Big House office to talk to one of the gentlemen about salary, available credit, and sale shop needs, and then heading to the sale shop with either a detailed list or a general chit for credit, to be exchanged for goods.

As noted, cash or prompt sales were the main type of transaction in the sale shop in 1858, apparently peaking in the late spring or early summer. In spite of the demands of this trade, the "inconvenient" second storey sale shop in Structure O continued to serve throughout the year. The cash sales probably did not require the same amount of bookkeeping as debit sales, but the Company still seemed to follow its conventions. Kinahan Cornwallis described the process of purchasing provisions at Fort Victoria in 1858:

> In purchasing from the company the buyers formed in a line, as at the land sale, only presenting a more composed aspect, in front of one of the whitewashed buildings of the Fort, which I have described in an earlier portion of the work; while in an office at the upper end of it, an order was written by one of the clerks, with a slow and serious certainty, authorizing the store-keeper to deliver the required amount of pork or beans, sugar or tea, as the case might be. On receiving this, the favoured recipient rushed off to another building of the Fort, of the same size and shape as the other, having a door and two windows on the ground floor, and there took up his place in the line, as at the first building. At length the door would be reached. The party would then present his order to a ruminating-looking individual, opening it to the extent of five inches, after which he would quietly shut it again. After time had elapsed sufficient to discharge a schooner, the desired articles would be as quietly handed

> out through one of the windows appointed for that purpose, and so the methodical door opening would be repeated till four o'clock, when the company's stores and offices were closed, to be opened at ten A.M. on the ensuing morning.[140]

The process described by Cornwallis corresponded closely to that noted by Matthieu at Fort Vancouver, and likely represented the last gasp of traditional H.B.C. retailing, as practiced at all Western posts prior to the gold rush. A rather different process was described by the editor of the Alta California in Harper's Weekly, who must have visited Fort Langley sometime in the summer of 1858. He described the activity he saw in and around the Structure O sale shop at that time:

> The door is scarcely opened when the small space allotted to customers inside the building is filled with people, and from that moment trade is unceasing, and a continuous stream of coin flows into the till of the company until noon, when a bell rings and business ceases at once. Everybody leaves the storehouse, the doors are closed, and all hands go to dinner. At the end of an hour business is resumed again, and the same dull and monotonous routine is gone through with until six p.m. when again trade is brought to a dead halt, the crowd disperses, and the business portion of the day is ended.[141]

This description makes it sound as though the prompt sales at Fort Langley in the summer of 1858 required a much less involved process than traditional H.B.C. retailing. This simplification would have allowed more sales more quickly, as well as minimizing the accounting required, and made perfect sense in light of the demands of the market.

In economic terms, the effect of the gold rush was to elevate the sale shop from a minor factor, producing about $420 gain in all of Outfit 1856, to the major earner for the Company, with sales of over $1500 per day in 1858. Due to the miners' demand for supplies, the Euro-American retail function was briefly transformed into the most important pursuit at Fort Langley.

Storage Function

As a mercantile organization, a secondary requirement of the Hudson's Bay Company in support of its retail activities was provision of secure storage for stock. This was particularly important in the remote posts which only received a limited amount of manufactured stock each year. The available goods had to provide the means of acquiring exportable products such as furs for the full "outfit", or business year.

At Fort Langley after 1848, with the assumption of the depot role, this storage aspect became particularly important. Not only Fort Langley goods had to be stored, but the post became a centre for the receipt and redistribution of the yearly outfits being sent to New Caledonia, Thompson's River, and Fort Colvile, and of the returns, particularly furs, sent out from those districts. It would appear that in the 1850s there were at least three buildings, one floor of a fourth and possibly another large building, which served as storehouses at Fort Langley. In addition, there was storage space provided in the retail buildings. The only other function that occupied similar space at Fort Langley was staff housing.

The storehouses at Fort Langley were arranged in a rank on the east side of the fort, or to the left as seen from the river (north) end of the palisade. This seems to have been a conventional H.B.C. approach; similar arrangements were found at Fort Colvile, Fort Rupert, Fort McLoughlin, and Fort Simpson,[1] and probably other Western Department posts, all of which had the storehouses to the left on entering through the front (facing the water) gate.

Besides this apparent convention, it has been hypothesized that the H.B.C. kept those buildings without fireplaces or chimneys separated from those which did use heating or work related fires, due the ever present risk of fire in their wooden forts. The buildings containing fires were supposedly always located downwind from those without such facilities.[2]

This hypothesis seems consistent with the situation at Fort Langley. The buildings containing fires were located to the west, north and south of the rank of storehouses, and as the prevailing wind down the Fraser Valley is easterly, this functional rationale would also seem to have applied.

The storehouses were among the most basic of the buildings constructed by the Hudson's Bay Company. The parameters for this function obviously would be dissimilar to those for residential, retail, or workshop functions, with the priority on dry, secure, easily accessible storage space. High levels of finish, provision of large window areas for interior light, and specialized interior organization, as required in other types of building, were not necessary in a storehouse context.

The storehouse function buildings will all be considered together, with elaboration of specific structures and functions as required.

Storage Structures

Identification

There is no positive contemporary identification of any of the Fort Langley buildings as storehouses. There is, however, the element of zoning mentioned above, which in both the comparative and functional cases indicates that the storehouses were on the east side of the fort enclosure. It shall also be seen, in the later sections on building configuration, that the evidence in comparative nineteenth century iconographic sources, as well as the one remaining original structure at Fort Langley (K), tends to support this storehouse identification.

Specific reference to stores and warehouses at Fort Langley is found in an inspection report from late 1861; there is unfortunately no reference to location, only to the "fearful state" of these buildings.[3]

In the 1920s, with the increase of interest in Fort Langley a number of people undertook the task of defining the appearance of the fort at its height of activity. Jason Allard provided much of the information for these writers. In the material generated by him or derived from his information, the storage

function was consistently assigned to buildings on the east side of the fort. For instance, the June 1920 sketch plan (figure 2) described the "still standing" building (Structure K) as a storehouse, as well as a two storey depot at the south end of the rank, which equated to Structure O, and a large warehouse between. This plan showed three rather than four buildings in this rank (see figure 1), and also identified the south building in the west rank as both carpenter shop and storehouse.

The September 1920 plan and references (figure 3) drawn by Allard himself provided more information. This also seems to be a more accurate plan; general configuration, number of bastions, building descriptions, and so on correspond well with other sources, particularly the McColl plan (figure 4) which was unknown to Allard, and not "rediscovered" until 1956. This plan showed an extra structure in the east rank, which was bounded by Structure K (DD on the plan), "Ration Shop", and Structure O (E on the plan) a "Depot Two Story" and contained three other "Ware Houses". The building at the south end of the west rank, Structure B (H on the plan) was identified as a "Large Two Story Ware Ho.".

The secondary sources, whose information was derived largely from Allard, sometimes jumbled the identification of buildings, but as late as 1937 John Gibbard still referred to warehouses "all along the Eastern side of the fort."[4]

In the 1920s Aurelia Manson, the daughter of James Murray Yale, described Fort Langley in general terms, independent of Allard. Viewed from the Big House, she placed the "stores on the right of the Fort", or the east side.[5]

Based on the information above, a storage role may be assigned to a number of the 1858 structures at Fort Langley. The available data point towards Structures K, L, and M all having been storehouses, with a reasonable probability that Structure K was the provision storehouse. This particular identification has been supported to some extent by archaeological investigation under this structure carried out in early 1984, as part of the stabilization process. Almost no artifacts were found in this excavation.[6] A provision storehouse would not produce many archaeological artifacts, so the negative evidence supports this identification. It is difficult to draw any firm conclusions about the specific storage roles of Structures L and M, in the complete absence of any documentary information, and only limited archaeological investigation.

Structure O contained a sale shop on the second floor, and probably its first floor housed the depot function. This would have been a logical activity to have included in the same structure as the sale shop/equipment shop; both personal and company requisitions could be assembled and baled in one location.

The role of Structure B in the 1850s is less certain than any of the above. The instructions in April 1858 to fit out the first floor of this structure as the new sale shop stated that it had been serving a transient residential function; the building "where Mr. Manson was living last winter."[7] Douglas went on in this letter to state that the conversion of the first floor would necessitate erecting another building "for the accommodation of the Gentlemen from the interior, who must this year occupy the big house", and that the carpenter doing the conversion could live in the building while working on it.[8]

Against this evidence were the Allard references to a storehouse role for Structure B. However, the two roles are not necessarily exclusive. Structure B was a large, two storey building, and the transient housing role would not have rquired much of its total volume, considering the small number of gentlemen normally accompanying the Brigades. There were precedents for the gentlemen of the H.B.C. in Columbia Department occupying temporary quarters in a storehouse, for instance the experience of Dr. Tolmie at Nisqually, where "a square of 10 feet has been taken off the store for my bedroom and like H's made very comfortable."[9]

Hypothetically, Structure B was a storehouse that was also used for other purposes. For one month in the summer a portion of its main floor was devoted to housing the interior gentlemen. This would have required only a small part of the space available in the building. The whole second floor would have been unaffected, and with the rest of the first floor would still have provided a great deal of storage space.

Direct Evidence

Structure K, the only remaining Hudson's Bay Company building at Fort Langley, provides a good example of storehouse construction. However, it has been heavily modified over the years, so it will be profitable to examine the earlier evidence available concerning its configuration as well as that to be found in the actual fabric of the building today.

This latter evidence, of course, establishes the overall configuration of the building. It is of post on sill construction; four bays by two bays, one and one-half storeys tall, with a hipped roof. The building measures some 15.7 metres (51'6") long by 7.1 metres (23'3") wide by 7.1 metres (23' 3") tall to the peak of the roof. For measured drawings of the structure as it is today, see figure 15.

The earliest evidence for Structure K is found in the McColl plan of September 17, 1862 (figure 4). The location of the appropriate structure relative to that of the present-day Structure K has been confirmed by archaeological research. The existing palisade was constructed on the site by using the McColl plan as the pattern, and Structure K as the referent. The 1979 archaeological excavations confirmed the accuracy of the palisade placement, and hence the undisturbed location of Structure K relative to the 1862 structure.[10] This was further confirmed by the under-building archaeology of January-February 1984, which yielded no evidence of movement.[11]

The McColl plan exhibits one quirk; it shows Structure K to have scaled about 15.7 metres (51') by 6.1 metres (20'). This is roughly one metre narrower than the observed width of the building today; 7.1 metres (23'3"). The length of the building is accurately shown. The same anomaly is exhibited in comparing photographs of Structure J, the only other 20th Century survivor, to its width as plotted by McColl. This indicates some error of drafting or surveying rather than a major structural change, such as the presence of two different buildings on the same site since 1862.

Structure K appeared in the Frederick Dally photograph (1867 or 1868) of Fort Langley (figure 8a). It was a one and one-half storey building with small second storey windows immediately under the eaves and a hipped roof covered by three courses of bark fixed by four batten boards. There is no evidence of any chimney, nor of any whitewashing.

By early 1872, the building was being fitted out as a sale shop. This involved a new "shingle" roof, a new door from the old sale shop, and the addition of interior fittings such as shelves and counter.[12] This signalled the end of the 1867-1868 configuration, which, in light of the lack of post-1858 activity at Fort Langley, was probably the same as that of a decade earlier.

This conversion would have entailed changes beyond those referred to above. As noted in Chapter 2, a sale shop would have had a greater need for light, so along with a new door, one would expect installation of larger window sash. This would follow the pattern of the 1858 sale shop conversion in Structure B.[13]

The various changes to Structure K have left traces of the "original", pre-1872 configuration, primarily in the form of anomalous door and window framing upright posts. These posts, in the west wall of the building, give evidence for the pre-1894 configuration of this wall (see figure 16 for the 1894 configuration, with similar door/window locations to the present day). The tops of these posts define a consistent level approximately 203 cm. (80") above the top surface of the sill; the post in the south bay extends from that level to the sill (figure 17). The other two, in the two centre bays (figure 17) extend down 86 cm. (34") below this 203 cm. (80") level. These post dimensions and heights are within 1 cm. (1/2") of these currently defining the door and first storey window openings in the north bay (figure 15). This would indicate that before 1872 these now redundant posts defined window and door openings of the same pattern and size as those which are still found in the north bay; the window openings some 86 cm. (34") tall by 70 cm. (27 1/2") wide, and the door openings about 203 cm. (80") tall by 99 cm. (39") wide.

The second storey window openings in this wall show no evidence of modification; through comparison with those openings shown in figure 8a, in 1867 or 1868, it is safe to assume that they remain in their pre-1872 configuration.

No contemporary evidence exists for the presence of openings in any wall other than the west one before 1872.

Early twentieth century photographs, combined with structural evidence in the building today, show that in normal H.B.C. style, the second storey plate was immediately above the window and door openings. This means that the historic second floor was at a height comparable to the modern one.

A hypothetical reconstruction of the west elevation of Structure K in the pre-1872 period based on the evidence above is found in figure 18. There is little available evidence for details of the interior of Structure K. Mrs. Kathleen McAllister remembered playing in the "log building of the old Fort" as a child in 1893. She described the interior:

> Great planks had formed the ceiling of the one large room and, at the same time, the floor of the upper part; these planks were no longer in place but slanted to the partly broken floor and were liable, at any time, to drop into the decaying cellar.[14]

Although this description post dated 1872, the floor/ceiling description was consistent with storehouse practice. Under floor archaeology in 1984 did not confirm the presence of a cellar. There was an irregular depression in the southwest quadrant of the building, but it had none of the elaboration normally associated with a cellar.[15]

Next to the south in the rank of storehouses was Structure L. The McColl plan (figure 4) provided the only contemporary evidence for this structure. It shows up in none of the iconographic sources, and did not survive into the post-H.B.C. period.

Scaled from the McColl plan, Structure L was about 15.1 metres (49' 6") by 6.0 metres (19' 10"), and was located 9.7 to 24.8 metres (31' 8" to 81' 2") south of the south wall of Structure K, and 0.2 metres (8") west to 5.8 metres (19' 2") east of the west wall of Structure K, following the axes of the latter building.

Structure M, next south of Structure L, was shown in the E. Mallandaine sketch of December 15 1858 (figure 12). It was a post on sill structure, five bays by two bays, one and one-half storeys tall, with a gable roof covered by three courses of bark. One doorway stood in the centre bay of the west wall at ground level, and another in the west bay of the north wall, reached by a short stairway. The doors themselves were of simple vertical plank construction. There were four small window openings in the other bays of the west wall which appear to have been covered by shutters. There were no openings in the upper portion of the building, although there was some sort of detail visible above the plate in the north gable end, which could have been an extended post, an opening, or another feature. It is not clear if the horizontal gable end infill was squared timber or plank, but no chimney was shown on the structure.

The approximate overall height of Structure M as shown in this sketch was7.2 to 7.8 metres (23'6" to 25'), and about 4.0 metres (14'6") from the ground to the top plate.

On the McColl plan, Structure M was shown as 19.9 metres (65' 4") long by 6.0 metres (19' 10") wide, and was located some 38.2 metres (125' 5") to 58.1 metres (190' 9") south of the south wall of Structure K, and about 0.2 metres (8") west to 5.8 metres (19' 2") east of the west wall of Structure K, following the axes of that building.

Archaeological investigation in 1979 exposed a shallow depression capped with north-south oriented wood planking "within the perimeter of Structure M."[16] It was concluded that this feature was not a cellar, but had been produced by floor planking slumping into a natural depression. The artifacts recovered beneath the planking were consistent with mid-nineteenth century material, but not really diagnostic of any specific use pattern.[17]

The structural envelope of Structure O has already been extensively discussed in the "sale shop" section (above pp. 30-39) so further examination is not necessary. However, it is worth repeating that the general configuration of this structure, and Structure B, was quite different from that of the other storehouses at Fort Langley in terms of size, roof configuration and material, and other details.

Structure B was shown in the Mallandaine watercolour sketch of Fort Langley of January 7 1859 (figure 5) as a large, hipped-roof building, with no chimneys evident on the west or north faces of the roof.

The McColl plan showed Structure B as about 18.5 metres (60' 9") by 13.1 metres (42' 11"), located 68.4 metres (224' 5") to 86.9 metres (285' 2") south of the south wall of Structure K, and 41.4 to 54.5 metres (135'10" to 178' 10") west of the west wall of Structure K, following the axes of the latter building. The McColl plan also included a landing or porch on the west side of Structure B, about 5.2 by 1.8 metres (17' 2" by 6'), and located 6.4 to 11.6 metres from the south end of the building. This feature was reached by a stairway to the north.

The Frederick Dally photograph of 1867 or 1868 (figure 8b) showed more details of Structure B. It was a full two-storey post on sill building, apparently five bays long. The landing shown in the McColl plan provided access to a second

storey doorway in the centre bay of the west wall. Window openings and shutters were visible on the second storey in the two southern bays, with openings directly below on the first storey. There also seem to have been two openings showing indistinctly below the landing. The openings on the first storey were much larger than those on the second storey. In turn, these second storey openings were smaller than those in the Big House, Structure A, to the right. The landing itself was supported by three posts, which extended upward to a railing. The overall height of Structure B, scaled from this photograph, was about 9.1 metres (30'), of which about half, 4.6 metres (15') was roof height. The peak of the roof was about 7.0 metres (23') long, and the pitch of the roof on the south face was about 5 in 6.

The exterior of the building was not whitewashed in the photograph, but there was paint applied to window and door facings, shutters, and the landing. The evidence of the Dally photograph casts some light on the 1858 instructions: "We propose replacing the present windows by the large sashes now forwarded per 'Otter'."[18]

It would seem that this larger sash was only installed on the first floor, as this floor alone was converted to a sale shop. The conversion meant not only that there were larger windows on the first floor after May 1858, but also a door located in the centre of the south elevation of Structure B.[19]

The instructions and "Specifications" for this conversion (see above p. 32 for details) suggest that the whole first floor of this building was outfitted, but not used, as a sale shop/equipment shop for most of 1858. A hypothetical layout of this first floor arrangement, based on the above specifications, is shown in figure 26.

Remains of the north and west sills of Structure B were located during the 1979 archaeological investigation. This evidence placed the north side of the building roughly 0.5 metre (1'8") south of the location shown by McColl and the west side of the building about 1.9 metres (6'3") east of the location shown by McColl.[20]

The chronology of Structure O has already been established. That of Structure B was probably similar. Accepting the hypothesis that Fort Langley expanded from north to south, given that Structure B was one of the three important buildings south of a major jog in the palisade (figure 1), and that these three structures were of larger, more elaborate configuration than the

other buildings of Fort Langley, a date of construction later than 1840 is likely. This was supported by the Jason Allard "Reminiscences", which stated that Structure A, the Big House, was "built in the early forties."[21]

The iconographic sources prove that Structure B was present as late as 1867 or 1868. Its demolition probably related to the reorganization of buildings carried out in 1871-1872 by Ovid Allard. To provide building materials, he suggested that "the balance of the wood could be taken from the old buildings."[22] This demolition and salvaging of materials through the winter of 1871 - 1872 probably involved Structures A, B, and O.

Following the hypothesis above, Structures K, L, and M were probably built before the other two storehouses, being located in the part of the enclosure north of the jog (figure 1). The essential nature of storage capacity in an H.B.C. fort would also support an early construction date. These buildings were erected early in the construction following May 1840 before Simpson described the new Fort Langley: "The establishment... has since then been built on a larger scale."[23] However, the first evidence for their presence is found, in the case of Structure M, in the Mallandaine sketch of December 1858 (figure 11), and in the cases of Structures K and L, in the McColl plan of September 1862 (figure 4).

As noted above, Structure K survived to be converted into a sale shop in 1872, and in turn outlived the Hudson's Bay Company era at Fort Langley. It is, in greatly modified form, the only remaining H.B.C. structure on the site today. No evidence exists for the continued existence of Structures L and M after 1862 and their demolition date is unknown.

The presence of Structures M, O, and B in 1858 was confirmed by iconographic material from that year. There is no such evidence for Structures K and L, but the level of activity at Fort Langley after 1858 would not have required the development of new buildings within the palisade prior to 1862. There were already more old buildings in the fort than were required. However, some rearrangement may have taken place in this period. A report in the Vancouver Daily World in August 1915, based on interviews with Joseph Maayo and Jason Allard describe Fort Langley, which then had:

> ...two block houses, now used as cow barns and chicken houses. The houses are still in a fine state of preservation, having been reconstructed out of the heavy timbers of the older buildings,... The old block houses now standing were rebuilt in '59.[24]

These two buildings were Structures J and K. If they were rebuilt in 1859, it was probably on the sites of two earlier buildings, and may in fact simply have involved partial disassembly and the replacement of rotten timbers. An 1859 reconstruction of these buildings would also offer an explanation of their anomalous hipped roofs compared to the other smaller buildings in the north end of the fort. Finally, a late rebuilding could explain why these two buildings were selected by Allard in 1871-1872 to be saved, when all the other buildings were demolished. In 1859, it was suggested that the clerk in charge "find material from some of the buildings inside the Fort" to develop structures outside the palisade.[25] It would seem that some of this material was also used to rebuild structures inside the Fort.

Indirect Evidence

Documentary references to H.B.C. storehouses were rare. However, there are iconographic materials available relating to these buildings, as well as two remaining Western Department storehouses other than Structure K at Fort Langley; one at Fort Nisqually, and one at Fort St. James.

There was a variety of building types serving the storage function at Fort Langley in 1858, from comparatively small one or one and one-half storey gable roof buildings to large two storey hipped roof structures. As noted above, an overall distinction may be made between those buildings south and north of the major jog in the palisade, with the larger, more elaborate buildings to the south (figure 1). The buildings shown within the palisade in the north end of the fort, Structures C, D, E, G, J, K, and M were all one or one and one-half storeys, and all had gable roofs with the exception of Structures J and K. The hipped roofs on these two buildings in 1867-1868 may relate to a late reconstruction, as suggested above. By the later 1850s perhaps the hipped roofs of Structures A, B, and O were used as models, rather than the gable roofs standard in 1840. Structure L remains an unknown due to the lack of iconographic information. Based on the surrounding buildings, its location would suggest it was a one and one-half storey, gable roofed post on sill building.

A great deal of construction information concerning a one and one-half storey hipped roof storehouse is available from the modern Structure K; it will be profitable, then, first to examine some of the gable-roofed structures, such as Structure M.

Figure 7 shows the gable end of Structure G in 1862. It was clearly filled with horizontal planks rather than squared timber. Horizontal planks as gable end infill were also used at Fort Colvile (figure 19) and at Fort Rupert (figure 20). Figure 7 also gives details of the bark roof covering that was apparently common to all the structures in the north end of Fort Langley as late as the 1860s. This confirms that cedar bark was used, and gives construction details for the building inside the fort, and the roof of the structure in the foreground.

The gable ended storehouses at Fort Colvile in figure 19 provide good comparative information. The larger building to the right was identified as a storehouse, and that to the left as a fur store.[26] The storehouse was almost exactly the same plan size as Structure M at Fort Langley, and was also of a height consistent with the latter structure. Scaled from the human figures, the window and door openings appear to have been almost the same size as the "original" openings in Structure K. The lowness of the doorsills is relevant, as is the garret access in the left gable end of the smaller fur store.

More detail on the construction of a small H.B.C. storehouse is provided by the as-found drawings of the building from Fort Nisqually (figure 21). Notable features include the framing of both the walls and the gable roof, the double, arched door, and the window opening sizes, again nearly identical to the "original" openings in Structure K at Fort Langley.

Documentary sources describing "small" Western Department storehouses yield more information. The storehouse at Fort Colvile shown in figure 19 was described as "25 by 77 feet, and twelve feet high... has two partition walls, (and) first and second floor", while the smaller fur store was said to be a "warehouse 25 by 42 feet, and ten feet high, built similarly to the storehouse, except partitions."[27] A visitor to Fort Colvile in 1859 recalled a few years later having been "in the attic of the building, looking at some furs."[28]

In the Thompson's River journal, John Tod described the construction of a storehouse with two floors and a bark roof in the winter of 1841.[29] From the

Fort Simpson journal of May 1842 to June 1843 come descriptions of "cutting knees for the beams of the Store,"[30] as well as digging a "provision cellar" under the provision store. This cellar had flooring installed before being used to store "casks of salt fish &c."[31]

The Western department convention of using planks to fill gable ends is confirmed at Fort Rupert, where the 1849 journal describes sawing and planing planks for the "gable ends of Mens Houses",[32] and also at Fort Simpson, where in June 1855 the men "finished boarding up gable ends New Store".[33] Some information about H.B.C. storehouse interiors comes from Nanaimo, where in 1856 three men "commenced lining the store",[34] and at Fort Rupert where in 1849 the men were engaged "putting up shelves in the Store".[35]

Large storehouse or storehouse/sale shop buildings were found at Fort Vancouver (figure 14), Fort Victoria (figure 22), and at a later period, Fort St. James (figure 23). Common elements may also be noted in these structures; they were all two full storeys tall, had hipped roofs (belled in the case of Fort Victoria), and showed some of the expected responses in terms of window size and arrangements.

The Fort Vancouver storehouse (left) and sale shop (right) although nearly identical structures, show in their window arrangements the different requirements of their functions. The storehouse had small window openings, probably about 91 cm. (36") tall by 79 cm. (31") wide, with no facings or embellishment, filled with nine-pane sash, and protected by simple side-hung shutters. The sale shop had twelve over twelve pane double hung sash on the first floor, of very large dimensions, and sixteen pane sash in much smaller openings, with side-hung single shutters on the second floor.

At Fort Victoria, the "Store House Sale Shop" may be differentiated from the "Store Houses" behind it not only by the Hudson's Bay company plan and valuation of buildings, but by the abundance of large windows in the former building.[36]

At Fort St. James the remaining large storehouse (figure 23) was built in 1888, and was apparently a depot and storehouse on the first floor, and fur store on the second initially.[37] Although it was constructed at a very late date, many of the details seem to follow mid-nineteenth century H.B.C. convention, so examination is worthwhile. The framing details of this structure (figure 24) are

relevant to the larger buildings that were at Fort Langley; it should be noted that there were originally central support pillars and a longitudinal beam for support of the second floor joists. The second storey, "fur store" window openings in this building are of nearly the same dimensions as those noted in the storehouses at Fort Langley, Colvile, and Nisqually, and are filled with nine-pane sash such as were seen in the Fort Vancouver storehouse. Larger sash, although still nine-pane, is installed in the first floor window openings.

Interior finishes are also of interest; "The ground floor consists of planks, finished on the upper side only, nailed to the floor joists."[38] The second floor is "tongue and groove boards, hand planed on both faces, nailed over continuous joists."[39] The flooring on the first and second floors is noted as being respectively 5 cm. (2") and 4 cm. (1½") thick.[40]
This building is

> lined with original, vertical tongue and groove spruce boards planed on the exposed face. The boards are nailed to furring strips that run parallel to the filler logs. At each structural post along the walls the lining is interrupted and the hewn Douglas fir is exposed flush with the match board sheathing.[41]

This lining is found on both floors; however neither floor is ceiled (figure 25). The two exterior doors of this building are constructed of vertical tongue and groove boards on the outside, and horizontal or diagonal boarding on the inside (figure 26). They both show ghosting evidence of former stocklocks, about 30 cm (12") by 19 cm (7½").[42]

The Fort Victoria Journal of 1846-1850 described large storehouse construction, beginning in May-June 1846: "The beams of Store #6 tenoned and mortised into the posts and beltings and the whole erected and filled up with Wallpieces - bound with Wallplates and six upper beams 8 pairs of Rafters also put up".[43] A main door and window shutters were made up and installed on the same building by October of that year,[44] and the next month it was noted that 2 inch boards were being pit sawn to provide flooring for "new stores".[45] In January and February of 1848, "hatchways" were being put in stores 5 and 6, presumably for second storey access. This also involved squaring four pieces of wood thirteen feet long and twelve inches square to make the "store ladd[r]".[46]

These large post on sill structures sometimes required extra support; almost two years after they were built, oak knees were being installed in "Nos. 5 and 6 to support the beams and posts of those buildings".[47] Flooring was being produced for the Granary at Fort Victoria in August and September of 1848. This involved dressing the edges of the planks "with the axe", and then grooving them.[48] It was also noted that the sale shop, which was of the same basic pattern as the storehouses (figure 22) also had at least its "upper flooring tongued and grooved".[49]

A new large storehouse was constructed at Fort Simpson in 1855 for which there is a fairly complete record. Its configuration closely followed the conventions already described. Externally, this building had "projecting pieces for roof", or a belled roof, doors made of planed boards, which were painted along with the shutters and "door steps".[50] The shutters covered windows, the exterior seams were plastered, and a "lining or facing" was installed around the front door.[51] On the interior, some iron knees were used between posts and beams, the floors were of sawn plank, a ladder or steps were installed "inside front", partitions were installed (part of the building was to serve the "Beaver"), a cellar was present, and the building was "lined".[52] In January 1856, a "Storeroom" was fitted out in the "Big Store", and wood was prepared "to make a frame for the Iron to lay on".[53] In 1861 as well as the front steps the men were "making a new gangway for the Store", which would have provided easier access for heavy goods.[54]

Conclusions

The information presented above permits some tentative conclusions to be drawn with respect to the configuration of the various storehouses at Fort Langley in 1858. These conclusions will vary in detail depending on how much evidence pertains to each of the structures concerned.

Definition of the historic Structure K is facilitated by the evidence left in the fabric of the extant building. This, together with the Dally photograph (figure 8a) gives a good idea of the appearance of the building before the 1872 modifications. The only element which may be anomalous is the hipped roof. The 1858-1862 period iconographic sources show all visible structures within the palisade, north of the jog, to have bark-covered gable roofs. This anomaly cannot be resolved at present, but may relate to a later (1859) reconstruction.

The general configuration of Structure K followed the conventions seen in other Western Department storehouses. It had small window openings,.of a size that would be neatly filled by nine pane sash utilizing the 7 by 9 inch or 7½ by 8½ inch glass sizes noted in Fort Langley inventories.[55] Following the pattern of the better documented storehouses, these window openings would have had simple side-hung shutters, such as those in figure 13. It had doorsills immediately on top of the building sills, which would have allowed easy access into the building.

The first evidence of a heat source in the building appeared in December 1879 when Henry Wark, then in charge of Fort Langley, was told to "get a stove at New Westmr. from Mr. Cunningham, if you require one for the Store."[56] This later addition was supported by the appearance of a stove pipe thimble shown in historic photographs of Structure K (figure 17), which was obviously an afterthought. The underfloor archaeology revealed no hearth or fireplace features, as would have been required for a permanent heat source .[57]

The obvious suitability of this configuration for storehousing, and its unsuitability for other purposes, with the lack of a fireplace or heat source, low light levels, and low levels of finish, supports the documentary identification as a storehouse.

Structure L is more difficult to define, given the almost total lack of evidence. It seems likely that it would have followed the Fort Langley "small" storehouse pattern of being a post on sill structure, one and one half storeys tall, with a cedar bark covered roof. Speculation on possible roof configuration is complicated by the hipped roof on the adjacent building, Structure K, rather than the gable roof expected in the north end of the fort. This building would likely have followed the storehouse convention of small window openings, possibly with nine pane sash and shutters. However, in the absence of evidence, only speculation based on comparative structures is possible.

Structure M, better served by iconographic evidence, was definitely typical of "small" H.B.C. storehouses. It was a one and one-half storey post on sill structure with a cedar bark covered gable roof, and no evidence of heat sources. It had the low level of exterior finish expected, apparently with no window or door facings, and simple plank doors. Based on the doors of the Fort St. James warehouse, other comparative examples, and those described in the saleshop "Specifications" above. these doors would have had an outer layer of 2.5 cm. (1") vertical tongue and groove planks backed by a horizontally arranged layer of the same material. The window openings were small, as expected in a storehouse; it is likely that they were the same dimensions as those in Structure K, 86 cm. (34") tall by 70 cm. (27½") wide. Similarly, the door openings probably were about 203 cm. (80") tall by 99 cm. (39") wide, following the example of Structure K. Given the height of the building, a second floor would have been expected, but the absence of any second storey windows refutes this.

Based on comparable buildings, the gable end infill was of planks rather than hewn timbers. Gable end openings were present in other buildings, but the feature shown in figure 11 can not be defined with any certainty.

Details of finish in these small storehouses may be extrapolated to some extent. The exterior doors would have probably followed the pattern noted above for Structure M. Floors would be 5 cm. (2") thick random width pit-sawn softwood planks, with at least those on the second floor tongued and grooved. Although the Nanaimo H.B.C. "store" was apparently lined, there is no evidence in the original fabric of Structure K at Fort Langley or in the Fort Nisqually storehouse to indicate this practice was generally followed. The interior finish in both these buildings was just the inner surface of the structural wall. The possibility of shelving is raised by its presence in the Fort Rupert storehouse. This would however, be dependent on the types of goods being stored, methods of packaging, and length of time stored. Shelving would seem more appropriate in a "destination" post such as Fort Rupert, where all goods would ultimately be utilized, than in a "depot" post like Fort Langley, where most of the goods were being sent on, either in original or newly made up packaging. Second storey access was presumably provided by "ladders" or steep stairways of simple pattern. As the Dally photograph (figure 8c) shows the Big House and associated

kitchen to have been the only painted buildings as late as 1867-1868, and Structure K shows no evidence of having been painted during the H.B.C. period, it follows that none of the three "small" storehouses were painted in 1858, with the probable exception of windows, doors and shutters.

The large storehouses, Structures O and B, were basically larger elaborations of the three buildings above. The overall configuration of Structure O has been covered above (above p. 3), so only interior and other details, particularly as applied to the first floor, will be reviewed here. There the large arched doorway providing ground level access to the first floor was noted (figure 12). A very similar doorway is found in the Fort Nisqually storehouse (figure 21), where it is filled by a double door, with an overall height of some 2.1 metres (7') by a width of 1.5 metres (4'11"). This provides a good prototype for the Structure O door; the style and location would have provided access for bulky goods, as required by the depot function. The north door opening was filled with a plank door, of the pattern discussed above.

The window openings on both levels of this structure were the same size, and larger than the storehouse norm. This reflects the higher light levels required for its function. The depot role on the first floor involved unpacking and packing of goods rather than simply storage. The exact size and configuration of the window openings and sash can not be determined from available evidence.

The first floor in this building would have been the conventional 5 cm. (2") pit sawn, random width softwood planks. The probability of a wood lining in this structure has already been established with details following those in figure 25. However a separate ceiling probably was not present on the first storey, the second storey joists and planks would have been exposed. Some form of inside access to the second floor also would have been provided, probably a simple stairway such as that in figure 28.

Structure B also reflected its changing function, or at least intended function in its configuration. This building was apparently five bays long but the number of bays in the width is unknown. The overall width of the building was some 13.1 metres (42'11"). Allowing 0.3 metres (1') for each upright post, this could have required either three or four bays. At Fort Langley the post on sill structures normally had bay lengths between 3 and 3.4 metres (10'to 11') in

building ends. Three bays in Structure B would have meant filler timbers about 4.0 metres (13') long; four bays would have given a bay length of some 2.9 metres (9'6"). As the latter figure is closer to the normal range, it seems likely that Structure B was four bays wide.

The width of this structure also would have required some form of central support such as that formerly in the Fort St. James warehouse, with central longitudinal beams under both sets of floor joists, supported by a series of pillars. This would have produced a span for the joists of roughly 6.1 metres (20'), a more acceptable figure.

Exterior door arrangements on this building can only be speculated on. In May 1858 as part of the sale shop conversion, the sale shop door had to be cut "about the centre of the building in the end next the Kitchen".[58] Presumably this was the 1.2 metre (4') wide door "in two halves" which was described in the "Specifications" for the conversion (above p. 33). In 1867 or 1868 a second storey door was present on the west side of the building (figure 86), reached by a stair and landing. In 1858 prior to the sale shop conversion, there must have been one or more main floor exterior doors. As every other building shown in the fort in contemporary illustrations (figure 12) or remaining at a later period (Structures J and K) had a door or doors facing the central yard of the fort, Structure B would have had such a door. Structure O, with its similar positioning, role, chronology, and central, arched doorway (figure 12) provided a good hypothetical model for Structure B. A building this large would have had more doors, but their locations cannot be determined.

The small, shuttered and undecorated window openings on the second floor of this building, as opposed to the large openings with light-coloured facings on the first floor, perhaps reflect back to the 1858 instructions to replace "the present windows by the large sashes now forwarded".[59] The specifications enclosed with the above instructions referred to twelve windows "to be fitted with outside facings hinges etc. complete".[60] Only the first floor was converted to a sales shop at this time, so only this floor needed the higher light levels afforded by the larger sash. Judging by the number of first floor windows visible in the wall section shown in figure 8b, and the total of eighteen bays that were present in Structure B, probably all twelve of the larger windows with facings were installed on the first storey. This would explain the appearance of

the building in Figure 8b, and would suggest that this configuration dated from May, 1858. In early 1858, the windows on both floors were probably of the same size and pattern, similar to those of Structure O. The second storey windows are fairly typical of the ones used on the other storehouses examined. It is difficult to estimate exact size, but they were probably in the range between those in Structure K and those on the upper floor of the Fort Vancouver saleshop (figure 14). The latter structure correlated well to Structure B in terms of window configuration, with similar sizes on the first floor for the retail area, and on the second floor for the storage area.

The general level of finish in Structure B would have been similar to that in Structure O; 5 cm. (2") thick random width softwood plank floors, with at least the upper floor tongued and grooved; 2.5 cm. (1") tongue and groove random width softwood planks as wall lining, vertically arranged (as in figure 25); no ceilings installed on either level; and internal second storey access provided by a steep, simple run of stairs (figure 28). It is possible to extrapolate a rough layout for the first floor of this building, from the sale shop specifications, as well as the existence of a partitioned baling room towards its north end (figure 27). Prior to the sale shop conversion, some sort of partitioning probably was present in the building to define the residential areas provided for the gentlemen of the brigades.

In all the storehouses, security was an important element, hence the use of shutters and strong, simple doors. These doors would also have had some sort of locking capability. The stocklocks noted on the warehouse at Fort St. James would seem a viable solution, but there is no definite evidence for their use at Fort Langley.

Some provision for moving heavy goods from floor to floor was also probably present in at least some of the above buildings. In the 1840s, when "articles in use" were noted in the Fort Langley inventories, "2 sets Blocks and Ropes" were listed in 1843,[61] decreasing to "1 pr. pullies and Rope" by 1848.[62] These items may have related to the above functions; if so, this would likely have also involved some sort of hatch in the second floor of the relevant building(s) as well as "a hoisting Beam in Garret", as was found in the Big House at Fort Simpson, where the second floor was used as storage space.[63]

Storehouse Operations

1858 was the last year that Fort Langley served as the inland depot, and also the last year that the storage space within the palisade would have been fully utilized. The final expansion of storage space probably related to the assumption of the depot role in 1848. Other events in 1858, particularly the sale shop conversion of Structure B, compromised the storehouses, but by the end of 1858 the storage space was no longer required.

The smaller storehouses, Structures K, L and M had probably served this function from construction, c. 1840, through 1858. The putative function is supported by location, documentary evidence,and known configuration unsuitable for any other usage (in the case of Structures K and M). The three general classes of items that were stored at Fort Langley in the 1850's were provisions, retail stock, and furs and other incoming goods.

Provision Store

The only storehouse described as containing a particular class of item was Structure K, the provision store. The documentary identification from Jason Allard (figures 2,4) of storehouse or "Ration Shop" was consistent with Company convention. For instance, at Fort McLaughlin John Dunn described "a place for holding provisions traded" adjoining the Indian shop and store on the "left" side of the post.[64] The lack of archaeological material excavated under Structure K also supports the provision store identification.

Structure K, as provision store, would have contained the variety of foodstuffs, both imported and country produced, required to feed the staff of the post and its subsidiaries. The basic provisions in the Western Department normally involved a protein and carbohydrate component. James Douglas described the basic allowances in an 1850 letter:

The dietary of the Country is as follows at the Companys establishment west of the Mountains -

3 lb. of Salt fish 2 lb of potatoes	one days ration
3 lb. of Salt fish 1½ lb of Flour	one days ration
6 lb. of Fresh Salmon or Codfish 2 lb. of potatoes	one days ration
4 dried Salmon	one days ration
10 lbs. Fresh Salmon or Codfish	one days ration
8 lbs. Fresh Venison	one days ration[65]

These provisions could all be produced "in-country", at negligable cost to the Company. In the retail section it was noted that "luxury" provision items such as tea, sugar and so on were popular choices for the servants in the sale shop. Sometimes such items were granted as part of the provisions, as to the British miners at Fort Rupert. Only about a year before his description of the "dietary" above, Douglas had granted these men:

> ...14 lbs. Flour, 10½ lbs. beef or venison or in lieu as much Salmon fresh as should be equivalent. 1 lb. Sugar, 4 oz.-tea, 3 Gills of Rum per week. Which he said was as much as any could destroy.[66]

The provision store would have housed not only the basic rations of the servants, but all of the foodstuffs required for the operation of the post. The total of these foodstuffs was listed by Archibald McDonald, in his 1830 "Report on Fort Langley". This was, as noted, to supply 3 gentlemen, their families, 14 servants, and some Indian provisions, so accordingly greater quantities would have be required by the 20 to 25 men at the post in the 1850s:

Expenditure of Provisions

Imported	lbs. flour	lbs. rice	gal. molasses	gal. rum	bush. salt
Mess - Three gentlemen including Mr. McDonald's family	915	8	6	4	
Families of Two Clerks	60		3		
					72
14 Men exclusive of 1 in kitchen	155		1-3/4	11	
Indians(Flour damaged)	275		20	2	
	1405	8	30-3/4	17	72

	Value		
Mess -3 Gentlemen including McD's Family	17	16	2
Families of 2 Clerks	2	15	9
14 Men exculsive of 1 in kitchen	18	17	10
Indians	6	11	
	£46		9

Country Produce																
Mess - 3 Gentlemen including McD's family	50	34	500	200	35	2050	310	380	52	848	18	5	75	4	235	12
Families of 2			235	40		750	230	220	35	350	12		5		40	
Clerks - 14 men exclusive of 1 in kitchen	35		1250	120	59	7350	920	4040	375	6920		12	12	3	33	
Indians																
	85	34	1985	360	94	10150	1360	4640	462	8118	30	17	92	7	308	12

Farms Proceeds	Bush. Barley	Bush. Peas	Bush. Potatoes	Bush. Wheat
	10	20	150 bu.	25

By 1852, the "Sundries" produced at Fort Langley included the following "country" provisions:

salt fish
salt salmon
fresh salmon
fresh beef
salt beef
pigs
salt pork
bacon
grease
salt butter
fowls
turkeys
eggs
flour
potatoes
hazel nuts[68]

Other foods produced in-country included ducks, geese, sturgeon, oolachins, peas and venison.[69]

All of these foodstuffs would have been found in the provision store. A variety of containers were used for these foods, with barrels , many of which were produced at Fort Langley, the most popular. The fresh meat, fish, and fowl would have just been piled or hung on hooks as at Fort Simpson. The latter was more likely. The following comments on containers are, unless otherwise cited, derived from the information in the Appendices to 'The History of Fort Langley, 1827-96' by Mary Cullen, Parks Canada M.R.S. #222, particularly Appendices F, G, and H.

Salt fish and meat were normally preserved in barrels of about 20 gallons, for the salmon described as 180 lb. and for the beef as 200 lb. barrels. Salmon was also packed in ½ barrels of 10 gallons. Pork was noted in both 200 and 300 lb. lots. These barrels were locally produced of softwood, likely fir, and would have used a mix of wood and iron hoops, with the centre hoops made of hardwood saplings, and the chine or end hoops made of iron. On the salmon barrels, iron chine hoops began to be used in 1854. By 1867 beef was to be cured in "our Salmon Barrels, which have already an iron hoop at each end."[70]

The salt butter was normally in kegs of 98 lbs., about the same size as the half barrels, and grease and other liquid or semi-liquid products were noted in 200 lb. casks. Flour was packed in 200 lb. barrels and 50 or 100 lb. sacks. Potatoes, biscuits, nuts, and other "dry" agricultural products would also normally be in barrels.

In May 1856, Douglas directed Yale that "the Salmon, cranberries, and all other exports put up in barrels may be branded very distinctly on one end with the outfit to which it belongs."[71] This process was likely followed for most country provisions. There were also letter codes for various products, including X for salt sturgeon, S for salt salmon, XS for "good but not best" salmon, H for hones, and B for butter.[72] On a bill of lading from Fort Langley for Outfit 1857, the goods were listed under $\frac{57}{HBC,}$ giving the outfit, Company, and post.[73] The provision barrels in the store would have probably been marked in the same way, with the addition of a code letter to identify the contents.

Besides the locally produced foodstuffs, "country produce" also included those items purchased in Hawaii, California, or Oregon. This class included molasses and brown sugar, packed in casks, from Hawaii; salt, from the same place, in 2 hundredweight bags or barrels; and various manufactured or farm products from Oregon and California.

Most processed foodstuffs were sent out with the outfits from England. The following list is excerpted from the invoice of "sundries" sent from Victoria to Fort Langley in May 1856.[74] The list is annotated with information on sources and packaging, when known:

<u>Provisions</u>

59 gallons	Cognac Brandy

- Shipped in casks up to 69 gallons, broken into kegs of 2 to 8 gallons for distribution; normally from Bordeaux.[75]

40 lbs	Scotch carraways
1000 lbs.	Coffee

- "Put up in a dry state in light casks", of 200 lbs.; supplied by Davison, Newman and Co.[76]

60 lbs.	Mixed comfits
½ lb.	Cinnamon
126 lbs.	Currants

- Shipped in soldered airtight tin cases of 8 or 14 lbs. and packed in wood; supplied by Davison, Newman and Co.[77]

34 lbs.	Paregoric lozenges
10 gallons	Lime juice

- 1 Keg; supplied by Burrows and Sons, C.and D. Woodman.[78]

24 lbs	Mustard

- "Durham" mustard in small clear glass bottles, from John Metcalfe.[79]

50 lbs.	Black pepper

- ground, in 1/2 lb. bottles; supplied by Davison, Newman and Co.[80]

1 lbs	Pimento
200 lbs	Rice
270 gallons	Rum

- shipped in 90 gallon puncheons.

200 cwt	Muscatel raisins

- in 5 lb. paper boxes packed in air tight tin cases ("bloom" raisins were packed in 2 cwt. barrels); supplied by Davision, Newman and Co.[81]

5 cwt	Fine salt

- 2 cwt. per cask

8 lb	Saltpetre
20 cwt.	Crush sugar

- damaged loaf sugar, supplied by Davison, Newman and Co., Webster, Simpson and Scott.[82]

8000 lbs.	brown sugar

- country provisions, from Hawaii

68 lbs.	barley sugar

- supplied by John Volckman and Sons.[83]

7 chests	Congo tea
6 chests	Hyson tea
5 chests	Twankay tea

- packed in chests of 50 to 90 lbs each.

As mentioned, this is a representative, but not exhaustive listing of English provisions. Other items worth mentioning are ale and porter, both of which were shipped in hogsheads, and also in quart and pint bottles, with respectively 4

dozen or 8 dozen to the case. Suppliers noted in 1861 included Byass for "stout porter", Bass and Alsopp for ale, and for Outfit in 1853, Gurney Dutlin for stout porter.[84]

In the early summer of 1858, due to the suddenly increased demand for provisions, standing orders were established for huge quantities of food with the Company's agents in San Francisco, Allan Lowe and Co. Although as "commission merchants" all the goods were sourced elsewhere, this company's business address of 132 Clay Street, San Francisco was technically where the orders would have originated. Although these provisions would have been sold quickly through the sale shop, some quantity doubtless would have remained in the provision store. This list is excerpted from the total monthly requisition sent by Douglas to Allan Lowe and Co. in June and July 1858.[85] Some annotations are added, but otherwise all information comes from this correspondence. Total quantities are not given, as they were for distribution through several of the Company's posts, and the intention is to provide some idea of the types of foodstuffs imported in 1858:

Flour

- in 50 lb sacks

Bacon

- in 1863 "Oregon Bacon" sent to Fort Langley was in "ten Gunnies... weighing 1075 lbs."[86]

Navy bread

Pilot bread

Butter

Ale and porter

- in bottles

Ale and porter

- in hogsheads

China sugar

- in 1861 a Chinese labourer was sent to Fort Langley to wrap China sugar "in mats of fifty pounds weight each in the Chinese fashion"; whether or not the San Francisco product was so wrapped is unknown.[87]

Coffee

Black tea

Cheese

At Fort Shepherd c. 1866 Jason Allard recalled opening 100 pound bales of cheese and repacking them into old rum barrels.[88]

The incoming food containers would have been marked in various ways, but generally included "HBC", destination codes, such as "FL", outfit numbers, and package or lot numbers.

Besides the containers the food was stored, shipped and received in, some special facilities may have been required in the provision store itself. At Fort Simpson in the 1850s, the blacksmith was "making Hooks &c for Provision H^{O}", probably to hang meat or fowl on.[89] At the same post bins had been built in the store for sugar, wheat, and flour.[90]

A normal part of the routine in the provision store was cleaning and sorting, with an eye particularly to eliminating or controlling vermin. At Fort Simpson this took the form of "cleaning and restowing Flour Bales &c in the Steamers Upper Store" to destroy mice.[91] Possibly more of a problem at Fort Langley were rats. At Nanaimo in 1856 bread smeared with rat poison was put in the store and trade shop to eliminate rats.[92] At Fort Kamloops in 1860 poison was also resorted to, as the rats were springing the traps set for them. These rats were described in such a way that it is clear the same problem also existed at Langley:

> I am sorry to say that the Langley or Norway Rat has made its appearance in this quarter and are doing injury to our Furs and Merchandise.[93]

The convention at all H.B.C. posts was to distribute the rations to the servants on Saturday. Jason Allard confirmed that this practice was also followed at Fort Langley, where Saturday was "a half holiday", with rum (and presumably the rest of the rations) distributed at noon.[94] In the post journals from other Western posts the rations were "served out", but what this involved was not made clear. At the farm associated with Fort Nisqually in the 1850s, the rations were taken around to the men in a horse wagon.[95] This was probably in part due to the remoteness of the farm workers from the Nisqually storehouses. At Fort Langley it would seem more likely that the rations were distributed from the provision store. This was certainly the case at Fort Simpson, where a "Depense" was referrred to in 1856, and equipped with blacksmith-made scales to weigh out the men's rations.[96] The rations would have been distributed by either one of the gentlemen, the chief trader or clerk, or a senior servant under the direction of a gentleman.

Fur Store

Furs were stored in the Indian trade shop at Fort Langley, but it is not known if one of the store houses served as a fur store, or if furs were simply kept in the lofts of the other stores. If a specialized fur store existed, it was likely Structure L, because of its relative proximity to the Indian Trade Shop and its small dimensions. This was the case at Fort Colvile, where the fur store was a smaller building closer to the river end of the fort (figure 19). If the convention was followed, this would tend to support the identification of Structure L as the fur store for Fort Langley.

Ranged against the possibility of a separate fur store at Langley is the case of Fort Simpson, which in the 1850s had a "fur room" or "fur loft", rather than a whole store in spite of fur returns substantially greater than those of Fort Langley.[97]

In J.K. Lord's description of Fort Colvile in 1860 he stated that "over the fur shop are large lofts for storing and drying the furs in as they are collected".[98] The strongest argument for a separate fur store at Fort Langley relates to its depot role. At some times of the year all of the inland furs, as well as the locally traded furs, would be in storage, albeit briefly, at Fort Langley. At Fort Vancouver, a huge fur store 12 m x 30 m (40' by 100') and two storeys tall, was required, primarily to serve this depot storage function.[99] It is likely that at Fort Langley, in view of the depot role, a fur store building with loft, as well as some fur storage in the Indian trade shop was provided. In the absence of other information, the most likely fur store was Structure L.

Regardless of the facility, a fur storage area would have been fitted out in a specific fashion at Fort Langley as well as other forts. The Fort Simpson journals describe several of these details. In 1857 the blacksmith and his assistant were making nails on which to hang marten skins in the fur loft.[100] The fitting out of a "new" fur room in 1859 - 1860 involved whitewashing the room, installing "ladders" and wooden boxes, and "laying ropes".[101] In late 1861 a wooden frame was built in the fur room "to air Martens on".[102] The "ladders" referred to in the 1859 - 1860 outfitting may have also been frames of some sort for hanging furs.

The operations of the fur store involved both local furs and those brought down by the brigades. In the case of the local furs, they would have been stored in the Indian trade shop on an interim basis before being shifted to the fur store. To dry the furs further in these facilities, they would have been hung from nails, frames of some sort, or ropes, as noted at Fort Simpson. John Hussey in his study of Fort Vancouver, concluded that more valuable and fragile furs, such as marten and fox, would be hung for storage, while cheaper or tougher pelts, such as beaver, were simply piled on the floor. J.K. Lord confirmed this practice in describing the treatment of the furs at Fort Colvile after trading. They were "carried to the fur room, and piled in heaps, that are constantly turned and aired".[104]

The furs may have been taken outside in good, dry weather and beaten or aired occasionally. This process would definitely occur before the furs were packed, in the late spring at Fort Langley. At Fort Simpson the larger skins, such as bear, were taken up on the gallery to air and beat them, but skins were also beaten "inside the old Store and Garrett Big house".[105] The beating and airing of the furs was a practice always observed before packing furs, whether they were coming from the fur store or repacked from other bales. At Fort Vancouver in the 1830s John Dunn noted "scores of Canadians beating and cleaning the furs from the dust and vermin and coarse hairs, previous to exportation".[106] The same process was noted in the Fort Victoria journal of the late 1840s, where all incoming furs were beaten and aired prior to packing.[107]

In the 1850s furs from Fort Langley were shipped to Fort Victoria in three forms of packaging: bales, cases, and casks.[108] The number of packages shipped in the 1848 - 1858 decade ranged from the 5 or 6 sent out in Outfit 1850 to about 40 in Outfit 1857, based on total fur returns for these years and those invoice lists available.[109] From the 1840s to the 1850s the size of the bales of furs from Fort Langley remained fairly standard. Skin weights of beaver on Puget Sound were stated to be about 1-1/2 to 2 pounds, and of bear about 7 to 8 pounds.[110] Approximating other skin weights from these, the bale weights packed in Outfits 1843 and 1844 were around 200 to 250 pounds.[111] Some of those packed in Outfits 1852 or 1855 were probably lighter, but most were in the same range.[112] The cases packed in Outfits 1851 and 1852 were probably about 100 pounds in weight.[113] From the existing invoices, it seems that the Fort Langley returns

were normally packed in "mixed bales", with more than one variety of skin in the package. On the invoices, most of the bales include some bear skins, while the cases do not. As inferior bear skins were noted as one of the standard wrappers, and were alway available at Fort Langley, it is likely that the bales were normally wrapped in these skins.[114] There was no listing of steelyard balance beams in the Fort Langley inventories through 1848.[115] This could simply represent an oversight in the inventories, or could mean that the bale sizes at Fort Langley were just estimated by numbers of skins and bulk rather than specific weight. It is not clear why some furs were packed in wooden cases rather than bales, as considerable extra work was required to build the cases. They contained marten, which were also the types packed in barrels. This last-named package was used in an attempt to preserve the furs better on their long sea voyage, with the liquor vapours driving away insects and other vermin. A description of Company fur rooms in the Victoria Gazette of September 1858 made reference to the furs being freely sprinkled with a decoction of rum and tobacco while being loaded into barrels for shipping.[116] The barrels used for fur packing were large "puncheons" which had held rum shipped from England.

The type of press or presses used at Fort Langley is unknown. The use of all of the three main types, lever, wedge, and screw was recorded west of the mountains. Both Fort Victoria and Fort Vancouver had screw presses in the 1850s, and apparently Fort Nisqually did also at one time.[117] There are references to wedge presses at Fort Simpson in the 1830s. John Work described such a press in 1835 at that post:

> It is a wedge press we have, and it presses the packs well but takes like all its kind, a great deal of time, and we make but slow progress with it.[118]

Edward Huggins described a wedge press at Fort Nisqually in 1855:

> ... a small press was made by one of our Canadian carpenters. It was a primitive affair, but answered all purposes. Its pressing power was the wedge, and it made a compact, strong bale...[119]

The third variation, the lever press, was seen at Fort Colvile by J.K. Lord in the early 1860s. There is no way at present to state which sort of press(es) was at Fort Langley. The strongest hint is that the man supervising the pressing

of the goods at Fort Nisqually in 1855 was Yale's son-in-law, and former clerk at Fort Langley, Henry Peers.[120] It is possible that the press was also built under his supervision, following the example he had used at Fort Langley.

It is likewise unknown if the press at Langley was indoors or outside. At Fort Nisqually there was a "press room" where the packing work took place.[121] At Fort Simpson in October 1856, the men were "employed at indoor work as before, and packed all Furs on hand 0+ 57".[122] Thomas Lowes' Fort Vancouver journal of the preceding decade is somewhat ambiguous. In September 1844 George Roberts was "busily engaged packing the Furs while the fine weather continues", a reference which certainly implies outdoor packing.[123] In June 1846, however, Lowe himself was "employed in the Fur Store" packing marten skins in puncheons for shipment to Fort Victoria.[124]

Douglas sent instructions to Yale in 1854 which seem to state that the packing location was of secondary importance compared to the need to keep the furs dry:

> The great point is to have them thoroughly cleaned and perfectly dry when packed. The Casks in which the small Furs are packed must also be as dry as heat can make them otherwise the Furs will be destroyed and serious losses ensue. If the weather is at all damp the furs should be well aired and packed in a house where fires are kept constantly burning.[125]

This last direction would mean that potentially, at least, the packing process could have occurred in residential buildings, or workshops, as the only buildings supplied with fireplaces or stoves. The nature of fur presses was such that they could be quickly built, in the case of wedge or lever styles, or moved, in the case of screw types, so the primary directive of keeping the furs dry could have been followed in spite of the need for a press. The need for a vermin-free environment was also demonstrated at Fort Vancouver, where in 1844, although the packing was weather-dependant, it was necessary to clean and wash the fur store "preparatory to packing".[126] Some two years later at Fort Victoria a fur store was selected from the available buildings:

> ... that Store being the lightest we have got and being at some distance from the grain, is the best place for keeping the furs free of moth.[127]

Through the decade 1848 - 1858 many more furs would have passed through Fort Langley en route to Fort Victoria than were actually produced there. The brigades normally arrived with their fur returns at the end of June or the beginning of July. In the spring of the first year of depot responsibility, Yale was directed as to what to do with the furs when they arrived:

> As soon as the Brigade arrives at Fort Langley, the packs of furs must be opened, dusted and carefully stored, until they can be sent to Fort Victoria. We have directed Mr. Finlayson to send you ten empty fur Puncheon to repack the martens and small furs, preparatory to shipping them from Langley.[128]

In August 1854, the furs arriving at Langley were to be opened, but apparently not repacked:

> I hope the furs have all been opened and well aired as I believe those from Fort Simpson were not in very good condition, and require to be closely looked after...
>
> We propose to pack the Furs at this place (Fort Victoria) in the latter part of Summer and not at Langley...[129]

Two months later, the plan had changed:

> Mr. Simpson now proceeds to Fort Langley for the purpose of packing the Furs for England. He was employed in that service last year and the Furs reached home in a high state or order.[130]

Again in October 1855 George Simpson was sent to Fort Langley to direct the airing, cleaning, and packing of the furs "as they ought to be."[131] By 1857 the furs were apparently sent straight through:

> Provided the packs of Furs are sound and dry it will be better not to open them at Fort Langley, as we propose bringing them on to this place (Fort Victoria) by the Otter; but should any of them exhibit a suspicious appearance, they should be opened and dried at once.[132]

When and if the furs from the interior were unpacked, they were treated in exactly the same fashion as the local furs. The same airing, cleaning, and beating were required, particularly if the furs did "exhibit a suspicious appearance." At Fort Vancouver it was the responsibility of the men from the interior to take care of this cleaning. In June 1846 Thomas Lowe noted "the men of the Brigade busy dusting and unpacking their furs."[133] After the inland furs

were unpacked they became the resonsibility of the Fort Vancouver servants; at the same time Lowe was responsible for packing the New Caledonia furs for shipment out. Whether kept in their bales or unpacked, the fur returns of the inland posts (and on some occasions coastal posts, judging by the reference to Fort Simpson) were kept separate from the Fort Langley returns. During the 1850s, the inland furs remained at Fort Langley from the late June arrival of the brigades until George Simpson arrived to prepare them for shipping out in early October. In 1853 and 1855 the "remainder" of the furs was picked up in December.[134]

Edward Huggins described the treatment of the furs from the Colvile district on the one occasion (1855) they came to Fort Nisqually:

> This valuable lot of Furs were turned over to me, and I had fifteen men already selected to watch them. There was a lot of work to do with these furs, in exposing them to the air, and beating and getting them ready for making up larger bales for shipment to Victoria. Amongst the lot of Furs received were a large number of "Foxes", "Marten", and "Mink", small, but valuable furs, and constant watch had to be kept over them, to prevent peculation. Indians, and sometimes, even whitemen would be caught in trying to get away with a valued "marten". Some of the furs had been slightly damaged in crossing the many rivers along the route, but I was surprised to see them open up in such good condition as they did.[135]

The returns from the inland posts were normally packed in smaller, 90 pound bales, or "pieces", for ease of transportation. Other than their size, these bales were much the same as those packed at Fort Langley, normally made up of mixed skins. An attempt would be made to distribute each type of fur as evenly as possible throughout the shipment, to minimize losses in the event of missing or damaged bales. Some idea of inland bale contents may be gathered from the following examples, taken from fragmentary New Caledonia and Fort Alexandria invoices respectively:

No. 25	44 Lar Beavers
	25 Sm ditto
	10 Martin
	6 Cats
	4 otters Sm [136]
No. 17	A Pack Cont'd
	1 Black Bear
	36 Large Beaver
	10 Small do.
	1 Fisher
	50 Martins
	5 Minks
	1 Otters [137]

In the case of the New Caledonia invoice, no special wrapping skins are evident; all the Alexandria bales except one include one black bear skin, which would have provided the wrapper. Another fragmentary invoice of New Caledonia fur packs also includes at least one black bear skin with each bale.[138] It seems that the standard cover for the bales received at Fort Langley was also a black bear skin or skins.

The bales were held together with pack cords, which were of both country manufacture, in the form of hide strips, and of imported line. They were of some value to the Company; in 1851 the packcords from Colvile, removed from the bales at Victoria, were returned to Fort Langley to be forwarded to Covile.[139]

The inland bales received at Fort Langley, as well as those made up there, would have each been marked with a symbol identifying the Company, the post of origin, the bale number per the accounts, and the outfit. Typical marks on a bale shipped from Fort Langley in the summer of 1858 would have been:

57
HBC #1 etc.
FL

Fur bales received at Fort Langley would have had different abreviations for their districts or posts of origin, but the pattern would be the same:

57

HBC #1 etc.

NC (New Caledonia)

The bales could be marked in many ways, including paint and stencil, or with attached staves, or small wooden signs, but the most likely method was branding, as noted for the salmon barrels. At Fort Simpson at the end of August 1855 the blacksmith spent two days "making a Brand HB for Fur packs"; and less than a month later the servants "finished Branding all the Fur packs Cases and Casks."[140] Whether the bales were branded on the wrapper skins themselves or on a stave is unknown. Burn brands bearing the HBC logo have been found by archaeologists at Fort Langley, so the same technique probably was used there.

Also packed and shipped with the fur returns of the inland posts and Fort Langley were castoreum, the scent gland of the beaver, and isinglass, the dried swim bladders of sturgeon. Insinglass from Fort Langley in the 1850s was packed in casks of various sizes from 54 to 148 pounds, cases of 1 hundred weight (112 pounds) and in bales with furs.[141] This represented comparatively few containers; the total weight exported per year in this decade varied between 149 and 688-1/2 pounds.[142] Castoreum was only included in the Fort Langley returns in 1856 and 1857, with a total of 8-1/2 pounds in the latter year.[143] Substantial quantities were sent from the interior posts. A shipment of 26 pieces from Fort Alexandria included two kegs of castoreum, each of which contained 40 pounds.[144] These commodities were shipped as part of the fur returns, so the containers of isinglass and castoreum would have beeen marked in the same way as the fur bales, cases, and barrels.

The fur returns from the interior were accompanied by invoices listing all the furs in each package. These lists were prepared as the furs were packed at the individual posts. The same sorts of lists were also prepared for the furs packed or repacked at Fort Langley. The responsibility for these invoices normally fell on the staff of the post of origin, but it is possible that George Simpson, as the clerk responsible for much of the depot and packing activity at Fort Langley, assumed this responsibility as well. In November 1854 Simpson returned to Victoria with "the Documents connected with the packing of the Furs in Depot at Fort Langley."[145]

Goods Storage

Besides provisions and fur returns, the third major class of item stored at Fort Langley was made up of those manufactured goods required by the Hudson's Bay Company at Fort Langley and in the interior. These made up the "stock in trade" of the Company; all the articles required for the Indian trade and the EuroAmerican sales, as well as the materials required for building, maintenance, and ongoing operation of the posts themselves. The majority of these items were manufactured in England or elsewhere and imported to the Departmental headquarters in Victoria, from where they were forwarded to Fort Langley. A certain number of commodities, particulary iron goods such as axes and traps, were produced at Fort Langley itself. Depending on demand the manufactured goods in storage at Fort Langley remained in the stores for a period ranging from a few days to several years.

The goods received at Fort Langley were supplied in response to the requisitions put in by the individual posts for each outfit. The term "Outfit" was used by the Company both for the business year, which ran from June 1 of one year to May 31 of the next, and for the total complement of goods required for its operations each fiscal year. The gentlemen in charge of the posts would attempt to anticipate what they required for the operation of their business for a full fiscal year. The ultimate responsibility for coordinating these requisitions, determining whether or not they were to be filled, and arranging for the purchase or manufacture of the goods lay with the departmental Board of Management in Victoria.

When the English and "foreign country made" goods (the items from Hawaii, and other points en route) were received at Victoria, they were split into the district or post "Outfits", based on the requisitions. The schedule for the distribution of the outfits was based on the demand of the fiscal year and the timing of the annual brigade from the interior, which was determined as much by the time of the spring thaw as anything else. Prior to Fort Victoria becoming the headquarters and Fort Langley the inland depot, the packing and shipping of the inland goods was all done at Fort Vancouver, immediately in advance of the brigade's arrival in late June.[146] At this time the total responsibility of making up the outfits fell of the staff of the headquarters. Thomas Lowe noted the activity in July 1846, when he and another clerk were receiving the shipment from England:

> I was employed all day in the Stores opening the New goods, and making out an Outfit for Mr. McKinlay at the Willamette Falls, as Mr. Roberts is busy receiving cargo from the Admiral Moorson and Vancouver.[147]

By the end of the 1840s, and through the 1850s, the Western Department outfit was arriving at Victoria in the early part of the year. The goods for Outfit 1857, through May 1858, arrived in Victoria on January 15, 1857; Douglas wrote to Yale at that time:

> I am happy to inform you of the safe arrival of the "Princess Royal" from London with the Western Department Supplies for Outfit 1857, which have all been safely landed; and she will God willing, soon be able to take in the Furs preparatory to her return voyage.[148]

In 1849 and 1850 the Outfits for the inland posts and Fort Langley were packed in the first three months of the year at Fort Victoria. The packing of the New Caledonia Outfit began on January 15, 1849 and 100 of the roughly 125 packages in the outfit were "packed and pressed" five days later.[149] "Everything for Langley" was shipped on March 29 that year.[150] Packing also took place in February and March 1850 at Fort Victoria, and the outfits for Fort Langley and the interior were shipped via the "Cowlitz" on April 19, 1850.[151] The next two years the oufits were sent in installments in February and March, as they were packed in Victoria.[152] The shipment of February 22, 1851, sent on the "Mary Dare" included 58 packages for New Caledonia and 21 packages for Fort Langley, as well as 1013 barrels of salt and 2 tons of coal for Langley.[153] From the time the goods were received at Fort Langley until the end of May they simply would be kept in storage as received from Fort Victoria. On May 11, 1855 Douglas wrote to Yale that the goods for Fort Langley and the interior were to remain "in store as they are until Mr. Simpson goes up to pack the Outfits".[154] Also in the month of May, the paperwork for the outfits was sent to Fort Langley; in 1850 the interpreter's wife was used as a courier:

> Willing's wife left this morning for Langley and brought the Oil Cloths for New Caledonia and Colvile and all the papers connected with the Outfits of the Interior and Fo Langley were forwarded by her.[155]

Willing's wife only delivered the invoices for these Outfits, as the bills of lading had been included with goods for "Fort Langley, the equipment shop and Districts of the Interior" which were shipped on May 7 and consigned to Yale.[156]

Goods were shipped from Victoria to Langley at various times of the year. Douglas sent many of the supplies for the interior and Fort Langley, Outfit 1851, in August 1850, almost a year before the outfit began:

> I have shipped... a great part of the supplies for the Langley Sale Shop, with the ammunition, tobacco and sugar for the Interior and a part of the Fort Langley supplies for Outfit 1851. These goods will all remain in depot, and will not be included in your inventories of this year; as we will bring them on the General Depot Inventory. I send 35 new oak kegs which you will fill from the puncheons in course of the winter for the interior Districts. Materials for oil cloths are also sent which should be made up in the autumn. If you require the salt this year, you will open an account in Books with Outfit 1851 from which it may be transferred and so with the Broad Axes or anything else you may require.[157]

Unless these goods were required at Fort Langley, they would have stayed in the stores as received for the better part of the year. Some goods for shipment, however, would only be completed immediately before the arrival of the brigade, such as the ironwork required in 1856. Douglas wrote to Yale on May 6:

> I herewith transmit a statement of the Axes and other made up Iron works required this season to complete the Outfit for the interior district. You will please to get the same prepared at your earliest conveniences and in time for the Brigades.[158]

George Simpson was responsible for the organization of the outfits at Fort Langley as well as the fur returns. Typically, he would arrive in late May or June, and remain through to the departure of the brigade in late July to assist "with the Brigade and other summer business."[159] These responsibilities included "packing the Outfits for the Interior and putting up the Servants orders". Yale was to provide him with any assistance required.[160] Simpson also packed any goods not required immediately in the district or by Fort Langley for storage in the Fort Langley Depot. In July 1853 Simpson packed the remnant of the Colvile Outfit, blankets and capots, in "large cases", after Yale selected

what he wanted from the depot supplies. These were kept on the "Fort Langley Depot Inventory", and not charged against Fort Langley in the "District Book", but had somehow disappeared by March 1854.[161] In 1852 a "List of Pieces left at Langly (sic) Belonging to New Caledonia" was prepared, with many items, including some from Outfits 1851 and 1849.[162] Presumably these items were also kept at Fort Langley in depot until sent to the district that owned them, or redirected to another district by the Board of Management.

As with the outgoing fur returns, not all the packages of the inland outfits were repacked at Fort Langley. The packing account of the New Caledonia outfit for 1853 lists 122 numbered packages. Of these only lot numbers 98 to 122 have the annotation "To be repacked at Fort Langley".[163] The only apparent difference between those items to be or not to be repacked involved the type of containers and fragility of the contents. Most of the 20% of goods to be repacked was in rigid containers, like cases or barrels, rather than bales, and many of them contained goods that could be broken or damaged in shipping. The repacking may have been a way of checking condition before sending goods inland where there was little hope of replacing broken items. It is also possible that cases were not the best container for packing on horses, and required some change. As the total of the inland outfits was about 250 pieces, if this repacking ratio is followed, perhaps 50 pieces were repacked at Fort Langley. If 100 pieces could be packed and pressed in five days at Fort Victoria, half that quantity could have been done easily enough at Fort Langley in the time available. In addition to the goods of the outfits, the servants' private orders were also packed and pressed in the same way at the same time. In Outfit 1854 20 bales were used for the New Caledonia "Servant Orders", so perhaps 70 bales were packed in total for the three districts.[164]

Edward Huggins described some of the preparations in 1855, when the Colvile brigade, which normally came to Fort Langley, visited Fort Nisqually instead to escape American taxes on goods:

> We - at Fort Nisqually made preparations for packing the goods for the interior posts long before the arrival of the brigade of horses bringing the furs, and a small press was made by one of our Canadian carpenters. It was a primitive affair, but answered all purposes. Its pressing power was the wedge, and it made a

> compact, strong bale, each bale weighing eighty pounds, two of which made a load for a horse... Some of the goods couldn't be pressed, and such were put in strong boxes... it was deemed of such importance that the goods should be properly packed, that a man well acquainted with the process of packing should superintend the work, so accordingly Mr. "H.N. Peers", an old officer, then in charge of the Company's establishment at Cowlitz, was ordered to come and instruct me, in fact, to take charge of the work.[165]

The materials used for packing the bales and quantities charged to New Caledonia for Outfit 1852 were:

70 yards 42 inch tow hessiens
55 lbs. Manchester baling line
2 skeins seaming twine
1/2 dozen darning needles
1-1/2 quire stout cartridge paper
1 quire wrapping paper
1-1/2 skein Holland twine [166]

Comparing the quantity of the above supplies charged against New Caledonia to the 42 bales on the 1852 packing account gives some idea of how each bale was packed.[167] Each bale required 60" by 42" of hessien and about 1-1/3 pounds of baling line as the main external components. This amount of fabric per bale would allow a bale size of roughly 3-1/2 cubic feet, which would closely approximate the fur bale sizes noted by Hussey of 3 to 4.4 cubic feet for 80 and 90 pound bales respectively.[168] The goods and furs were packed in bales of exactly the same size. In June 1855, 200 yards of hessien was sent to Langley depot.[169] This would have wrapped about 120 bales of the above size, giving some further idea of the amount of packing going on in preparation for the brigades. The "Charges" only included 9 cases rather than the 14 on the packing account and 32 kegs rather than 40. The difference may indicate re-use of old kegs and cases from the district in question. The goods received in the stores at Fort Langley were entered on the books, and marked, in several fashions. The largest single group was made up of those items in depot. This included the articles which were to make up the Outfits of Fort Langley and the inland posts.

Although these items were often sent to "Langley Depot", it is not clear whether or not this was a real entity. In Douglas' letter of August 1850 cited earlier, he instructed Yale not to include the goods in depot in the Fort Langley books, as they were included in the "General Depot Inventory". This process is clarified by the Outfit 1852 Inventory of the Fort Victoria Depot, which includes a subsection, "The Following at Langley".[170] Until the goods in depot at Fort Langley were brought onto the books of one post or another they were considered Fort Victoria or departmental depot stock. These depot goods were assigned to specific outfits, but apparently there was selection process available to the gentlemen in charge of the posts; a remnant of the 1853 Colvile outfit was left in depot at Fort Langley after "the goods wanted for the use of Fort Langley" had been selected by Yale.[171] These depot goods were shipped to Fort Langley throughout the year, and were normally marked with LD for Langley Depot, and a lot number; sometimes an outfit year was also included.

The next largest group was the goods packed in Victoria for the specific district outfits. These have already been discussed at some length. They would normally begin arriving in February, and by the time of the arrival of the brigades there were some 200 or more inland pieces ready to go, to which would be added the servants' orders packed while the brigade was at Fort Langley. The markings on these packages would included the Outfit number, destination, and lot number; for example $\frac{52}{NC}$ #1 for New Caledonia, $\frac{52}{TR}$ #1 for Thompson's River, and $\frac{52}{C}$ #1 for Colvile. Most of these goods were packed in Victoria, but some were repacked, and some selected and packed from the depot goods at Fort Langley. These goods, being the property of other posts and only temporarily at Fort Langley, would not appear on the Fort Langley books.

Finally, there were the goods to be retailed at Fort Langley, through the Indian trade shop and the equipment or sales shop. The two branches of the business were kept separate both for purposes of shipping and storage, and for bookkeeping. These goods, were sent in the same way as the inland Outfits, with markings of the same sort; $\frac{52}{(F)LES}$ for the sales/equipment shop, and $\frac{52}{(F)L}$ for the Indian trade goods. These articles would also remain the total responsibility of Fort Langley, so inventories would be done at least once year, and used to base the requistions on. Having the goods in depot on site would simplify the problem

of keeping a stock of goods for the full year on hand, as compared to the inland posts, which had no such opportunity. Numerous examples of the types and quantities of goods contained in the shipments to Fort Langley may be found in the "Appendices to 'The History of Fort Langley 1827 - 96'" by Mary Cullen (Parks Canada M.R.S. #222), specifically Appendices F, G, and H, and inventories of goods in store for the Indian and Euro-American retail trade in Appendix E.

Depot Activity

The busiest period annually at Fort Langley was the time of preparation for, the arrival, and the departure of the brigades. Although the brigade system was intended only to transport goods and fur returns back and forth between Victoria and the inland posts, the social aspect always seemed to have been paramount. The wife of the clerk, Emmeline Newton, remembered the arrival of the brigade as a "break in the monotony", but appreciated the reason the interior gentlemen visited:

> with their year's trading of furs and returned with the necessary articles of barter for the following year, blankets, guns, ammunition, shawls and all things dear to the Indian heart.[172]

C.C. Gardiner, a miner from Prince Edward Island attended the brigade ball, but also noted the business aspect:

> During my stay there what is called the Brigade Train, happened to arrive from New Caledonia, a country situated west at the foot of the Rocky Mountains, for whom quite an interesting Ball was given, as a welcome for their annual visit; the great number of furs which they bring going to prove their last year's success in trading with the savages in that desolate part of the country.[173]

J.R. Anderson described what he remembered of his arrival at Fort Langley with the brigade of 1850:

> Yale was at the landing to welcome us and we soon were installed in quarters in the Fort;...
>
> A day or two after our arrival, the late Mr. Paul Fraser and his eldest son and daughter, Peter and Margaret arrived with the New Caledonia outfit when more renewing of old acquaintances took place. Then ensued a period of activity at Fort Langley such as only occurred at the periods I have described. The packs of furs had to be loaded on the "Cadboro" for transmission to Fort Victoria where they had to be all opened and repacked preparatory to shipment for England. The year's outfits for the various interior stations had to be prepared and packed in convenient bales for horse loads; the officers' yearly requisitions had to be selected...[174]

Charles Wilkes was at Fort Vancouver when the inland brigade arrived in 1841, and described the scene:

> During my absence, Mr. Peter Ogden, chief factor of the northern district, had arrived with his brigade. The fort had, in consequence, a very different appearance from the one it bore when I left it. I was exceedingly amused by the voyageurs of the brigade, who were to be seen lounging about in groups, decked in gay feathers, ribands &c, full of conceit, and with the flaunting air of those who consider themselves the beau-ideal of grace and beauty; full of frolic and fun, and seeming to have nothing to do but to attend to the decorations of their persons and seek for pleasure; looking down with contempt upon those who are employed about the fort, whose sombre cast of countenance and business employments form a strong contrast to these jovial fellows.[175]

Edward Huggins described the partying and competition when the Colvile brigade came to Fort Nisqually in the summer of 1855. He also noted another role for a storehouse:

> One of the large stores was emptied of goods, and it made a fine dancing hall. A room about sixty feet in length, and thirty in width, its floor was rather rough but that didn't trouble the dancers any.[176]

The strutting and posturing of the inland servants was not appreciated by Yale. He complained of this in a letter to Sir George Simpson in the fall of 1849:

> The disorderly state of the men of the interior has become if not alarming distressing and to which I in some degree attribute the mishaps that befall the Brigade. This motly set of renegades scruple not in the least to threaten on any trifling pretence and without a shadow of real provocation to desert their employer and thus keep the Gentlemen in constant perplexity of mind.[177]

The complaint was repeated three years later in more eloquent terms:

> I anticipated that the Brigades as coming from the interior would have afforded a sample somewhat in accordance with things here, but was sorely disappointed. They could not believe it possible that in a place so obscure anything good could exist, and seemed benignly disposed to regenerate the whole and thwart my whimsical propensities to uphold the ancient and idolatrous usages. The desire of disorganization, that the laws of the morality should be changed, perfidy rewarded and honesty scorned, seemed to my bewildered imagination, to prevade the land. I never in the course of my life witnessed so much ill disposition: I could not have believed it possible a few years ago that, among so few people, there could have been found so great a majority of unsteadfast persons.[177]

The number of men who made up these "so few people" is uncertain, but was probably less than the 60 men and officers who were expected in 1848.[178] William Yates remembered about 200 to 250 horses arriving at Fort Hope each year, and the furs being transferred to four batteaux, with "seven men to a boat".[179] In 1855, when the Colvile district brigade came to Fort Nisqually with 200 horses, it required 25 men to manage them.[180] The number of men accompanying the brigades to Fort Langley was probably between 25 and 40.

Huggins went on to describe the inland servants:

> The men accompanying "MacDonald" were a cosmopolitan crowd. There were Scotchmen, French Canadians, Halfbreeds, and Iroquois Indians. The foreman was a Scotch highlander, ... The Candians were strong, wiry fellows, and amongst them were men who had been in the employ of of the company for nearly fifty years. The Iroquois, or half breed Iroquois were the best looking men in the band.[181]

William Yates saw a similar group every year at Hope, en route for Langley:

> The boats crews were a mixed crowd - Indian, French Canadians and Whites.[182]

This group would stay at Fort Langley for about one month, from the end of June to the end of July. In this time the furs and goods were exchanged, the private orders were selected and packed, and James Douglas "came from Victoria to renew employees' contracts, receive reports from the officers and discuss arrangements for the following year".[183] In 1857 the brigades from New Caledonia and Thompson's River arrived on June 27.[184] The Colvile returns were using Fort Hope as the terminus that year, and the "Otter" was to leave for Fort Langley in the second week of July, to deliver any final orders required, pick up the inland returns, and carry Douglas to Langley. Douglas wrote to Yale on July 1:

> In the mean time, let the work proceed as usual, that is equipping the men, and completing the remainder of the Outfits, so as to have everything as far advanced as possible before my arrival.[185]

Douglas remained at Langley between July 8 and 15 that year, carrying on the business required, primarily to do with the affairs of the inland posts for the next Outfit. William Yates remembered one of Douglas' tasks during this time; reengaging recalcitrant servants:

> Sir James Douglas used to came up here because there were always some to go out. Sir James always encouraged the men to stay in the country. If a man were dissatisfied he would suggest that he go to Kamloops or elsewhere in the interior. He suggested this to me when I wished to go home, and when I refused to go to the interior he called me a hard headed Scotchman. Finally he suggested "How would it do for you to stop with Mr. Yale here - he is always good to his men "I said that is alright Sir, but I would like to go home. He said. "Your consider on it and I will be here for a couple of days longer before the steamer sails and I will send for you on the morrow and I think you will have your mind changed". So there was a Scotchman down there Jimmy Taylor just from where I came from -Strongness - he died about three months ago - and he advised me to

> engage again. I said "Jimmy I will engage for one year and no longer". Sir James sent for me the next morning and I said "Yes Sir I will engage for another year and see how Mr. Yale behaves towards me and if he treats me well I may stay longer". He said "I am glad you have made your mind up to stop at Langley".[186]

During the decade 1848 - 1858 the main role of the stores at Fort Langley was to serve the depot needs of the retail operations of Fort Langley and all the inland posts. The period of major activity in the stores related to the demands of the Company's fiscal arrangements and the vagaries of the weather in the interior of British Columbia. Most of the goods in store at Fort Langley were charged to other posts or districts, or simply to the departmental depot accounts. 1858 was the last year that Fort Langley served as the terminus of the brigades, and with the abandonment of this role many of the storehouses became redundant. By March of 1859 Yale was asking Victoria how much he could charge as rental for buildings at Fort Langley.[187] From a need to store 360 pieces of goods for the interior, and probably more than that number of packs of furs going out in the summer of 1856, there was now little need for any storage space at Langley other than that required for the remaining retail activity.[188]

The first floor of Structure O would have served as the depot storehouse through 1858. Easy access to the first floor was provided through a large, arched, groundlevel doorway. Relatively large windows (for a storehouse) would have provided high enough natural light levels to allow the depot functions of breaking down, sorting, and repackaging orders of goods. The proximity of the sale shop/equipment shop, on the second floor of the building, would have kept all the Company and personal orders which were going to the interior in one location. These elements of configuration in support of a function tend to reinforce the documentary indentification of Structure O as "depot".

In 1858, the inland brigade was at Fort Langley from June 30 until July 18.[189] With the depot activity in Structure O, as well as the gold rush retail business in the second floor sale shop, this building would have been the primary focus of activity at Fort Langley, in the summer of 1858.

Structure B, on the other hand, had begun a period of relative disuse in the summer of 1858. The second storey window configuration shown in the Dally photograph (figure 8), the Allard reminiscences, and the need for larger windows as part of the sale shop conversion, point toward an intended storehouse role. However, it is clear that before 1858 the building had been used for transient housing, both for the gentlemen of the interior brigades and others. It is unknown to what extent this would have affected the configuration of the structure. Transient housing provided by the H.B.C. was not elaborate:

> They (immigrants to Vancouver Island) were all located in the Fort (Victoria), in one or more of the large block buildings. Very little preparation had been made for their reception, excepting that bunks had been fitted up for sleeping places, as though they were still on board ship... but soon they had divisions - curtains and so forth everything was in the rough.[190]

Although this refers to quarters for independent settlers, those provided for a clerk at Fort Nisqually in 1833 were not much more elaborate:

> A square of 10 feet has been taken off the store for my bedroom and like H's made very comfortable, carpeted with mats, and tapestried with red Baize, which is necessary, as the partitions are made with round posts.[191]

These references suggest that elaborate modifications to a basic storehouse configuration were not required to provide transient housing. However, at Fort Simpson in the early 1850s, the "garrett" of the Big House was serving a storehouse function; in this case a permanent residential and storage role were combined in the same building.[192]

From the above information, it may be concluded that the primary role of Structure B until April 1858 was storage. A residential element was formally but simply defined, probably with partitions, berths, and so forth, to provide transient accommodation for the six or eight gentlemen and their families that would have been the maximum number accompanying the brigade.

From May to June of 1858, the building was undergoing renovations, with the changes ordered in the "Specification" being performed by a carpenter (and crew?) who would also have been resident in the building. As these changes only extended to the first floor, it is likely that the second floor, besides providing temporary accommodation for the carpenter, would have still fulfilled a storage role.

From mid-June 1858 to the end of the year, the first floor was equipped but not used as a sale shop. Presumably both floors would still be available for storage of goods, and perhaps also for transient housing, on an informal basis.

In each of the cases above, it may be seen that the function of a building largely determined its configuration within the overall framework of Hudson's Bay Company Western Department conventions. When the role changed, as in the sale shop conversions of Structure B and Structure K in 1858 and 1872 respectively, it was reflected in the external appearance of these buildings, primarily through the introduction of larger windows. These modifications brought the structures into line with other H.B.C. sale shops, as well as better reflecting the functional needs of the role.

Non-subsistence Food Production

Introduction

As well as the economic pursuits typical of a fur trade depot, a large part of the activity at Fort Langley was directed towards food production. This involved provisioning of other Western Department posts and export sales, the latter proving more profitable than the local fur trade at some periods. Food production included cultivation of a large farm, development of a dairy, trading and packing of salmon, and trading and packing of cranberries.

The location of the 1839 Fort Langley and the subsequent 1840 fort was determined in a large part by the requirements of food production:

> We must therefore... fix upon some other spot, alike convenient for the fur and salmon trade, combined with facilities for the farm and shipping... remember that the Salmon trade must not be sacrificed, as it will always yield a more valuable return at less trouble risk and expense than the farm.[1]

This choice, although apparently biased towards the requirements of the fishery, also located the fort closer to the 'grande prairie', first put under the plow in 1834.[2] This area, south of the Fraser, on the Salmon and Nicomekl Rivers, was to become the main centre of agricultural development over the next thirty years.

Agriculture in 1858

As mentioned in Chapter 1, the period of most intensive cultivation of this farm was in the early 1840s, but another phase of development began in 1850. This involved sending in four English labourers in May 1851 to "enlarge the Farm, subdivide it into fields of proper size and to surround it with neat substantial rail fences."[3] As these English labourers proved unsatisfactory the plan "of improving and extending the Fort Langley farm with the view of rendering it independent of foreign supplies of provisions" was defeated.[4]

The total area of land under cultivation in 1858 was not recorded and remains unknown. However, in 1845, towards the end of the most active phase of agriculture, Fort Langley was said to have had 240 acres (97 hectares) under cultivation.[5] The quantities of the major crops grown on the farm in the 1850s, such as wheat, oats, potatoes and peas also give some clue as to the cultivated area.

By April of 1851, James Douglas noted that "140 Bushels of grain had been sown."[6] Sources from the 1850s and 1860s indicate that the usual quantity of wheat sown per acre on Vancouver Island was one and one-half bushels.[7] Assuming similar conditions at Langley, and that the "grain" was wheat, this sowing would have involved some ninety acres. Douglas also noted in the same letter that trade was slow, "the Indians of the Fort being at present engaged in planting potato fields on a more intensive scale that usual."[8] It is possible this activity related to H.B.C. potato fields, but more probably to fields cultivated by the natives for themselves. As early as 1839, John McLoughlin noted that:

> the Cowegins around Fort Langley, influenced by the Council and example of the Fort, are beginning to cultivate the soil, many of them having with great perserverance and industry cleared patches of forest land of sufficient extent to plant each 10 bushels of potatoes.[9]

In outfit 1852, 100 bushels of potatoes were sent to Fort Victoria.[10] The same caveat as above applies; the potatoes could have been obtained from the local natives rather than grown on company land. However, even if exclusively H.B.C. produced, this quantity would have required only a few acres.[11]

By 1854, Fort Langley had 450 bushels of wheat and 150 bushels of peas available for export.[12] This production, following the contemporary sources, would have required respectively some 15-18 and some 5-6 acres of land.[13]

In June 1856, a substantial amount of wheat was sent to Victoria, 487 bushels.[14] This would have required a similar amount of land.[15] It would seem that the total land required for cultivation for non-subsistence crops in the 1850s was somewhere between 100 acres and the "liberal estimate" of 200 acres given by Mary Cullen in her "History of Fort Langley."[16] However, John Tod, in his "History of New Caledonia and the Northwest Coast", recalled a larger farm:

> The Co. had a farm of five or six hundred acres at Fort Langley, and raised large crops of grain - wheat, barley, oats, peas, potatoes, hogs, cattle, horses...[17]

In addition to the cultivation of crops, animal husbandry was important in the 1850s. This pursuit entailed four aspects; dairying, meat production, draft and transportation animals, and fowl.

Dairying at Fort Langley had first developed as a more than domestic endeavour in response to the 1839 provisioning arrangement with the Russian American Company. At this time John McLoughlin decided that two dairies would be established at Fort Langley.[18] The Jason Allard plan and "References" of Fort Langley (figure 3) also described two dairies, one near the fort and one on Langley Prairie. Allard also mentioned "about 50 cows" being milked. Donald Fraser, the correspondent of the London Times, commented on the "good quality of the dairy produce" in September of 1858.[19] William Yates, a former H.B.C. employee, recalled that:

> At Langley the company was in the dairy business. They had 150 head of cattle there. They were milking in my time - in 1854 - twenty five head every morning. The butter was shipped to Victoria.[20]

Substantial quantities of this butter were sent to Fort Victoria until at least 1857.[21]

Fresh and salt meat, both beef and pork, were produced for other posts as well as domestic use. Substantial numbers of hogs show up in the livestock inventories from the 1840s, for instance 250 in 1848, and pork products are noted as exports, albeit on a fairly low level, until 1857, so some hogs were present in the 1858 period.[22]

Beef cattle were definitely present in 1858. Beef, both fresh and salted, was being exported in substantial quantities throughout the 1850s, and "very tough" beef was fed to Charles Wilson, an 1858 visitor to the fort.[23] This toughness was hardly surprising considering that H.B.C. practice was to allow beef cattle to roam freely in natural meadows, and to hunt them as meat was required. This custom of "wild calf hunting" was reported at Fort Langley in 1858 by Fenton Aylmer as one of the area's main attractions.[24] The same practice was noted at other H.B.C. farms at Fort Vancouver and on Vancouver Island, where "the H.B.Co. had bands of wild cattle in the mountain ranges".[25]

Animals for draft and transportation purposes included horses and oxen. Exact numbers of horses in 1858 are unknown, but there were 23 inventoried in 1848.[26] In March 1859 horses from Fort Langley were being sold at $50.00 each,

indicating that there was a surplus available at that time.[27] It may be concluded that substantial numbers of horses were kept at Fort Langley throughout 1858.

The number of oxen is similarly unknown. One hundred and eleven were listed in 1848, and some were present in 1858 as iconographic sources show oxen used as draft animals at Fort Langley (for instance figure 5).

In support of the stockraising noted above, the Company also developed specialized pasturage. In 1850 a variety of exotic forage crop seeds were sent to Fort Langley from Fort Victoria. These included perennial and Italian rye grass, cocksfoot grass, white and red top clover, foxtail grass, rib grass, cow grass, and trefoil grass.[28] The cultivation of pasture crops must have been successful; by 1857 Fort Langley was sending 6 casks of timothy seed back to Victoria.[29] This developed pasture was apparently used for the dairy herd. Donald Fraser attributed the "good quality of the dairy produce" noted above to the "most excellent pasture" on which the herd was fed.[30]

Fowl noted in the 1840s inventories at Fort Langley include chickens and pigeons;[31] by the early 1850s items supplied by Fort Langley included geese, turkeys, and eggs.[32] Jason Allard recalled that rations at Fort Langley included geese, ducks, and pigeon pies. He also stated that "domesticated geese and ducks were kept as well as tamed turkeys".[33]

A minor interior post, Fort Alexandria, also had "fowls, turkey and pigeons" included in the livestock in the 1840s, and turkeys and pigeons were brought to Kamloops in 1842.[34] It is probable that Fort Langley had chickens, turkeys, ducks, pigeons, and geese in the 1850s.

Agriculture: Location and Structures

It has been noted that there were two centres of agricultural activity at Fort Langley; one in the immediate vicinity of the fort and one on the prairie to the south.

Donald Fraser, who was apparently only at the fort site, described "excellent pasture", with the "ground matted with grass... long and green even at this season" and other agricultural features:

> Fruit and vegetables are very abundant, and the apple trees are bending under the weight of their golden crop. The company have a farm four miles in the interior, on which horses and cattle thrive well, but not sheep - there is too much forest for them.[35]

Another contemporary visitor to Fort Langley noted a similar arrangement:

> The company have a large farm at this place, with a considerable amount of stock. The land, cleared of heavy timber, is said to produce good crops, and in the garden attached to the fort vegetables grew last summer in the greatest luxuriance, while the apple trees were loaded down with fruit. There are many little prairies in the neighborhood, which being covered with coarse grass, afford ample feed for stock as well as hay for winter use.[36]

In the spring of 1859, the farm was leased out. In the instructions to Yale it was noted that he should: "put Mr. Bedford into possession of the farm -stock of cattle, horses, etc... The above arrangement has nothing to do with the Cows and land at the fort..."[37]

Besides the animal husbandry noted at the Langley farm, it seems to have been the centre of grain cultivation. Aurelia Manson, Yale's daughter, remembered that "the men of the fort with Indian lads, used to go to Langley prairie to cut the grain which they had sown in the Spring".[38] Jason Allard, in his plan and "References (figure 3) also referred to "the grain from the Prairie".

This farm on the flats south of the fort was probably used for the cultivation of grain and raising of horses and cattle in 1858. The burning of a building on the farm in 1849 also resulted in the loss of the "whole crop of peas"; the fire was ignited by three servants who "went there to hunt fowl".[39] This reference indicated the cultivation of some vegetable crops on the prairie, confirmed by Yale's complaint of November, 1858: "On taking up our prairie crop of potatoes we discovered that some insidious animals had deprived the stalks of their roots."[40] The "hunting" of fowl not only established their presence, but indicated that they perhaps led a feral existence like the beef cattle.

A dairy on the farm, shown by Allard (figure 3) is found in the appropriate location as one of the "principle (sic) buildings erected, and improvements made on Langley Farm from September 1864 to December 31st, 1866" (figure 29).[41] Either an existing building needed replacement, or more likely, there was no dairy in that location before 1864.

One of the two dairies established at Fort Langley in March 1840 was phased out in May of the same year, and in the absence of other information, it seems likely that there was no dairy on the farm prior to the 1864 developments.[42]

Hogs were kept on the farm both before and after the target period, in 1840, and in 1866.[43] By 1869 most of them, 37 of 43, were kept on the farm.[44] It is probable that hogs were also present at Langley Prairie in 1858.

The facilities provided for these stock raising activities, and their locations in 1858 are almost impossible to determine. In 1840, during the first agricultural boom there were some substantial barns on the farm; 24.3 m x 10.9 m (80' x 36') and 27.4 m x 9 m (90' x 30'), used for storing "Farm produce".[45] By 1844, the farm was "well established with buildings and fences".[46] The building that burnt on the farm in 1849 was described by Yale as a shed "the most spacious and stable built of the sort I ever saw with an adjoining shed for thrashing in". It was used for storage of oats, peas, and animal fodder.[47] A.G. Dallas, in an 1861 memo on H.B.C. land claims in British Columbia, mentioned "all our buildings and lands actually fenced" at the farm.[48] The 1862 surveyor's notes on the farm show very few structures; only a "B.C. Ho." (Bay Company House?) and a shed, both in the north part of the farm, and some fencing (figure 30).

The above information points to the existence of some buildings on the farm in 1858, but fewer than in the 1860s. If the pattern seen in the 1840s was followed, these buildings would have been primarily for storage and processing of field crops. Some stabling for horses and cattle would also seem likely, and housing and pens for hogs. Fencing would have been provided for horses, and to protect field crops from the depradations of the semi-feral cattle. The small natural meadows amidst the heavy forest cover would have localized the herds of cattle adequately. The buildings on the farm in the 1850s were not described, but some hints of configuration are found in Company practice at other posts.

H.B.C. barns in the west usually seem to have been of substantial size. The hay barn/cattle houses built on Langley farm after 1864 were 30 metres long by 15.8 and 9 metres (100' x 52' x 30') wide respectively, with the former building two storeys tall (figure 28). At Fort Colvile in the 1860s an "old" barn 19 m x 5.7 m and 2.4 m high (63' x 19' x 8') to the plates was built in post-in-ground style, with pole wall-fill and a board roof. A newer barn, 15 m x 7.6 m x 3.6 m

(50' x 25' x 12') was "regularly framed", had vertical boards as siding and a bark roof. Both structures had dirt floors.[49] A barn at Cowlitz Farm in 1866 was 12 m x 9 m x 4.2 m (40' x 30' x 14'), of post on sill construction, with a split board roof and sheds on three sides.[50] A decade earlier at Esquimalt Farm a barn was listed as being 18 m x 7.6 m x 4.8 m (60' x 25' x 16') to the plates, with a squared timber frame, weatherboarded and "finished complete."[51] The same farm also had "3 Capital Cattle Sheds" 15 m x 18 m (50' x 60') of the same construction, and one 15 m x 3.6 m (50' x 12') cattle shed.[52]

At Cowlitz, where the barn was post on sill, there was also an "open cow-shed", with 2.4 m (8 foot) posts set in the ground, and a split board roof.[53] It seems that at least some of the barns and sheds on the Fort Vancouver farm were also open.[54] At Fort Colvile, 2 "byres" were also noted, each 19.8 m x 6 m (65' x 20').[55]

The stables at Company posts were smaller on the average than the barns. Two stables at Cowlitz farm in 1866 were of post on sill construction with split board roofs. One of the stables was 7.6 m x 9.4 m (25' x 3'), 3.6 m (12') to the plates, and the other was 4.5 m x 6 m x 3 m (15' x 20' x 10').[56] At Fort Colvile in 1846 there was only one stable 5.2 m x 3.9 m (17' x 13').[57] Stock yards were often found near the buildings for housing stock, usually of "picket" or small palisade construction. These were noted at Esquimalt Farm, where there were "5 stock yards fenced with Picket Fence".[58] At Fort Colvile there was a horse yard, 38.7 m x 26.5 m (127' x 87') and 1.8 m (6') high; solid logs, a barn yard 24.6 m x 18 m (81' x 60') and a cattle yard 25.6 m x 10 m (84' x 33').[59]

Piggeries or "Pig houses" seem to have been fairly long and narrow. The post-1864 example on the Langley farm was 25.6 m x 5.4 m (84' x 18') (figure 29), the example noted at Fort Rupert in 1857 was about 21 m x 3.6 m (70' x 12'), and that found at Fort Colvile was 18 m x 4.5 m (60' x 15').[60] At Esquimalt Farm, a labourer was given a contract for $100 "for building a Piggery 52 ft. x 16 ft., squaring the frame work and joists, weather boarding, and roofing with shingles".[61]

Poultry houses were relatively small; at Fort Colvile 6 m x 3.9 m (20' x 13'), and at Cowlitz Farm 3.6 m (12') square.[62] At Fort Nisqually there was a "hennery, 150 by 92 feet, enclosing an enclosure 44 by 54 feet; the latter enclosure having a hen-house in the middle of it".[63] At Esquimalt Farm the

"Fowl House" was 4.2 m x 3.6 m (14' x 12'), with an attached poultry yard.[64] At Fort Colvile there was also a pigeon house 2.7 m x 2.7 m (9' x 9'), but at Fort Langley, this function was assumed by the bastions.[65] Jason Allard remembered "a pigeon house on each of the four bastions of the fort."[66]

Other structures which may have been found in an agrarian context such as this include storage buildings. At both Fort Nisqually and Esquimalt farm were squared log granaries, the former 9.4 m x 6 m (31' x 20'), and three metres (10') to the plates, and the latter 9 m x 6 m (30' x 20').[67] At the Bellevue Sheep Farm, a shingle-covered shed was built for storage of oats and peas.[68] A root house was usually found at the H.B.C. farms; that at Fort Colvile was said to have been 6 m (20') square, and the new one built at Belle Vue in 1858 was covered with turf.[69]

Some sort of servants' housing was probably located at the farm; there were definitely such structures in the post-1864 development, and the "B.C. Ho." noted in McColl's field notes (figure 30) could well have been residential. Such structures were usually of hewn timber, post on sill construction, and one storey tall. The servants' houses at Cowlitz Farm were remembered as about 6 metres (20') square, those at Fort Colvile were about the same size, and at Esquimalt Farm were two houses "containing two Dwellings 40 x 20 ft."[70] Such a house would have been finished in the roughest way, and also furnished in a basic fashion.

The varieties and numbers of buildings and structures on the Langley Prairie Farm in 1858 is unknown, but probably included most of the types noted above. More descriptions may be found of agricultural activities in the immediate vicinity of the fort. Donald Fraser, visiting in 1858, noted a dairy, vegetable gardens, and fruit trees around the fort. The centre of this agriculture seems to have been the low-lying area just to the east of the bluff on which Fort Langley was built. According to Jason Allard "There were large barns and cow sheds a short distance up the river... They also had a Dairy and milked about 50 cows" (figure 3).

This was confirmed by the 1862 McColl plan, which showed two structures (5 and 6) just to the east of the fort. These were identified in his field notebook as "Cowhouses" (figure 31). This area probably contained the dairy function. It was lowlying and moist, so would produce the "excellent pasture" to which Fraser

attributed the quality of the dairy products in 1858. It was also extensively developed with structures and fencing. These features would relate more to the needs of dairy cattle than to those of half-wild beef cattle. The reference to "cows" rather than "cattle" and the high level of development points towards the Fort Langley dairy having been located in this area. The development referred to is illustrated in iconographic materials from the period. In January of 1859 E. Mallandaine in "Fort Langley N. View" (figure 5) showed Structures 5 and 6 to the extreme left of the sketch. They were large, gable roofed structures, and appear to have been clad with vertical planks; they were not of post on sill construction.

A watercolour, probably by James Alden, the artist with the American Boundary Commission in 1858-1860, shows the view east from the north gallery of Fort Langley (figure 6). This shows the "panhandle" of land to the east of the fort property to have been heavily utilized. It was divided into at least three fields, defined by post and rail fences. These were apparently used to grow forage crops or as pasturage, judging by the more intensive green colour chosen by the artist. The field nearest the fort appears to have been freshly ploughed; a furrow-like texture on a north-south axis is shown. Two structures are visible in this painting within the three "pasture" fields, that nearest the fort appears to be the residence discussed below p. 266. The structure in the far field was not clearly shown, and may be a building or simply a haystack.

More details of the residence and one of the "cowhouses" was revealed in the 1910 photograph of the C.N.R. construction through Fort Langley (figure 32). The cowhouse is towards the right, and was clad in very wide vertical planks, with no evidence of windows or doors in the visible walls. The roof was covered with seven courses of long shakes, and there was a lean-to on the far (east) end of the structure.

Structures 5 and 6 seem to have been barns associated with the dairying activity. Scaled from the McColl plan they were each about 12.6 by 7.8 metres (41'3" by 25'9"). This size was in the range noted for comparative H.B.C. barns and byres in the region. The two structures relative to Structure K and following the axes of that building were respectively 20.7 to 28.6 metres (68' to 93' 9") and 20.5 to 28.4 metres (67'4" to 93') north of the north wall of Structure K and 42.2 to 55.7 metres (138'7" to 182'10") and 172.6 to 86.1 metres (238'3" to 282'6") east of the east wall of Structure K.

The photograph, figure 32, confirms the impression given in figure 5 that these structures were vertically planked, with gable roofs. The shed in figure 32 was not shown in figure 5; so was probably a later addition. The structure in the photograph was some 7.9 metres (26') tall to the peak, and about 3.7 metres (12') tall to the eaves; the roof pitch was roughly 1 in 1. The planks cladding the building were very wide and fairly even, so would appear to have been sawn (probably pit-sawn) rather than split. There was no paint visible on the building.

The "new" dairy, constructed after 1864 on the Langley Prairie Farm comprised:

> 1 Barn and Cow and Calf House with Hay Loft combined. Of sawn lumber 100 x 50 ft. 1 Dwelling - of sawn lumber 28 x 18 ft. 1 Dairy -of sawn lumber 20 x 16 ft.[72]

The dairy at Fort Nisqually was:

> "...11 by 16 feet, protected from the sun by a shed covering the building, and extending on all sides six feet beyond it".[73]

The dairy structures noted at Fort Vancouver were also fairly small, generally 9 m x 6 m (30' x 20') or 5.4 m x 5.4 m (18' x 18').[74]

It would seem that an H.B.C. dairy required a large barn or cowhouse, a manager's residence, and a small dairy structure. This arrangement could provide an explanation for the function of Structures 7 and 10, the buildings nearest the cowhouses and residence east of the fort. Structures 5 and 6 combined were only about half the size of the single large cowhouse/barn at the new dairy. Structure 10, the same size as Structures 5 and 6, could have been another cowhouse or calf house for the dairy, and Structure 7, which measured about 3.6 m x 8 m (12' x 26'), was in the size range of the other Company dairies noted.

It is difficult to draw any more conclusions concerning the dairy structures. Structure 10 may have been built in the same style as Structures 5 and 6. Dairy structures per se were often built in association with a small creek; such may have been the case at the foot of the bluff where Structure 7 was located. Whether this convention, noted at Fort Langley post-1864 and Fort Nisqually was for cooling or hygiene is unknown.[75] One of the dairies at Fort Victoria was "gravelled" in 1848, again presumably to provide cleanliness and good drainage.[76]

In 1858 this area probably also was utilized for growing crops. The "furrowed" field in figure 5 would point towards large-scale cultivation. These agricultural areas were defined with post and rail fences. The exact relationship of structures to functions, however, is impossible to establish, with the exception of the "cowhouses" identified by McColl to the immediate east of the fort.

To the southwest of the palisade was another area defined by various types of fencing. This was shown in the Mallandaine sketch, "New Fort Langley, S. View" (figure 13) drawn in December 1858, as well as the McColl plan (figure 4) of September, 1862, which locates precisely some of the features illustrated in the Mallandaine sketch. In spite of the four years between sources a good degree of correlation exists.

Features shown in both include: a fenced area attached to the southwest corner of the palisade (Field a) - this was shown as a palisade or picket type fence in the Mallandaine sketch; two structures to the south of the above field (Structures 8 and 9); an area enclosed by a post and rail fence to the south of the structures (Field c) - and a path leading southeast from a gate in the south palisade.

Features appearing only in the Mallandaine sketch were a small structure (Structure 15) between Field a and the path leading southeast and the roof of a structure just north of Field a near the west palisade (Structure 16).

Shown only in the McColl plan was a small fenced area, Field b, which connected Structures 8 and 9 to Field a and paths which led from both sides of Field b to the palisaded area.

The Mallandaine sketch provides evidence for the existence and appearance of features in the target year; the McColl plan locates and provides dimensions for those features which were still present some four years later.

The fencing and windowless, utilitarian buildings point to an agrarian role for this area. A clue to specific usage was given in the Jason Allard plan and "References" (figure 3) which identified the two structures which relate to Structures 8 and 9 as "barn and stable".

As shown in the McColl plan, Structure 8 measured about 8.6 by 7.6 metres (28'5" by 25'1"), and was located 253.7 to 263.1 metres (832'3" to 863'3") south of Structure K, and 84.9 to 95.6 metres (278'6" to 313'6") west of Structure K, following the axes of that building.

It is shown in figure 12 to have been a small, single storey, windowless building, with a combination of horizontal and vertical cladding, and gable roof; the roof covering could have been either bark or shakes.

Structure 9 scaled to about 16.1 by 7.6 metres (52'10" by 25'1") and was located some 247.8 to 258.5 metres (813'2" to 848'1") south of Structure K and 53.3 to 70.4 metres (174'11" to 231') west of Structure K following the axes of that building. Figure 13 showed this building to have been a larger, single-storey post on sill structure, four bays by two, with no doors or windows showing, and a gable roof which could have been covered with either bark or shakes, with a shallower pitch than that of Structure 8.

The general size and configuration of these structures corresponds well to the comparable buildings noted above. Probably the smaller structure was a stable and the larger a barn.

No openings in the east or south walls of Structures 8 and 9 appear in figure 13. The large doors expected on a barn or stable would presumably have been found in the long north walls of these buildings, oriented to Fields a and b. This orientation is supported by the McColl plan, which shows paths leading out of each side of Field b. immediately to the north of Structures 8 and 9.

It may be concluded that Structures 8 and 9 and Fields a and b related to animal husbandry. The presence of established paths nearby indicates high levels of movement, probably of stock. It is likely that these areas and structures were used for the housing of transportation or draft animals, either horses or oxen.

The other two structures, 15 and 16, shown near the palisade were in the former case so vaguely sketched, and in the latter so little shown, that it is impossible to draw any conclusions concerning use or configuration.

The fence associated with Field a was of the palisade type often utilized by the H.B.C. in the Western Department. It was seen at various other posts (figures 20 and 33) as well as at Fort Langley (figure 8). Such fences were normally built as a miniature, six foot high palisades, using saplings as pickets, and constructed in the same way as a "real" palisade (see Chapter 9). The fences at Kamloops (figure 33) and Fort Rupert (figure 20) used a king post system. The king posts at Kamloops were located roughly 3 m (10') apart, and two palings were used to support the pickets. The system at Fort Rupert used king posts about 1.8 m (6') apart, and a single paling to which the pickets were fastened

with wooden pegs. In both cases, the tops of the pickets appear to have been pointed; this feature also shows up at Fort Langley in the palisade fence near the river shown in figure 8a.

The horse yard already noted at Fort Colvile, 1.8 m (6') high and built of solid logs, would have been of this same construction, and the "8 feet Pine Pickets" which were cut at Belle Vue Farm in 1854 would have provided the components for this type of fence.[77] This would also suggest that these pickets were set in a 610 mm (2') deep trench.

The palisade fence enclosing Field a probably followed the construction and size of that seen in figure 20, in the location which was shown by Mallandaine and McColl. No interior development or activity was shown in Field a, so precise usage is difficult to assess. However, it is likely that it served as a stockyard, and perhaps had forage crops introduced.

Field c, enclosed with a post and rail fence, was located south of structures 8 and 9. This type of fence was widely used by the H.B.C. in agricultural contexts. Fences in the Langley area most likely would have been constructed of split cedar. This was the material that comprised the 11 or 12 km (7 or 8 miles) of split rail fencing on the farm in 1878 prior to its sale; "chiefly Cedar".[78] This was also the material used at Belle Vue Farm in the 1850s, where "splitting Cedar fence Posts" was noted, and at Thompson's River in the 1840s, where "cedar railings", were used for fences. Given the easy availability and suitability of cedar for this purpose, it is likely that it was the material of choice at Langley throughout the 1850s as well.

The post and rail fences around Fort Colvile were described in some detail in the 1860s: "the bottom rails rest upon stakes or posts, which raises them about one foot from the ground and fastened together at the top; from three to five poles or rails make each panel."[80] In figure 13 it may be seen that the bottom rails of the fence at Fort Langley were elevated above the ground in the same way as those described at Fort Colvile.

Field c was somewhat larger than Field a. Its 1858 use is unknown, although it could have served either for stock-raising or vegetable cultivation. The latter hypothesis is supported by a copy of the McColl plan which shows parallel lines on an east-west axis in field c.[81] This could be intended to represent furrows, which in turn would indicate cultivation rather than pasture.

Frequent references were made to fruit trees, particularly apple trees, in the immediate vicinity of Fort Langley. The origins of these trees are obscure. James Anderson reported that the Fort Vancouver apple trees were "said to have been grown from seed brought from England".[82] At Fort Langley the trees were clearly mature and producing fruit by 1858. Enough trees were present nine years later that surplus apples were available for export to Victoria.[83]

A clue to the location of some of these apple trees was given in the late 1870s when a road was being put in along the south bank of the Fraser River. The H.B.C. had to remove some of their buildings to the west of the fort to facilitate this road-building. These structures included a shed opposite the steamboat landing (at the west end of the sandspit) and three years later "Cromarty Ould Hous".[84] However, the postmaster at that time, Henry Wark, complained that pulling down the house wouldn't "do any good as long as the Apple Trees is allowed to remain."[85] This suggests the presence of apple trees to the west of the palisade. There are some very old looking apple trees to the southwest of the reconstructed palisade today. It is possible that these are remnants or descendants of the apple trees of 1858.

Agricultural Operations

Agricultural Workforce

Little is known about the organization of the Fort Langley agricultural ventures. It is known from Hudson's Bay Company records and other sources that a dairyman was employed at Fort Langley. In the 1850s, this was Basil Brousseau dit Lafleur.[86] Other than Brousseau, no employees were listed as agricultural workers after the removal of the English farmers who were so unsuccessful in 1851-1852. As with all other undertakings at Fort Langley, Yale was ultimately responsible for overseeing agricultural activities. Although his background prior to his assignment to Fort Langley would not have prepared him for this task, his nearly thirty years of exposure to farming at that post would have provided him with a practical grounding.

It is known that some reference books were available in the department. At Fort Vancouver in the 1840s at least two such books were available, the first the unidentified "2 Vol. Cattle Doctors". The second was John Claudius Loudon's An Ecyclopaedia of Agriculture:..., London, Longman, Rees, Orme, Brown, and Green 1831, which was apparently a major reference for Dr. John McLoughlin, as he ordered machinery in 1836 after reading about it in Loudon.[87] Many other books may have been available. For instance, William F. Tolmie had in his personal library a copy of David Lowe, Elements of Practical Agriculture, London, Longman, Brown, Green and Longmans, 1847.[88]

As well as Yale, whose knowledge was based upon local experience and possibly reference books, there was also W.H. Newton, to assist in running the farm. Newton, the clerk, had originally come to Vancouver Island as assistant to E.E. Langford, the bailiff at the Puget Sound Agricultural Company's Esquimalt Farm.[89] Although Langford turned out to be completely incompetent in this role, presumably he and Newton had some agricultural experience in England prior to being hired by the P.S.A.C. Given the period, it is also probable that at least some of the servants had farming backgrounds. One of the Canadian servants, Etienne Pepin, although listed as a blacksmith on Company records, was referred to by Aurelia Manson as a "farmer".[90] Possibly he had learned his trade in a farming context, and so also directed some of the activities on the Langley farm. Pepin was returned to Fort Langley in 1852 to replace some of the useless English labourers. Douglas wrote to Yale:

> We now send you a man who will be more serviceable than either of those now dismissed, the veteran E. Pepin who has left the Cowlitz in disgust to return to his old quarters.[91]

As a replacement for two dismissed farmers, it is clear that Pepin was viewed as a farmer himself, at least by Douglas.

Many of the servants of the Company would have been expected to provide agricultural labour at peak times such as ploughing, planting, and harvesting. However, at Fort Langley as at other posts in the department, most of the agricultural labourers were Indians. A note concerning the use of Indian labour was entered in the Fort Rupert journal in 1849:

> Although not noted down daily Indians are constantly employed working for the Establishment sometimes as many as 100 per day. Six are paid monthly at 1 Blanket per month.[92]

The same practice was followed at Fort Victoria:

> 12 Indians were hired this evening for six months at the rate of 5 Blankets each for that period.[93]

At Esquimalt Farm the engaged native agricultural workers were also paid in blankets. Some rates noted include; 3 - 2 1/2 point blankets for one month as a bullock driver or 1 month harvesting; 4 - 2 1/2 point blankets for two months labour, or 6 blankets "without eating"; and 2 - 2 1/2 point blankets for "hoeing turnips and thrashing".[94]

As well as the "engaged" Indians, working on a monthly basis, many natives would have been hired on a daily basis as well. The payment for this work was usually some sort of "disposable" items, rather than durable goods like blankets. At Fort Kamloops in 1842 a rate was set:

> ...the price promised them is a skin each for two days work and to be paid in ammunition or any small articles such as beads, knives or tobacco.[95]

Indian women hired to work in the garden at Fort Simpson in 1856 were paid 15 leaves of tobacco per day or 1 ounce of vermilion per two days, with a gratuity of 2 gallons of potatoes each when the job was completed.[96] The Indians were not always satisfied with their pay. At Fort Rupert in 1849 the "Indians today refused to work till more pay is given", and the following spring the H.B.C. men "had to raise the Indians wages today to 9 sticks each" from "7 sticks of tobacco each per day".[97]

Donald Fraser, at Fort Langley in 1858, saw engaged Indians, although none specifically in agricultural activities.

> Here were young Indians employed as porters, coopers, boatmen, menials in the houses, all earning wages, paid chiefly in commodities;...[98]

Indians were definitely used as assistants at the dairy. These would likely have been engaged on a monthly basis, as the number of labourers required for this function would have been fairly consistent. The size of the native labour force employed as assistants or milkers at the dairy may have varied between the "three or four" remembered by Aurelia Manson to the eight mentioned by Jason Allard.[99]

Aurelia Manson also recalled the "men of the fort, with Indian lads" cutting grain on the Langley Prairie.[100] For a task of this nature, requiring a large body of men for a relatively short time, the natives would have been engaged as day labourers.

Field Crop Cultivation

The main stages in H.B.C. crop production involved preparation of the fields, planting, harvesting, and processing. The soil on the Langley farm was evidently of high quality. It was described as part of the preparations for selling off the property in 1878:

> The soil of the open land is chiefly a black loam, in some parts over 2 ft. deep and of the timbered land a lighter, and in part sandy, loam -on clay subsoil.[101]

Much of the land cultivated apparently had been a natural prairie, eliminating the need for a great deal of clearing. Whether or not the fields at Fort Langley were fertilized is unknown; the practice was certainly common enough on H.B.C. farms. James Douglas commented on the subject in 1838:

> The method hitherto most successfully pursued in the management of the Farm, is a rotation of grain with occasional hoe crops, keeping the soil in good heart, by fallowing and manures, the latter operation being most commonly performed by folding the cattle upon the impoverished land.[102]

Samuel Robertson, the former Fort Langley boatbuilder, was farming on the north side of the Fraser River in the early 1860s. Robertson probably had learned his farming techniques from the H.B.C. He noted in his diary both "hauling Dung" for spreading on fields, and "pulling turneps" in a corral.[103] He was both gathering and spreading manure, and taking advantage of the fertilized soil in a disused stockyard. Both these techniques were noted at other Company Farms, such as those at Cowlitz and Nisqually.[104] The soil at Langley seems to have been fertile; the problems in farming crops related more to the spring and fall rains commonly encountered. Yale described these obstacles in brief form in 1842: "the fit Season here for ploughing, sowing and harvest is very short...".[105]

The preparation for planting would have commenced with ploughing. This took place at Langley in the spring, before planting, although at other Company farms it was noted at all times of the year. John Hussey, in "The Fort Vancouver Farm" speculated that the time of ploughing was as much related to the weather as to any arbitrary schedule.[106] Yale's reference to a "season for ploughing..." and his solution for the problem, "expert Hands" and horses, suggest a definite time for ploughing at Fort Langley. Samuel Robertson's diary also notes spring ploughing only, and he was growing the same crops in the same environment. For instance, in 1863 he ploughed between March 23 and May 11.[107] Two types of ploughs were noted in Fort Langley inventories. "Articles in Use" in 1848, the last year for which records are available, include 2 "English cast iron Ploughs" and 4 "country made ploughs".[108] Lists of "New Stores" from the earlier 1840s show that "plough share moulds", "wrought share moulds", "Plough Share Moulds with iron", and "Plough Share Moulds", "Plough Share Moulds (C.M.) (Country Made)", 1 "English Plough with wheels", English plough shares and an English plough breast.[109] The plough listed may have been the same as the "2 Wheel plough" or the "big Norfolk Plough" used at Cowlitz Farm.[110] Roderick Finlayson described the country made ploughs, used at Fort Victoria:

> Wooden ploughs were made, with mould boards made of oak, chopped out with the axe. ...As a favor we were supplied with a few iron plough shares from the Depot at Ft. Vancouver, and our plough moulds we got lined on the outside with iron hoops taken off the provision casks first supplied us.[111]

The country made ploughs may have resembled that specified by Robertson in his diary. He had to build a new plough March 31-April 1, 1863 after breaking his old one, and likely would have followed the example of his former employers:

> Plow
> 13 inch under the Beam
> 2 feet 10 inches under the handles
> Beam 6 feet long
> handles 3 do from the Beam
> Beam 2 3/4 in. by 5 in. deep
> handles 1 1/4 in. by 2 1/2 in. Deep[112]

The ploughs were horse drawn at least in the 1840s. Yale's proposed solution to the difficulties of ploughing, sowing, and harvesting in 1842 and 1844 involved "extra Horses" as well as skilled men.[113] There is a possibility that oxen were used as well as or in place of horses. Many more oxen than horses were listed in Fort Langley livestock inventories; in 1848, 111 of the former to 16 of the latter.[114] During the same period oxen were definitely being used at Fort Victoria:

> 4 Wild oxen were taken in today, to be broke in and yoked for the plough.[115]

According to Hussey "both horses and oxen were employed to draw the plows and harrows" at Fort Vancouver.[116]

The time of actual sowing of the crops could also have varied somewhat. Hussey noted that at Fort Vancouver and Cowlitz Farm most of the grain was sown in the fall, between September and December.[117] "Fall wheat" was also cultivated at Fort Alexandria, up the Fraser, where it was "less to be depended on than the spring variety", and at Fort Victoria, where planting began on October 6 in 1847.[118] At Fort Langley the returns on winter wheat were consistently poor. Mary Cullen stated that "winter wheat was almost a total failure every year" and Aurelia Manson referred in her reminiscences only to grain "sown in the Spring".[119] In the early 1860s Samuel Robertson was not planting fall wheat at all; he began planting wheat and oats on April 13, 1863, and finished sowing oats by May 2.[120] At Fort Alexandria in the 1840s "Wheat, Barley and Oats were sown in the order mentioned, as fast as the ground was prepared", and completed about the beginning of May.[121] Fall wheat may still have been planted at Fort Langley in the 1850s, but in view of the failures of this variety, spring sown wheat would have definitely predominated. James Douglas wrote on April 17, 1851 that 140 bushels of grain had been sown at Fort Langley.[122] This relates well to the time Robertson was sowing twelve years later, so probably represents the normal planting time for wheat and other grains. Further confirmation was given by McLoughlin's instructions to Yale in December 1839 that oats were to be sown in February and spring wheat at the end of April.[123]

Typically, the grain was sown by broadcasting it on freshly ploughed fields, and then turning it into the soil with the harrow. This process was noted at Fort

Vancouver, Cowlitz Farm, and Fort Victoria.[124] Three harrows "with iron teeth" were noted on Fort Langley inventories from the 1840s, so the practice was likely also followed there.[125] At Cowlitz Farm some variations were utilized, including plouging in the seed:

> Great injury is often done, when the seed is merely harrowed in by heavy rains in the falling; washing away the earth from the slightly covered grain.[126]

Given the heavy rains at Fort Langley, perhaps such measures were also taken to protect the seed from the weather. Donald Fraser noted that the quantities of wheat and oats sown per acre on Vancouver Island in 1858 were respectively 1 1/2 bushels and 2 bushels.[127] Returns noted at Fort Langley in the early 1840s ranged from about fourfold for barley, fivefold for fall wheat, tenfold for spring wheat, and twelvefold for oats.[128]

Besides the grain, the major field crops were potatoes and peas. Peas were probably sown sometime in April; at Fort Victoria this was noted on April 8, 1848, and at Fort Simpson April 21, 1857.[129] Peas, as with other crops, were usually sown after the grain. McLoughlin's 1839 instructions to Yale had stated that peas were to be sown in mid-May, after the spring wheat.[130] The actual process of planting them was probably much like that of the grain. At Fort Victoria in 1848 the peas were "sowed and harrowed".[131]

Potatoes were a little more involved to plant; this happened around the same time as the sowing of the peas, generally from mid-April to early May. Potato planting time was the beginning of May at Alexandria, mid-April to early May at Fort Simpson, was over by May 5 at Fort Victoria, and occupied Samuel Robertson from April 20 to May 11.[132] The Indians at Fort Langley were busy planting potato fields in mid-April 1851.[133] At Cowlitz Farm the potatoes were planted early, in a freshly ploughed field, with shallow drills, just "deep enough to protect the tubers from the frost".[134] At Fort Simpson several Indians were required for planting:

> It requires for one drill 2 or 4 men to dig - 3 women to hoe - 2 to place the potatoe(sic) - say 7 or 9 in number.[135]

Prior to planting at Fort Simpson the potatoes were cut up for seed.[136] A "gang of Indians" was also employed at Fort Vancouver in 1845 for planting potatoes.[137] At Fort Nisqually the following year the planting was described:

Planted 9 bushels Potatoes white, dunged in the drills 11 inches apart.

Harrowed over or rather covered with the harrow.[138]

The next day the potatoes were planted 200 mm (8") apart instead.[139] At Cowlitz Farm it was found that the results were better if the potatoes were covered with the hoe rather than "the harrow teeth down", but more labourers were required for the former process.[140] At Fort Victoria in 1847, 400 bushels of potatoes were planted in a 27 acre field, roughly 15 bushels to the acre.[141]

Other vegetables were probably grown as field crops at Fort Langley as well, although not specifically noted. Probably the most prevalent of these crops were turnips and cabbage (and/or "coleseed"), which were found at most H.B.C. posts. Some other crops possibly grown for purposes other than domestic consumption included beans and onions. A variety of vegetables were available; by the late 1850s the garden at Fort Simpson contained beets, lettuce, carrots, parsley, cress, radishes "and other small seeds" in addition to those vegetables already noted, but these would be kitchen garden crops rather than farm crops.[142] Turnips were planted at Alexandria in the period of thundershowers encountered in late June or early July.[143] At Fort Simpson the ground was being prepared for cabbage in early June, and coleseed was sown at Fort Nisqually in mid May.[144] Samuel Robertson sowed his "turneps" at various times between March 26 and July 14 in 1863, cabbage on March 26 and 27, and onions on March 27 and April 10.[145] Coleseed at Cowlitz Farm was normally covered with a brush or roller, but at Fort Nisqually it was harrowed in, as was at least some of the turnip seed sown by Samuel Robertson.[146] George B. Roberts, the clerk in charge of Cowlitz Farm had some problems with coleseed and turnip seed being sown too thickly. He had requested that only 1 pint per acre be sown, but the seedmen were sowing at the rate of 1/2 gallon per acre.[147]

After planting was completed, a certain amount of cultivation was required. This seems to have been exclusively performed by native female labour. At Fort Nisqually the beans were hoed and the wheat weeded by women, and at Belle Vue Farm women and one servant weeded turnips.[148] At Fort Simpson Indian women were always used to cultivate the potato crops. Sometimes as many as 24 were employed under the supervision of the same servant, Leplante.[149] This practice would have been followed at Langley as well; in 1848 there were 22 "garden hoes" noted as "Articles in Use", giving some idea

of how many women could have been employed.[150] The potatoes would have been hoed at about the same time that Robertson was doing his in 1863; that is, the latter part of June.[151]

The harvest on the Langley Farm began in August, although if spring wheat was sown it would have been harvested in May or June. The harvest proper would have begun with the cereal crops in the latter part of August. At Fort Vancouver the harvest extended from the third week in July to the third week in August, and at Cowlitz Farm in 1847 the last of the wheat was harvested on September 2.[152] At Fort Victoria the same year wheat was mowed on August 6.[153] Samuel Robertson was cutting wheat on September 10, 1862 and "tying oats and wheat" on August 27, 1863, when it probably had been cut no more than a day or two earlier.[154]

The cereal crops at Langley were cut with scythes, possibly using cradles as well. John Hussey noted a technological change at Fort Vancouver about 1840, when sickles were abandoned in favour of scythes and cradles for reaping grain. A similar pattern showed up in Fort Langley inventories from the 1840s, where both sickles and scythes appeared in earlier years but only 12 grass scythes by 1848.[155] At Fort Vancouver and Fort Victoria, where "6 craddles(sic) were at work" mowing hay, cradles were specifically noted, but not at Fort Langley.[156] Once the grain was cut, it would have been bound into sheaves, or "tied" as Robertson recorded, and carted to the barns or sheds where it was stored.[157] At least some of the unspecified carts noted in Fort Langley inventories could have been used for this purpose. At Cowlitz Farm and Fort Vancouver the grain was threshed quite quickly after reaping.[158] A "thrashing mill" and 2 "Fanning Machines" showed up in the 1841 Fort Langley inventory, and still appeared as "threshing machine" and 2 "winnowing machines" 7 years later.[159] At least one winnowing machine was still at Langley in 1856, when it was being used to clean cranberries.[160]

No details were given of the threshing machines at Fort Langley, but those at Fort Vancouver in the 1840s were described as 1 Country Made portable Thrashing Machine 4 horse power Complete and 2 English Thrashing machines.[161] These machines, although described as "mammoth", were transported from barn to barn, where threshing floors were available for the process. Prior to threshing, the grain in the sheaf was stored in long sheds near the threshing barns.[162]

All three of the main cereal crops grown at Fort Langley, wheat, oats, and barley were threshed at Cowlitz Farm.[163] Threshing was sometimes performed long after the reaping of the grain. Samuel Robertson was threshing his oats in September 1862, about a month after reaping, but in 1863 not until November, when the sheaves would have been stored for three months or more.[164] Wheat was also threshed at Fort Victoria at the end of November, almost four months after harvesting.[165] At Fort Langley in the 1850s, threshing may have followed reaping more quickly. In August 1867, Ovid Allard wrote Victoria, suggesting that the oat crop be "thrashed at once on the field as in former times, with Indian labour".[166] Some of the crops of wheat and oats at Fort Nisqually were not threshed at all, but used as cut for cattle feed and straw.[167] At Esquimalt Farm wheat, peas, and oats were all used as animal feed and straw also, but it is not clear if the reaped crops were threshed first.[168]

After being threshed, the grain would have been winnowed, to clean it thoroughly. As 2 fanning or winnowing machines were available at Fort Langley, this process was mechanized. At Fort Vancouver in the 1840s "1 pair English Fanners" and "3 pair C.M. (Country Made) Fanners" were used, so at least one of those at Fort Langley was likely country made. At Cowlitz Farm, when "perfectly clean" wheat was needed for seed the threshing crew passed it "thro and thro" the fannery".[169] In January 1864, Samuel Robertson was "cleaning oats", about five weeks after he had threshed them.[170]

Threshing, as well as cultivation, was apparently done with a labour force of native women under the direction of one H.B.C. servant. George Roberts, at Cowlitz, referred to the "thrashing mill women" gathering potatoes for their own provisions.[171] He also referred to the "harvest Indians" in the late summer of 1847, in one case to their having been paid off.[172] No references to granaries at Fort Langley have been found, so probably the grain was stored in barns or sheds. For shipping purposes wheat was put in barrels. In the 1850s these held about 3 bushels of wheat each, or a total weight of about 200 pounds, based on a previously noted figure of 66 1/2 pounds per bushel.[173] As much of the wheat and other grain was exported, it is possible it was put into barrels immediately after threshing and winnowing. In the 1840s a great deal of the grain was shipped out as part of the supplies for the Russian-American Company, to be processed by that firm, but by the 1850s the majority of the grain was sent to Fort Victoria to

be milled and then either sent back to Fort Langley for local and interior use or kept on Vancouver Island. For example, in 1854 Yale had 450 bushels of wheat at Fort Langley, and wanted 90 barrels of flour.[174] On June 3, 1856, 160 1/2 barrels of wheat containing 487 bushels were sent to Victoria, and Douglas wrote Yale on June 6 describing its processing:

> The Langley Wheat has been sent to the Grist Mill, where it will be ground into flour without delay, and after being packed up into the Casks in which the Wheat was brought here, it will be forwarded to Fort Langley.[175]

In the 1850s it seems that most of the Fort Langley grain was sent to Victoria and its large-scale mills for processing. In the 1840s inventories of "Articles of Use" did include "1 hand flour mill" which may have still existed in the 1850s but was likely inadequate for the demands of 400 bushels or more of wheat at a time.[176]

Peas were probably harvested at about the same time as the grain. At Fort Nisqually the peas were pulled in August, left for several days on the threshing floor until "entirely dry", and then threshed and cleaned.[177] At Cowlitz Farm the peas were threshed, at Belle Vue Farm threshed "in Barn", and at Fort Victoria they were both threshed and fanned.[178] Peas on shipping lists and invoices are normally listed in bushels, so may have been shipped either in barrels or sacks.

Potatoes were probably "taken up" in October. At Belle Vue Farm all hands were digging potatoes between September 20-25 and October 1-11, 1858, and Robertson was "taking up" his from October 15-23, 1862 and October 9-24, 1863.[179] In 1858 the potatoes at Fort Langley were taken up prior to November 27, when Yale wrote:

> On taking up our prairie crop of potatoes we discovered that some insidious animals had deprived the stalks of the roots,...[180]

The potato harvest at Fort Simpson in October 1857 was described in some detail:

> 60 Indian <u>Women</u> and <u>Girls</u> taking up Potatoes in the Garden no men employed except Six of our own which are looking after the Indians, and three to carry the Bbls, Two of our men gave out, the <u>Indians</u> stand it well.[181]

This confirms both the role of native women in this labour-intensive harvest and the immediate loading of the potatoes into barrels. Potatoes were also kept in barrels at Cowlitz Farm, so these would have been the most likely containers at Fort Langley as well, although shipping lists and invoices normally just specify bushels as the unit of measure.[182] Although no root house was noted at Fort Langley, they were quite common at other posts, and a distinct possibility there also.

Robertson was pulling his turnips in the last week of October both in 1862 and 1863.[183] As they were generally used for animal feed, little more would have been done with them, other than storing them in some sort of root house. One "English Turnip Cutter" was on inventory at Fort Vancouver for preparing the animals' feed, and such a device may also have been found at Fort Langley.[184] Cole was also usually grown for feed.

Little information is available concerning beans. At both Belle Vue Farm and Fort Nisqually the onions were first gathered and the strung for drying and storage.[185]

Dairying

The efforts of the Fort Langley dairy were directed toward the production of butter, initially for the Russian American Company, and later, as with the cereal crops, for H.B.C. use west of the mountains. As already noted, the elements comprising an H.B.C. dairy operation were barn(s), a dairy structure, and a residence, all of which were present at Fort Langley. If, as stated by Yates, about 25 cows were milked per day, the manpower requirements would not have been great. At Fort Victoria one servant and an Indian assistant managed one of the dairies, and near Fort Vancouver "the whole establishment" of one of the dairies was "well managed by a Canadian and his wife".[186] Roderick Finlayson, at Fort Victoria in the late 1840s, described 2 dairies, with 70 cows each "regularly milked twice a day, with some of those wild Indians as assistant dairy men, each cow giving 70 p Butter for the sumr(sic)..."[187] Basil Brousseau, with his Indian milkers, could have easily managed a dairy operation such as that of

Fort Langley. Few specifics are revealed about the operation of these H.B.C. dairies. At Fort Victoria the dairies were identified with the individuals in charge; "his Dairy", and were furnished with tables.[188]

The basic equipment required for a dairy as described in the Fort Vancouver inventories included tin milk pans, tin milk kettles of 3, 5, or 9 gallons, milk strainers, cream skimmers, tubs, and churns.[189] The Fort Langley inventories from the 1840s list a fair number of "round milk Pans", 42 in 1848, and 16 "assorted tin kettles", which may well have included the large milk kettles, but no other dairy equipment.[190] The cream separation process used at Fort Vancouver was described by the missionary Narcissa Whitman in 1836:

> Their pans are of an oblong square, quite large, but shallow, flaring a little, made of wood and lined with tin. In the center is a hole with a long plug. When the cream has all arisen to the surface, (they) place the pan over a tub or pail, remove the plug and the milk will all run off leaving the cream in the pan only.[191]

Charles Wilkes, on his visit to one of the other Fort Vancouver dairies some five years later, noted that "they churn in barrel-machines, of which there are several".[192] As the dairies at Fort Langley were established under the direction of John McLoughlin in 1839, the procedures and equipment at Fort Langley probably followed the Fort Vancouver lead.

Once the butter was churned, it was put into kegs for shipment. Generally this was in the form of "salt butter" for preservation, but on at least some occasions "fresh butter" was also shipped out.[193] The kegs used were generally fairly small; when weights were recorded they varied between 56 pounds, or half a hundredweight, and 66 pounds.[194] Sometimes smaller quantities of salt butter were shipped, presumably in some other sort of container. In 1852, 32 pounds were sent to New Caledonia and 8 pounds to Thompson's River.[195]

Stockraising

Besides the dairy herd, the beef cattle, oxen, horses, and hogs at Fort Langley in the 1850s all required some care. The beef cattle would require the least attention, as they were free ranging except during the winters, when they needed stabling or shelter, as well as some supply of food. Oxen and horses would have required more ongoing attention to work effectively, both on the farm and around the fort.

Until Outfit 1844, California and Fort Langley cattle were noted separately on inventories.[196] The practice probably ended with the inevitible cross-breeding of the two varieties. The California cattle would have been the longhorned Mexican breed sent to Fort Langley, which were often noted for their ferocity.[197]

Horses were apparently kept primarily as draft animals for farm work, although some may have been available for the gentlemen to ride. The Company's "Standing Rules and Regulations" of 1843 specified that no horses, cattle, or dogs could be owned "on private account", although if necessary each commissioned gentlemen could keep a saddle horse "on paying the surplus cost thereof over and above the established Indian or Inventory price". Clerks and servants could purchase horses from the Company only if needed to perform their duty, but these horses had to be sold back to the Company at their cost price if the servant resigned. The rule was clarified in 1856 due to constant abuse; thereafter any private trade in horses or other animals was to be punished by fines, as well as forfeiture of any profits so made.[198]

There was apparently some traffic in these illicit horses through Fort Langley. In 1851 a reference was made to a Fort Victoria servant, Frederick Minie, having a horse at Langley, while John Tod had two located there. Two years later, Yale was instructed by Douglas to take particularly good care of one horse, "Blanc Cardin", as it was to be shipped to Douglas in Victoria.[199]

Perhaps no profits were made, but clearly the servants and gentlemen of the Company in the area had horses available for their private use.

Hogs were probably kept in a number of places around the farm, and indeed seemed to flourish at Fort Langley. A.C. Anderson, in charge of Fort Alexandria in the 1840s, was not enamoured of the H.B.C. hogs:

> Swine...were not raised in large numbers on account of the trouble attending them when ranging at large. A few were raised in styes for awhile, but the breed eventually was lost. It was an abominable breed, lank, long-legged and with a snout like a plough share.[200]

As for sheep, Donald Fraser reported in the London Times that at Fort Langley:

> The Company have a farm four miles in the interior, on which horses and cattle thrive well, but not sheep - there is too much forest for them.[201]

Sheep were never noted in the livestock inventories of Fort Langley up to 1848, or implied by products shipped out. However, some seven months before Fraser's visit, on February 5, 1858 the "Beaver" left the Belle Vue Sheep Farm, carrying "20 young wethers for Langley" and three servants to assist on the trip.[202] There was no further reference, so it is unknown if these animals were an unsuccessful experiment, or simply mutton on the hoof for Fort Langley.

As already noted, some specialized forage crops were grown at Fort Langley for animal feed, and it is also likely that coleseed and turnips, along with some of the wheat, oats, barley, and peas would have been used for this purpose. At Cowlitz farm both timothy and clover were being threshed for seed.[203] Timothy must have been threshed at Fort Langley as well, as "3 Barrels Timothy Seed" were sent to Fort Victoria on June 3, 1856, and 6 casks marked "57 T" were sent the following year.[204]
HBC
FL

The cattle and hogs raised were mostly exported as meat, either fresh or salted. Even oxen were often used as meat when their useful working life was over. Sometimes stock was shipped out from Langley live in comparatively small numbers, but the usual form of export was barrels of salt cured meat. Fresh beef or fresh pork was normally sent out by weight, possibly as carcasses or half-carcasses, as one reference was made to "360 lbs. pork (2 pigs) fresh".[205] The salt pork was sent out in 200 pound barrels or 300 pound tierces, and the salt beef was put in the same size of containers.[206] Other meats sent out included "cured hams and cheeks", bacon, and fresh venison. In 1857 the hams sent out were in "2 casks".[207] Other stock by-products shipped out included ox hides, calf hides, hog's lard and grease.[208]

Although no details of fowl raising at Fort Langley are known, several varieties were being exported, including geese, turkeys, ducks, as well as "fowls", or chickens, and eggs.[209] The fowl are simply listed by number shipped, so may have been sent either live or freshly killed.

The Fishery in 1858

The volume of trading, packing, and export of fish peaked in the late 1840s, although it continued to carry on at a high level through the first half of the

1850s.[210] At Fort Langley both dried and fresh salmon was purchased from the natives. The former was used as a winter staple by the Company, the latter, along with smaller quantities of sturgeon and eulachon, was preserved by salting, and served primarily as an export commodity.

The geographical framework of this activity was determined by the availability of the resource and the traditional utilization patterns of the natives along the Fraser River. This meant that the trade and curing of fish did not necessarily take place in the immediate vicinity of Fort Langley.

The dried salmon was prepared by the Indians, and acquired by the Company largely to serve as servants' provisions, both at Fort Langley and other posts. On the other hand, the salt salmon would have been cured by company employees after being acquired as fresh salmon from the natives.

Fisheries: Location and Structures

The relatively low demands of the dried salmon trade, involving an already prepared product, would require no special facility. It was probably simply brought to the H.B.C. posts by the natives, or sought by the Company in those areas where the drying was done, or the fish cached. Salt-curing of fish, on the other hand, would have required a specific establishment, at least seasonally manned. On the lower Fraser, these establishments were widely spread out. James Douglas, writing in 1855, blamed the poor quality of the salmon shipped to the Sandwich Islands that year on this factor:

> ... and by having the fisheries so widely scattered, you cannot attend as closely as necessary, to the curing of the fish.[211]

The salting stations active in the 1850s were at the mouth of the Salmon River, just downstream from Fort Langley, at the mouth of the Chilliwack River, about 37 kilometres (23 miles) above Fort Langley, and at Fort Hope, the subsidiary post of Fort Langley and terminus of the overland section of the brigade (figure 34).

The mouth of the Salmon River was probably the location of the earliest of these stations; after Fort Langley was moved in 1839, it was noted that the new

site was "fully as convenient for the fur and Salmon trade, as the former site".[212] It may be seen that both sites were roughly equidistant to the mouth of the Salmon River (figure 35). More direct evidence is found in the correspondence surrounding the proposed move of Fort Langley in 1860 to "a site lower down the stream, long used by the Company as a point of embarcation for salt salmon, and whereon still stand a salmon shed, and a roughly constructed wharf, erected by us."[213] By 1885, when the sale of this property was being considered, it was described in some detail:

> the company's 2 acre Lot No. 20, Group 2 New Westminister District, near 'Old Langley, or Derby'. This plot situated at the mouth of the Salmon River (a small stream discharging into the Fraser) is entirely isolated from the rest of the Company's lands, and has not been utilized in any way for many years, tho' formerly used by the Company for Salmon Salting & Packing.[214]

More evidence is given by the "Plan of the Town of Langley", a map of the Derby townsite lots. This showed a "2 acre claim marked off for the H.B. Co.", to the west of the mouth of the Salmon River, where a "salmon house" oriented to the Fraser River was located (figure 36). This plan, although dated 1891, relates to the 1858 subdivision and sale of town lots; this would imply that it showed the location of the "salmon house" in the target year. The references to this activity at the mouth of the Salmon River were the only site-specific descriptions of salmon curing in the immediate Fort Langley area; most of the other descriptions, such as Yale's 1844 reference to "outdoor buildings for curing Salmon etc." or his daughter's reminiscences of a wharf and shed(s) in close proximity for salmon curing give no idea of the actual location of these structures.[215]

Going upstream, the next major fishing station was located at the mouth of the Chilliwack River. When it burned in 1848 it was reported to have consisted of "a dwelling house, sheds, salting tubs, 200 empty barrels and about 60 bushels of salt."[216] This station is shown in the hydrographic maps of the late 1850s (figure 37) as building(s) which faced onto the Chilliwack River at its junction with the Fraser.

The last of the "permanent" stations was at Fort Hope. A.C. Anderson wrote that "according to all accounts this vicinity affords one of the most prolific fisheries on Fraser's River".[127] In August 1853 Napoleon Dease sent several boatloads of salt salmon to Fort Langley from that post, and also noted that he was about to begin trading for dried salmon.[218] William Yates, who came to Fort Hope in 1854, "used to put up salmon at Hope and ship them to Fort Langley for the company... It was customary to put up salmon every year here".[219]

Salmon was cured sometimes at the mouth of the Harrison River, at least as early as 1852, and probably in other locations as well.[220] All of the curing centres were considered subsidiaries of Fort Langley. For instance, at Fort Hope the barrels and salt were received from Fort Langley, the salmon was cured, and then the full barrels sent back.[221] The fish was sent back to Langley after the brigade had gone inland from Fort Hope, which until 1858 served as a summer post only, for the brigade and fishery.[222] The total output of these subsidiaries was simply added into the total production for Fort Langley. In 1847 the "salmon fishery at the establishment" only produced 365 barrels of salmon; however, as the Chilliwack fishery produced "1020 Barrels of excellent fish" that year, the total yield of salmon from Fort Langley was noted as 1385 barrels.[223]

This practice makes it difficult to establish how much of the salmon was packed at any given station. William Yates remembered having put up 150 barrels of salmon at Fort Hope in 1857.[224] In that year the salmon exported from Fort Langley to Hawaii was recorded as 524 barrels and 150 half barrels; there is no total given for the quantity cured.[225] It would seem that the subsidiary stations were often producing equal or greater quantities of salmon than Fort Langley itself. Aurelia Manson said that the structures used for the curing activity at Fort Langley included a wharf, and possibly two sheds. She described the salmon being cut in a shed, then being run to "the big shed where the salting took place".[226] The description of the Chilliwack station cited above also refers to "sheds", so there was a good possibility of multiple structures at all the stations.

The "Plan of the Town of Langley" (figure 36) showed the "salmon house" to have been roughly 12 by 6 metres (40' by 20') scaled from the size of the town lots. The structures at Chilliwack appear to have been much the same size. Not shown in either case was a wharf, although it seems to have been an essential element of such a facility.

On plans of the major posts of Fort Victoria (figure 38) and Fort Vancouver, large "Salmon Stores" and wharves were shown, in both cases in a "T" configuration; the building was arranged parallel with the shoreline, and the wharf extended out at a right angle into the water.

Descriptions of two H.B.C. salmon curing stations in the Oregon territory were given by W.H. Gray. In the mid-1840s those structures at Pillar Rock:

> consisted of four posts set in the ground, some split cedar puncheons fastened up around the sides by withes and ropes covered with poles and split puncheons.. and a few tanks or barrels for salting salmon.[227]

The fishery at Cape Disappointment was also described:

> a shed or an establishment similar to the one described at Pillar Rock, with the difference that the house or shed at the Cape had a two-sided peaked roof, with the fixtures for salting salmon.[228]

Evidently the Pillar Rock structure had a shed roof, while that at Cape Disappointment had a gable roof.

The fishery on San Juan Island was described in an 1878 interview with William John MacDonald:

> That year, 1851 Mr. MacDonald erected a small log dwelling house to live in and a shed under which to cure the salmon. He had 3 or 4 French Canadians with him, who spent their time curing fish, not in fishing.[229]

An 1865 advertisement for the sale of a salmon fishery on the south bank of the Fraser opposite New Westminster lists more of the requirements of a curing station. It contained material for fishing, which was apparently done in-house, but also had a cooperage and curing house, 30 m x 6 m (100' x 20'); a room for barrels; buildings for employees' accommodation; a four room private residence; a convenient wharf; as well as equipment and material; vats, barrels, staves, salt, and other incidentals.[230]

It is probable that the curing stations of the H.B.C. on the Fraser would have followed the pattern of those described above, with one or two simple structures with posts set in the ground, partially walled with split cedar planks, and probably bark roofs, either shed or gable style. There would be a wharf in close proximity, or perhaps attached, as at Forts Victoria and Vancouver. The

structures would provide an area for trading (the wharf) and areas for cutting and curing the fish, barrel storage, and some place to boil the brine, likely over an open fire. The cooperage and residential function would not be required at Forts Langley or Hope, and only the latter at Chilliwack, hence the reference to a "dwelling house" at that station.

Fishery Operations

Although preparation for curing the fish would take all year, the major activity was in August and September. Yale stated in a letter to Simpson in 1847 that the salmon trade "commences with the harvest".[231] John Dunn described the H.B.C. salmon curing process as he observed it at Fort Vancouver:

> Mode of curing salmon - As soon as a cargo of salmon is caught, the natives bring it to the trading post in their canoes. A number of Indian women are employed by the trader, seated on the beach, with knives, ready to cut up the fish. The salmon are counted from each Indian, for which a ticket is given for the quantity, large or small. After the whole of the salmon are landed, the Indians congregate around the trading shop for the payment, and receive ammunition, baize, tobacco, buttons, etc.
>
> The women employed by the trader commence cutting out the backbones, and cut off the heads of the salmon. They are then taken to the salter, and placed in a large hogshead, with a quantity of coarse salt. They remain there several days, until they become quite firm. The pickle produced from these is boiled in a large copper kettle; and the blood, which floats by the boiling process to the top, is skimmed off, leaving the pickle perfectly clear. The salmon are then taken from the hogshead and packed in tierces, with a little more salt; the tierces are then headed up, and laid upon their bilge, or widest part, leaving the bung-hole open; the pickle is next poured in, until the tierce becomes full; a circle of clay, about four inches high, is then made round the bung-hole, into which the oil from the salmon rises. This oil is skimmed off; and, according as the salmon

imbibes the pickle, more pickle is poured in, so as to keep the liquid sufficiently on the surface, and afford facility for skimming off the oil. After the oil ceases to rise to the circle round the bung hole, the salmon is then supposed to be sufficiently prepared; the clay circle is cleared away, and the hole is bunged up.[232]

Aurelia Manson described the process as she remembered seeing it at Fort Langley:

Ovid Allard did all the trading with the natives for their salmon. He used to stand at the wharf with two or three trunks full of the Indians favourite stuffs such as vermilion for the women to give themselves rosy cheeks, and Tobacco for the men.

W. Cromarty at the big cauldron, making brine, and ever so many boys, and a man or two, would be running from the wharf withe(sic) the salmon, which they piled before the women of the fort and others who were seated in a circle in the shed where they cut the salmon. No rest for the boys. They had to continue their running, this time with the cut salmon to the men in the big shed where they were salting the salmon. And so they worked all the week, early in the morning till late at night till the salmon run was over.[233]

In another version, Aurelia described the process in much the same terms, but described the runners from the wharf to the shed as "boys of the fort with 2 or 3 native lads from the Indian village".[234]

In 1878 W.J. MacDonald recalled going to San Juan Island 27 years earlier to cure salmon for the H.B.C.:

In 1851 I went to San Juan Island, still acting for H.B. Co. for the purpose of curing salmon. The natives were pleased to have an establishment so near them where they could get work and goods. The natives brought in salmon and gave sixty for a blanket worth four dollars.[235]

The salmon-curing process at Fort Langley may be synthesized from these sources. From Aurelia Manson's description, it would seem that the trade with the Indians on the Fraser was on an immediate basis, without going through the Indian tradeshop. One man would apparently manage the trade on the wharf for the small or disposable items used. On some occasions goods were sent in

specifically for this trade. In June of 1853, Yale was sent a "further supply of goods...for the Salmon Trade which we wish you to prosecute with the utmost activity".[236] Native helpers, presumably paid with the same sorts of goods, would then be used to transport and cut up the fish. It is interesting to speculate on whether the cutting out of the backbone and cutting off the head was an H.B.C. convention, or simply the way the Indian women insisted on doing it, in deference to native taboos.

Rather than the hogsheads noted by Dunn, in 1841 and 1860 the Fort Langley men used "Tubs for pickling salmon in".[237] "Salting tubs" were also present at the Chilliwack fishery in 1848.[238]

Aurelia Manson noted Cromarty at the cauldron during the salmon curing. This supports the supposition that Cromarty was a dual purpose "Cooper, Fish Curer" such as the Company hired at least until the 1839-1840 period.[239] This makes it likely that he had learned both his coopering and fish curing in the Scottish fishery prior to joining the H.B.C., and was the expert in curing as well as barrel making. The "cauldrons" for boiling the brine may have been copper, as at Fort Vancouver, but more likely were the 3 iron boilers of 16 or 18 gallons which were shipped to Fort Langley in 1854.[240]

Dunn also referred to the pickled salmon being put in tierces, or large 300 pound barrels, while that at Fort Langley was normally packed in smaller barrels of about 180 to 200 pounds, and half barrels of about 90 pounds.[241] On more than one occasion management suggested the use of other containers for putting up the salmon instead of barrels. In 1840 it was suggested that large wooden boxes 18 by 8 by 6 feet be used, and in 1851, "kits", a sort of simplified staved container, were recommended: "in kits the fish will fetch about twice the money, and the vessels are easily made".[242] However, as far as known, these vessels, although theoretically more profitable, were never used.

Ovid Allard, writing to Victoria in 1870, specified that about 80 pounds of salt were required per barrel of salmon cured.[243] This probably relates to all phases of the curing. The salt was sent in barrels, with approximately 3 bushels per barrel, and often in huge quantities; in Outfit 1854 at least 3870 bushels of salt were supplied to Fort Langley.[244]

The Fort Langley cured salmon had problems in the foreign markets in which it was sold.[245] One of the most common concerned the poor quality of the barrels, which allowed the brine to escape. This showed up even in the barrels sent to Fort Hope for curing there. Napoleon Dease wrote to Yale in 1853:

> I sent another Boat load of salt salmon 56 barles. There will be another boat load remaining Sir the barles that are hear are verry mutch out of Order it leeks verry mutch.[246]

At Belle Vue Farm, on San Juan Island, "all the empty Salmon barrels" were put "in one of the empty stables for safe keeping" in the spring of 1858.[247] In the fall of 1859 the following preparations were made for the September salmon run:

> cleaning Salmon barrels, carrying them down to the beach, cleaning cauldron tubs, etc.[248]

It is quite likely that the same sort of care would be taken of the barrels, and similar preparation made in anticipation of the salmon run at Fort Langley.

As already noted, the manpower requirements of the fishery would have been high, both for H.B.C. servants and native labourers. At Fort Simpson a small perquisite was noted in the journal, connected with the eulachen fishery at that post in 1856:

> Gave the men salting small Fish two glasses of Rum each understanding such has been the custom heretofor.[249]

In addition to the salmon fishery, other varieties of fish were packed for export, notably sturgeon and eulachen. These were intended primarily for local use, rather than export, but at times substantial quantities were sent to Victoria, for instance 125 barrels of sturgeon in 1855 and 26 barrels of eulachens in 1857.[250]

In 1858 the fishery was affected in two ways. First, the influx of goldseekers provided other economic options for the native fisherman who had always supplied the H.B.C. They were now free to participate in a cash economy by panning gold themselves, acting as guides and pilots on the river, renting or selling their canoes, or selling salmon and other provisions directly to the miners. Second, the H.B.C. responded to the gold miners' demand for goods by emphasizing retailing to a huge extent, probably to the detriment of other summer activities, such as fish curing. Although records are not available for 1858, it seems that little salmon was packed that year.[251]

Conversely, as early as April 1858 James Douglas was anticipating a serious shortage of provisions on the Fraser due to the influx of miners. His instructions to Yale reflected this:

> You should also direct Ovid Allard to purchase as many dried salmon as he possibly can, in course of the summer, as there will be a great scarcity of food next winter.[252]

It is not known whether or not this effort was successful, but the comments of Donald Fraser, based on what he saw on the Fraser in the fall of 1858 cast some doubt:

> At the mouth of the Chilwaiuk there is a fishing station of the Company, now deserted in consequence of the idleness of the Indians. The discovery of gold is fast corrupting the river Indians. They neither have caught sufficient salmon this season for their own winter supply nor have they worked as heretofore for the Company.[253]

The Cranberry Trade

The cranberry trade developed as a result of demand in San Francisco in the early 1850s. The largest number of barrels packed was in 1855, when 725 of between 8 and 24 gallons were processed.[254]

The cranberries, along with the fish, were supplied by the natives on a barter basis. Less processing was involved than with the salmon. The berries were cleaned, sometimes in a winnowing machine, and then placed in barrels, which were topped with water.[255]

The cranberry trade proved extremely lucrative in 1854, 1855, and 1856, but had a bad year in 1857.[256] In December of 1859 cranberries were still being stored at and exported from Fort Langley.[257] However, Cullen states that in 1858 the cranberry processing was limited to a domestic venture, presumably as a result of the same factors which affected the salmon trade.[258]

The Cranberry Trade: Location and Structures

In a description of the cranberry trade prepared by James Douglas in 1856, he referred to the difficulty of determining the value paid to the natives for the berries

> at Fort Langley when Indians are numerous and pressing in their demands, and trading all sorts of things at the same time.[259]

This would imply that the cranberries were not traded at specialized locations like the salmon, but rather as part of the general native trade, presumably at the Fort Langley Indian Trade Shop (Structure G). In turn, this would suggest processing nearby; the berries and barrels were located at the fort, so it would not be viable to pack in a remote location. Unlike salmon curing, there was no reason to move the processing centre to the source of the produce.

In October 1856 Yale wrote Douglas describing "a stable and a stately store for the convenience of the (cranberry) business" which had been built. He also referred to the use of a winnowing machine in cleaning the berries.[260]

In December 1859, cranberries were being stored somewhere outside the fort: "To save cartage, store these packages in the buildings at the foot of the hill, where the Cranberries are".[261]

The "cartage" mentioned would have been between the steamer landing on the sandspit to the west and the fort site; as the path ran down the spit and crossed to the fort at the pier (Structure 1) it would seem likely that the "foot of the hill" was referring to the base of the bluff the fort stood on, although other locations are possible. The only building in that general area which looks like a storehouse is Structure 13 (figure 1) which is shown in figure 5 to have been a low, gable-roofed structure, with visible framing members in the gable end. This is probably the same structure shown in figure 40; the location and orientation is appropriate and the gable end framing was again evident. However, there were sheds shown flanking the building on each side; this perhaps relates to development of more storage facilities outside the palisade.

The location of this structure would be convenient for the cranberry trade; it was near the point of trade, the source of the barrels, and the waterfront/steamer landing. However, no definite conclusion may be drawn at this time on the basis of available information.

Extrapolating from figure 5, and the McColl plan and field notes, Structure 13 was located about 173 to 183 metres (568' to 600') west of Structure K and 39 to 45 metres (128' to 148') north of Structure K, measuring from the west and north walls and following the axes of the latter building. The structure was of one storey, post on sill construction, with a bark-covered gable roof, possibly with open gable ends, and with no doors or windows visible.

The cranberry industry although at a low ebb in 1858 still had a facility provided, presumably near the fort. However, this facility would not have required specialization. Structure 13 would seem to have come closest to meeting the criteria for this function, but there is no definitive evidence. A cranberry storehouse would probably have been turned to higher priority use in 1858, as in late 1859, when it was used to store flour and bacon.[262]

On occasion, other types of country produce (such as hazelnuts) were exported, presumably on the same basis as the cranberries; traded from the natives, packaged, and exported.[263] However, this trade was of a very minor order, and probably would have disappeared in the 1858 excitement. In any case, it is doubtful that the scope of this minor trade would have requird special buildings and facilities.

Transportation

Fort Langley, as the inland depot of the Western Department from 1848 to 1858, had an integral role to play in the transportation of goods up and down the Fraser River. On Fort Langley fell the responsibility of maintaining water transportation links with Fort Hope, and hence the interior. This aspect of the depot role resulted in Fort Langley becoming the post responsible for the building, maintenance and manning of a fleet of river craft.

Locally, goods had to be transported between the river and the fort, which contained most of the storage, depot, and retail facilities.

Finally, as noted in the preceding chapter, much of the food was produced some distance away from the fort proper, and so transportation links were required. Transportation patterns and facilities will be examined by destination; the Fort Langley-Fort Victoria route, the Fort Langley-Fort Hope river transportation route, and local transportation.

Fort Langley - Fort Victoria Transportation

The connection between Fort Victoria and Fort Langley was maintained through various types of watercraft. Fort Victoria, as the Western Department headquarters, was the source of all imported goods and provisions required for the pursuit of trade and maintenance of the network of posts in the district. There was constant communication between Fort Victoria and Langley: the latter post was the inland depot, so all the goods for the interior posts were funnelled through it, along with the goods required at Fort Langley itself. Likewise, all of the interior fur returns passed through Fort Langley en route to Fort Victoria. Fort Langley's production of foodstuffs was also shipped to Fort Victoria, for redistribution within the district or ultimate foreign resale.

During the 1850s various methods were used for transporting smaller quantities of goods or personnel to Fort Victoria. Vessels used included native dugout canoes which were used to transport personnel,[1] or goods.[2] Batteaux were also used on occasion,[3] as well as two "keel boats" built at Fort Langley in 1851.[4]

However, by far the greatest part of the transportation between Fort Victoria and Fort Langley was carried out by Company ships. The vessels most often used in the 1850s included the steamers "Otter" and "Beaver", and the sailing ships "Mary Dare" and "Recovery". By the latter part of the decade, the "Otter" was apparently carrying most of the cargo to and from Fort Langley.[5]

The Otter was 37 metres (122 feet) long, 6.7 metres (22 feet) wide and 3.6 metres (12 feet) inside depth, screw propelled and carried a little over 191 tonnes (200 tons) of cargo. She had arrived in Victoria in August 1853, and began running to Fort Langley the following month.[6]

A constant problem during these years for larger vessels was the marginal navigability of the south channel of the Fraser River in front of Fort Langley. This channel had a shallow bottom and huge sandspit and both these features were extremely changeable. These conditions complicated access to the fort and the loading and unloading of ships.

The details of the channel and the sandspit were illustrated in the 1859-60 hydrographic map of the Fraser River (figure 41). This shows the sandspit as a large feature separating the river bank from the channel at Fort Langley. It is clear that this sandspit would have been a major impediment to larger vessels' ability to discharge and load cargo. This map confirms the existence of the sandspit at the end of the decade, but it had also been a problem at the beginning:

> This morning we shifted our berth nearer to the sand to allow the Cowlitz room to drop by us. This afternoon the Cowlitz dropped down to the lower end of the sand to take on the remainder of her cargo. She grounded on the spit at the lower end of the sand and was unable to heave of (sic) again as the tide was ebbing.[7]

This pattern of loading and unloading in more than one location was frequently repeated due to the constraints of the channel. When the "Otter" came to Fort Langley in February 1858 she came "abreast of the Narrows below the fort. Sent a boat ahead and sounded, but found that there was not sufficient water to cross". As a result, the ship moored at that location, was partially unloaded with batteaux, and then was able to proceed to a point "abreast of Fort".[8]

The location of the lower mooring point was given in the log of the "Beaver" in February 1851, when the "Mary Dare" and "Beaver" anchored a quarter mile and "a little" below the fort, and as above proceeded to send out a boat to check the depth of water.[9] Most of the relevant entries in the "Otter's" log for the 1850s referred to about three fathoms of water "off Fort Langley", once past the "narrows". This would increase to four or more fathoms during freshet in the late spring and early summer.[10]

The activities noted at the mooring location off the fort included loading barrels of salmon and "dry salmon in bulk".[11] When personnel needed to get to the fort they "lowered the stern boat down and ... proceeded onshore".[12] The loading of goods normally was not recorded in any detail. A major portion of the export cargo, salt salmon, was apparently loaded from a point near the fort, and was gathered in one place prior to the arrival of the ships. In 1859 the clerk in charge received instructions: "You will please have it (the salt salmon) in readiness on the beach beforehand".[13] A reference from some ten years later suggests that no special care was taken of the barrels of fish before shipping: "The salted salmon has been on the bank of the River since the 11th and although covered with boughs, are not altogether in a safe condition".[14]

As well as loading salted or dried salmon near the Fort, goods were also unloaded there: "anchored abreast of Fort Langley, P.M. employed getting the Longboat out, and preparing to discharge Cargo.".[15]

In all the ships' logs, references were made to "anchoring" or "mooring" off Fort Langley, never to berthing at a pier or wharf. This lack of docking facilities is supported by the negative evidence from the log of the "Beaver" from 1858-1860; constant references were made to wharves at Victoria and Queensborough, but never at Fort Langley.[16]

Indirect evidence supporting the absence of a wharf at Fort Langley is found in the description of the arrival of the party for the ceremony proclaiming

the new colony on November 19, 1958. James Douglas, the most important man in the colony, "disembarked on the wet, loamy, bank under the Fort, and the procession proceeded up the steep bank which leads to the palisade".[17] If a wharf had been available, this ceremony certainly would have merited its use.

In figure 40, a view to the west of Fort Langley, there is visible a steamship, probably the "Beaver", moored off the south shore of MacMillan Island. There is also a small boat, perhaps a batteau, shown serving as transportation to and from the south bank of the river. The sandspit occupied nearly half the width of the channel in this painting and access to the fort would have required crossing it.

The process of loading and unloading "off the Fort" in 1858 involved getting the ship over a sandbar, located more than a quarter mile downstream from the fort, mooring it towards the north bank of the south channel, and then using ships' boats or batteaux to unload and load the vessels (see figure 42). Salmon was one of the products loaded in this location, having been previously gathered on the shore or sandspit.

There were other locations used for the loading and unloading of ships around Fort Langley in 1858, which may have in some ways been more convenient than "off the Fort". Fort Langley was described in 1860 as "situated on hill, about half a mile from where the River steamers touch".[18] A complex of structures was shown on the sandspit to the west of the fort both in the hydrographic map of 1859-60 (figure 41) and the Alden watercolour (figure 40). Combined with this was the reference above to the mooring location downstream of the sandbar, below the obstruction in the channel that had proven such an obstacle to navigation. It was at this point on the sandspit that the miners' shanty town developed, perhaps because it was a centre of transportation in 1858. Most of the mining population was transient, either going to the mines, or more likely in the fall and winter, trying to get to Victoria. Otis Parsons in August 1858 noted "a great many miners here some bound up and others down".[19]

Another description of the steamer landing was given by Dr. Carl Freisach in September 1858 as "a camp of tents erected only two months ago on the left bank where the ship was made fast to the steep sandy bank as if it had been a pier. A few hundred paces away we found the Hudson Bay Company Fort".[20]

This settlement was described by Alfred Waddington in the same month: "The village of Fort Langley is situated about half a mile below the fort, on a low bank, subject to inundations, and may contain about 75 inhabitants".[21] An architect, E. Mallandaine, visiting in the winter of 1858, noted more substantial structures:

> There was quite a settlement of slightly built shanties: a few posts with roofs over them and the sides enclosed with shakes as they were called, that is thin slabs of pine wood (chiefly the Douglas Fir) about 3.0 long nailed from post to post. The roof partook of the same character. The shakes slightly overlapt.[22]

A fuller description of the sandspit village and landing was given the following spring:

> The present business part of Upper Langley is built upon a large, deep bar, made by a slough between the island and main land on the south, and from the experience of California, I should judge would be very nearly if not quite overflowed by the freshet of the coming season. Most of the buildings hereabouts are temporary, erected since the fall of the river, and seemingly intended for desertion upon its again rising. The resident population of the town is not numerous, but the transient custom from the mines gives it a decided business air, and the canoes that line the shore are undergoing continuous changes, as the laden ones depart, their places to be filled by thoses of more recent comers.[23]

By the time of Mallandaine's visit in November 1858, the structures on the sandspit included a hotel, where his companions stayed. This was perhaps the "Langley Hotel - W. Winnard prop"., which advertised in the "New Westminster Times" the following year.[24] In the McColl field notebook (figure 43), "Winnards House", was used as one of the referents. It is shown by the notes to have been located near the west end of the spit, some 760 metres (2495') west of Structure G of Fort Langley; this corresponds well to the distances between the landing and the fort mentioned in the literature. Figure 43 also shows the west end of the sandspit to have been very close to the mouth of the Salmon River.

The final possible location for loading and unloading ships near Fort Langley was the mouth of the Salmon River. In the previous chapter the salmon fishery at this location was discussed; it was noted that in 1860 a wharf still stood there. Jason Allard in his plan and "References" (figure 3) stated that "Vessels outward bound usually took a part of their load in from of the Fort and then dropped down to deep water at the Salmon River Shed".

This corresponds in general terms with the references in the ships' logs noted above. However it is possible that Allard was remembering the 1860s, when hay from the farm was stored in sheds on the sandspit prior to shipment. Maps and plans of the 1858-1862 period show no development or structures at the mouth of the Salmon River other than the "salmon house". In any case, the mouth of the Salmon River and the steamer landing were physically very close. The Salmon River sheds could easily have been those located on the sandspit.

It is probable that in the 1850s, the two main centres for loading and unloading ships were "off the Fort" and the "steamer landing" towards the west end of the sandspit. In 1858, the latter area became the primary focus of activity, most of which related to independent mercantile ventures rather than the H.B.C. This also resulted in the development of a shanty town on the sandspit.

Once goods were landed, they still needed to be transported to the Fort. This could have entailed a substantial trip, up to about 800 metres (1/2 mile), depending on which moorage was used. The iconographic sources consistently show a cart path which led from the steamer landing along the sandspit towards the fort (figure 40, 5, 8), at dates between 1858 and 1867 or 1868. A narrow slough also shows up in these sources, which separated the sandspit and mainland, and was crossed by a bridge tying into the pier plotted by McColl (Structure 1). The arrangement of this pier and bridge may be seen in figures 5 and 44. Native canoes were shown in this slough in figure 44, sketched in late May, when the water would have been at a higher level than usual. For substantial loads it was clearly more convenient to bypass this slough by using the bridge. Whether the landing point was at the west end of the sandspit, as usual in 1858, or on the shore of the spit in front of the fort, the normal route for goods probably involved Structure 1 and the attached bridge to the sandspit. A short curved roadway or path connected Structure 1 to the northwest gate of the fort (figures 5 and 44).

Structure 1, as shown in figures 44 and 5, from May 1858 and January 1859 respectively, had a gable roof, probably bark-covered, supported by three pairs of posts. This roof was raised over a platform supported on pilings, with the long axis of the roof perpindicular to the river bank.

The McColl plan, figure 3, identifies this structure as a "pier", and shows the platform to have been of a substantial size, oriented on an east-west axis. Scaling from this plan, the overall size of the pier was about 18.1 by 8.5 metres (59' 5" by 27' 11"). If the small separation to the west was the roofed section, it was roughly 8.5 by 4.0 metres (27' 11" by 13' 1"). This relates well to the size of the structure in figure 44, scaled from the human figures shown. Structure 1 was located approximately 114.7 to 132.8 metres (376' 4" to 435' 9") west and 58.3 to 68.8 metres (191' 3" to 225' 9") north of Structure K, following the axes of that building.

The method used to transfer goods back and forth between the river and the fort is not clear. The tracks in the illustrations suggest wheeled vehicles, and figure 5 shows a simple oxcart heading towards the fort. In the lists of "Articles in Use " at Fort Langley in the late 1840s, 5 "carts" are listed, with no further elaboration.[25] The style of these vehicles, and their distribution between farm and fort remain unknown. At the "Muck Farm" associated with Fort Nisqually, a "Horse Wagon" was used to take around rations.[26] At Fort Nisqually itself "ox wagons" under the direction of an Indian were used to haul heavy goods from the "Beach Store" to the fort.[27] Most of these vehicles were country-made. At Fort Nisqually in 1846 oak was gathered for wheels, and at Fort Victoria in August of that year "a Cart for oxen" was built.[28] In July of 1847 another cart was built at Fort Victoria, and three men were "putting Iron bands about a pair of new Cart wheels".[29]

New carts were being built at smaller posts much later, up to the 1860s at least. At Fort Alexandria in January 1858 a new cart was built, and in May of that year completion of a "New Horse Cart" at Belle Vue Farm involved painting it, installing "iron work", and adding the axletree.[30]

Carts were also made at Fort Langley in the 1850s. Douglas wrote to Yale in June 1850 that "we have laid aside some oak timber for cart wheels... which will be forwarded".[31]

Many of the references to vehicles at Fort Victoria described rough functional varieties. In describing her wedding in 1856, the former Emmeline Tod said that there was "nothing on wheels, except the ox carts".[32] James Anderson described the vehicles used to transport the children of the Fort Victoria school to a picnic in 1850 or 1851:

> Dump carts, waggons and any other rough vehicles and horses were put into requisition for the conveyance of the guests on this memorable occasion.[33]

The wheeled vehicles at Fort Langley were probably also of functional design and country construction. At least some of the wheels were constructed of Vancouver Island oak, and ironbound. In the absence of any other directly relevant information, the oxcart shown in the Mallandaine sketch (figure 5) remains the best representative of the sort of vehicles used, both for transporting goods around the fort, and on the farm.

River Transportation - The Fraser River Batteau

Fort Langley, as the primary post on the lower Fraser and the inland depot, was responsible for the maintenance of a system of river transportation, connecting Fort Langley with its subsidiary posts of Hope and Yale, as well as the fish curing stations and other areas of activity. A variety of craft were used for this transportation, including canoes and scows, but the usual vessel was the batteau, or boat, as it was interchangeably called. William Yates, who was at Fort Hope from 1854, described the role of the Fort Langley based batteaux in the tranportation of the inland outfits and returns:

> There were batteaux - flat bottomed boats at Hope - we used to have four of them here ready to meet us. We loaded the furs on the boats and took them to Fort Langley... The furs generally got here from the interior about the 20th of June...
>
> Every year three or four batteaux came up from Fort Langley with goods for the interior, which was called New Caledonia. All the goods came this way...
> It would take us from Langley here from ten to twelve days with the boats to get up - tracking, poling and rowing. We usually had about seven men to a boat.[34]

Fort Langley's complement of batteaux was probably four throughout the 1848-58 decade. When a boatbuilder was first sent to Fort Langley in 1847, it was for the purpose of building four large batteaux.[35] Although seven boats had been built by the following December the bill of lading for the goods shipped from Langley to Yale in the summer of 1848 makes it clear that only four boats were used.[36] In July of 1856 Douglas wrote to Yale that "360 pieces of goods cannot be conveyed in one trip to Fort Hope". As existing bills of lading indicate that four boats would accommodate up to 250 pieces, or around 60 pieces each, the complement of batteaux in 1856 was less than six.[38] In April 1859 the Royal Engineers wished to borrow 2 batteaux from Fort Langley:

> I have also directed the HBC that 2 or more batteaux may be sent down from Fort Langly (sic) but it is uncertain whether they can be spared.[39]

This would mean that more than 2 boats were still present and used in that year, even after the end of the Fort Langley's depot role.

The batteaux used at Fort Langley were derived from those developed by the Company on the Columbia River, where the Fort Langley boatbuilder, Samuel Robertson, had learned his trade. Goerge Simpson travelled in one of these boats on the Pend d'Oreille River in 1841:

> Our boat proved to be a flat-bottomed bateau, capable of carrying all our baggage and ourselves, with a crew of five men.[40]

Charles Wilkes, commanding the U.S. Exploring Expedition the same year described the boats at Fort Vancouver:

> ... these boats... have great strength and buoyancy, carry three tons weight, and have a crew of eight men, besides a padroon: they are thirty feet long and five and a half feet beam, sharp at both ends, clinker-built, and have no knees. In building them, flat timbers of oak are bent to the requisite shape by steaming; they are bolted to a flat keel, at distances of a foot from each other: the planks are of cedar and generally extend the whole length of the boat. The gunwale is of the same kind of wood, but the rowlocks are of birch. The peculiarity in the construction of these boats is, that they are only riveted at each end with a strong rivet, and being well gummed, they have no occasion for nailing.[41]

Henry Warre travelled down the Columbia in such a boat in August 1845:

> ... a large Boat made of Cedar, and built on the same Model as the large Canoes in which we ascended the Ottawa River from Montreal. This Boat has been found after repeated trials to be the best adapted for the intricate River Navigation. The Crew consists of Six Men as Rowers and a Bows Man and Steersman who guide the Boat through the Rapids with very large Paddles. The Bows Man is the responsible guide and it is the duty of the Steersman to follow his directions.[42]

Edward Huggins described the batteaux used on the Cowlitz river between the Columbia and the portage to Fort Nisqually:

> ... a bateau, which is a large, flat bottomed boat, double ended. These boats are made purposely for river navigation, and carry a large amount of freight, sometimes five or six tons, and they draw very little water. They are clumsy, and require skilful men to handle them, and french canadians are the best men for that work.[43]

The most comprehensive and complete description of the Company boats on the Columbia was left by Jesse Applegate, who emigrated to Oregon with his parents in 1843, and lived all his life there:

> The boats were about 40 ft long and 5 ft. beam and about 3-1/2 ft. deep; of light weight built in the fashion known as clinkers. A plank about 1 ft wide, from a pine or larch tree, sawed with a whip saw forms the bottom of the boat. Upon this keel or bottom is fastened the knees or bones for supporting the sides. These are about 4 inches wide and an inch thick, and bent to suit the curve required at the particular part of the boat where they are fastened. The planks are 7 or 8 inches wide, and 1/2 inch thick, overlapping each other like weather boarding on the side of a wooden house. Thro' the planks where they overlap, is inserted a rivet passing thro' both plank and the knee or hoop opposite on the inside of the boat. A washer fitting the size of the rivet is put over on the inside and the rivet hammered down to fit closely and compactly to hold it together. They were built at Fort Colville. The seams were not caulked, but simply payed with pitch. Except at the bow and stern posts which were very much alike, the oars were held in place by wooden tholes or pins, but on the side near the top of the bow and stern posts was an iron ring, securely fastened with a staple, large enough to allow the free movement of the bow and stern sterring oars. This was the only construction possible for navigation in these difficult waters, and was the result of the experience of years.

> The crew consisted of 8 men, 3 to each side and two steerman. When the Dalles or any other insuperable obstruction was reached, the boats were landed, unloaded, and taken out of the water with their cargoes.[44]

Samuel Robertson learned his trade building these boats on the Columbia River. He had been originally engaged by the H.B.C. as a labourer in 1843 and went to the Columbia in 1844.[45] By the time he was sent to Fort Langley in 1847, he was designated a "boatbuilder". However, he was still engaged as a labourer at that time and it was stated that he had "learnt his trade at this place" (Fort Vancouver).[46] The initial set of boats he built for Outfit 1848 would certainly have been to the same pattern as those he had learnt to build on the Columbia. This is confirmed by a letter from Douglas to Yale written October 27, 1852:

> I am glad to hear that you are preparing wood for a new set of river boats as they will soon be required and I have no doubt Robinson(sic) is now able to make many improvements in framing and modelling which will better adapt them for the navigation of Fraser's River.[47]

The improvements were hinted at in another letter of some five years later. At that time, after gold had been discovered at Thompson's River, Douglas wanted to established a "transport corps" of "efficient men and craft" to supply the miners. For this inland transporation, Douglas wanted to know what sort of boat Yale recommended, in order to forward planks of the correct size:

> Will batteau answer for that navigation or will it be advisable to use craft of a lighter description.[48]

Douglas decided to build these boats for navigation above Yale at Fort Victoria. They were to be substantially smaller than what he described as the "large craft used in the lower part of the River", and were to carry about 30 pieces each, or half the load of the Fort Langley batteaux.[49] This suggests that the Fraser River batteaux built at Fort Langley were of heavier construction than the equivalent vessels on the Columbia. On the waters where the Fort Langley batteaux were used, there was no need to portage the boats, so the construction could be adapted accordingly.

In Fort Vancouver inventories from the 1840s, a distinction was made between "Columbia Boats" and "Batteaux"; for instance in 1844 there were 6 of the former and 9 of the latter based at Fort Vancouver.[50] The two varieties of boat seem to have differed more in construction, particularly framing, than in size. Batteaux were always described as flat-bottomed, but the Applegate, Wilkes, Warre, and some of the Simpson references were to canoe-like cedar boats. Applegate and Wilkes were very specific about the bent oak frames and lack of knees on the boats they described; this would have producted a rounded section, like a canoe, and related well to Warre's description. This construction would mean a much lighter, but also much more flexible boat than using sawn frames and knees, but would allow only a round-bottomed configuration. The boats built by Samuel Robertson after he left the H.B.C. definitely had flat bottoms. In his journal of January 1864 there are references to marking out the "Bottom of Skeft", and "putting knees in the Bato (sic)".[51] In the Fort Kamloops journal of 1859 to 1862 appears a list of the materials required to build a batteau. No date is associated, but such a boat was built in January to March of 1861.[52] Some idea of configuration may be gleaned from the materials required:

List of wood for Batteau

48	Lar(ge) courbs (per batteau)
12	sm(all) d(itt)o.
2	stem and stern do
1	Kiel 4 x 6 and 30 feet long and cross pieces for Bottom all in one piece to be split with the saw 5 logs for boards 30 feet and more length.[53]

The "courbs" or crooks for the frames and the stem and stern, the keel and crosspieces for the bottom, all describe a flat-bottomed boat. If it was the full 9 m (30') on the keel, it had a frame every foot, like the boat described by Wilkes, but with much heavier frames. The batteau built at Kamloops in 1861 also was planked with planed boards, painted, and equipped with oars, as well as a "Mast and Yard".[54]

A batteau was defined by Howard Chapelle, a leading expert on small craft as:

> ... a double-ended, flat-bottomed type, with straight, or curved flaring sides between bottom and gunwale, raking bow and stern, and with rather marked sheer and fore-and-aft camber to the bottom. Some boats... were lapstrake, but on the whole the smooth-planked or caravel-built sides were popular.[55]

Chapelle notes standard 19th Centry sizes of batteaux as 9 m to 10.9 m, 12 m to 13.7 m and 15 m to 15.2 m (30'-36', 40'-45', 50'-52') overall. The greatest beam on these boats was just before amidships, the stem or bow was longer and more raked than the stern, and a 7.3 m (24') boat had two pairs of oars on double tholes. "A 36-foot boat was 7 feet wide over the gunwales, 5 feet on the bottom, and about 22 inches deep amidships; such a boat would have four thwarts".[56] Chapelle also described these boats as "planked lengthwise the hull, over floor timbers which are part of the side frames".[57] The cross pieces noted for the bottom of the Kamloops batteau suggest the same style of construction; it would seem the H.B.C. thought of a batteau in the same way as Chapelle. Materials sent to Fort Langley for boatbuilding give no idea of configuration. Included were pitch, Stockholm Tar, and various types of clench nails; 70 mm, 76 mm or 102 mm (2-3/4", 3" or 4") (the latter referred to as "boat knee nails").[58]

The batteaux built at Fort Langley were not Columbia boats; the latter were the cedar plank canoes described by Applegate and Wilkes particularly, with thin, bent frames. These boats were used when portages were necessary. "Batteau", in the H.B.C. usage, described a heavier-built flat bottomed boat, closely aligned with Chapelle's description. The nine metre (30 ft.) keel of the Kamloops batteau would have produced a boat of about 10.8 m (35'-36') overall length, so the Chapelle information on beam and depth would apply in general terms.

A boat that follows both Chapelle's definition and the contemporary descriptions, on a smaller scale, is the "Pioneer Fraser River Fishing Skiff", drawn by D.H. Carter, a Maple Ridge boatbuilder, who lived in the area from 1910, and started building boats in the 1920s (figure 39). Samuel Robertson

settled in that area, and began building skiffs from the 1860s. With the obvious resemblence between Carter's skiff and the batteau style, it is more than possible that the skiff is derived from the boats Robertson had built for the Company. One unresolved question is whether the batteaux were lapstrake or carvel planked. The evidence of the skiff and the Columbia boats supports the former, but oakum used for caulking carvel hulls, was sent in as "New Stores" in Outfit 1848, when the first batch of batteaux were built, and again in 1854.[59] This material may have been intended for scows or other vessels. Carter's skiff is the contemporary craft that relates most strongly to an H.B.C. batteau, and in fact meets Chapelle's definition of a batteau rather than "skiff"; the latter normally having a cross-planked bottom.[60]

The boats that Robertson learned to build on the Columbia were light "plank canoes" as described on the upper river, and classical flat-bottomed batteaux. It was apparently only the latter form that was built and used on the lower Fraser, and the Carter skiff provides the best surviving example of the form, actually being a scaled-down batteau.

Regardless of the precise configuration of the batteaux, they were propelled up and down the river primarily by human power, probably with a crew of 8 men, three manning the oars on each side, and a bowsman and steersman.

George Simpson descibed his descent of the Columbia in 1841 in a number of craft of "the same size and build". On the upper Columbia" our cano (sic) was worked by six oars, besides bowsman and steersman".[61] The technique was modified when the boat approached Fort Vancouver:

> Being anxious to approach headquarters in proper style, our men here exchanged the oar for the paddle, which, besides being more orthodox in itself, was better adapted to the quick notes of the voyageur songs.[62]

Charles Wilkes described the departure of his boat from Fort Vancouver to Cowlitz in 1841, accompanied by the same rituals. Voyageurs from New Caledonia were dressed in plumes and "ribands" tied in large bunches of various colours, with numerous ends floating in the breeze, ornamented leggins, and decorated tobacco and fire pouches. The men shared a parting cup of wine and then embarked:

> The signal being given, we shoved off, and the voyageurs at once struck up one of their boat-songs. After paddling up the stream for some distance, we... passed by the spectators with great animation. ... On we merrily went, while each voyageur in succession took up the song, and all joined in the chorus.[63]

The second day the men had removed their finery, which reappeared for arrival at Cowlitz. En route, "the bowman is the most important man, giving all the directions, and is held responsible for the safety of the boat".[64]

Wilkes also accompanied the inland brigade from Fort Vancouver to Fort Walla Walla, and described the operation in some detail. This brigade had nine boats, carrying sixty voyageurs and eight native wives, in addition to the inland gentlemen. Each vessel held sixty pieces, except that of the man in charge, which held forty.[65] The boats were moved up river by rowing with oars, in "the French or Spanish fashion, adding the whole weight of the body to the strength of arm". In addition the boats were poled, tracked with half loads, sailed with a single square sail, and portaged.[66] The goods removed for tracking and portaging were packed by the men using tump lines, 2 pieces per man, and Indians were hired to assist with tobacco. The boats were frequently regummed when leaks developed due to damage in portaging:

> ... The boats are tracked up and turned bottom up, when they are suffered to dry; two flat-sided pieces of firewood, about two feet long, are then laid together, and put into the fire, until both are well lighted, and the wood burns readily at one end and in the space between; they then draw the lighted end slowly along the gummed seam, blowing at the same time between the sticks; this melts the gum and a small spatula is used to smooth it off and render the seam quite tight.[67]

Wilkes also learned that the most experienced voyageur became the pilot for the brigade, acting as bowman of the leading boat. Each boat had a bowman and padroon, both using "long and large blade-paddles" to guide the boat.[68]

Thomas Lowe, who was in charge of the spring express from Fort Vancouver to York Factory in 1847, also described tracking (often with the aid of Indians and their horses), portaging, and re-gumming to repair the subsequent damage.[69] Edward Huggins wrote of his trips up the Cowlitz river:

> In making the ascent of some of them (rapids), ropes have to be used, and the boat pulled up, inch by inch, the men often being up to their middles in water. The first time I went up, I had a heavily laden boat and the crew was composed of Canadians ahd Englishmen. The steersman though, was a big, strong halfbreed, the best man by far in the boat. The englishmen were clumsy fellows, strong and splendid fellows to pull at a rope when it came to fighting our way up a rapid.[70]

When J.R. Anderson accompanied the brigade to Fort Langley in 1850, the boats camped at the mouth of the Harrison river en route from Hope to Langley. The men were devoured by mosquitoes while the local Indians "begged and stole". After a quick breakfast, they struck camp and set out:

> Bidding adieu to our unwelcome hosts, the boats were lashed together and allowed to drift with the stream, a bowsman and steersman in each boat taking turn about to keep the boats in the channel. Early the next morning nearing Fort Langley we were aroused, the men decorated with gay ribbons on their caps, singing Canadian boat songs and pulling lustily, soon brought the boats in sight of Fort Langley. The gentleman in charge, the late J.M. Yale was at the landing to welcome us...[71]

On the lower Fraser River conditions were easier than on the Columbia. There was a strong current to work against, but no need for the portages necessary on the Columbia. All the other methods noted above were apparently used to propel the batteaux up and down the river. William Yates made reference to tracking, poling and rowing. The former is confirmed by Douglas

directing Yale in June 1858 to "keep a sufficient quantity of Manilla Rope to make tow lines for the Batteau".[72] The minimum time noted for transporting the goods upstream from Langley to Hope was five days, in July 1853.[73] The batteau built at Fort Kamloops in 1861 was equipped with a mast and yard for the sail, and oars as well.[74]

The men who crewed the batteaux were from Fort Langley, but not always Company employees. In 1857 the Colvile outfit of 240 pieces was sent to Fort Hope under the direction of Angus McDonald. McDonald was told to select his outfit at Langley and:

> Proceed with the same without delay to Fort Hope, and you (Yale) will please to furnish him with as many men and Indians as will be necessary to man the boats.[75]

The postscript to this letter identifies another source of boatmen for the Company on the Fraser:

> I have told Ohule, who returns to Langley with Mr. McDonald, to mention to the free Kanakas on the route, that your would require them for the trip for Fort Hope, and to go to you for that purpose. There are seven able men among their number.[76]

The H.B.C. employees, Indians, and Kanaka freemen who manned the boats on the river probably relied primarily on the oar. Anderson's reference to the men "pulling lustily" and singing differs from Simpson's description of paddles being used on the Columbia. Tracking was also used, and granted the conditions and comparative information, probably poling and sailing as well. Paddling would have been less effective with batteaux than Columbia boats, so probably was not use. When tracking, the boats were partly unloaded judging by the references to 19 country-made "portage straps" in the Fort Langley equipment shop in Outfit 1849;[77] these were what Wilkes described as being used for carrying the goods on the Columbia while tracking took place.

Even in the absence of paddles, the boats' crews on the Fraser decorated themselves and sang their boat songs as described further south. Some of

the songs noted in the area by R.C. Mayne were "Ma Belle Rosa" and "Le Beau Soldat", and H.J. Warre transcribed one of them, "A La Claire Fontaine", in its entirety (Appendix C).[78]

The batteaux of Fort Langley were the primary mode of river transportation, serving not only the depot, but almost all the incidental movement of goods up and down the river. The capacity of these boats was apparently somewhere between 2.7 and 3.6 tonnes (3-4 tons). The normal complement of 60 or 65 inland pieces, plus a crew of eight men and provisions, and one or two passengers, would represent about 3200 kg (7,000 pounds) load. In 1853 56 barrels of salt salmon which was to be shipped from Fort Hope to Fort Langley was considered a "boat load".[79] The plan space of this number of barrels would be roughly the same as the inland pieces, assuming the standard 82 kg (180 pounds) salmon barrels, but the weight of the barrels alone would have been over 3700 kg. (8,000 pounds). Fewer men would be required to crew the boat, however, as it could drift down the river as described by Anderson.

Some idea of the cargo carried by the batteaux taking goods from Fort Langley for the brigades may be gathered from existing bills of lading from the period. Boat No. 2 (of 4) in 1848 contained the following:

11	Bales Merchandise
2	Cases Goods
4	Do Ironworks
1	Do Guns
1	Basket Kettles
10	Kegs
6	Rolls Tobacco
2	Bundles Iron
13	Bags Ball Shot

Total 50 Pieces

Provisions

90 lbs.	Fresh Beef
100 lbs.	Fresh Pork
90 lbs.	Biscuit
100 lbs.	Flour

Agrits

1	Boat Line
1	" Kettle
1	Lge Axe

Men

Onarisi 80

A later cargo is illustrated in another, undated bill of lading. Boat No. 2, again of 4, contained the following goods:

4	Cases Merchandise
25	Bales do
2	Cases Ironworks
4	Cases Soap
4	Kegs Liquor
1	Keg Gunpowder
6	Rolls Tobacco
5	Kegs Sugar
1	Box Candles
1	Maccaron
1	Keg Rice
7	Bags Salt
1	Case Medicine
1	Case Tea
1	Bag Shot
1	Box Mr. P Ogden
65	
1	Case Guns (Arm Chest)
66	

Provs

4 Bags Flour
1 Bag Biscuit
2 Bag Beef

Duquette and Issue [81]

Although undated, this boatload was probably from the 1850s or 1860s, with the box for Peter Ogden, but not from 1855, 1857, or 1858, as other arrangements were made for Fort Colvile those years, and this bill of lading includes Colvile goods. The increased number of pieces shipped per boat could reflect the changes in the second, 1852 batch of Fort Langley batteaux, presuming one of the changes was greater size.

Although the responsibility of building, maintaining, and manning the batteaux fell on Fort Langley, the cost of maintaining the fleet was "carried to account of general charges".[82] This meant that the expense was considered a departmental one rather than to be incurred by any one post.

The batteaux were relatively shallow draft vessels, although they drew more water than canoes. Donald Fraser, in the London Times, referred to the Chilliwack and Sumas Rivers being "at all seasons navigable by large canoes, and in the high stages of water in summer by the batteaux of the Hudson's Bay Company".[83] Strongly built and flat bottomed, they could easily be run ashore, particularly on the sand or mud banks of the lower Fraser, and so were used to unload ships at Fort Langley, as noted. It is therefore difficult to isolate batteaux landings in the same way as for the larger vessels involved in the Fort Victoria to Fort Langley commerce.

A facility would have been expected for storage of the batteaux when not in use; this seemed a standard feature at riverside forts involved in the depot function. The journal of Thomas Lowe, an H.B.C. clerk at Fort Vancouver, describes a fall storm in 1846, when "a Boat shed at the water side was blown

down braking (sic) one of the River Boats which was inside".[84] The construction of these sheds at Fort Vancouver was recalled by an American settler some years later: "The boat sheds were fir posts stuck in the ground, with slab roofs".[85]

The boats of the New Caledonia brigade were also provided with storage facilities at their rendezvous, Fort Alexandria. In August 1851 the boats were hauled out of "the Shed" to prepare them for the trip north, and in May of the following year poles were cut for a new "Boat shed".[86] In May, 1858, the men of the Brigade were occupied in "hauling up the Boats to the shed" and two days later "cutting small popular (sic) trees to cover the boat".[87]

At Belle Vue Farm on San Juan Island, a shed was built on the beach for the canoe of the man in charge.[88] The only man-made features that would be expected in support of this aspect of the depot function would be some form of protected storage for the batteaux. These sheds would presumably have been of a simple pattern, like those at Fort Vancouver and Fort Alexandria. To facilitate access to the river, and to keep the boats in a moist environment (at Alexandria done by covering the boats with trees) such structures would most likely have been located on the sandspit.

There is no evidence for the existence of these sheds at Fort Langley in 1858, but perhaps the complex near the steamer landing would have included this function along with the other storehouses.

Local Transportation

Transportation in the vicinity of the fort was facilitated by horses, oxcarts, and apparently a complex of roads or paths (see figures 4, 5, 12, 13, 44, etc.). Some of the paths may have extended south to the farm in 1858, but they were apparently not suitable for heavy cartage; Ovid Allard requested a cart or wagon in December 1868 "now that we have a cart road made to the farm".[89] A bridge for this road had been built some three years earlier.[90] This roadbuilding was clearly related to the new emphasis and redevelopment of agricultural facilities on the farm in the 1864-1868 period.

Earlier in 1868, before the cart road as completed, Allard referred to the method of getting hay from the farm to the "Shead on the spit". This was possible "when the Salmon Creek was high enough to float the scow down with 5 tons".[91]

The same mode of transportation was recalled by his son, Jason Allard in his plan and "References" (figure 3): "Most of the grain from the Prairie was shipped down the Salmon River to the sheds built at the Mouth".

Before the completion of the cart road in the late 1860s, it seems that most of the heavy transportation to and from the farm was carried out in scows on the Salmon River; it drained the farm, and entered the Fraser near the landing point of the coastal shipping on the Fraser River.

A scow was listed in the "Articles In Use" inventories of the late 1840s.[92] As there was still at least one present in the late 1860s, it is likely that a scow or scows would also be available and used in 1858, for this farm transporation. Some idea of the size of these scows amy be gathered by the 4.5 tonnes (5 tons) of hay they would carry, or the three trips required to move 26 head of cattle in the late 1860s.[93]

The wood being prepared for the "New Skows" at Fort Victoria in early 1847 ranged from 12 m to 14 m (40' - 46') in length, and 300-600 mm (1'-2') square. The planking was sawn 500 mm (20") wide by 76 mm (3") thick, and the vessels were "caulked and tarred prior to use.[94] Of rough construction, one of these vessels only took a little over one week to build in the fall of 1848.[95]

The only structures which would have been expected in association with this local transporation would be sheds or storehouses for farm produce. If present in 1858 they likely would have been located in the complex on the west end of the sandspit, for convenience in shipping, proximity to the mouth of the Salmon River.

Trades

The viable pursuit of the primary economic goals of the H.B.C. at Fort Langley required a number of other activities in support, foremost of which were the trades of blacksmithing, coopering and boatbuilding/carpentry. These trades enabled the diversified operations of the Hudson's Bay Company to proceed at Fort Langley, and will be examined here in their order of chronological development.

Blacksmithing

Blacksmithing was essential at Fort Langley for the production of iron goods such as axes and traps for the native trade, and tools and hardware for maintenance of the fort and farm. After the depot function was assumed in 1848, the blacksmiths at Fort Langley were also responsible for producing some of the ironwork required for Indian trade and maintenance at the inland posts.[1] By the late 1850s there was one blacksmith and one assistant blacksmith at Fort Langley, a complement which had remained stable throughout the decade.[2] The two men designated as blacksmiths in outfits 1857 and 1858 were James Taylor and Etienne Pepin.[3]

Location

Structure J may be tentatively identified as the building housing this function in 1868. In March of that year Ovid Allard wrote to the Board of Management informing it that "Our blacksmith shop much requires a new Roof also a chimney."[4] The Frederick Dally photograph of 1867 or 1868 (figure 8) shows that there was only one appropriately small building still in existence within the formerly palisaded area by this time; Structure J. In the photograph this structure is a much darker colour than Structure K, the next building to the right. This colour difference could have related to the activity within the building, showing the results of years of exposure to coal dust and smoke, and so supporting the blacksmith shop identification.

In September and October 1871 the blacksmith shop was converted to a dwelling house, and in the "Langley 1868" map (figure 45; the date is suspect) a "dwelling house" was shown just north of the "store" (presumably meaning Structure K), corresponding to the location of Structure J.

In the 1920s the information derived from Jason Allard consistently identified Structure J as "Blacksmith Shop" (see figure 3, the most accurate of these sources.)

Finally, local tradition identifies Structure J as the blacksmith shop. Concentrations of iron waste found both in site development in the 1950s and during archaeology in the 1970s support this identification. Structure J was almost certainly the blacksmith shop at Fort Langley in 1858.

Direct Evidence

The plan of Fort Langley drawn by William McColl in September 1862 shows Structure J was 10.3 metres (33'8") by 5.8 metres (19'2"). The latter dimension is in some question; Structure K was shown by McColl to have been the same width, which does not correspond to the observed width of this extant building. Structure J was plotted 13.7 metres (45') to 24.0 metres (78'9") north of the north wall of Structure K, and on precisely the same east-west axis.

The Frederick Dally photograph of 1867 or 1868 (figures 8, 8a) shows Structures J and K to have been the only structures left by this date in what had been the extreme north end of the fort enclosure. Structure J was a relatively small, low, hipped-roof building. Assuming the building length shown in the McColl plan to have been accurate, the peak of the roof was some 4.3 metres (14') long, and was about 3 metres (10') above the line of the eaves.

The roof was covered in bark, probably cedar, and looks as though it was laid in three units; three batten boards and three courses of bark. A chimney top is visible near the north (left) end of the peak on the far side of the ridge. The visible portion was about 1 metre (3'3") wide by 0.5 metres (1'7") above the ridge of the roof. Two light coloured features are visible on the front face of the roof; that to the right appears to be simply a flaw on the original negative; that in the centre is symmetrical and aligned with the eave of the roof, so possibly was a feature of the structure, but unidentifiable.

Framing details of the front wall of the building are not clearly shown, but the facade seems to have been divided into thirds, with the centre third blank, and two openings in each of the outside sections. As mentioned, this building was much darker in colour than Structure K.

In March 1868 Ovid Allard, then in charge at Fort Langley, wrote to the H.B.C. Board of Management that "Our blacksmith shop much requires a new roof, also a chimney"[5], and some four weeks later that he would "Endeavour to have the work done immediately".[6] Three and one half years later Allard wrote to Roderick Finlayson that "the blk:smith has a new roof, and I have shingles nearly enough for another building".[7] This implies that the 1868 reroofing involved shingles, rather than bark, so the Dally photograph probably predates March, 1868.

In September 1871 Allard, taking advantage of the "new" roof, decided to convert the former blacksmith shop into a residence.[8] He almost had it completed by the latter part of October, but gave no information on the conversion other than noting that "it is going to be more expensive to fix up these old buildings than I expected".[9]

Photographs from the period 1909-1917 reveal more about the configuration of Structure J. A postcard produced in 1909 shows Structures J and K and the post-1868 shed connecting them from the east side (figure 46).

Structure J is shown to have conformed in gross configuration to its 1868 appearance, as shown in the Dally photograph. The most evident change is the six courses of shakes which had replaced the bark roof covering. Structure J is shown to have been three bays long on the east side, and of normal post on sill construction. The sill appears to have been more than 0.3 metres (12") wide, the four upright posts were about 0.3 metres (12") wide, and 2.6 metres (8'6") tall. The bays, from south to north (left to right) measured about 3.2 metres (10'6"), 2.9 metres (9'6"), and 3.2 metres (10'6") long respectively. The bays were filled by six wall fill members. The top wall fill members in each bay had square notches or mortises cut into their top faces, immediately below the plate. The south bay had one central notch, and both others had one at the extreme south end, and one centred in the member. The roof had very little overhang compared to Structure K, perhaps 0.1 to 0.2 metres (6"). A small metal chimney was centred in the second course of shakes from the ridge. The height of the roof peak from the plate bottom was about 3 metres (10'), and the overall height of the building was close to 5.8 metres (19').

The north and west walls of Structure J are shown in a photograph from the northwest, taken pre-1917 (figure 47). The north wall was divided into two bays, each filled with 5 members, and a window opening was located immediately west of the centre post, 1 metre (3'3") to 2.2 metres (7'3") above the top of the sill.

The west wall was divided, as was the east, into three bays, which appear to have been of the same dimensions as their equivalents on the opposite side. The outer bays were symmetrically arranged, with a door opening adjacent to the two centre posts, and a window opening midway between the door opening and the corner posts. These openings all showed signs of modification from their original configurations, revealed by the 0.2 metres (7"-8") wide vertical framing members on each side of them. The original door openings were apparently about 2 metres (80") tall by 0.8 metres (30"-32") wide, and original window openings started at about 1 metre (3'3") above the sill. All the openings were extended upwards some 0.3 to 0.4 metres (14") from their original configurations. The south window opening contained a nine-pane sash of a size apropriate to fill one of the original openings, which had been moved up to the top of the enlarged opening; the bottom was blanked with wood. A sort of half-door or gate may be seen in the adjacent door opening. Both these outer bays seem to have had five or six wall fill members.

The top member in each of these bays shows a central notch equating to two of the five seen in the east wall.

The centre bay in this wall is shown to have been anomalous, filled with vertical planking, rather than the expected horizontal wall fill. This bay contained no features except a closed door, with the remains of a ramp at its base.

The sills had lapped corners, with the west sill overlaying the north and south sills.

This photo, combined with the east view above, shows the relationship between the width of the connecting shed and Structures J and K. The similarity evident in the widths of the buildings means that Structure J was about 7.1 metres (23'4") wide, and that the bays on the north and south walls were some 3.1 metres (10'2") wide.

The west and south walls of Structures J appear in a photograph taken from the southwest after the shed was removed, about 1917 (figure 48). This shows a filled window opening in the south wall similar to that shown in the north wall in figure 47; both ends of the building were symmetrical. Figure 48 shows the vertical infill in the centre bay of the west wall to have been removed; this was probably shortly before Structure J was torn down.

In 1979 archaeological excavations, a concentration of iron artifacts was located to the east of the former site of Structure J which supports the existence of blacksmithing activity in the area at one time.[10]

Chronology

A blacksmith shop would have been an essential structure at Fort Langley. Presumably a facility for production of ironwork was required for the rebuilding of the third Fort Langley starting in April-May 1840, after the fire that destroyed the second fort. However, whether this function was performed in Structure J at that early date, or in another building, is not known. At other H.B.C. posts the first blacksmith shops seem to have been shortlived, perhaps

only intended as temporary facilities. At the first Fort Langley, for instance, a "new" blacksmith shop was referred to within two years of the initial fort construction.[11] At Fort Vancouver the first phase of construction was served by an outdoor shop set up under a tree.[12]

Indirect evidence including the essential nature of the function, and its location in the north (and probably earliest developed) part of the fort, would point to an early date of construction for Structure J.[13] The first definite evidence of its presence comes from the McColl plan of 1862 (Figure 4). The downward trend of activity at Fort Langley after 1858 makes it unlikely that a totally new structure was built in the intervening four years. However, an article in the Vancouver Daily World of 1915 referred to the two "block houses now standing" which were "reconstructed out of the heavy timbers of the older buildings" in 1859. The author of the article spoke to both Jason Allard and Joseph Maayo, so this information may be accurate.[14] If Structure J was built (or rebuilt) in 1859, it is likely that a similar earlier building on the same site served as the blacksmith shop through the active period.

After the Dally photograph of 1867 or 1868 was taken, Structure J underwent a series of modifications. In 1868, it was reroofed and had a new chimney built, and continued to serve as a blacksmith shop for at least two more years.[15] In 1871 it was converted to serve as a dwelling house "for the men which are required to carry on the labour of this Establishment".[16]

The building is shown by the photographic record to have gradually deteriorated from c. 1894 to 1917, when it was finally torn down.[17] It is reputed that Structure J housed a boiler for the preparation of pig food in this period, which could explain the small chimney on the east face of the roof.[18]

Indirect Evidence

Most of the construction details of Structure J have been discussed in the section above. Unanswered questions remain concerning the layout of the building, the chimney/forge, and the centre bay of the west wall. Although comparative materials on blacksmith shops in Columbia Department are scarce, some examination will help resolving these issues.

It is known from the Fort Langley inventories (goods in use; noted through 1849) that the blacksmith shop was equipped with one forge, as only one anvil and bellows were present.[19] The allotment of space per work station in Columbia Department blacksmith shops was something on the order of 28.1 square metres (300 square feet). At Fort Colvile, a secondary post that had a minor blacksmith function, and presumably one forge, the building was 20 feet by 15 feet, or 28.1 square metres.[20] The blacksmith shop at Fort Vancouver, where the inventories and personnel lists indicate four work stations, was 45 feet by 27 feet, or 112.3 square metres.[21]

In comparison, Structure J, with one work station, was about 10.3 metres (33'8") by 7.1 metres (23'4") or 73.1 square metres (785 square feet). This is well over double the space expected for this level of activity.

Two possible explanations arise, both involving Structure J housing more than one function. This two function alternative is supported by the facade of Structure J, with its symmetrical door and window configuration, evident even before the 1871 conversion to a dwelling. One possibility is that Structure J was a combined blacksmith shop and iron store. The combined area of the two buildings serving these functions at Fort Vancouver was about 223.3 square metres (2415 square feet).[22] This total space allocation, which served four forges, corresponds more closely to the space which was available in Structure J for only one forge.

Another possibility is presented by the blacksmith shop which was at Fort Victoria. This structure was nearly identical with Structure J, both having been single storey post on sill buildings with hipped roofs (figure 49). The Fort Victoria structure was about 10.1 by 6.5 metres (33'2" by 21'4") or 65.7 square metres (708 square feet), and as described as a "house and Blacksmith's Shop."[23] A "Blacksmiths house and shop" was also listed by Henry J. Warre in his 1845 description of Fort Vancouver, indicating that possibly residential and workshop functions were combined.[24]

Of the two options the latter would better explain the configuration of Structure J. An iron store/blacksmith shop would have had less need for partitioning, which in turn would have obviated the need for two entrances in a relatively small building. Residential space, on the other hand, would have definitely required some separation from the workshop function, and hence would provide a better explanation for the Structure J facade.

The chimney of the Fort Victoria blacksmith shop appears to have been very similar to the visible portion of that at Fort Langley (figures 49, 8a). This example of a chimney, together with the absence of door or window openings in the east (back) wall of Structure J, would suggest a forge located against this wall, and a free-standing chimney.

Prototypes for period forges and chimneys may be seen in materials relating to those at Lower Fort Garry (figure 50), Fort Vancouver (figure 51) and Jones Falls (figure 52). The first and last of these sources are farther afield than is desirable for comparative purposes, but figure 52 in particular seems to relate well to the chimney size and configuration which was in Structure J, although this shop was built as part of the Rideau Canal works in Ontario.

A possible explanation for the anomalous centre bay in Structure J may be found in comparative sources. A blacksmith shop often would have a double door (figure 53) to facilitate access. This would normally occur where farrier's or heavy cart/agricultural work was performed. Whether this need was present at Fort Langley is not indicated in documentary sources. However, the overall width of this bay was wider than would be anticipated for such a door, so specific details are difficult to establish.

The floors to H.B.C. blacksmith shops in the area were normally of packed earth; at Fort Colvile there was "no floor";[25] and at Fort Vancouver a "hard-packed earth" floor showed up archaeologically in the blacksmith shop.[26]

Conclusion

The appearance of Structure J, with the exception of the centre bay of the west wall, is revealed in the iconographic sources. The through mortises which were in the wall fill members immediately below the plate of the east wall provide a possible explanation of this section (figure 46). The mortises which were in the two outer bays of the east wall had equivalent features directly opposite them in the west wall (figure 47). This suggests that these mortises served to locate tie beams extending across the short axis of the building. Figure 54 shows an example of this technique, with the tie beams mortised into the wall fill members below the plate.

Structure J had the same type of mortises in the centre bay of the east wall (Figure 46). Without similar construction and mortises in the centre bay of the west wall, these features would have served no purpose; hence it is likely that this bay was also filled with horizontal timbers. The Dally photograph shows no openings in this centre bay; however, a closed door is possible, granted the limited detail visible.

The relatively central location of the chimney over the north part of the central bay, means that at least half of the building was occupied by the blacksmith shop. If interior partitioning was present to separate functions, it was probably of vertical plank construction, either tongued and grooved or battened for a tight seal following the examples of such partitions at Fort Vancouver and Fort Victoria.[27]

Whatever portion of Structure J served as the blacksmith shop would have had a packed earth floor, as in the comparative cases above. However, if the rest of the building served a residential role, it would have had a wooden plank floor installed.

The level of finish of this building would have been very low, with no interior or exterior elaboration. This was typical of both workshops (see figures 51 and 54 for comparative information) and H.B.C. servants' quarters, as will be seen in the next chapter.

The material of the forge and chimney is unknown. By 1858 brick, as seen at Fort Victoria (figure 50) was probable, but clay and stone, as mentioned in the Fort Langley journal of the 1820s , remains a possibility. The chimney of the blacksmith shop built at Fort Rupert in the fall of 1849 was also built of stone.[28] At Fort Simpson in 1857 two men were working on a "Chimney 'outside' Blacksmith Shop", suggesting an exterior chimney.[29] The light, regular feature above the centre bay in figure 8a may have been a metal chimney, as used with Canada stoves. If so, this supports a dual function and relatively equal allocation of space in Structure J.

Blacksmith Shop Operations

There were enough anomalous elements in Structure J to suggest that it served another function, perhaps residential, in addition to its primary function. In the period during which this building was erected, early in the development of the fort, residential space was probably at a premium. It would have been reasonable to include accommodation in a structure serving a trade, even one as dirty as blacksmithing. By the 1850s the need for housing within the fort was alleviated, and residential space in an industrial context would have been less appealing. The scope of the blacksmith's trade remained more or less stable through the years, so no real pressure existed to expand the shop into the other half of the building. The space would have been convenient to use for other purposes such as temporary accommodation or storage. If half the building had remained in this configuration, it could explain why, in 1871 Allard decided to convert this particular structure to a multiple dwelling for the "Men which are required to carry the labour of this Establishment."[30] The primary role of Structure J in the 1850s was as a blacksmith shop, and its large size may have been no more than a local variation; any other activity it housed was secondary.

The importance of the blacksmith to the Company in the west was noted by Charles Wilkes, when he visited the large shop at the H.B.C. mill near Fort Vancouver in 1841:

> They have a large smith's shop here, which, besides doing the work of the mill, makes all the axes and hatchets used by the trappers. The iron and steel are imported: the tools are manufactured at a much less price than those imported, and are more to be depended on... I was surprised at seeing the celerity with which these axes are made. Fifty of them, it is said, can be manufactured in a day, and twenty-five are accounted an ordinary day's work. They are eagerly sought after by the Indians, who are very particular that the axe should have a certain shape, somewhat like a tomahawk.[31]

For the same reasons much of the ironwork needed for each outfit in Western Department was produced at the various Company posts. In 1850 Douglas apparently wanted Fort Langley to assume a major role in this work:

> There is only one Blacksmith here (Fort Victoria) and we consequently depend on you for all the Iron works required in the Interior.[32]

In that year Fort Langley also had only one blacksmith listed, Etienne Pepin.[33] It would seem that one man could not meet the demand, as Douglas requested another for Fort Langley, but he still had not been supplied by March 1852.[34] A blacksmith was expected later that year on the York Factory Express, in spite of the presence of George Mitchell, who appeared at Fort Langley in June 1851, and was still on the books for 1852.[35] Mitchell was ordered away from Fort Langley in March, 1853:

> Please to send Mitchell the Blacksmith by the return canoe as the Steam vessel is now here, and he is wanted for the next voyage.[36]

By Outfit 1856 James Taylor was at Fort Langley, and seems to have assumed the responsibilities of head blacksmith.[37]

Throughout the active decade, orders were sent to Fort Langley for ironworks to be made up for the inland posts. These requisitions of goods exist for Outfit 1850 for New Caledonia, and Outfit 1852 for that district, along with Colvile and Thompson's River.[38] The 1850 order included garden hoes, components for beaver traps, building hardware, ice chisels and horseshoes, while the 1852 order was primarily 642 axes of different sizes and configurations.[39]

The range of projects undertaken by H.B.C. blacksmiths was vast. At Fort Simpson the trade was pursued at a level similar to that at Fort Langley, with two blacksmiths, one of whom was sometimes referred to as a gunsmith. The jobs performed included:

- H.B. brands for fur bales
- large and small axes
- repairing axes
- "steeling" axes
- repairing guns and gun locks
- scrapers for the Big House
- adzes
- nails
- an iron bedstead
- candle moulds

- meat hooks
- brass weights for the trade shop
- hinges
- gratings for drains
- a chandelier
- tin scales and a pair of steelyards for Fort Rupert
- tin pans and coffee pot
- downspouts
- stoves
- door bolts
- fire irons 40

The axes, adzes, and repair of axes and guns related to the native trade, but the rest of the metal goods were for use around the post itself. The range of items produced at Fort Langley would have been similar.

The technology used by the blacksmiths at Fort Langley was relatively simple. The "Articles in Use" in 1848 included the following items which related to the blacksmith shop:

1 blacksmiths Anvil
1 Blacksmiths Bellows
2 cold chisels
1 Grindstone
2 sledge hammers
1 blacksmiths vice
3 Axe mandrils (sic)
2 single nail mounds
4 pr. Blacksmiths pincers
1 screw plate 41

More information on these items is found in other sources. For Outfit 1848 1-1/2, 2 and 2-1/2 cwt. anvils with "beak Iron" were received at Fort Vancouver, the 2 cwt. one intended for the "N.W. Coast".[42] In Outfit 1853 25 anvils were ordered, 10 each of 1-1/2 and 2 cwt., and 5 of 1 cwt.[43] The Fort Langley anvil probably was 2 cwt., with a horn, or "beak Iron". A pair of blacksmiths bellows

ordered from Fort Vancouver for Outfit 1843 were to be "36 ins. broad and 8 feet long".[44] This may have been a standard size. However, the bellows at Fort Langley in the 1850s, although also of a substantial size had been made in-country. On August 12, 1850, Douglas shipped to Yale "5 hides tanned leather for making Blacksmith bellows".[45] The grindstones imported into the district in Outfits 1847 and 1852 were 480 mm (19") diameter, and "hard or fine grit".[46] In the Thompson's River requisition for Outfit 1856, the hard grit 19 inch grindstones were noted as the ones used for axes.[47] The bench vices imported in Outfits 1843 and 1847 were 1/2 and 1 cwt., and in the earlier requisition were listed as being "for our own forges".[48] Either size would have been appropriate at Fort Langley. Screw plates "with Taps Complete" came in various sizes. For Outfit 1845 "2 large blacksmiths screw Plates wh taps from 3/16 to 3/8 in. ... first quality ... for the Service of the Company's forges" were ordered for Columbia Department.[49] By the time of the 1847 requisition a "regular" screw plate had taps 3/4" and 3/8" and a "large" one had taps 1" to 1/2".[50]

A new tool was added to the blacksmith shop in 1856. The Fort Langley cooper, Cromarty, requested iron truss hoops for forming barrels from Victoria. Douglas thought they should be made at Fort Langley, but intended to send them if available in Victoria.[51] Although one set was sent in April, by October 1856 Fort Langley was in

> ... immediate need of two or three sheets of Sheet Iron to cover a wooden block mould for making truss hoops and repairing old ones.[52]

In the late 1850s, the activity in the blacksmith shop had remained fairly stable over the preceding decade. For instance, Douglas wrote Yale in May 1856:

> I herewith transmit a statement of the Axes and other made up Iron works required this season to complete the Outfit for the interior district. You will please to get the same prepared at your earliest convenience and in time for the Brigades.[53]

The months of May and June would normally have been occupied with these preparations. If some of the axes were not stockpiled, there may have been as many as 12 or 15 fabricated per day, to complete more than 600 in two months. The same applies to the other ironworks, which were more complex than the simple folded axes. In addition to these rush jobs for the interior, the shop would have turned out axes, traps, and various other goods for the local Indian trade,

presumably on a year-round basis. The blacksmiths also fabricated boat hardware when and as needed, and were producing and repairing truss hoops for the coopers. There would also have been an ongoing need for various domestic metal goods, such as those made by the blacksmiths at Fort Simpson.

The first real change in this pattern of production came in late 1857, as a result of the gold rush to Thompson's River. Douglas sent a requisition for Yale to fill on December 26:

> Two sample Pick Axes are also forwarded, the small one being for rock and other for digging earth; they require to be steeled and carefully tempered.[54]

The blacksmiths at Fort Langley were to make 100 picks based on the samples, which were then to be forwarded to Thompson's River via Fort Hope.[55] It is likely that some tools were also produced for the goldminers on the lower Fraser, prior to the start of the large shipments of such items from San Francisco in June 1858. A high level of activity in preparation for the brigade would have continued, as demand from the inland posts did not decrease with the 1858 gold rush. However, the local native trade decreased sharply, as already discussed. The ongoing demand for trade goods such as axes and traps would have declined sharply. The corollary of this lessened trade was a lower demand for barrels to hold salmon and other products, and so less need for the blacksmiths to produce truss hoops or other articles in support of coopering. Boat building also ended with Robertson's resignation in 1858, and construction was at a standstill. With the end of brigade preparations in June, the blacksmith shop would have been at a very low level of activity.

The men working in the blacksmith shop in the later 1850s were James Taylor and Etienne Pepin. Taylor was an Orkney man, as were both the other head tradesmen at Langley, Cromarty and Robertson. As with Robertson, Taylor seems to have learned his trade in the country. He was initially engaged as a labourer in 1833, and was sent to Columbia department for his first five year term of engagement.[56] Sometime between this and his appearance at Fort Langley prior to 1856 he acquired blacksmith training. In the late 1850s Taylor was definitely in charge of the shop, and as with the other tradesmen, quite autonomous. He was, for instance, making trips to Victoria to select iron, as noted by Douglas in 1856:

> The hoop and blacksmiths' Iron have been selected by Cromarty and Taylor, and will I trust be found suitable, for the work you have to do...[57]

Taylor's assistant, and the man who had been listed as a blacksmith at Langley for many years, was Etienne Pepin, who had started working there in 1827.[58] Aurelia Manson remembered him as a farmer rather than blacksmith, and this is repeated in other secondary sources.[59] Pepin was the only French Canadian tradesman listed, and was definitely not in the tight-knit circle of the three Orkneymen (see below). In any case, the responsibility for producing the ironwork at Fort Langley fell on these men.

The techniques and furnishing of the Fort Langley blacksmith shop would have followed mid-nineteenth century convention for a non-mechanized shop. Archaeological examples of the blacksmiths' work are available in the collections of Parks Canada W.R.O. Archaeological Research Section, and there is also a very extensive type collection at Fort Vancouver National Historic Site in Vancouver, Washington. The techniques of producing some of the articles, particularly axes, have been examined thoroughly in other reports, notably Fort Vancouver 1829-1860 by Lester Ross, and A Frontier Fur Trade Blacksmith Shop 1796-1812 by John D. Light and Henry Unglik.[60] These studies give most of the particulars of fur trade axe manufacture.

Some "standards" or specifications for Company blacksmiths were described in a "Store Memoranda", apparently from York Factory, c. 1831. Many of these standards were still observed west of the mountains in the 1850s:

Blacksmiths work

Standard Iron and Steel

Iron flat Bar	Stem and Stern plates	4 x 1/4
for	Plough Coulters	3 x 7/8
	Plough Shares	
	Large Axes	2 5/8 x 1/2
	Half do.	1 7/8 x 3/8
	Small do.	1 1/2 x 1/4
	Broad ice Chisels	1 5/8 x 1/4
	Narrow ice do.	1 x 7/16
	Traps No. 1	1 x 3/8
	Traps No. 2	7/8 x 1/4

Steel German	Large Axes	1 1/4 x 1/2
for	Half do.	7/8 x 5/16
	Small do.	7/8 x 1/4
	Trap Springs	7/8 x 1/4

Standard weight for Axes:

Round head large	4 1/8 lb	Sq. head large	4 1/2 lb
half	2 lb	half	2 1/4 lb
small	1 1/4 lb	small	1 1/4 lb
Grooving	3 5/16 lb	Pick	11 lb [61]

Fort Langley records show that some of the standards were followed there in the 1850s. Substantial quantities of "flat bar iron" of unspecified sizes were shipped in, as well as 19 mm (3/4"), 25mm (1") ("Beaver trap iron"), 32 mm (1 1/4"), 25 mm x 9.5 mm (1" x 3/8"), and various sizes of round and square iron.[62] In addition, "steel for axes", and "steel for traps" was also sent in.[63] The "Articles in Use" listed in the Spring 1847 inventory of Fort Langley includes mandrels for large, half, and small axes, so seemingly convention was followed; the stock sizes and finished weights of 1831 would have remained appropriate.[64]

Both of the Langley blacksmiths were apparently "country-trained", so probably lacked something in skill compared to traditional tradesmen. However, in the context of producing large quantities of standard specification goods such as axes and traps, they would soon acquire the ability to meet any demands made on them at Fort Langley.

Coopering

This trade developed at Fort Langley as a necessary adjunct of the various food exporting activities. At the peak period, in the late 1840s and early 1850s, some 2,500 or more barrels were required each year for the salmon and cranberry packing industries alone. The Fort Langley coopers would probably have

produced between 2,000 and 3,000 barrels per year during this peak period. There were at least four coopers working at Fort Langley in the 1850s.[65] By Outfits 1857 and 1858 respectively, three and then two men were listed as Coopers in Company records.[60]

Location

The first reference to the location of a cooper's shop at Fort Langley was in 1852, when "a fire broke out in the Cooper's shop, which was burnt to the ground with another small building and a part of the stockade on the north side of the Fort".[67]

By 1858 the rebuilding of the "north side" of the fort was apparently complete; the iconographic sources (figures 5 and 44) show the palisade to be intact. Figure 44 also shows the west end of a building with a large central chimney, set transversely inside the north end of the fort. This building appears in 1862 in a photograph (figure 7) and on the McColl plan (figure 4). This plan shows the north end of the fort to have been fully stocked with buildings, with Structure G the only large building near the north palisade.

The Dally photograph of 1867 or 1868 shows Structure G to have disappeared, presumably as part of the c. 1864 demolition of the north end of the fort (figure 8). By November 23, 1869, Ovid Allard was thinking of buying barrels on contract; he claimed that at Fort Langley "their (sic) is no fit shop nor fireplace to make them in."[68] By 1871 Structure K was referred to as the "old Cooperage".[69]

Jason Allard, in his 1920 plans and "References" identifies a transverse building in the northwest corner of the palisade corresponding to Structure G as the "Cooperage" (figure 2) or "Cooper Shop" (figure 3). This identification is consistent in the Allard-derived material published in the 1920s and 1930s.

The 1852 reference gave the general location of the cooperage. It was apparently rebuilt after burning. The iconographic sources of 1858-1859 and the McColl map of 1862 shows that the north end of the palisade was intact, and contained a full complement of buildings. The Allard plans, independent of the McColl plan, show a transverse building at the north end of the fort, and further identify this building as a cooperage. The requirement for a fireplace to allow coopering is noted later; Structure G is shown with a chimney in figure 44, and the lack of a suitable shop and fireplace is noted after its mid-1860s demolition.

Direct Evidence

The earliest iconographic source which shows Structure G is the Dallas sketch of May 24, 1858 (figure 44). Only the west end of the roof is visible; this shows horizontally arranged planks or roofing, and a large central chimney.

The building is also shown in the 1862 photograph of the northwest corner of Fort Langley (figure 7). It is seen as a gable-roofed structure, with a three course bark roof, horizontal plank gable end infill, and possibly a light-coloured central chimney, silhouetted against Structure H. Based on the relative height of the palisade, the structure was about 6.4 metres (21') high overall, and perhaps 3.7 to 4 metres (12' to 13') tall to the plates, so was probably one storey tall.

The McColl plan of September 1862 shows Structure G to have been some 15.7 by 7.4 metres (51' 6" by 24' 5") and located 21.5 to 37.2 metres (70' 7" to 122' 1") west of Structure K and 25.7 to 33.2 metres (84' 6" to 108' 11") north of Structure K, following the axes of that building.

Chronology

A cooperage was a necessary adjunct to the food export activity at Fort Langley. This was in operation in 1840-1841 because the Russian provisioning contract and salmon packing, so it is likely that a cooper's shop was part of the initial complement of buildings in the third phase Fort Langley. Such a shop was definitely present inside the fort in 1852, and probably a new cooperage was built immediately after the fire, to prepare barrels for the next salmon curing season. This rebuilt cooperage was presumably Structure G, which was used for the purpose through about 1862. The building was torn down some time before the Dally photograph of 1867 or 1868 was taken (figure 8), and apparently the funcition was assumed temporarily by Structure K. The trade ended altogether with the retirement of the last cooper in November 1870.[70]

Indirect Evidence

In contemporary iconographic sources all the buildings shown within the palisade at Fort Langley were of post-on-sill construction. It would seem certain that Structure G followed this pattern. The building was most likely four bays by two bays, based on the average bay length observed at Fort Langley. A workshop of this sort would have required fairly high natural light levels so window openings would have been larger than those in a storehouse or a blacksmith shop.

A high level of finish was not usual in this sort of structure. There would normally be no wall or ceiling lining. Figure 54 shows the interior of a one-storey post on sill boatbuilding shop at Norway House. The general level of finish, storage of supplies above the ceiling beams, and relatively large windows are all relevant to any workshop.

The height of Structure G to the plates would indicate the presence of a floor carried on joists rather than a packed earth floor. To facilitate access, a relatively low floor level, and even a ramp of some sort would have been appropriate responses. Although barrels were relatively small, some coopers' shops apparently used large doors to further ease access, and to provide extra light and fresh air.[71]

The interior layout of Structure G would have depended on its specific role. Many of the components of the barrels were prepared outside the fort, including "rising Staves"[72] which included "dressing with the axe and reducing to proper length".[73] The building within the fort was apparently used for final finishing of the staves and heads of the barrels, and assembly of the barrels.

The plan of a small, early twentieth century cooperage is shown in figure 55; the first steps of production, up to the "Dry Kilns" would not have had equivalents in Structure G. However, the separation of the finishing mill, hoop shop, cooper shop, and warehouse should be noted; this separation of functions would be equallly appropriate in both machine and hand cooperage.

Figure 56 shows the interior of another early 20th Century cooperage; the "cooper shop" area proper, where the barrels are set up, bent, and fired. The simple hearth/chimney arrangement for firing the barrels is of particular interest, confirming that this stage of the process was performed inside the building. The milling area in the background would be equivalent to a stave and head dressing area in a hand cooperage. Although the architecture is different, the basic level of finish, with unpainted plank floors, and open ceiling trusses, as well as the generous windows, would certainly be appropriate to any such shop.

The depot of York Factory had a coopers' shop. Although it was a much bigger post and located on Hudson's Bay, some of the detail from York factory may be applicable to Fort Langley, as Cromarty, the head cooper at Langley worked his first full outfit in North America at York Factory.[74] At York Factory after 1829, there was a combined coopers' and carpenter's shop. In 1839 the "Funnel" in the coopers' shop was altered, as the shop filled with smoke when the barrels were fired. The "funnel" must have been metal as blacksmiths worked on it, but the final solution was a leather tent outside the door of the shop in which to fire the barrels.[75] In the same year a new plank floor was put in the shop, as well as a new "chimney and fire hearth", which was built by masons.[76] Another new chimney had to be built four years later.[77]

Conclusion

Structure G was a one storey post on sill structure, four bays by two bays. Roof construction details may be observed in figure 7. To provide adequate light, each bay in the south wall (facing into the fort) would probably have had an opening; perhaps three windows and one large door. Window openings in the remaining walls also would be expected, as well as another door. The interior would have been unfinished with no wall lining or ceiling, and a plank, or "deal" floor. It would have contained specific areas for final shaping of heads and staves, assembly of wood and iron hoops, and the "cooper shop" for setting up, forming and firing the barrels. This last area also would have included a "fireplace" for performing the firing. Some storage also would have been provided, either for raw materials (staves and heads) or completed barrels. It is unlikely that this building would have been painted or elaborated, with the exception of paint on doors and windows.

Cooperage Operations

The role of the cooperage was directly connected to the export of food products. The disruption to these exports caused by the Fraser River gold rush has been noted; this would have been reflected in the demand for barrels. Although Jason Allard remembered "usually 6 to 8 coopers employed sometimes more" (figure 3), by 1858 there were only two coopers on the staff list, suggesting a decline in the demand for barrels.[78]

Although production had dropped off by 1858, the building and furnishing were probably left in place until considerably later. In 1863 Newton received directions to send coopers' tools and rivets to Fort Yale "supposing that you have more than one set of these tools in use, which you do not require".[79]

However, the coopers' trade was still active at Fort Langley in late 1858. Donald Fraser, visiting in September, noted "young Indians employed as ...coopers".[80] If this native labour was required, there still must have been a relatively high level of activity at that time. Another visitor in the summer of 1858, described Fort Langley as follows: "The chief part of those buildings are used as dwelling houses for the officers and men, stores, fur rooms, cooper shops, etc."[81]

The primary responsibility of the cooper's shop at Langley was to turn out barrels for food storage and export. The configuration of the containers was determined by the products they were to hold, the materials available at Fort Langley, and the traditions of the men constructing the barrels. Most of the food exported from Fort Langley in the 1850s was packed in liquid; this applies to both the salt fish and the cranberries. The barrels had to be watertight, and many of the complaints concerning Langley salmon in export markets were because of leaking barrels. Through the years, steps were taken to alleviate this problem, culminating with the acquisition of a "real" cooper, William Cromarty. The need for tradesmen in the West was recognized by the Council of the Northern Department in 1843; Resolution 60 that year included specific instructions concerning the servants to accompany the 1844 Express back to Fort Vancouver:

> Of these servants, 2 to be blacksmiths, and 2 coopers, if any such be disposable, if not those tradesmen coming out by the ship this season to be forwarded next season to the Columbia.[82]

Cromarty arrived at York Factory on August 10, 1843, so he was one of "those tradesmen". He worked the rest of Outfit 1843 at York Factory, and then in July 1844, accompanied the Express to Fort Vancouver, where he spent the next Outfit, and finally arrrived at Fort Langley for Outfit 1845.[83] Cromarty was engaged as a cooper, at £25 to £30 per year, so was apparently considered a tradesman before arriving in North America, unlike the blacksmith and boatbuilder at Fort Langley.[84]

Although barrels had been produced at Fort Langley since the 1830s, they had been constructed by labourers or servants rather than designated tradesmen. The two other men called "coopers" in Cromarty's first outfit at Fort Langley, 1845, were John Bell and Peopeo, and by Outfit 1850, they were joined by Ohule.[85] Cromarty continued to ply his trade through 1858, and until his retirement in 1870. By the beginning of 1858, Bell had died (in the summer of 1857), Ohule was listed as a labourer, and Joseph Maayo - Peopeo's son - had taken over from his father as a cooper.[86] With the exception of Cromarty, everyone working in the coopers' shop was Hawaiian, country-born, or both, so presumably most of the coopering tradition was supplied by Cromarty. There was also a doubling of the number of barrels of salmon cured after Cromarty's arrival, from 800 barrels recorded for Outfit 1845 to 1600 barrels for Outfit 1846.[87]

It is unknown if Cromarty's expertise was acquired through a conventional apprenticeship. The most likely circumstance would be that he learned his trade in connection with the herring fishery on the east coast of Scotland. He was recruited in the Orkneys, and the Company had been in the habit of engaging "coopers and fish curers", so it is probable that his skill was gained in this indigenous industry.[88] The North Sea herring fishery required huge numbers of softwood barrels. These barrels were tight cooperage, to hold salt-cured herring for export, but the semi-skilled local men who produced them were not recognized by the Cooper's Company. The industry began in the 1790s in Caithness, so was in full swing in time for Cromarty to acquire his skills in this context in the 1820s or 1830s.[89] The Scottish barrels were made of spruce or fir, and it is clear that at Fort Langley the barrels were also made of softwood. In 1830, Archibald McDonald described "not too well finished barrels built by one of the servants of 'Pin Blanc'," or as he also described it, "American White Pine". Some stands of this had been found in the vicinity of Langley.[90] Ten years later, a change was pending. John McLoughlin wrote to Yale in February 1840:

> I observe what you state about the difficulty of getting white pine staves, but I think red pine would answer the purpose and even if we get a sufficiency of white pine, we must try a few red pine barrels to see how it answers.[91]

The red pine referred to would have been Douglas Fir, more generally available in the Fraser Valley. Possibly fir was used right from the beginning; some variation shows up in the nomenclature. In the Fort Langley journal of September 1829, a reference was made to a "sample of the white fir, dit Pin blanc" to be used as stave material.[92]

The suitability of Douglas fir for fish barrels is confirmed by its being used for this purpose until 1981 by the largest cooperage in B.C., Sweeney's. Although this company, established in 1889, imported many exotic woods for special barrels the majority of their food barrels, and particularly those for salmon, were produced from local Douglas fir.[93] In fact, "high class cured herring" was exported from Scotland in the 1940s packed in B.C. fir barrels.[94]

The technology used to produce these softwood barrels would have followed European practice of the period. This is largely supported by the tools used, which made up a standard kit for hand coopering and the need for a fireplace and chimney to fire the barrels in. The tools and techniques of hand coopering are well illustrated in "The Cooper and His Trade" by Kenneth Kilby.[95] Those which appear in lists of "New Stores" or "Articles in Use" at Fort Langley in Outfits 1845 through 1848, after Cromarty's arrival and the full development of the trade, include:

Coopers' adzes	(4 in 1845, 5 in 1848)
Coopers' anvil	(only in 1848)
Coopers' broad axes	(4 in 1845, 5 in 1848)
Coopers' dog	(1 throughout)
Coopers' drivers	(2 in 1845, 5 in 1848)
Coopers' hammers	(4 in 1845, 5 in 1848)
Truss hoops for barrels	(2 sets in 1845, 3 in 1847)
Truss hoops for half barrels	(none in 1845, 1 set in 1847)
Truss hoops for kegs	(2 sets in 1845, 2 in 1847)

Coopers' straight draw knives	(6 in 1845, 10 in 1848)
Coopers' hollowing knives	(3 in 1845, 4 in 1848)
Coopers' crumbing knives	(3 in 1845, 4 in 1848)
Coopers' jointer planes	(4 in 1845, 4 in 1848)
Coopers' heading (or turning) saws	(2 in 1845, 2 in 1848)

New tools were shipped in as late as 1855; a list of sundries from that outfit includes:

1 Coopers' chive
2 Coopers' adzes
4 Coopers' axes
2 Pr. Coopers' drawing knives[97]

The process of making these fir barrrels at Fort Langley was not described. A magazine article on Sweeney Cooperage described fir as difficult to bend, and its need for kiln-drying.[98] However, the firing of the barrels, and the presence of truss hoops would suggest fairly standard coopering techniques, which would have needed some adaptation for the softwood material used. In late 1869, the issue was raised of whether barrels for Fort Langley should be purchased on contract or made by Cromarty, who was still employed. This points out the observed need to have the fir staves well seasoned:

> The stave and heads will have to be got out of the bush, and dressed, and can be put together in the spring when sufficiently seasoned, whereas if we employed Manson we would be obliged to furnish him staves and heads which would be green, and the consequence would be a lot of unseasoned barrels.[99]

Part of the chronic problems with the barrels produced at Fort Langley may have related to this need for air or kiln-dried staves. When production was at a high level, there would not have been sufficient time to air dry the material, and unlike Sweeney Cooperage, Fort Langley had no drying kiln.

Besides hiring an experienced cooper and seasoning material, another attempted solution for the leaking barrel problem was to use iron rather than wooden hoops. Iron hoops were stronger, and could be driven onto the barrels more agressively, to some extent compensating for shrinkage. Iron hoops were used as early as 1841, when 45 kg (100 lbs.) of 31 mm x 28.5 mm (1 1/4" x 1 1/8") hoop iron was included in "New Stores".[100] After Cromarty's arrival iron hoops became more common. Seventeen bundles of hoop iron were included in the "New Stores" for 1846.[101] The standard sizes of hoop iron in the 1850s were 31 mm x 3 mm (1 1/4" x 1/8), 28.5 mm x 3 mm (1 1/8" x 1/8") and 19 mm x 3 mm (3/4" x 1/8"), with by far the greatest quantity being in the largest size; 20 cwt. in December 1855 and 125 bundles in September 1856. The hoop iron received at York Factory in the 1830s was in 1 cwt. bundles, with 119 m (387') per bundle for 31 mm (1 1/4") iron.[102] The December 1855 shipment to Fort Langley also included some 19 mm x 12.7 mm (3/4" x 1/2") hoop iron, probably intended for truss hoops.[103] One set of iron truss hoops was sent from Fort Victoria in April 1856, but the need for the truss hoop "mould" in the blacksmith shop suggests that more were required.[104] Hoop iron and rivets were sent at the same time as the truss hoops in April 1856.[105] Although the truss hoops were made and repaired by the blacksmith, the appearance of the coopers' anvil and large quantities of hoop iron after Cromarty began working at Langley suggests that the barrel hoops were fabricated in the coopers' shop.

Douglas encouraged Yale to use iron hoops on the ends (chine hoops) of the barrels, and to fasten the wooden hoops with nails (hoop stays) to prevent their sliding off as the barrels shrank. This point was reiterated twice in the fall of 1852, and again in April 1854, when some wooden hooped barrels of salmon proved unsaleable in Australia.[106] As a result of the latter problem, Douglas ordered Yale to use iron hoops on at least two thirds of the salmon barrels, with the remaining wooden hooped barrels to "serve for the native trade at Woaho".[107] When beef was being pickled more than a decade later Ovid Allard commented on the types of barrel hoops used:

> ... our salmon barrels, which have already an iron hoop at each end...It is requisite to have iron hoops, as some of the wooden hoops may either break or get loose.[108]

From these materials, and with these tools, at least three sizes of barrels were built at Fort Langley. There is little information from direct sources concerning sizes, but truss hoops were available for barrels, half barrels, and kegs. In 1842, references were made to 180 pound (81 kg) salmon barrels, and 200 pound (90 kg) salmon, pork and beef barrels.[109] By 1856 barrels and half barrels of cranberries were defined as being of 24 Imperial gallons (110 litres) and 12 Imperial gallons (55 litres) capacity respectively.[110] It is known that the first shipments of cranberries a few years earlier were sent out in existing salmon barrels, so it seems likely that there was some correspondence in size between the 24 gallon and 180 or 200 pound barrel.

In 1842, the Northern Department of the Company ordered oak barrel staves and heads from Red River Colony to be supplied to Norway House. These materials were intended for 24 gallon (110 litres) and 8 gallon (36 litres) barrels, suggesting standard sizes. The staves for 24 gallon barrels were 750 mm x 140 mm x 22 mm thick (30" x 5 1/2" x 7/8") and the heading material was 500 mm x 165 mm x 25 mm (20" x 6 1/2" x 1"). Eight gallon staves were 560 mm x 85 mm x 19 mm (22" x 3 1/3" x 3/4") and the heads 500 mm x 100 mm x 19 mm (20" x 4" x 3/4").[111] In the resolutions of the same year, reference was made to 56 pound (25 kg) "firkins" of butter; the same size showed up at Fort Langley five years later.[112]

The gallons to weight ratios of these barrels is confirmed by the sizes of the fir salmon barrels produced by Sweeney Cooperage a century later. Specifications were given for 25 gallon (114 litre) barrels, also referred to as 200 pound fish or pork barrels. The staves were 710 mm x 95 mm x 16 mm (30" x 3.68" x 5/8"), and the heads were 444 mm (17 1/2") diameter by 19 mm (3/4") thick. Nineteen staves were used, and the barrel circumference was 1.8 m (70"). The chine or end hoops were 38 mm (1 1/2") wide and 1518 mm (59 3/4") around, barrels were about 470 mm (18 1/2") diameter at the ends, and 512 mm (22 1/3") diameter at the bilge or belly.[113] In a price list from Sweeney's American branch, 90 kg (200 pound) salmon barrels were 110 litres (30 gallons U.S.), and 45 kg (100 pound) barrels 55 litres (15 gallons). This same list states that 22.5 kg (50 pound) butter barrels were 37 litres (10 gallon) size.[114] This would be 8 Imperial gallons, already noted as a standard size use by the H.B.C.

A specification for 52 litres (11 1/2 gallon) barrels from Sweeney Cooperage lists: 16 staves, 584 mm x 82 mm x 14 mm (23" x 3 1/4" x 9/16"); heads 334 mm (13 1/8") diameter by 16 mm (5/8"); 1.3 m (52") circumference; and 32 mm (1¼") wide chine hoops, 1163 mm (46") around.[115] The 37 litre (8 gallon) barrels they produced had 16 staves, 383 mm x 76 mm x 12 mm (19" x 3" x 1/2") with heads 318 mm (12 1/2") diameter and 16 mm (5/8") thick.[116]

A York Factory "Store Memoranda" book lists materials required for oak barrels c.1831. An "8 Gall. Keg" required 15 staves 560 mm x 76 mm x 19 mm (22" x 3" x 3/4") thick and 6 pieces of heading material 350 mm x 114 mm x 19 mm (14" x 4 1/2" x 3/4"), with 32 mm (1¼") end hoops.[117] This shape of barrel was somewhat longer and thinner than Sweeney's barrels. It should also be noted that the oak staves were consistently thicker than the fir staves, probably due to the difficulty of bending the latter material.

The combination of H.B.C. and Sweeney specifications allows an approximate determination of Fort Langley barrel dimensions. The 24 gallon (110 litre), 180 or 200 pound (81 or 90 kg) barrels were about 760 mm (30") long, 470 mm (18 1/2") end diameter, and 567 mm (22 1/3") bilge or belly diameter. The 12 gallon (55 litre) half barrels were 610 mm (24"), 368 mm (14 1/2") and 457 mm (18") on the same dimensions, and the 8 gallon (37 litre) cranberry and butter kegs 508mm (20"), 343 mm (13 1/2") and 407 mm (16") respectively. Although many of the hoops were wooden, made of local hardwood saplings, the three sizes of iron hoop material imported probably related to the three barrel sizes. The most common 32 mm (1¼") size was for the standard 24 gallon barrels, the 29 mm (1 1/8") and the 45 mm (3/4") for the much less common 12 and 8 gallon barrels. Many of these hoops were fastened with hoop stays by the 1850s.

By 1858, the barrel specifications at Fort Langley had probably remained stable since Cromarty's arrival thirteen years earlier. The problems with the barrels noted throughout the 1850s would have related more to the quantities produced and the vagaries of the material used rather than any peculiarities of technology or configuration.

Boatbuilding and Carpentry

These activities may not be assigned to any known building or particular location at Fort Langley. At this post boatbuilding was an integral part of the depot function which began in 1847, when a boatbuilder, Samuel Robertson, was sent to Fort Langley to build four batteaux, and continued until 1858, when Robertson retired and went into business for himself with the "What Cheer House", a saloon at Derby.[118] Boatbuilding at Fort Langley seemed to relate specifically to this man and only to have occurred when he was present. Even after his resignation, he apparently continued to meet this need for the Company; he spent a half day in November 1859 on "Repairing of Boats for the H.B.C."[119]

Carpentry at Fort Langley was pursued in several aspects; building construction and renovation, furniture manufacture, and the building of carts and other agricultural implements. Probably Robertson was responsible for much of this work as well as boatbuilding. In 1853, he was re-engaged for two years as "Labourer, Boatbuilder, and Carpenter". Although it was stated that his skills were required primarily to supply boats for the interior, general carpentry was clearly his responsibility.[120]

Robertson arrived in 1847, and had completed seven boats by the winter of 1848. Douglas wrote to Yale on May 3, 1847 when a shipment of tools was sent for Robertson's use, right after his arrival at Langley:

> I enclose a list of tools supplied Samuel Robertson and left in his charge, as you are unable to furnish the needful at Langley.[121]

The tools included four planes, four chisels, one axe, one adze, one handsaw, two hammers, one maul, one caulking mallet, one spokeshave, one pair of compasses and six gimlets. These tools were not included in general Fort Langley inventories; the lists of 1847 and 1848 were much the same as that of 1845 in types and quantities of carpenter's tools.[122] Apparently the kit of boatbuilding tools remained in Robertson's "charge", rather than being assimilated into general stock.

Boatbuilding would have taken place somewhere near the water, the sandspit would have been a natural location. A specialized building to serve the trade may have existed, but more likely would be a shed or simple structure such

as was used for storing boats. At Fort Victoria in 1849, the men were "erecting a shed alongside the pickets outside for building a boat."[123] At Fort Kamloops in 1861, a shed was erected specifically for building a single batteau:

> Vallette and Jack having finished blocking the timbers of Batteau were employed in prepareing (sic) a shed to plain (sic) his boards in and build his Batteau in.[124]

Although it took Vallette almost two months to build this batteau, in 1862 Samuel Robertson and one helper were able to build a "skeft" in ten working days, starting with "sawing plank" and finishing with painting.[125] With such a short working time required to produce a vessel, and the small number of boats being built each year at Fort Langley, a specialized shop such as that in figure 54 was not required. Although much of Robertson's post-H.B.C. diary describes boatbuilding, no mention was ever made of a boatbuilding shop in that context either.[126]

The simplicity of these vesels and their relatively quick construction would not have required elaborate facilities, particularly in a benign climate. Simple sheds would have served, both for building and storing the boats and logically would have been located near the water, probably on the sandspit.

At Fort Langley in 1858 the level of boatbuilding activity was not high. Robertson, on whom the H.B.C. depended for this function, resigned early in the year. As mentioned, he was still repairing boats for the Company in late 1859, which suggests that no other employees were capable of boatbuilding. The combination of the loss of the boatbuilder and the disruption due to the gold rush would have resulted in little boatbuilding activity in 1858. This was confirmed by the fact that new boats intended for the use of the inland transportation corps in the spring of 1858 were built at Fort Victoria and shipped to Fort Langley.[127]

General carpentry at Fort Langley was not as closely related to one other function, so probably was less affected by the gold rush. However, carpentry in 1858 would have been related more to maintenance than new development. The 1858 configuration of Fort Langley was apparently consistent with that of the preceding decade. By 1858, there would have been limited need for construction, other than repair and renovation. Furniture probably would have been produced on an on-going basis, and certainly there would have been a steady demand for carts, ploughs, harrows, and other functional items, but after construction was completed, carpentry would not have been a high priority at an H.B.C. post such as Fort Langley.

At Fort Langley in 1858 this trade would not have required a specialized structure. The only identification of a building as a "carpenter shop" is in the June 1920 Allard/Howay plan of Fort Langley (figure 2). However, by September 1920, Allard was identifying the same structure (Structure B) as "Large Two Storey Ware Ho-" (figure 3).

Although there are no other references to Structure B having served as a carpenter's shop, it was the focus of most of the construction that occurred at Fort Langley in 1858. The main floor of this structure was converted to a sale shop in May of 1858. This work was not performed by employees but rather by a contractor hired by the directors of the company in Victoria.[128] For this conversion a supply of "deals", or planks, likely mill-sawn, was sent from Victoria. This access to outside lumber markets would have rendered the traditional H.B.C. pitsaw obsolete for any substantial quantities of lumber by the target year.

The changeover from lumber producer to lumber consumer probably came after the Company's introduction of mechanized saw mills to Vancouver Island. In May 1848, "300 plank were discharged... from the Mary Dare", which had just arrived at Fort Victoria from Fort Langley.[129] Nine years later Douglas was writing to Yale:

> The ship is at present too full to take the deals, they will however be sent by the next opportunity.[130]

These deals were probably products of one of the steam mills which began operation in the early 1850s near Victoria.

Boatbuilding and Carpentry Operations

As stated, Samuel Robertson was the individual responsible for all the boatbuilding and probably much of the carpentry at Fort Langley. Robertson was sent to Fort Langley in the spring of 1847. Douglas and Odgen sent the following information to Yale in a letter of April 28, 1847:

> Samuel Robertson, a boatbuilder, is sent by the Schooner Cadboro to build four large batteaux for the use of Fort Langley and he may afterwards be employed in building a large keel boat of about 50 feet overall which might in a pressure be sent to Fort Victoria for supplies of goods.
>
> Robertson is engaged as a labourer at £16 per annum and has learnt his trade at this place. His engagement will expire on the 1st June 1848 and you may offer him £22 per annum on a new agreement: in fact we should be sorry to see him leave the service as he is a decent, honest, industrious man and a good workman. We hope you will therefore make him as comfortable as possible as an inducement for him to renew his contract.[131]

Robertson did re-engage, and his services became essential enough that he was able to extract a large increase in salary for his next contract, in 1850. Douglas instructed Yale that he could allow £40 per year if Robertson was indispensable:

> ...though that is a very high rate of pay for the services of a half tradesman like him, and much more than he could earn, in any other country.[132]

After talking to Douglas, Robertson did get his £40 per year, primarily due to Douglas' desire to have two large keel boats built for transportation between Victoria and Langley:

> The first may be a pine boat and the second will be constructed of Oak as he will then have experience enough to build a good craft. For the first boat the whole material may be procured at Fort Langley but for the second I will forward a keel and oak timber from this place, by next trip of the Cadboro.
>
> Some copper nails for fastenings are forwarded by this canoe and Mitchell must make anything else required.
>
> Robertson will give you the Model and draft of the Boat.[133]

This suggests that Robertson was still learning his craft at this time. In spite of this, by the next spring he had produced a boat that impressed Douglas with its strength and ability under oar and sail.[134] Whether both boats were

eventually produced is unknown, but apparently these vessels did not play a major role on the transportation route they were intended for. However, Robertson continued to learn. Douglas wrote Yale in October, 1852:

> I am glad to hear that you are preparing wood for a new set of river boats as they will soon be required and I have no doubt Robertson is now able to make many improvements in framing and modelling which will better adapt them for the navigation of Fraser's River.[135]

At least until this date, the boat lumber was produced at Fort Langley by hand sawing. Robertson was still following this procedure privately in the 1860s, starting with squaring a log, "lining", or marking it, and then sawing planks.[136] The list of wood required for a batteau at Fort Kamloops, cited in the last chapter, gives an idea of the material which had to be prepared. All these components could be fashioned with the tools available to Robertson at Fort Langley. At Fort Kamloops, the preparation of wood also involved planing boards.[137] The carpenter's tools available at Fort Langley in Outfits 1847 and 1848, from "Articles in Use", included:

2	Carpenter's adzes
2	Shell augers
8	Screw augers
1	Brace and centre bit
3	Square chisels
4	Flat chisels
6	Assorted gimlets
2	Gouges
1	Claw hammer
1	Pr. carpenter's pincers
3	Piochons
4	Pr. grooving planes
2	Hand planes
3	Jack planes
2	Rabbet planes
2	Trying planes
4	Handsaws
2	Cross cut saws
2	Pit saws
1	Oil stone[138]

Some other tools, such as straight draw knives, already listed in the coopers' shop, would have been equally appropriate for boat or other carpentry.

At Fort Kamloops, Fort Victoria and with Robertson after he left the Company, it was normally a boatbuilder and one assistant preparing the lumber, as well as actually building the boats.

Fasteners and other hardware were typically a mix of imported and country-made items, as with Robertson's keel boat. At Fort Alexandria in 1853, an old boat was to be burnt to "secure the nails", pointing out the value of the fasteners.[139] In a York Factory "Store Memoranda" of c.1831 there is a list of hardware required for building an inland boat. Although of different construction, the size was similar to the Fraser River batteaux, and so some equivalency exists. The inland boat required 2,200 nails, 10 dy (penny) clench nails for "clinker work", and also 14 dy, 20 dy clench nails, 30 dy flat nails, 10 dy rose head nails, and 7 inch knee nails. Over and above the nails, about 27 kg (60 lbs.) of iron was required per boat. For "caulking and paying a New Boat -outside and inside" 4.5 kg to 9 kg (10 to 20 pounds) of oakum, 13.6 kg (30 pounds) of pitch, and 9 litres (2 gallons) of tar was required.[140] Although boat nails were shipped into Fort Langley, many of the fasteners would have been made by the blacksmith at the post. It is unknown whether or not the batteaux were caulked, but definitely scows and other boats were pitched and caulked in 1848 and 1849 at Fort Victoria.[141]

Howard Chapelle described the building of batteaux-style vessels. These boats were as a general rule built right-side up:

> The bottom was first formed and sprung to fore-and-aft camber, then the frames were set up on this as though it was a keel, after which the sides were planked. This is the style of building that appears to have been universal in English flat-bottomed boats.[142]

It may be noted that the York boat under construction at Norway House in figure 54 was also built right-side up; perhaps yet another Company convention was followed in spite of the differenct construction. At Fort Victoria, a boat was constructed "on the stock", so some sort of building frame was used.[143]

Although Robertson was the only man described in the records as a carpenter, his associate, Cromarty, did construction work for Fort Langley in later years.[144] Throughout the 1848 to 1858 period, one or both of these men probably supervised and directed most of the carpentry performed at Fort Langley.

As with boatbuilding, carpentry materials had to be produced locally. This would mean hewing timbers and pit sawing planks. At posts where the natives were more of a threat, most of the lumber was prepared inside the fort. At Fort Rupert, cedar logs were "brought home" for the sawyers, and at Fort Simpson sawlogs were brought to a roofed sawpit inside the fort, where 25 mm, 50 mm and 100 mm (1", 2" and 4") stock was cut.[145] At Fort Langley the native threat did not exist so it is difficult to determine if the saw pit was inside the fort. The "sawpit logs" prepared at Fort Nisqually in 1846 were squared and 6 metres (20') long.[146]

The lumber produced would have been made into any wooden articles required; some of the things noted in other post journals included:

Wheelbarrows
Carts
Mowing cradles
Collars
Ox Yoke
Shaving horse
Cart wheels
Front doors
Truck wheels
Hubs
Window frames
Kitchen table
Packing cases and chests

as well as all building components of all sorts. Many of the surviving products of the carpenters both at Fort Langley and other western posts show conventional styles and construction. These conventions, which may be seen in architecture, furniture, and tools, probably relate to several factors. First, the primary commercial mandate ensured that any elaboration was kept at a minimum. In

the words of Donald Fraser, the London Times correspondent who visited Fort Langley in 1858 "everything has been designed for use and nothing for ornament".[147] Second, the available tool kit, as noted, was very basic, without the elaboration found in a normal carpenter's shop of the time. Third, there were not the skilled personnel available. Cromarty and Robertson were not tradesmen in the European sense, although they clearly possessed skill in their trades. These trades also would have required most of their energy most of the time. At many other posts, the lack of skilled labour became a particular problem when construction was underway. At Thompson's River in 1847, none of the men could tenon a post to build frames for houses.[148] The same problem was encountered on the coast, at Fort Rupert and Fort Simpson, where Indians were hired to cut the mortices in a building frame in 1857; "Indians can do one half of the work much better than many of our men".[149] These three factors meant that most carpentry was of a functional rather than decorative nature. As with all the Company's pursuits at Fort Langley, carpentry was seen as a support activity to allow the primary economic mandate to be fulfilled.

Carpentry at Fort Langley was probably carried out on an as-required basis, and as such, assimilated into another building. Logically, this would have been the coopers' shop, which also housed a woodworking trade. It also seems that the cooperage was most active seasonally, with staves and heads cut in the fall and seasoned until the spring. The slack period in the winter would have left the building underutilized, and would have provided a natural environment for that carpentry required.

Residential: H.B.C. Gentlemen

The Big House

At Fort Langley in 1858, as during the preceeding decade, there were only two "gentlemen" of the Hudson's Bay Company in residence, a chief trader and a clerk. The chief trader had ultimate responsibility for the operation of Fort Langley and its subsidiary posts, and both men would have been involved primarily in managing the economic and other activities of the post, as well as keeping those records required. The personal and professional lives of these men were centred around the "Big House". This building had an associated kitchen structure which would have also provided housing for those servants responsible for meeting the domestic needs of the gentlemen.

Location

The role of the Big House at Fort Langley is positively defined by contemporary materials. Structure A is identified as "the Hall" by E. Mallandaine in two sketches from December 1858 (figures 57 and 58). The McColl map of 1862 lists Structure A as the "Managers Residence" (figure 4).

These contemporary identifications are reinforced and clarified by early twentieth century reminiscences and historical writing concerning Fort Langley. The Jason Allard derived plans of 1920 to 1925, for example, identify the appropriate structure as "Chief Trader Yale" (figure 2), "Officers Quarters" (figure 3), "Officers' Residence."[1] This theme is repeated in slightly later sources such as Denys Nelson, "Officer's residence, or 'Big House'";[2] Aurelia Manson, "At the top, Traders, Clerks dwelling Houses";[3] and John Gibbard, "Big House."[4]

Direct Evidence

Two views of Structure A were sketched by E. Mallandaine (figures 57 and 58), which show much of its configuration in 1858. Figure 57 shows it to have been a large two storey post on sill structure with the first storey a few feet above the ground, and reached by a stairway. The north (front) wall of the building was divided into six bays; each one had an upper and lower floor window, and a simple plank door was located to the immediate right of the centre post. The roof was hipped, and apparently covered with nine or ten courses of shakes.

Figure 58 shows the roof and part of the second storey of Structure A from the southeast. The points noted above are confirmed, additionally, four windows are visible in the upper storey of the south wall and the upper storey of the east wall is shown to have contained two or three windows. Oddly, no chimney is evident in either of the sketches.

The McColl plan of September 1862 (figure 4) shows Structure A to have been approximately 21.7 metres (71' 2") long by 11.9 metres (39') wide. It was located 108.6 metres to 120.5 metres south of the south wall of Structure K, and 10.1 metres to 31.8 metres west of the west wall of Structure K, following the axes of the latter building. A porch is shown on the front of the building, perhaps a post-1858 addition.

A photograph taken c. 1860-1864 of W.H. Newton, the clerk then in charge of Fort Langley, and his wife, on the front stairs of Structure A gives more structural information (figure 59). The facade had changed in some respects from that shown in figure 57 a few years earlier. The porch shown in the McColl plan is prominent in this photograph, as is a six-panel front door with a transom light above. The building was painted white, with at least two trim colours, a darker one on the door, and a lighter one on the door panel mouldings, the door and window facings, and the window sash. Paint colours listed in Fort Langley inventories included Spanish brown, green, white, and crimson.[5]

Scaling from this photograph, the porch (and presumably first floor) level was about 1.5 metres (5') above ground level; the door and window openings were roughly 1 metre (3'4") wide, their tops were at the 2.4 metre (8') level, while the bottom of the window openings were 1.1 metres (3'6") above the floor level.

The Frederick Dally photograph of 1867 or 1868 (figure 8, 8c) shows the north and west roof and part of the north wall of Structure A. Its overall configuration is confirmed; the hipped, shake-covered roof, the whitewashed finish, and the overall appearance of the north wall. Again, no chimnies are visible.

Contemporary references to Structure A are limited both in number and information offered. In 1858 "the principal building" was noted as having a "large room", when the colony of B.C. was proclaimed.[6]

In March of the following year, a Methodist missionary preached in "the dining hall of the Company's house".[7]

Ovid Allard, the clerk in charge of Fort Langley in 1868, incidentally describes the layout of Structure A in recounting his problems with a teamster he had agreed to let "Sleep above my bedroom".[8] This named a specific room on the main floor, and by writing "above my bedroom" rather than just "upstairs", Allard hinted at defined areas upstairs as well.

Allard also stated in a letter on the same subject that he would not put the man on the "Ground floor" because the "stove of one end of the house was taken away".[9] This gives clues both to the mode of heating and space allocation with the structure being described in "ends".

The correspondence about building a new manager's house in 1872 provides more information. Allard thought he could salvage most of the materials needed from the old buildings, except weather boarding, as "the lining that is in these old houses is not fit for weatherboarding".[10] This implies wooden interior wall finishes, and the presence of this wallboarding in Structure A specifically was confirmed by Allard referring to "pulling down the lining of the old Hall" for reuse.[11]

The revived interest in Fort Langley during the 1920s produced more information, mostly from Jason Allard, the son of Ovid Allard. In his plan of September, 1920 (figure 3), he identified the "officers' quarters" as being "2 storey 70 x 40", which agrees well with the dimensions shown in the McColl plan. In 1925, a description of Fort Langley attributed primarily to J. Allard described the "Officers' Residence" as:

"a log building with cedar shake roof. It was 2 1/2 storeys high and was the residence of the factor and clerk and their families. The rooms on the second floor were reserved for the use of the officers in charge of the fur brigades...during their temporary stays at the fort".

It also mentioned "the small reception room on the lower floor", and "a pile of stones from the chimney", which was by 1925 the only evidence of the building.[12] This description seems to have served as the prototype for later writers such as Nelson and Gibbard.

Slightly more information is found in Jason Allard's reminiscences; in a story about the reason for building the 1872 manager's house, he describes Structure A as having had private accommodation for his father, a room for a visitor (Dr. Tolmie), a potato cellar, and a mess table.[13]

A detailed reference was made to the "chimney stones" by W.L. Marr, the son of Dr. Marr, who had built a house on the site of Structure A shortly after the First World War. Mr. Marr was specific as to the word "chimney, rather than fireplace", and remembered the stones, which numbered about 75 to 100, to have been "about the size of a man's head", to have had no mortar adhering, and to have been concentrated near the southeast corner of his father's house.[13]

Chronology

Structure A, according to Jason Allard in his "Reminiscences", was built "in the early forties".[14] In the absence of contrary evidence, this date may be tentatively accepted. Its presence in 1858 is confirmed by figures 57 and 58, in 1860-1864 by figures 4 and 7, and in 1867 or 1868 by figure 8. It definitely served as a residence until 1872, when a new house was built, and occupied late in the year.[16] When Structure A was actually demolished is not known, although presumably it would have been concurrent with the occupation of the new residence, especially if material salvaged from the older building was used in the newer.

Indirect Evidence

The overall configuration of Structure A is largely revealed by iconographic sources. The areas requiring clarification include interior layout, interior finish, doors and windows, and heating mechanisms.

Two relevant Big House plans are those from Fort Vancouver and Fort Nisqually (figure 60). That from Fort Vancouver is particularly applicable, being a composite developed by John Hussey based on archaeological and historical information. It is laid out within a similar plan area to Structure A at Fort Langley, to meet the residential needs of two Company gentlemen and their families.

Contemporary descriptions of chief traders' accommodation usually ignore the structures themselves, but some observations were made. The Big House at Fort Colvile, intended for one family, had an inside hallway with "a fair sized comfortable room on each side" in 1853.[17] John Keast Lord, upon entering the same building a few years later, found a large room with only two windows, furnished with a few rough chairs and a large deal table. There was a trap door leading to a storage cellar under the table, a large fireplace for light and heat, and this room apparently also served as the bedroom for the chief trader.[17]

A new residence was built in the early 1860s at Colvile; it contained a "large room 20 by 30 feet" in which New Year's Day was celebrated.[19] Jason Allard described this room as "the hall or mess room", noted the absence of carpets, and the serving of refreshments at the office, suggesting that this office was in the same structure as the mess hall.[20]

The manager's dwelling at Fort Nisqually was described as having "five rooms below, finished with cloth and paper, ceiled above with plank".[21] The equivalent house on the Cowlitz Farm was noted as being "lined and papered on the inside".[22]

Charles Wilkes, at Fort Vancouver in 1841, stated that the "interior of the houses in the fort are unpretending. They are simply finished with pine board panels, without any paint: bunks are built for bedsteads; but the whole, though plain, is as comfortable as could be desired."[23]

The bachelors' quarters at Fort Colvile (gentlemen's quarters) were said to be "partly ceiled inside with tongued and grooved boards".[24] This detail is countered by the reminiscences of James Anderson, a student at Fort Victoria in

the early 1850s, whose dormitory was over the bachelors' hall. He referred to "raising up a board in the flooring and which formed the ceiling of the room below" to spy on the gentlemen.[25] Anderson also described his dormitory:

> The garret we occupied was not lined, simply the bare logs; the interstices, where the roof joined the wall, was a veritable runway for the numerous rats which infested the building and through which the fresh air had unimpeded access even in the coldest weather.[26]

Descriptions of the gentlemen's quarters at Fort Victoria are found in the reminiscences of Dr. John Sebastian Helmcken. On his arrival at Fort Victoria in 1850, Helmcken was introduced to the men in charge in their quarters:

> ...the room of Mr. Douglas, partly an office and partly domestic, stood open, and there I saw Cecilia his eldest daughter flitting about,...
>
> Mrs. Finlayson was introduced to me by Benson at her residence, a room in her husband's office...[27]

John Hussey, in determining interior finishes appropriate to Fort Vancouver's Big House, surveyed many of the available primary and comparative sources, and concluded that vertical wall panelling, and tongue and groove ceilings, all planed, were appropriate. The question of papering or painting remained unresolved; green and blue paint traces were found on archaeological brick remains inside the preimeter of the Big House.[28]

Windows in these gentlemen's residences usually seem to have been quite large, with the sash often arranged four panes wide by six panes tall, in both double hung and casement sash. Both varieties were found side by side at Fort Vancouver in 1860 (figure 61), and the "new manager's residence" at Fort Langley, photographed in the early twentieth century (figure 62), had classic H.B.C. casement sash but in a four panes wide by five panes tall arrangement. This sash was probably salvaged from an older building.

The door in figure 59 is nearly identical to those in figure 61 in the bachelors' quarters at Fort Vancouver. This type of door is also found today in at least one H.B.C.-related structure along the coast, the McLoughlin House in Oregon City (figure 63). In this house six-panel doors, with mouldings applied

rather than struck on the rails, are used throughout the interiors as well. Similar door construction, but in a four-panel style, may be found in H.B.C. related structures on Vancouver Island (figure 64).

It is difficult to determine how Structure A was heated. The comparative iconographic materials all show chimneys, ranging from a small single one at Fort Vancouver to two huge ones at Fort Colvile, and contemporary documentary sources do not clarify the issue, except for the one reference to a stove (above p. 202).

Conclusion

The 1858 Mallandaine sketches of Structure A provide the baseline data for the building's configuration. In general terms this information is supported by later photographs. Structure A was clearly a two-storey post on sill building with a hipped roof. As its plan size is known, and the height to the top of the front door and windows was about 4 to 4.2 metres (13' to 14'), the height of the building to the plate was about 6.7 to 7 metres (22' to 23'), and the overall height, judging by figures 1 and 7, was some 12.2 to 12.8 metres (40' to 42'). The shorter east and west walls of the structure were probably divided into three bays, judging from normal bay lengths at Fort Langley.

In the absence of coloured iconographic sources from 1858, the presence or absence of paint remains in doubt. The photographs of 1860-1864 (figure 59) and 1867 or 1868 (figure 8c) show Structure A to have been whitewashed, with trim painted contrasting colours. Structure A and its associated kitchen were the only whitewashed buildings at Fort Langley in the 1860s; this is shown in Figure 8 and confirmed by other iconographic sources. It is probable that the building was also painted in the 1850s; certainly the paint was available in quantity at that time, and the practice seemed common enough.

The door in figure 57 is drawn as a simple plank door which was a typical for gentlemen's dwellings. The door and window openings were the same height both in this sketch and figure 59, and the photograph reveals no hint of the size of the openings having been modified in the interim. It is unlikely that an opening intended for a warehouse type plank door would accommodate so neatly

a typical H.B.C. six-panel door and transom light without changing the height of the opening relative to the height of the surrounding window openings. Therefore the door configuration shown in figure 59 was probably consistent throughout the life of Structure A.

The size and prominence of the porch, and the possibility of its being overlooked by a trained architect like Mallandaine makes it likely that the porch was a post-1858 addition.

The window opening sizes seen in Structure A are not tall enough to have accommodated the twenty four pane sash noted as typical. The left window opening in figure 59 shows what is probably the edge of a side rail of casement sash, opened inwards. The sash would have been a similar pattern to that in figure 62, but probably only five panes tall, due to the window opening size in Structure A. The presence of this particular sash configuration in the later manager's residence, and the probability of it having been recycled from an older building supports this configuration in Structure A. The second storey windows appear to have been somewhat smaller than those of the first storey. This was typical; the sash would have been to the same pattern, only one or two panes shorter, and perhaps one pane narrower (figure 65).

Window locations in the north wall are clearly shown, with six windows per floor. The south wall had a window in each of the four inner bays on the second storey. The east wall had two or three windows on this storey as well. However, other window locations are unknown.

The interior layout is also largely unknown. The first floor had a mess hall, and provided accommodation for the Chief Trader and his family as well as a clerk and his family. It would seem that Structure A also contained the fort's office. An 1860 reference to removing the sale shop and "Office dwelling" to a new site implies this dual role, as it is unlikely that servants' quarters would have contained such a facility.[29]

In 1868 Allard was living in one end of the house, as "the stove of one end of the house was taken away". This implies a modular or symmetrical layout, a hypothetical plan of which is shown in figure 66.

The arrangement of the second floor is even less clearly defined, but it seems probable that it too was partioned in some fashion. Given the reference to the building being two and a half storeys tall, and the height of the roof, it is possible that there was a ceiling and attic space above the second storey.

The height of the first floor above the ground supports the reference in Allard's reminiscences to a cellar in Structure A. The Big House at Fort Vancouver, with its main floor five or six feet above the ground, had such a cellar used for the storage of wines and spirits.[30] The storage cellar under the Fort Colvile Big House has already been noted.

The interior walls of Structure A were lined with planks. If Company convention was followed, these would have been narrow, random width softwood planks, hand-planed, tongued and grooved, with a bead detail down the edge, and vertically applied. Partitions would have been similar material, either battened, as at Fort Vancouver, but more likely tongued and grooved, as at Fort Victoria, to ensure a tight fit.[31]

As there were no ceilings in the Fort Victoria Bachelors' Hall, externally a more elaborate building, it is uncertain if they were included in Structure A. If present, they would have been constructed in the same way as the walls, perhaps without the bead detail.

Floors would have been random-width softwood planks; probably hand-planed two-inch stock, tongued and grooved for better fit (figure 67). Stairs would have been better finished than in the more functional buildings; those in figure 68 provide some guidance.

Following the examples of Fort Vancouver and Fort Victoria, it was unlikely that the public rooms of the Big House would have been painted. However, the interior of the Fort Simpson Big House was whitewashed in 1853, so the practice was not totally unknown on the coast.[32] Private residential areas were probably painted or perhaps even papered but such elaboration would have been the responsibility of the individual occupants rather than the Company.

Interior doors probably would have followed the pattern of the front door; six panels, applied mouldings, and relatively simple hardware. The typical moulding used for embellishing window and door surrounds would have been beading, possibly with some ogee mouldings also used, particularly on the door panels.

Box or Canada stoves provided heat in the late 1860s. The lack of evidence for chimneys in contemporary iconographic sources suggests that this also applied a decade earlier. In figures 57 and 58 an artist's oversight is a possibility, but the Dally photograph (figure 8c) seems to confirm the lack of chimneys.

There were certainly no chimneys visible similar to those seen in comparable buildings at other posts. The "Chimney stones" remembered by Mr. Marr were located to the southeast of the former site of Structure A. They could have related to the Big House, but equally well to the kitchen (Structure Q), which would typically have had a stone chimney. In the absence of any positive evidence for stone chimneys or fireplaces, and the confirmed presence of Canada stoves at Fort Langley, both in the inventories of the 1850s and in the Big House in the 1860s, it seems certain that this building was heated with such stoves, vented through metal pipes. Assuming three "zones" on the main floor, one public and two private, it is likely that three stoves would have been utilized to heat the building.

Role of the Big House

James Murray Yale

The role of Structure A probably remained more constant from the time it was constructed in the early 1840s until 1858, than that of most of the buildings in the fort. Besides its social and administrative role during that period, it served as the residence of James Murray Yale, the man responsible in many respects for the creation and operation of the third phase Fort Langley (figure 89).

The tone of the fort overall, and the Big House specifically, would have reflected the attitudes of the man in charge. A number of visitors passed through Fort Langley in 1858-9, the last two years of Yale's tenure, providing some contemporary impressions of Yale. Entertaining visitors was apparently part of the responsibility of the chief trader. For instance, John Nevin King, with the American contingent of the Northwest Boundary surveying part in 1858, recorded in his journal of June 29, 1858 that he "spent the evening with Mr. Yale".[33]

Donald Fraser, the correspondent of the London Times, at Fort Langley in the beginning of September, 1858, wrote:

> The welcome was kind and hearty, and the hospitality generous, for which I am most grateful...the gentlemen in charge, like all the

"servants", is well-educated, intelligent, very civil, obliging, and gentlemenly; no show, fuss, or ostentation.[34]

August Kautz, another American officer with the Boundary Commission, who was at Fort Langley in November of 1858 presented a different portrait of the chief trader:

Mr. Yale and Mr. Newton are not very intertaining (sic) and had their own affairs to look after.[35]

Kautz went on with his impressions of the sixty-year old Yale:

Mr. Yale indulges in quiet sneers at His Excellency (James Douglas) which is as far as his hostility to the Gov. can go. He seems to have been overlooked and neglected which is the origin of his feeling towards the Gov. He is quite old, has been forty years at Fort Langley with the exception of some years spent in New Caledonia. He talks little and is so fogyish in his manners and deportment.[36]

A number of commentators described Yale's personality, both before and after Kautz's visit in 1858. One of the earliest of these was George Simpson, the governor of the H.B.C., in his famous "Character Book" of 1832:

No. 87. Yale, J.M. A Canadian, about 36 years of Age, 17 Years in the Service. A Sharp active well conducted very little Man but full of fire with the courage of a Lion. Deficient in Education, but has a good deal of adress and Management with Indians and nothwithstanding his diminutive size is more feared and respected than some of our 6 foot men, but the want of Education precludes all hopes of his succeeding to an interest in the concern. Stationed at Fraser River.[37]

The "adress" with Indians was demonstrated in front of R.C. Mayne in January of 1859, when Yale provided Mayne with a canoe and crew for a trip up the Fraser River. The crew consisted of four halfbreeds and five Indians:

Mr. Yale had previously harangued them and presented them with these streamers by way of impressing them with the importance of the service in which they were engaged.[38]

In the winter of 1858, Walter Moberly was also welcomed to Fort Langley by Yale:

> On reaching Fort Langley a most hospitable reception awaited me from Chief Factor Yale, then- and, as he afterwards informed me, for thirty years previous - in charge of that large and important fort. I here met with several of the officers of the company, all of whom were most kind and gave me a great deal of information.[39]

Mrs. Edward Mohun, the former Mrs. W.H. Newton, who shared the Big House with Yale in 1858, remembered him in a favourable light when interviewed in the 1920s:

> Mr. Yale was always kind and agreeable to us, and I have much respect for his memory.[40]

On the other hand her father, John Tod, who had been a friend and colleague of Yale's since New Caledonia days, presented a different point of view in describing Yale in 1861, two years after Yale's retirement from the Company:

> ...having spent the greater portion of his life in seclusion, he seems at times much at loss, on getting into Company.[41]

In late 1866, Tod enlarged on his opinion of Yale:

> I saw little Yale the other day (I call him the antediluvian fossil) he seems fated to wind up the latter part of his career, like the majority of the Coy at rather an advanced period of life, with, however, this difference - Yale is perfectly temperate in all his habits - but a long life of total seclusion from the haunts of civilized beings, has given a chimerical, and even childish cast to most of his ideas and opinions, and thereby to a considerable extent, unfited (sic) him to cope successfully with the change of circumstances, into which he has recently been brought as a Colonist on V.I.[42]

Just over a year later, the task of taking care of the now ill Yale had apparently devolved on Tod, provoking more comment on the man:

> Poor Yale, I am sorry to say, has lately had a paralytic stroke, which has rendered him entirely speechless and unconscious - no one seems to care about him - not even his own children - There he lays in his big house, (in one end of which I counted 27 windows) alone without attendance of any kind - Altho' at the distance of 4 miles from me I assure you I have had my hands full in looking after him.[43]

In two more letters, written later in 1868, Tod gave more insight into the personality of his old friend:

> ...he is indeed a curious specimen of human kind - the more prominate (sic) features of his character have certainly no small resemblance to those of Cowper's Red Stocking, and, I take it, are the result of his Fur Trade education - having all along evinced a decided aversion, and total incapacity to cope with the most simple occurances of human life, he should never have left the solitary haunts of the Savage.[44]
>
> Poor Yale, I regret to say, is now in a state of almost helpless imbecility, and, withall, so morbidly suspicious of everyone and every thing few feel disposed to go near him, so that he still continues to luxuriate in the same sort of life, he did for so many years in the Coys Service - a sort of Autocrat hermit, lord paramount of all he surveys.[45]

Several posthumous comments were offered on Yale, and while not as immediate, insightful, or entertaining as those of Tod, perhaps add to our picture of the man. First, there is Tod's statement in a Bancroft interview of 1878:

> Mr. Yale was a small man in stature, but courageous, showing as the Indians said, a big heart.[46]

James Anderson, a contemporary of Yales's two younger daughters and himself the son of an H.B.C. officer, recalled Yale as:

> ...a man of studious habits, rather reserved in his bearing, and an exceedingly well thought of and trusted officer of the Hundson's Bay Co.[47]

Anderson described Yale again in his memoirs, as he remembered him in 1850:

> He was then a man of about 50 years of age, of medium height, somewhat dark complexion, and of a rather taciturn demeanour, well-fitted for the post he was then in charge of as the Indians at that time were occasionally apt to be troublesome.[48]

Another impression was provided by Jason Allard, via F.W. Howay, in response to a request for information about Yale from Brenda Peers, one of Yale's granddaughters:

> Mr. Yale, altho' energetic and zealous for the welfare of the company's interests - his excitable temperament and recluse deprived him of promotion.[49]

J.A. Grant, Yale's grandson-in-law, wrote a biography of Yale in the 1930s, which gave another opinion:

> He was, she (Aurelia, Yale's daughter) recalled, most outspoken and direct in his opinions, but had always kept a strict reign upon himself, and had never to her knowledge allowed himself to display undue violence of nature.[50]

Little direct evidence is available concerning Yale's personal life. The first evidence of a relationship dates from 1824, when Yale was in charge of Fort George, in New Caledonia. Yale had gone to Fraser Lake and Stuart Lake on "some frivolous pretext", leaving the post in the charge of two servants. Two Indians came to Fort George in Yale's absence, "one of whom had formerly been the lover of Mr. Yale's woman; the servants discovered some familiarities between the woman and the young man and threatened to inform Mr. Yale". The servants were murdered to silence them, and "Mr. Yale's woman" ran away with the two murderers.[51]

The path of romance continued tortuous for Yale in New Caledonia. He and his fellow clerk, James Douglas, were subordinate to Chief Factor William Connolly, whose country-born daughter, Amelia, was apparently the object of both the younger men's affections. In 1827 Yale was forced to leave New Caledonia to receive medical treatment to an injured hand at Fort Vancouver. While Yale was absent "Mr. Douglas immediately after his return from Alexandria was married to Miss Connolly the young lady promised to Mr. Yale".[52] It would seem that the resentment of Douglas that Kautz saw in Yale some thirty years later may have owed as much to personal as to professional differences.

After this second rejection, Yale seems to have made some sort of decision that he would not attempt any more liasons with country women. This resolution was applauded by his Montreal correspondent Mary Julia Mechtler in a letter of 1828.[53] However, Yale apparently did not hold to this resolution for too long after his transfer to Fort Langley.

In November 1828 Yale and a "Quitlines" chief's daughter were married, as Archibald McDonald, who had taken over the post the preceding month "thought it good policy".[54] Less than two weeks later, it was discovered that the Kwantlen chief had given his daughter to Yale in spite of her being already the "lawful wife" of a "Scatchad".[55] In January 1829, the "Quoitline chief", also described as a "scamp", was still Yale's father-in-law.[56] On March 21, 1830 the Fort Langley journal notes the birth of a "young daughter" to "Mrs. Yale".[57] This daughter was Eliza, Yale's eldest known child.

She was referred to in October 1832 by one of Yale's correspondents as "your little girl".[58] In her "Recollections of School Days", written in 1928, Aurelia Manson, Yale's second daughter, referred to "a cousin/sister (sic) 10 yrs. older than myself who became the bride of Capt. Henry Newsham Peers."[59] This again referred to Eliza; the ambiguity in Aurelia's terms for their relationship stems from the fact that they had two different mothers.

The circumstances of Yale's domestic life at Fort Langley are unclear; the best source is the manuscript "An Unsung Pioneer, Life and Letters of James Murray Yale and his 30 Years at Fort Langley", written by Aurelia Manson's son-in-law, J.A. Grant. Presumably much of the information in this work was obtained from Aurelia (figure 90), so some factual basis can be presumed. Grant describes a first country marriage on the Fraser River for Yale, which produced Eliza, and ended shortly thereafter, with the woman unable to adjust to life within the fort.[60] This may in part relate to the fact that, as with his New Caledonia country wife, she was already another's mate. Grant then described the "marriage" which produced Aurelia and her younger sister, Isabella, or "Bella". According to Grant, this was a permanent arrangement, with Yale's new "wife" residing in the native village across the river, and Yale paddling his canoe back and forth for nighttime assignations. Regardless of the accuracy of this story, Yale definitely did father Aurelia (born March 14, 1839) and Isabella, or Bella (born October, 1840), apparently by the same Indian mother.[61] This last point is supported by the entry in the baptismal record. On October 6, 1850 at Fort Victoria, Aurelia and Isabella, the children of J. Yale and an unnamed "Indian Woman", were baptised by Staines, the chaplain and schoolmaster of the Hudson's Bay Company in Victoria.[62]

Grant described Yale's attitudes towards his children, and something of their childhood:

> They were well known to all the Indian Village families, their father was exceedingly particular about where they should go, and seldom let them out of his sight in the evenings - a habit formed early and continued long after they had grown up. He used to lock them in their rooms every night, and ordered them to bed and out of it in the manner of all disciplinarians of his day.[63]

Yale's three daughters apparently resided with him at Fort Langley until the late 1840s. By that time he was examining options for sending the two younger daughters off to school. In 1849 Yale received a letter from John Nobili, a Jesuit who had been at Fort Langley sometime prior to that:

> I hope that since I left your place you and your family have enjoyed good health. I would be happy to learn what became of your children, for whom you requested me to write to the Superior of the Sisters of Notre Dame in the Wallamette, and in Oregon City, where they opened just a new establishment for the education of Americans and English exclusively. Indeed I wrote a letter to them on account of your children...[64]

In the same year, the Hudson's Bay Company employed Robert John Staines as chaplain and schoolteacher in Victoria, with his wife as assistant. The two younger Yale girls, with most of the other children of gentlemen on Vancouver Island and New Caledonia, were sent to the new school. Yale wrote as early as November 5, 1849 that he was about to send his two younger daughters to the Staines' school.[65] The Yale girls apparently sailed to Fort Victoria in the care of James Douglas on his return from Fort Langley, in the late spring of 1850. In a letter to Yale dated June 27, 1850, Douglas told their father: "Your little daughters have been placed in Mrs. Staines hands and look quite smart".[66] The approximate date of Bella and Aurelia's arrival in Victoria is supported by the records of the Fort Victoria school, which show that boarding fees were paid for them by their father from July 1850 on.[67]

The next summer Mr. Staines escorted the Fraser and Anderson children to Fort Langley to meet their fathers, who were leading the brigades. It is probable that Aurelia and Bella also made the trip, as their half sister, Eliza was married at Fort Langley by Staines on the same occasion.[68] It is not clear how often the girls travelled back and forth to Fort Langley, but the two younger

daughters were based in Victoria from July 1850 through November 30, 1853, the date to which Yale had paid boarding fees.[69]

Yale's eldest daughter, Eliza, was legally married to Henry Newsham Peers on July 13, 1851, while Staines was on his summer visit to Fort Langley.[70] Peers was apparently based at Fort Vancouver until the end of Outfit 1847, in June 1848, and then spent the next year developing brigade routes between the Fraser River and Kamloops. In Outfit 1849 he was in charge of Kamloops, and in Outfit 1850 was back at Langley as clerk.[71] On August 7, 1851, Douglas sent instructions to Yale that Peers was to return to Victoria with his family and then proceed to Cowlitz, in Washington Territory, to take over the management of the Company's farm there.[72] The reference to a family supports the liklihood of a country marriage pre-dating 1851. This is confirmed by Yale's November 1849 letter to Sir George Simpson, in which he referred to his "son-in-law who is in charge of Fort Kamloops".[73] The J.A. Grant Manuscript gives their year of marriage as 1849, and Brenda Peers, their daughter, stated in a letter written in 1938 that the marriage began in 1847.[74]

The best opportunity for a relationship to start was in 1848-1849, when Peers was based at Fort Langley while exploring brigade routes. Clearly they were already in a country marriage by the time of Peers' departure to take over at Kamloops. Peers and Eliza were resident at Fort Langley from June 1850 to August 1851. As Staines was at the post in July 1851 to administer to the religious needs of the inland servants, it was a convenient time to formalize their country marriage of two or three years duration.

By 1851, all three of Yale's daughters were resident elsewhere. As mentioned, boarding fees were paid for Bella and Aurelia until November 1853 at the Staines' school. Whether they continued as pupils there until 1854 is unknown. Their options were limited by the death of Robert Staines in March 1854.[75] The end of the Fort Victoria school led to the girls' being shipped further off, this time to the Cowlitz farm, where they lived with Henry and Eliza Peers and their young family. The J.A. Grant manuscript implies that they left for Cowlitz to continue their education with their half-sister and her husband immediately on the closure of the school.[76]

By August 2, 1856 Yale was requesting leave on the basis of "ill health, an abhorrance of the prevailing disposition around, and other urgent causes".[77] This

leave was denied, and within two months Yale had decided he wanted his daughters to return to Fort Langley. He wrote a letter to Peers at Cowlitz in October 1856 with instructions to "try to furnish Aurelia and Bella with such articles as they may need till they get supplies at Fort Victoria".[78]

In February 1857 Peers drafted a letter, probably to Douglas, soliciting the latter's assistance in returning the girls to Langley. In this letter a little more is revealed of the arrangements:

> When these young ladies came to the Cowlitz it was supposed that their father would ere this have followed and taken them up on his road to Canada - but it appears now to be against his inclination to tear himself away from his old anchorage - which - seeming that it is a safe one - is perhaps his best course.[79]

Yale's letter to Peers of October 1856 demonstrated Yale's reluctance to journey to Cowlitz himself by canoe, although this was apparently the most expedient means of retrieving his daughters. Peers made other plans for their transportation which he described in two letters written March 4, 1857. The plan involved leaving the girls at Fort Nisqually with the Tolmies until the Company steamer "Otter" visited that post and could take them to Victoria, where they could stay with either the Douglas or Work family until such time as a vessel proceeded to the Fraser River.[80]

Douglas wrote to Yale on March 14, 1857:

> Your two daughters arrived here from Nisqually in charge of Mrs. Work, and are now staying with her. I will send them on to Langley by the Steamer or any other earlier safe conveyance. They are quite well at present.[81]

Four months later, on July 12, 1857, both daughters were married to Company clerks.[82] Aurelia married John D. Manson, from New Caledonia, who was the son of one of Yale's old colleagues. Bella married George Simpson, from Fort Victoria, and the son of Sir George Simpson, the governor of the Company. George Simpson had left for Langley on April 14, 1857, to pack the inland goods, and John Manson had "come out" from the interior for the summer, apparently also in the spring.[83]

In August, 1857, Simpson arrived at Victoria, with a Fort Langley requisition, and "Mr. Manson" was on the same ship, although this may have been

John's father, Donald, who was taking furlough that year.[84] On December 26, 1857, Douglas informed Yale that "one of your two present assistants will complete the staff of officers" of a transport corps being assembled for 1858. Douglas closed this letter by wishing his "best respects to Mrs. Simpson and Newton".[85] This suggests that their respective husbands were the assistants referred to. According to the J.A. Grant manuscript, John and Aurelia Manson left for Fraser's Lake in July 1858.[86] Possibly 1857 was meant; in any case they were not at Fort Langley. Simpson made two trips in early 1858 with the transport corps, returning to Langley on April 7.[87] The question arose at that time as to whether Simpson or Newton would operate the "Fort Victoria Langley sale shop", after Simpson had returned to Victoria to report to Douglas. This was settled by Douglas' response on April 19, 1858:

> Mr. Newton may be continued in charge of the Sale Shop, as Mr. Simpson will be required for other service.[88]

Up to this time, it is probable that Bella had stayed at Fort Langley, as her husband was based there, but the couple probably left in the spring of 1858. According to the Grant manuscript, Yale had purchased Newton's old house in Victoria, "and assigned it to the use of Mrs. Simpson", so it is possible they returned to Victoria.[89] In any case, the Simpsons were not resident at Fort Langley in the latter part of 1858.

Yale's daughters spent very little time at Fort Langley in the decade 1848 to 1858. Eliza was probably resident through summer 1849, when she would have accompanied Peers to Kamloops. At the same time, Yale began trying to place the younger girls in a residential school. He succeeded in June 1850, shortly before Eliza returned with Peers, who took over as clerk for one year, during which they would have occupied the clerk's apartment in the Big House. In August 1851, the Peers left for Cowlitz, and from then through March 1857, Yale was alone at Fort Langley. His two younger daughters were present until their marriages in July 1857, and Bella remained with her husband, George Simpson, at Langley through the spring of 1858. When the Peers and the Simpsons were living at Langley as married couples, it is probable, but not certain, that they lived in the Big House.

Yale's marital status is even more uncertain. He attempted at least two country marriages, the second of which produced Eliza. The particulars of the relationship which produced Aurelia and Bella are unknown. The commuting arrangement described by Grant seems a little unlikely, but possible in light of Yale's previous problems with native women. Other possible explanations could be another short-term liason which produced the two daughters and then ended, or even an ongoing country marriage, not acknowledged for one reason or another. In the late (post 1840s) period involved, a man of Yale's status would not normally be involved with a full blooded native woman, but rather with the daughters of older H.B.C. officers and their native or country-born wives. The lack of a name assigned to the "Indian woman" in the baptismal records is apparently no proof of an absence of some relationship between the parents. Jennifer Brown, in Strangers in Blood noted the anonymity of country wives in the absence of Christian marriage as reflected in Red River baptismal records:

> But many other parents were listed under the name of the father and the added phrase "and a halfbreed woman" or "and an Indian woman", even when they were still both living and together, the wife's identity well known, and her standing long acknowledged.[90]

In this case it seems likely that Yale did not have a long-term country marriage, judging by his desire to board out his two daughters when Eliza left in about 1849. By 1860, in a letter to Sir George Simpson, Yale indicated that he considered himself unmarried:

> Great tenderness was evinced in consequence of the rigid appointment to Peace River, the ladies forgetting, that he was too old now to marry.[91]

Perhaps the safest speculation is that Yale, in light of his attitudes and experience concerning country marriages, was not involved in any long-term relationship with a native woman. He obviously did not have the same reluctance to indulge in sexual liasons, nor to accept the responsibility of raising the products of such adventures in an acceptably Euro-American fashion.

With Yale's eccentricities, and somewhat odd marital arrangements, it is difficult to draw conclusions about the atmosphere in his apartments. The Grant manuscript contains some personal details, which may be valid. The reference to discipline with children has already been noted; this apparently also extended to

table manners.[92] His main entertainment after retirement was said to be hunting, which relates well to his own words to Sir George Simpson in 1860, stating ironically that he was "becoming at last nearly celebrated as a hunter".[93] Dogs were also said to be an enthusiasm, and also the cause of Ovid Allard's dismissal from Fort Langley in 1852:

> Yale had always been a great fancier of dogs, and had always a number of pet hunters and watch dogs, carefully trained. One in particular he kept chained outside his house each night.[94]

Allard, who as interpreter had to call by the Big House to get the keys to the buildings of the fort, apparently fell afoul of these dogs and shot one of them, which led Yale to dismiss him and send him to Victoria.[95]

According to Grant, Yale was an art lover as well as a dog fancier:

> During the years Yale had taken to picking up here and there odd Souveniers(sic). Some few curios had been sent years before by his friend Colin Robertson, and occasionally a friend would write telling him of a new picture, or send a fine print for his collection.[96]

William Henry Newton

Although Yale's presence at Fort Langley was a constant over the decade 1848-1858, there were changes in clerks, with successively Henry Peers, Gavin Hamilton, and finally William Henry Newton (figure 91) filling that position. Newton, accompanied by his wife, was sent from Fort Victoria to Fort Langley on board the "Otter" on April 14, 1857:

> Mr. Newton is sent for the purpose of being stationed at Fort Langley as your assistant, and is accompanied by Mrs. Newton, for whom you will provide house accommodations and provisions according to the rules of the service.[97]

Newton, originally of Bromley Common, Kent, England, wrote to the Governor and Committee in June 1850, wishing to join his friend Edward Langford on his assignment to Vancouver Island. They arrived on the "Tory" in May 1851, with Newton as an "agricultural assistant" to Langford, a bailiff in the service of the Puget Sound Agricultural Company, assigned the charge of Colwood farm.[98]

Dr. John Sebastian Helmcken had first met Newton when the latter was still on Colwood farm, but he soon afterwards joined the H.B.C. proper as a clerk stationed at Fort Victoria:

> ...added to the frequenters of Bachelors' Hall. Newton was a nice agreeable young fellow - a stripling - Langford's factotum and almost relative... Newton (and another bachelor) could sing well, and so in the evening there was always or often singing going on particularly on Saturday nights, much to the annoyance of the parson and his wife, but not so the girl boarders.[99]

On September 30, 1856, Newton was married to Emmeline Jane Tod (figure 92), the daughter of John Tod, one of Yale's old colleagues:

> A wedding took place to day Mr. Newton one of the Company's Clerks, to Miss Tod, they go down to Metchosen to spend the honey week, they were the first couple to be married in the Colonial Church.[100]

The witnesses to the wedding were Joseph Despard Pemberton and Louise Ellen Langford, both prominent names in pre gold-rush Victoria.[101]

Emmeline Tod was the only child of John Tod by a white mother. After a long term country marriage, Tod returned to Leven, Scotland in the early 1830s. Years later he described his marriage thus:

> I at last went home and got married to a lady afterwards the mother of the present Mrs. Newton of this country. My wife became insane, and she was obliged to be taken home.[102]

Accompanying her mother back to Britian was the infant Emmeline, born in 1835. Interviewed in the 1920s, Emmeline referred to having lost her mother, Eliza Waugh, before she was one year old, and how she was raised by the Greenshields, relatives of her father, who eventually settled in Montreal.[103] She was in Montreal by 1844; in that year John Tod instructed his old friend Edward Ermatinger to see that the annual interest of Tod's investments was to go to Mr. John Greenshields of Montreal partially to defray the expense of her education.[104] Miss Tod arrived on Vancouver Island as a young adult in the winter of 1855, having travelled out on the "Princess Royal":

> I was well supplied with books and fancy work, so did not find the voyage monotonous. I remember how pleased the Captain was when I

offered him a reading of "Pickwick". Dickens at that time had made his name known, and everyone was reading "Pickwick".[105]

Besides her interest in literature and needlework, Miss Tod had also been instructed in drawing while a child in Montreal.[106]

For the six months until their departure for Langley the Newtons played a prominant part in the social life of Victoria. The move to Fort Langley must have come as quite a shock:

> Life at Langley was our first experience of loneliness, but fortunately it did not last long. The first break in the monotony was the arrival of the gentlemen in charge of the Interior Forts, who, once a year, came to Langley with their year's trading of furs and returned with the necessary articles of barter for the following year; blankets, guns, ammunition, shawls and all things dear to the Indian heart. Some of these gentlemen were delighted with my music and piano. Two or three had never seen a piano before, having been born and brought up in the Interior. The memory of youthful days was stirred in the heart of Chief Factor Donald McLean from Kamloops, and he never tired of hearing another song, especially if it happened to be a Scottish one.
>
> The next break in the usual dullness was the arrival from home of a corps of Royal Engineers, under Colonel Moody.[107]

Along with the dullness came the birth of the Newton's first child, Emmeline Frances, on November 1, 1857, at Fort Langley.[108] The second child, Florence Mary, was not born until October 31, 1859, so in 1858 the Newtons had one infant child.

The Newtons represented something new at Fort Langley; they were more a part of the emergent colonial society of Vancouver Island than the traditional fur trade population. Besides bringing the first piano to the mainland ("a beautiful Collard & Collard") Mrs. Newton was probably the first white women resident at Fort Langley. At least two descriptions exist of visits paid to the Newtons at Langley in the early 1860s, when William was in charge. The first comes from Miss Sophia Cracroft, Sir John Franklin's niece, who accompanied Lady Franklin on her trip to British Columbia in 1861:

> We met Mr. and Mrs. Newton who walked back with us. They seem very nice people and have two fine little girls. They have an excellent roomy house, built in the old fashioned style, roomy and substantial. We saw an already pretty numerous collection of butterflies of the country, which Mr. Newton is collecting.[109]

In September 1862, a steamer cruise up the Fraser River was taken in honour of the Honourable Malcolm Campbell, visiting from Canada:

> Putting about and taking another channel she soon made fast at Langley, where a sufficient pause was made to admit of a visit to the Hudson Bay Company's Fort. Mr. Newton, the agent in charge, was absent, but his good lady did the honors of the house most handsomely. The party were bounteously regaled with wines and fruit, after which they indulged in a waltz, Mrs. Newton playing the piano.[110]

The Newtons were clearly considered a most amiable couple, but those more closely involved with them had different ideas. James Bissett, an H.B.C. Chief Trader, in a memorandum concerning the placement of clerks for Outfit 1867, noted six men available for other districts or departments, one man to be dismissed, and:

> W.H. Newton
>
> respectable &c but of very little ability.[111]

Jason Allard seems to have shared Bisset's opinion. His view of Newton was cited by John Gibbard in the 1930s:

> It is the claim of Jason Allard that he (Newton) so mismanaged trade that Finlayson, who had by now replaced Douglas in management of the Company's affairs, sent his father, Ovid Allard, to redeem business while he himself, a lad just out of school, took the place of several clerks to reduce the staff of "gentlemen's sons".[112]

Some three years earlier John Tod wrote a letter to Edward Ermatinger concerning terms of his will which were intended to give his Canadian farm to his brothers:

> Otherwise my daughter, Mrs. Newton, after I am dead and gone, may possibly attempt to litigate in the affair, and give them both some trouble, which, if possible, I would avoid - Her ardent and dominant

> spirit, joined to a selfish ambition, will never allow her to rest satisfied with anything less than the lions share of this worlds goods. She is in fact another example in proof of that which I have already remarked she has been in every sense of the term, most religiously brough up, yet, there is no more fellow feeling - no more christian charity in her, than in the heart of a piece of sun-dried Oak.[113]

The Newton family in 1858 comprised William, or "Billy", with his butterflies, singing and art, perhaps lacking something in the execution of his duties, his wife Emmeline, who shared his artistic tendencies but was of somewhat different character, and their infant daughter, Emmeline.

Office Function

Besides serving as the residence of Yale, Newton, and their families, the Big House was the location of the Company office. Fort Langley and its subsidiary posts, with their broad range of economic activities, required a substantial amount of paperwork and record keeping.

The Hudson's Bay Company ran its business on the basis of Outfits, running from June first of one year to the end of May the next year - thus the calendar year 1858 would include half of Outfit 1857 and half of Outfit 1858. The records kept for each Outfit were extensive, normally beginning with requisitions for all the imported goods needed to carry on business for the year. These requisitions would be prepared by the gentlemen in charge of each of the posts, sent to the depot (in this case Fort Victoria) where they would be consolidated, and then one large order was sent with the returns to England. To allow adequate time for transportation, as well as time for the Company agents in London to procure the goods needed, the requisitions would be sent to Victoria more than two years in advance of the start of the relevant outfit.

Every day an entry was made in a "Journal of Occurences", again the responsibility of the gentlemen in charge of the post. In this would be noted the weather, level of activity of trade or sales, and the happenings around the post, including the work assignments of the men.

Most of the other records kept related directly to economic factors. At least once every Outfit, a full inventory of the post would be carried out, to determine precisely what retail stock was on hand, as well as what goods were in use in the operation of the post.

All economic transactions would normally be recorded in more than one place; the basic mechanism was the "Day Book". James Douglas gave instructions to the Chief Trader at Nanaimo in 1856 that such a book should include "...an entry of each transaction as it occurs, whether relating to personal accounts, Indian labour"... or goods and supplies to work centres. It was also to describe all Indian trading, and to include a transcription of cash transactions from a separate cash book. The Day Book was to be forwarded at the end of each month to Victoria, and a new one started on the first day of each month. Also required was an "Accounts Current" Book, to be kept with the Day Book, and to be a "duplicate entry of transactions on personal accounts, or any other account of which a record is required to be retained at Nanaimo".[114]

Most of the records were duplicated in order to allow local control of accounts and records as well as the departmental reviews which were the responsibility of the Fort Victoria headquarters. The "Standing Rules and Regulations" of the Company, established in 1843, included Rule 34, which stated the accounting responsibilities of each district:

> That Gentlemen in charge of Districts be directed to furnish annually a complete set of accounts of the business thereof to the Accountant at the Depot, likewise journals of occurences at the several posts, with correct copies of all correspondence, & a Report, conveying every requisite information in regard to the state & mode of conducting the trade, exhibiting a comparative statement of the closing & immediately preceeding Outfits; together with such suggestions in regard to the improvement of the Trade as may occur, such Reports also to contain an Abstract of the Indian population exhibiting the number of Men, Women, & Children of both Sexes; and that all persons in charge of Posts be directed to furnish similar accounts and statements to the Gentlemen superintending their respective Districts.[115]

Besides the ongoing record-keeping, there would be a constant flow of goods in and out of Fort Langley, which required bills of lading, invoices, and packing lists to be prepared, as well as more or less constant correspondence with Fort Victoria. Apparently Yale was quite scrupulous about his record keeping. A letter to him from James Douglas dated December 26, 1857 included plaudits:

> The Fort Langley Courier arrived this morning and delivered the packets entrusted to his charge. The Langley accounts are clear and neatly made out and will I have no doubt be found correct, as they are truly satisfactory showing that your good management has been crowned with success.[116]

Just over a year later, on February 4, 1859, Yale described in a letter to John Work some of the problems with the accounts at Fort Langley:

> Mr. Newton will have the rest of the Accounts ready for transmittal by the next conveyance. Keeping Accounts for the several divisions of Fort Langley, Forts Hope and Yale is no trifle, and if the Board of Management do not speedily adopt a less complicated plan of action we will do the thing for them and make Fort Langley one Establishment.[117]

An emphasis on inventories and final compilation of the records of the preceeding outfit seemed to occur in the early fall, normally September. There are references from both Fort Vancouver and Fort Victoria to completing the year's accounts for England in October and November, so logically all outlying posts would have to submit their final accounts a little in advance of those months.[118]

Although some of the accounts, particularly in rough form, would be kept in the other buildings of the fort, the bulk of the work, especially when the rush was on to get material prepared for Victoria, would take place in the Big House office. Sometimes the work was a little arduous. Thomas Lowe, a clerk at Fort Vancouver in the 1840s, spent a full week in November 1844 preparing the accounts to go to England. This included working through a Sunday, which was most unusual for the H.B.C.[119]

The duties of Gavin Hamilton, Newton's predecessor as Yale's assistant at Fort Langley, were specified by Douglas when he sent Hamilton to Langley in 1853:

> He is sent to learn the business and I hope you will give him every opportunity of doing so by making him copy letters, accounts, and above all placing him in the Indian shop...[120]

Thomas Lowe described some of the clerks' duties at Fort Vancouver in 1844:

> Mr. Roberts putting up some articles for the N.W. Coast in the Store, and Mr. Peers gone up to assist Mr. Harvey on the Mill Plain, while K. Logan is helping Mr. David McL. in the Sale Shop, so that I am left by myself in the office at present...[121]
>
> Mr. Grahame who is in charge of the Sale Shop in the absence of Mr. David McLoughlin, began to take the Shop Inventory yesterday and finished this afternoon.[122]

As the only clerk at Langley, Newton would have had a comparatively wide range of duties. However, on the basis of directions issued by Douglas in April 1858 that he was to continue in charge of the sale shop, and of the primacy of the retail function in 1858, it would be safe to assume that the retail function was his main focus of activity.[123]

Also from Thomas Lowe comes a description of some of the hardships of being an H.B.C. clerk. In 1845 he wrote of shortening his working days by refraining from going to the office after supper. Almost five years later perhaps he had started following this practice again:

> I am suffering much from sore eyes, brought on by working too much in the office by candlelight, and have been unable to write today, although my services can ill be spared at present.[124]

The precise physical layout of the Fort Langley office remains unknown, but it is certain that it would have been first and foremost designed for function. It is also safe to assume that it was adequate to the task of accommodating the two gentlemen who were at Fort Langley in the most active decade, and would have contained the basic elements of furniture, stationery, and other equipment required for their work.

Mess Hall

In addition to housing and office, the Big House served as the dining area for the resident and visiting H.B.C. gentlemen at Fort Langley. In fact, at most H.B.C. posts the mess hall also seemed to serve as the focus of most of the organized social activity going on. This began with the meals themselves, although at Langley the normal complement of only two gentlemen would have been a mitigating factor. Dr. John Sebastian Helmcken described the protocol of dinner at Fort Victoria in 1850:

> (Douglas) took the head of the table, Mr. Finlayson the foot...Grace having been said by Mr. Douglas... on comes the soup, then the salmon, then the meats - venison on this occasion and ducks - then the pies and so forth, and down they go into their proper receptacle, each one ready and willing to receive them. Having done justice to the dinner and taken a glass "to the Queen", many of the junior members left, either to work or to smoke their pipes in their own quarters. We remained; the steward, a Kanaka, (the cook was also a Kanaka) brought on tobacco and long clay pipes of the kind called "alderman". .. During the dinner there was conversation, Mr. Douglas taking the lead.[125]

Charles Wilkes, an American naval officer who visited Fort Vancouver in 1841, recorded a similar pattern:

> Dr. McLaughlin showed us our rooms, and told us that the bell was the signal for meals... we met in a large hall, with a long table spread with abundance of good fare. Dr. McLaughlin took the head of the table, with myself on the right, Messrs. Douglas and Drayton on his left, and the others apparently according to their rank... The meal lasts no longer than is necessary to satisfy hunger. After meals, it is the custom to introduce pipes and tobacco.[126]

At Fort Vancouver the food was prepared and served by male domestic servants, probably including those of the Chief Factor and Chief Trader.[127] The formal seating arrangements in H.B.C. mess halls seem to have included visitors, sometimes Indians, as at Fort Vancouver. Not all gentlemen were as interested in entertaining natives. Hamilton Moffat, at Fort Simpson wrote in 1860:

> Old Sebassa paid us a visit - I sent him to the kitchen to get his dinner, I have no idea of being compelled to make the mess room or my own quarters a public place of entertainment to every chief that likes to come.[128]

Gavin Hamilton, the clerk at Fort Langley from 1853 to 1857, later referred to mess room conversations with Yale, confirming the existence of this social nicety.[129] According to the J.A. Grant manuscript, after his retirement to Vancouver Island, Yale had two particular Indian friends, one from Kamloops and one the "interpreter" from Langley, who always sat at the table with the family during their visits.[130] This would seem to open the possibility of Indians sometimes dining in the mess hall at Fort Langley. Grant also referred to a "negro" cook who had been an "integral part of Yale's household at Langley", who "still sat at table with the family, according to Yale's unbroken law, seated at the foot of the table, his master at the head" after Yale's retirement to Vancouver Island.[131] Several explanations may be offered for the presence of a "negro" cook in Yale's household, but regardless of "personal law", no servant would be allowed to dine in an H.B.C. mess hall with gentlemen.

The mess hall would also have served as the location for most of the Company's formalized social events, such as the celebration of Christmas, New Year's, and the social activities relating to the arrival of the brigades each summer. Jason Allard described the events of Christmas at Fort Langley involving the "hall".

> On Christmas morning all the employees of the fort, dressed in their very best, marched in a body up to Mr. Yale's quarters - it was called the big hall. Mr. Yale usually received them kindly and held a sort of smoker for a couple of hours in which the decanter was passed around freely... In the afternoon of Christmas Day the men's wives were invited to the big hall where they were given two or three "shots" of wine after which their baskets (they were told to bring them) were filled with cookies, cranberries and blueberry jam and ships biscuits.[132]

C.C. Gardiner, a gold-seeker from Prince Edward Island, was invited to the brigade ball in 1858:

> To this ball I received an invitation, which I, with much pleasure attended, and was not a little surprised at seeing the company composed of so heterogenous a kind. There were English, Scotch, French, and the Kanackas present, and their offspring, and all so thoroughly mixed with the native Indian blood, that it would take a well versed Zoologist to decide what class of people they were, and what relation they had to each other; though that will cause you but little surprise, when you are informed that almost all the Co's. wives are the native squaws, their children, which are called half breeds, as a general thing, being quite fair, docile, and intelligent. The ball was conducted with the best possible decorum. The music was sweet, from the violin, and the dancing was performed in the most graceful manner, by the Indians and the half breeds, who took a very prominent part on that occasion. I retired to my tent about twelve o'clock leaving them still enjoying their mirth to the utmost extent.[133]

Although Allard remembered Christmas Day as the major holiday occasion, it seems that at most H.B.C. posts it was New Year's Day that took precedence. There was always a "regale" distributed on both holidays, and Christmas was also a day off, but the distribution of liquor and occurence of partying and dancing was not as universal. At Fort Nisqually in 1852 one of the storehouses was emptied "to make a dancing Room for the men on Christmas day", and the men did spend the day dancing and singing.[134] Dancing on Christmas day was also noted at Fort Simpson in 1855, where:

> The men paid us a visit this morning fired a volley of musketry. They received a few drams and retired. They also received the usual extra rations. We gave them a dance in the evening.[135]

"Fiddling, dancing, singing, eating and drinking" on Christmas was also noted by Robert Melrose at Craigflower Farm the year before.[136]

In general, though, the major celebrations were reserved for New Year's. William Fraser Tolmie described the activity at Fort McLoughlin on January 1, 1835:

> The men after breakfast visited us in the dining hall and after the compliments of the season received a couple of drams. In the

> evening they assembled in the same apartment and danced with great vivacity till 10, to vocal music. Manson and I danced several reels. The Canadians possess a natural ease of manner... They sung several paddling songs. Our two Iroquois danced the war dance with great spirit of their tribe and the S. Islanders sang Rule Britannia tolerably well. They all seemed to enjoy themselves highly.[137]

Dr. John S. Helmcken commented on the holiday practices he saw observed at Fort Victoria some fifteen years later:

> I did not see the usual Christmas festivities, holidays with gay and good things, but on New Year's Day, all officers and men presented themselves very respectfully before Mr. Douglas, paying him the usual compliments with the usual chat and enquiries - but the remarkable part was, that on this day, the gentlemen kissed the ladies. They would shake hands and then present as a mere matter of politeness, their cheek to be kissed. It mattered little what position the ladies held, this routine went on for this day only. As the company's servants had originally been nearly all French Canadians, I supposed the custom had been brought with them. As it did not seem a very unpleasant ordeal, I, rather bashfully, though perhaps not unwillingly took my part in the performance of the duty. This day was devoted to jollity - all mixed after a fashion - man and master together, good feeling reigned, all were polite and nothing "outre" took place.[138]

The practice of kissing all the ladies was also noted by Charles Wilson, a British officer who spent January 1, 1861 at Fort Colvile:

> I believe I was the only one to follow the custom of the place and kiss all the old squaws right round...[139]

The Fort Langley mess hall likely served as the location for these Christmas and New Year's celebrations. Christmas would have involved primarily the distribution of special provisions to the men and their families, as well as some relaxation of the rigid proscriptions which normally separated the servants from the gentlemen. The major celebration would be expected on New Year's day, which would involve the same extra provisions and liquor as Christmas, but probably also a dance or social event. This would probably have

included the practice noted above of kissing all the ladies associated with the post. The other major yearly event in the mess hall would have been the ball given for the brigades. Other holidays were celebrated at some H.B.C. posts, including Guy Fawkes[140], and All Saints Day, (November 1), which was observed as a formal holiday at some posts, with a day off and special rations.[141] There is at present no way to determine if these November holidays were also observed at Fort Langley in the 1850s.

There are a number of descriptions of H.B.C. "balls" or dances in the Western Department, which illustrate some of the social conventions followed, and add to Gardiner's description of the Fort Langley brigade ball in 1858. One of the most scrupulous commentators on these social events was Lt. (later Sir) Henry James Warre, who with Vavasour came to the Columbia and Vancouver Island as a British military observer in 1845. Warre often seemed more interested in dancing, hunting, and riding than military observation, and this is reflected in his journals. On October 5, 1845, Warre's group was detained at Fort Victoria due to wind, and a party was held (figure 93):

> In the evening the Company's Servants were regaled with a feast and ball-Dancing was kept up with great spirit to the music of an Old Violin. The Indian Women dressed in European Costume, covered over with ornaments after their own fancy, presented some curious figures for the admirers of the noblest work of Nature, the female face divine. I joined in the amusements and enjoyed the "dance ronde" a Canadian dance, not a little.[142]

Warre often encountered the "dance ronde" in the west, along with Scottish reels and jigs, country dances, and the undescribed Rabbit and Duck dances. The "dance ronde" began with the host or his proxy dancing around the seated women with a handkerchief. He would then throw the handkerchief over the neck of his favorite, who:

> in turn takes the kerchief and is followed by her swain, performs the same feat on her favorite male; and each in turn giving and receiving salute till the whole are selected; and dancing round the room in couples, you form a circle and the best singer commences, (the rest join in Chorus) an old French Canadian song, commencing "Entrez une danse & C" meaning that the said lady is to enter into the circle, and,

at the proper words of the song, select by a kiss a gentlemen who takes her place, and she is allowed to return to her seat. The gentlemen performs the same ceremony (in his turn) till the whole are finished. As may be supposed, this dance causes not a little jealousy between not only the young ladies, but even the males, and the luckless "wight" who is taken as a final dancer at last, is received with laughter.[143]

Charles Wilson, another British officer who visited various H.B.C. posts, described a wedding party at Fort Colville fifteen years later, in 1860:

...after the ceremony was over the guests adjourned to the house of the bridegroom's brother-in-law where refreshment was provided on an extensive if not very refined scale; dancing soon commenced and was kept up until morning shone in upon the merry revellers; it was a most amusing sight, except myself there were hardly a dozen who could speak any English, the French element showing forth strongly in the energy with which all laid themselves out to enjoy themselves as much as possible in the time; the dances consisted of Irish jigs, Scottish reels and a wonderful dance called a French Cotillon, no time was lost about it when one fiddler tired another seized the bow, one couple down, another up, huge voyageurs with their coats off and perspiration streaming down their faces, throwing their legs about in the most frantic manner and trim little women with their neat calico dresses and grave faces dancing away in the most staid and demure manner, everything went off in the most quiet and respectable manner and everyone seemed to enjoy themselves greatly, especially the old people.[144]

Wilson also attended a "grand ball" given by Angus MacDonald, the Chief Trader at Fort Colvile, in early 1861:

you have no idea of the scene such a wonderful collection of people, from the light hearted trapper with his gaudy moccasins and leggings, through all shades of colour to the dusky hue of an Indian; songs and dancing were the order of the evening, some of the Canadian boat songs sung by a lot of voyageurs were capital, but the dancing after all was the great thing and at 4 o'clock in the morning I found myself

> dancing a "reel de deux" with an Indian squaw, in a state of uncertainty as to whether I had any legs on at all, having danced them clean away and nearly dislocated them into the bargain by trying to pick up the proper step, a kind of spasmodic kick, in which the legs are doubled up and thrown out again in the most extraordinary manner, the ladies part is much easier as she simply stands up and dances the double shuffle in the same place till she has tired out two or three partners when she sits down;...[145]

It is likely that the balls at Fort Langley were conducted on a similar basis to those described above; clearly there was a strong degree of continuity through time and space within the Western Department during the relevant period (figure 94). The ethnic mix at Fort Langley was like that described at the other posts, the social organization was identical, and the resources available were similar. Earlier on, the violin was the primary instrument; Yale's daughter Aurelia later described the first time she heard the bagpipes played in Victoria, while attending school there.[146] Although a piano had arrived with the Newtons in 1857, and Mrs. Newton played it for the gentlemen from the interior, it is clear from the C.C. Gardiner description of the 1858 brigade ball that the violin was the instrument used for dancing at that time.

The references made by Gardiner to the brigade ball being conducted with "the best possible decorum" and by Wilson to a "most quiet and respectable manner" may reflect a calming-down by the late 1850s and early 1860s. There is evidence of wilder times earlier. Ovid Allard in a letter written in 1867 describes having bought a piano for his daughter, "and when I feel lonely I get her to play, but never dance on the hall table any more".[147]

The mess hall in the Big House also served as the site of some more solemn occasions. The first clergyman to visit Fort Langley had been Modeste Demers, O.M.I., in September 1841, and although he "received from Mr. Yale a reception which one may await from a man of merit and of elevated mind", there is no reference to him preaching in the Big House.[148] The first specific reference to preaching in the mess hall came some eighteen years later, with the arrival of the first Anglican and Methodist missionaries in British Columbia.

In February 1859, Rev. William B. Crickmer, the Anglican minister stationed at Derby began preaching to from "ten to forty" miners and H.B.C. employees on Sunday evenings in the "Fort Hall", and the following month Dr. Ephraim Evans preached a Methodist sermon in the Big House.149

It is likely that religious observances had begun in the Fort Langley mess hall at a substantially earlier date than this. The Hudson's Bay Company had employed a schoolmaster/chaplain, Robert Staines, from 1849, and although based in Victoria he must have made at least occasional forays to Fort Langley. He was definitely there in July 1851, when he performed a number of baptisms at Fort Langley, as well as the marriage of Eliza Yale to Henry Peers.[150] It would seem likely that while at Langley, Staines would have followed his own example from Victoria, of preaching in the mess hall of his employer. Roderick Finlayson remembered in the 1870s that Staines' services at Fort Victoria:

> were carried on the (sic) Mess room of the Fort, which was made to serve for almost every purpose. Here also was erected a sort of temporary pulpit and prayers held every Sunday.[151]

Dr. J.S. Helmcken reiterated the same point:

> All had to go to church every Sunday, the mess-room serving every purpose - baptisms, marriages, funerals, councils, dances, theatrical, or other amusements - and did not seem any the worse for it.[152]

The practice of holding church services and other religious ceremonies in the mess hall was not limited to Fort Victoria. The Fort Simpson Journal of November 1, 1857 notes that "Mr. Duncan (the missionary in that area) performed divine service in hall <u>as usual</u> (sic)".[153]

Even in the absence of ordained clergy, the Company seems to have encouraged some formal religious observances on Sundays, the only full day off. The directions for these observances were articulated in the "Standing Rules and Regulations" of the H.B.C., as the first resolution for "promoting moral and religious improvement". It was resolved that:

> ...every Sunday divine service be publicly read, with becoming solemnity, once or twice a day, to be regulated by the number of people and other circumstances, at which every man, woman and child resident, will be required to attend, together with any of the Indians who may be at hand, and whom it may be proper to invite.[154]

H.J. Warre commented on the situation at Fort Vancouver in 1845, even after the Catholic Church was present in the region:

> Every Sunday we have prayers in the dining hall the service being performed by Mr. Douglas.[155]

The assumption of this responsibility by Douglas is explained by Roderick Finlayson:

> In those days Chief Factors and Chief Traders held the offices of Justices of the Peace and solemnized marriages etc.[156]

In this Finlayson was half right. The 86th Resolve of the 1846 Council stated:

> That throughout the Country in the Absence of Clergymen, Chief Factors only Solemnize Marriages...[157]

Finlayson also offers an explanation for Douglas offering religious services over those offered by the Catholic priests:

> One of the usages of the H.B. Cos was to hold religious services on every Sunday morning, whether on land or on board of their vessels. If there were Catholics present as there were many - viz French-Canadians etc., their religion was respected, by holding two services.[158]

The mess hall at Fort Langley certainly would have been used for religious ceremonies by Staines from the beginning of the 1850s on his infrequent visits to Fort Langley. Whether Yale or one of the other gentlemen of the Company performed these religious functions at Fort Langley in the absence of clergymen is unknown, but it would not be unexpected.

As Helmcken noted at Fort Victoria, the mess hall was the seat of most special events, and as such the mess hall at Langley was the site of the ceremony proclaiming the new crown colony of British Columbia. This took place on November 19, 1858, and was perhaps the only significant political event that ever occurred at Fort Langley.[159]

Transient Housing

In the active period, the only clear evidence for transients being lodged in the Big House comes from an 1858 letter from Douglas to Yale suggesting that another building be erected to accommodate the gentlemen from the interior (replacing Structure B), but that they "must this year occupy the big house".[160] This would imply that for the inland gentlemen, Structure B had been the main domicile, but in the event of its unavailability, the Big House was the next best

choice. Other than the above reference, it is not clear where transients were housed in this period. In 1858 large numbers of people were accommodated at Fort Langley, but even prior to the gold rush, there had been a certain transient population of Company employees to be housed and fed.

In 1858 several references were made to the hospitality of Fort Langley and its Chief Trader, James Yale. For instance, John Nevin King, with the American Boundary Commission, spent the evening of June 29, 1858 with Mr. Yale, apparently just as a visit.[161] Douglas wrote to Yale on July 7, 1858, referring to Ogden, McLean, and "other Gentlemen at Fort Langley".[162] This was, of course, during the visit of the inland brigades. About a month later, Douglas sent a surveyor to Fort Langley who was to be provided with lodgings and "a seat at the mess table".[163] Donald Fraser, the correspondent of the Times, visited Fort Langley in September:

> Passed last night at Fort Langley, a post of the Hudson's Bay Company... The welcome was kind and hearty, and the hospitality generous, for which I am most grateful, but the bed rather primitive.[164]

Fraser was obviously impressed with the hardness of the Fort Langley beds, but gives no hint of which building he was housed in. In November 1858, August Kautz, an American military officer, arrived at Langley:

> I had some difficulty in finding a bed. I finally went up to the fort and asked the hospitality of Mr. Yale. I met Dr. Tuzo and Mr. Newton and Mr. McNeil at the Fort. They received me very kindly.[165]

It is likely that Kautz stayed in the Big House. Not only does he refer to the two resident gentlemen, but also two visiting H.B.C. officers who were present, and the likely location for their visit was the Big House. Kautz also referred to "amusing himself" by, among other things, reading the papers. From his earlier-quoted statements concerning Yale, he also spent some time socializing as well. These activities all suggest the Big House.

Walter Moberly also visited Fort Langley in late 1858:

> On reaching Fort Langley a most hospitable reception awaited me from Chief Factor Yale, then - and, as he afterwards informed me, for thirty years previous - in charge of that large and important fort. I here met with several of the officers of the company, all of whom were most kind and gave me a great deal of information.[166]

Charles Wilson of the British Boundary Commission also visited Langley for the first time in the fall of 1858:

> On arriving at Langley I went to see Mr. Yale the chief man there in the H.B.C.... We dined off some very tough beef at the Fort... (The next day) In the evening we drank the usual toast to friends at home in whiskey punch to moderate the effects of wet clothes.[167]

On a visit to Fort Langley in June, 1859, Wilson was served breakfast as well as evening drinks:

> As I was smoking my pipe after breakfast who should come up the fort square but the Governor and Good who... came just in time to see the cloth disappearing, however, that was soon remedied...[168]

The description of Douglas and Good coming "up" the fort square, and Wilson's subsequent socializing with them points to his presence in the Big House, at least for meals. When Wilson returned in December 1859 he and his party were welcomed:

> here we received all the attention that could be given us and after imbibing some hot liquor to counteract the effects of the cold, I wrapped myself in some blankets and was soon far away in the land of dreams.[169]

Although no indication is given of where he slept, it would seem likely, based on earlier experience of being entertained and fed in the Big House, that it also served as his accommodations. Certainly by 1868, the upstairs of the Big House was being used as lodging for a teamster staying at Fort Langley, although admittedly there were fewer buildings to choose from at that time.[170]

The hospitality offered at Fort Langley seems to have been typical of that found at other posts; the gentlemen of the Company were more than willing to "put themselves out" to entertain visitors from the outside world. John Tod described normal practice in the Company posts:

> Everything on Hudson Bay tables as a rule was good, but homely. The table cloth consisted of a piece of packing canvas, the plates were of iron and so on.[171]

Doctor Helmcken noted some elaboration in the routine at Fort Rupert in 1850 when the captain of the "England" was invited to dine:

> Wine, etc., placed on the table, an unusual occurrence, and only adopted when strangers arrived, to uphold the dignity of the company and to show off a bit on these state occasions.[172]

At Fort Vancouver in 1841 Wilkes noted that even McLoughlin and Douglas "were kind enough to give up a large portion of their time to us, and I felt occasionally that we must be trespassing on their business hours".[173] Roderick Finlayson, at Victoria, recalled going even further, by giving up his bed to a visiting sea captain, and sleeping on the floor himself.[174] The hospitality of the Company led some visitors to comment on its shortcomings when it was not encountered, as with Wilson's complaint about tough beef at Langley, and H.J. Warre's denunciation of his reception at Fort Colvile in August 1845:

> We found Mr. Fraser in charge of the Fort - Whatever good qualities he may possess, he certainly does not keep a good table, judging from the appearance of our supper - We had nothing but dried salmon without vegetables or bread; although in the river there are abundance of fine fish, and potatoes and wheat grow abundantly about the Fort.[175]

Food Preparation

The primary function of the mess hall involved at least one ancillary building at Fort Langley. Normal Company practice had food prepared in a kitchen structure, which could be either attached or separate, but near the gentlemen's mess hall. A servant then delivered the prepared meals to the mess hall. Meals were also taken to the private quarters of the gentlemen, where their families were served. The Company supplied the families of the gentlemen, but not of the servants, with an allowance of (prepared) provisions as part of their terms of employment. With the wives and children of the gentlemen eating separately, and not socializing a great deal in other circumstances, an almost cloistered environment could develop. John McLoughlin's daughter, later Mrs. Harvey, recalled the situation at Fort Vancouver when interviewed in 1878:

> The families lived separate and private entirely. Gentlemen who came trading to the Fort never saw the family. We never saw anybody.[176]

The demand for food preparation at Fort Langley would have been comparatively light, given the small population of gentlemen. In the decade 1848-1858 the "regular" number of people served at each meal would have varied between two and seven, with an increase at brigade times to possibly twelve or fifteen in total. A futher indication of the numbers accommodated for meals in the Big House may be gained from the quantities of items related to eating found in the last inventory of "Articles in Use" at Fort Langley, from 1848. These numbers would only relate to the mess hall proper, as the gentlemen's tables were privately stocked.

Quantities include:

1 dozen earthenware cups and saucers
1 cruetstand
1 dozen forbuck table knives and forks
1 dozen earthenware plates
10 tablespoons
6 teaspoons
4 wine glasses
5 glass tumblers
2 table cloths[177]

The unit of a dozen may have indicated what was anticipated to be the maximum number served in the mess hall.

To complete the "unit" of the gentlemen's accommodation it is necessary to include the associated food preparation areas.

Kitchen Structure

The kitchen structure would have been located in close proximity to the Big House. A small building oriented on a north-south axis was identified by Jason Allard in figures 2 and 3 as "kitchen" or "cook house". The McColl plan of 1862 (figures 1, 4) shows three structures present in this general area, Structures Q,

R, and S, without any identification of function. However, one of the three must have related to the role under discussion. Allard in figure 3 also referred to a "cook and assistants Ho" next to the kitchen, placing another related function in this area.

In the directions for the conversion of Structure B to a sale shop in 1858, Douglas wrote that "the shop door will have to be cut, about the centre of the building in the end next the kitchen, say (Fallerdeau's House)".[178] As Fallerdeau was noted in some sources as the cook or steward at Fort Langley, it follows that his residence and the kitchen would have been in close proximity or in the same building.[179] This reference also points towards one of the buildings behind the Big House having functioned as the kitchen. However, there is no direct documentary or iconographic evidence suggesting which structure was actually the kitchen. It is likely, however, that the largest of these three buildings, Structure Q, was the kitchen in 1858; information will be presented to reinforce this hypothesis.

Direct Evidence

The earliest sources showing the three structures in this complex are the Mallandaine sketches of December 1858 (figures 12 and 13), which show respectively the extreme west end of Structure Q, to the right of the Big House, and the south and east faces of the roof of the same building. These sketches show Structure Q to have been a single storey, hipped-roof structure. Relative to the palisade and Big House, it would appear to have been some 3.7 to 4 metres (12' to 13') to the plate, and perhaps 7 to 7.6 metres (23' to 25') in overall height. The roof was covered with shakes or shingles, and there was no chimney visible.

In August 1861 a Chinese labourer was sent to Fort Langley to wrap surplus sugar in mats. Newton was directed to "feed and lodge him in the kitchen".[180] This would seem to indicate another role for the kitchen, that of transient housing.

As noted above, the McColl plan of 1862 shows three buildings in this area: Structure Q was some 13.1 by 6.0 metres (42' 11" by 19' 10") and was located 132.6 to 145.7 metres (435' to 477' 10") south of Structure K, and 26.8 to 32.8

metres (87' 10" to 107' 8") west of Structure K; Structure R is shown to have been about 7.2 by 3.0 metres (23' 9" by 9' 11"), 131.2 to 138.4 metres (430' 4" to 454' 1") south and 41.5 to 44.5 metres (136' to 145' 11") west of Structure K; Structure S scaled to 7.6 by 2.6 metres (25' 1" by 8' 7"), and was 140.4 to 148.0 metres (460' 8" to 485' 9") south and 41.5 to 44.1 metres (136' to 144' 7") west of Structure K, all measured following the axes of the latter building. This plan also indicates a series of fences or divisions which connected these three structures and the palisade.

The Dally photograph of 1867 or 1868 (figure 8, 8c) shows the south end of Structure Q, and confirms the configuration shown in the Mallandaine sketches; a one storey, hipped roof structure, probably with a shake covered roof. Additionally it is shown to have been, except for the Big House, the only whitewashed structure in the fort, and does not seem to have had any openings in the half of the west wall shown. Again, no chimney is evident.

Chronology

Structure Q, as noted in the section above, appears in iconographic sources from 1858 to 1867-1868; Structures R and S only in 1862, in the McColl plan. There are no other references to these latter two structures. Structure Q probably followed a similar chronology to the Big House; built in the early 1840s, and presumably demolished (as it would be redundant) after Allard occupied his new house in September 1872.[181]

Indirect Evidence

At Fort Vancouver, the much larger Big House mess hall, seating up to 30 men, was served by a 15.2 m x 7.3 m (50' x 24') kitchen structure, which had a hard-packed earth and plaster floor, a stone and mortar hearth, one known door adjacent to the Big House. It contained a kitchen proper, several rooms for servants' quarters, and probably a pantry. Facilities for a laundry were also found in this kitchen structure.[182]

The kitchen at Fort Colvile was attached to the Big House (figure 69); it was said to be 6.7 m x 4.6 m (22' x 15'), and had a large chimney of quartz rock.[183] Fort Colvile also contained a 4.6 m x 4.6 m (15' x 15') bake house, a poultry house 3 m x 3.6 m (10' x 12'), and a pigeon house, apparently all inside the palisade.[184] Fort Nisqually was described in the 1860s as having a "cookhouse" 4.2 m x 6.7 m (14' x 22'), and a "wash-house" 3.9 m x 5.5 m (13' x 18').[185]

An 1857 plan of Fort Rupert shows the kitchen at that post to have been 6 m x 9 m (20' x 30') and located behind the "Officers House", in a small compound outside the palisade, with a gate providing access back and forth. Fort Rupert also had an oven at this time, in a structure measuring approximately 3.3 m x 3.9 m (11' x 13').[186] This oven at Forty Rupert was described later in more detail:

> In the central part of the fortifications was a large brick oven, and here was done the baking for the community.[187]

At Esquimalt Farm in 1855 there was "1 Bake house 16 x 12 feet with large Brick Oven (for people)", and at Fort Victoria two years later, a "Bake House of wood with 2 ovens" was located outside the fort.[188] Six years earlier, the use of fire bricks to build a "Baking oven" at the same post had been noted.[189]

Fort Nisqually had several generations of ovens between 1846 and 1855; the 1846 reference involved hauling clay for the oven's construction.[190] In the spring of 1849 the men were "laying a foundation of a new oven under indian (sic) shed"; the shed had been built behind the kitchen for "Indians to mess under".[191] In late 1852 a new oven was built in "a Shed adjoining Kitchen", and two weeks later the men were "roofing Bakehouse".[192] In February 1855 they were again "making an oven behind kitchen".[193]

Entries in the Fort Simpson Journal from the late 1850s indicate that the oven there had a shingled roof over it, and was "plastered". When repairs to the "ovens" were planned in the early fall of 1856 it was first necessary to "make a few Bricks" to do so, and in October 1856 "Two men fitted up a pig stye under the oven outside 'back'".[194] The Fort Simpson references would suggest the existence of at least two ovens at the post, one inside and one outside.

The Fort Simpson Journal from 1853 describes "repairing Kitchen Fireplace" in a way that makes it sound as though it was attached to the Big House. A week earlier the kitchen at that post was whitewashed inside.[195]

J.K. Lord, who visited several H.B.C. posts as a member of the British Boundary Commission, described the ovens he saw:

> I have seen capital ovens made at the Hudson's Bay Company's trading posts - fixtures, be it remembered - by covering an empty pork cask with thick clay, and then continuing a fire in the cask until its staves burn away and the clay hardens like brick on the iron hoops.[196]

The Fort Langley journal from the first fort describes hauling stones to the fort "for our chimnies and one oven" in March 1829, and then a two week period in June spent "building chimnies and an oven adjoining the kitchen".[197] In December 1864, a stove for the mess at Fort Langley was to be sent from Victoria.[198] In December 1870, when presumably Structure Q was still present at Fort Langley, Allard noted that "we all Mess together, there being only one Cooking Stove".[199]

Conclusion

The comparative sizes of the structures at various Columbia/Western Department posts noted above would indicate that the only structure in the appropriate area large enough to have served the kitchen role at Fort Langley was Structure Q. Both Structures R and S were substantially smaller than the kitchens at the non-depot posts of Fort Colvile and Fort Nisqually, with their comparatively lower demands. Structure Q was also more conveniently located to the Big House than either of the smaller buildings.

Structure Q was probably a post on sill structure, following the pattern of all known buildings inside the palisade. Like the Big House, it was whitewashed by the early 1860s, and very likely prior to 1858, with windows and doors painted to match the Big House. There is no way to determine door and window locations. It is clear from figure 8c that there were no openings in the southern part of the west wall. It would seem likely that there was a door somewhere in the north end of the building to facilitate access to the Big House mess hall.

The interior layout of this building is difficult to establish. For convenience, it is likely that the kitchen/food preparation area proper was in the north end of the building, as close as possible to the mess hall. The size of the building was adequate for both this kitchen function and residential space. John

Hussey speculated that at Fort Vancouver "the servants' quarters were in the space under the roof gable, off the damp ground and away from the cooking and food preparation areas."[200] This would not have been feasible in Structure Q, given the hipped roof with no windows or dormers, or indeed any other evidence of a second floor. The reference to temporary housing in the kitchen, as well as the "Kitchen, say (Fallerdeau's House)" makes it probable that Structure Q served a residential role, but on the main floor. Whether that floor was packed earth as at Fort Vancouver or wooden planking is unknown. The kitchen area would not need to be large; the maximum number of people served did not exceed ten to twelve, and that many only at brigade time. This would have left adequate space for a pantry and at least one apartment in the building.

Facilities provided for cooking are unknown; in the Western Department open fireplaces seemed to have been standard. At Fort Vancouver there was a "large open fireplace, probably with attached oven"; its use for cooking was substantiated by the inventories of articles in use.[201]

At Fort Rupert in 1850 a "cooking chimney" was temporarily fitted in the blacksmith shop until the Big House was ready.[202] The "Kitchen Fireplace", at Fort Simpson and the large chimney at Fort Colvile have already been described, and the latter may be seen in figure 69.

Ranged against this consistent comparative evidence are the 1864 and 1870 references to a cooking stove at Fort Langley. There is also a lack of the diagnostic items for open fire cookery such as were found at Fort Vancouver in the Fort Langley "Articles in Use" inventories from the late 1840s. As noted above in the discussion of Structure A, it is very possible that the "chimney stones" at Fort Langley may have been associated with Structure Q, rather than the Big House.

Except for the general configuration of this structure, it is impossible to establish more than possibilities. Overall size, roof type and finish is known, and it seems that Structure Q served as both kitchen and servants' residence in 1858, but further conclusions cannot be drawn on the basis of available evidence.

Although an oven was not reported at Fort Langley in the 1850s, it was a feature present at other similar sized posts in the Western Department, as well as at the first Fort Langley. This would increase the likelihood of an oven also having been at Fort Langley in the 1850s. If the comparative evidence applies,

such an oven would be built in proximity to the kitchen under some sort of roof or shelter. Although the Fort Langley reference from the 1820s described a stone oven, all the later ovens were built of clay or brick, and were "plastered", probably with clay. The reference to foundations, and installing a pig stye under an oven, would point towards a fairly elaborate form of construction, and possibly a convention of having the base of the oven somewhat elevated.

Gentlemen's Food Preparation

The sort of meals served at H.B.C. posts in the west has already been described; granted the conventions in terms of food supplied by the Company and produced in-country, the meals in the Fort Langley Big House would have followed the same pattern. Details of preparation remain unknown. Structure Q would have been the centre of food preparation, and likely housed at least one man who served as cook and steward.

In his "report on Fort Langley, 1830", Archibald McDonald described the expenditures on provisions made at that time, which confirms that the diet at Langley, allowing for the comparative lack of agriculture at that early date, followed the pattern of the other posts.[203] This report also described provisions for the men "exclusive of 1 in the kitchen", which means that one man was preparing the food for the three gentlemen and nine family members at that time resident at Fort Langley. The exclusion of the cook's provisions from those of the rest of the men could mean that a perquisite of his position involved access to the gentlemen's supplies.

If one man prepared food for twelve in 1830, the same ratio seems possible in 1858. The only man whose name was associated with food preparation or serving in the 1850s at Langley was Narcisse Fallerdeau. Aurelia Manson, in her "Recollections" of 1928, referred to the "cook Noel Follardeau (sic)".[204] Both Nelson and Gibbard, with information from Jason Allard, refer to "Fallerdo (sic)" as having been the steward at Fort Langley, with three assistants or "flunkeys".[205] The April 1858 instructions for the conversion of Structure B already cited using the "kitchen, say (Fallerdeau's House)" as a reference for direction would point to the house and kitchen either having been near one another or synonymous; either option associates the man and the kitchen.

Fallerdeau first showed up as an employee at Fort Langley in Outfit 1839, and remained at least through Outfit 1860.[206] In those personnel lists with positions identified, he is always called a "midman".[207] By Outfits 1857 and 1858, Fallerdeau was listed as receiving £23 and £30 a year respectively for his services, and his home parish as Berthier, Quebec.[208] The £23 per year was £3 more than other midmen or labourers were making in Outfit 1857.[209] This anomaly makes sense if examined in light of Rule 19 of the "Standing Rules and Regulations" of the Company:

> That all Commissioned Gentlemen having distinct charges, be permitted to employ, on the voyage, or Inland, one of the people appointed to the District in the Capacity of Cook or Servant, in addition to his ordinary duties; and that for such extra service he be allowed the sum of £3 over & above the wages of a regular Laborer of the District,...[210]

The basic wage of midmen and labourers was set by Rule 86 at £20 per year as of June 1, 1849, so Fallerdeau's salary, combined with the other information supports his identification as Yale's cook.[211] As Yale was the only commissioned gentlemen at Fort Langley, presumably there would also have been only one "Cook or Servant", as stipulated in the "Rules and Regulations". Family trees done by Don Waite in the 1970s based on interviews with various descendents of Langley pioneers give birth and death dates for Fallerdeau of 1818 and 1888. They also list the names of two daughters, Catherine, born in 1839, and Louisa, born in 1850.[212] The St. Andrews Cathedral register of marriages, baptisms, and deaths lists at least one more child, Narcisse, baptised on September 11, 1853 at Fort Langley. The baptismal record also specifies that Fallerdeau's country wife was a "Quatlen" (Kwantlen) woman, and that the godfather was Augustin Willing, the interpreter at Fort Langley.[213] In 1858, Narcisse and Catherine Fallerdeau acted as godparents to Augustin Willings' child Elizabeth; Catherine may have been Fallerdeau's daughter, but may also have been his Kwantlen wife's name.[214] Some two weeks later, on July 26, Catherine (the daughter) married James "Tellers" (Taylor), the blacksmith at Fort Langley.[215]

In the latter part of the 1850s it is likely that Fallerdeau was working as cook for the Big House, perhaps with some assistance from Indians or the half

breed children of other servants. He and his Kwantlen wife, and at least three children were living in the kitchen structure. His daughter Catherine moved out by July 1858, and perhaps earlier, if the common practice was followed of legitimizing a country marriage when the first available clergyman arrived. Fallerdeau, along with Willing, witnessed many of the Catholic weddings at Fort Langley in the 1850s, indicating that he was either quite religious, a leader among the Catholic Canadians at Fort Langley, or a combination of both.[216]

Other than its proximity to the kitchen, the housing for Fallerdeau and his family would be similar to that provided for the other servants, so the information on servants' quarters may be assumed to apply.

Actual cooking methods in the kitchen are speculative; the "Articles in Use" section of the 1848 inventory contained a meagre assortment of potential cooking utensils:

15 tin Basins
4 open copper kettles
3 open brass kettles
16 assorted tin kettles
2 tea kettles
1 large iron pot
3 metal pots
2 frying pans
6 oval tin pans
3 assorted tin pots[217]

All these items, such as the tin basins and kettles, would not have been used in the kitchen. One or two axes would have been expected for splitting firewood, as well as various knives and other tools. Perhaps the general pattern of cooking would follow that remembered by a young American immigrant to Oregon, if open fire rather than stove cooking was used. In the family cabin Louis Banks remembered that "all the cooking was done at the fireplace", which contained a bar and iron hooks for kettles. Most of the cooking involved boiling or stewing the food in a kettle, and baking was done in a large Dutch oven, with two or three inch legs, which would have been placed on the hearth with coals put under it and on top of the lid for heat.[218] The latter technique would not have been needed if an oven existed at Fort Langley. John Emmerson was employed as an assistant in the Fort Victoria blacksmith shop in 1862-1863, and lived in one of the Company houses:

> The fireplace and chimney were built of brick, but of a much more recent date than the building, and presented quite a substantial appearance. The fireplace was a very wide one, but had no grate in it. We built the fire on the ground, and our pans when cooking were suspended over the fire by sundry pieces of crooked iron, which dangled from inside the chimney.[219]

In the rations of the H.B.C., carbohydrates usually came in the form of potatoes, flour, or some "unprocessed" form, except where there was a preponderance of English or Scottish servants who demanded bread. However, the range of baked goods produced in the ovens of the Company was large, ranging from ship's biscuit at Fort Simpson to "bread &c." at the Belle Vue Sheep Farm on San Juan Island.[220] Jason Allard's memories of the Christmas holidays at Fort Langley included the distribution of cookies and ship's biscuits, both potentially baked in an oven associated with Structure Q.[221]

Structure Q continued to serve the same purposes in 1858 that it had during the preceeding decade. Its primary function was as a centre of food preparation for the two resident gentlemen at Fort Langley, as well as the gentlemen of the brigades and other official guests of the Company. Secondly, it provided housing for the servant responsible for the preparation of food and other domestic activities related to the Big House. By the 1860s it also provided temporary housing for some transient labourers; perhaps this function was also present in the decade before. The resident population of the building, assuming Fallardeau to be the only full-time cook/steward, was four or five persons.

The two smaller structures, R and S, may have served any of several purposes. They were large enough to have been residential but their shape was wrong; the H.B.C. followed a convention of "square" apartments. The comparative material shows that many posts, including the earlier Fort Langley, had small buildings which served domestic functions in association with the kitchen/residential areas. Ovens seem to have been the most prevalent, but bath houses, wash houses, and fowl houses were also noted. Any one of these roles could be suggested for Structures R and S. The fencing which was found in association with them points towards an agrarian use, but in the absence of relevant information, their functions remain unknown, as well as their very existence prior to the McColl plan of September 1862.

Residential: H.B.C. Servants

The vast majority of the employees of the Hudson's Bay Company were of the "servant" class. This was the working class of the Company; it performed all of the tasks other than the management and accounting that were the responsibility of the gentlemen. However, not all these servants were equal; at the top of the heirarchy would be the traders or interpreters and the tradesmen - boatbuilder, cooper, and blacksmith. At the bottom would be the labourers with no special skills. There was a further breakdown on an ethnic basis; at Fort Langley the tradesmen were generally Scots, the interpreters Canadian French, and the labourers a mix of Canadians or "country-born" of various French-Indian permutations and Kanakas, natives of the Hawaiian Islands. The Kanakas after long service could rise a little in the heirarchy, but were normally at the bottom, accorded the worst conditions of employment, lower salaries, and higher tariffs in the sale shop.

The servants of the Company were employed on an "all-found" basis; they were supplied with housing and basic provisions as part of their conditions of employment. Unlike the officers, the servants were responsible for the preparation of their own food. P.N. Compton, a former clerk at Fort Simpson noted at that post that "every man cooked for himself, except the officers".[1] At Fort Langley it seems that all the servants were married as early as 1830, mostly to local Indian women.[2] This would not have affected their terms of employment. The same housing and provisions would be provided. Only the officers' families would be provided for at company expense.[3]

Location

No contemporary sources give the location of the servants' quarters at Fort Langley. However, the conventional layout of H.B.C. posts in the Western Department has already been noted. Applying this convention with the aspect of fire risk already discussed suggests that the residential function was located

along the west side of Fort Langley. Some elements of building configuration such as chimneys, shown in contemporary images of this area, tend to support this hypothesis.

The first evidence specifically relating to the location of servants' quarters is found in the Jason Allard based material from the 1920s. The earliest sketch plan based on his information (figure 2) is ethnically specific, with the rank of structures on the west of the palisade being residential. Kanakas were to the north, "Scotch" in the centre, and "Canadian French" to the south. The plan done by Allard himself a few months later (figure 3) is much less specific, with the rank of buildings now simply shown as "Mens Quarters".

Other materials from the 1920s and 1930s, mostly based on Allard's information, but some independent, identify these structures as "Employees Quarters",[4] "working mens houses",[5] "residences for craftsmen and labourers",[6] while one source, a guide to the Worral model of 1925, again specifies an ethnic range, with tradesmen to the south, and Kanakas down the hill, to the north.[7] This reiterates the pattern in figure 2, with Euro-American employees to the south end of the row, and Kanakas to the north. The conclusion to be drawn from the above evidence is that Structures C, D and E at Fort Langley served as servants' quarters in the active period through 1858.

Direct Evidence

Structure C

Structure C is shown in the Mallandaine watercolour "Fort Langley, N. View" (figure 5), but only part of the building is visible over the west palisade. Structure C is shown to have had a gable roof covered with bark (probably cedar), laid in three courses. A window is shown in the north gable end. Roughly scaled from the palisade, Structure C was perhaps 7.8 metres (25') tall overall, of which about 3.4 metres (11') was roof height.

The McColl plan of 1862 shows Structure C as the smallest of these servants' quarters, scaling to about 18.1 metres (59'5") by 7.8 metres (25'3"). It was located about 38.4 to 56.1 metres (126'1" to 185'6") south of the south wall of Structure K, and 41.2 to 49 metres (135'4" to 160'7") west of Structure K, following the axes of that building.

Structure D

This structure is shown in figure 5 to have been a low gable-roofed building. The roof was covered in three courses of bark, there were two large chimneys, and horizontal gable-end infill.

The McColl plan shows Structure D to have been 23.1 by 7 metres (75'11" by 23'1") and to have been located about 2.4 to 25.1 metres (7'11" to 83'10") south and 41 to 48 metres (124'8" to 157'9") west of Structure K, following the axes of that building.

This above configuration is confirmed in the Dally photograph of 1867 or 1868 (figure 8), which shows Structure D to have been a low, bark roofed building with at least one chimney.

Structure E

In figure 5 this building resembled Structure D.

The McColl plan shows it to have been about 19.5 by 7.2 metres (64' by 23'9"), located from 5.8 metres (19'2") south to 13.7 metres (44'10") north of the north wall of Structure K, and 40.8 to 48 metres (134' to 157'9") west of Structure K.

Chronology

These structures were all located to the north of the jog in the palisade (figure 1). Accepting the theory of D. Steer et. al. that the fort developed from north to south, and the essential nature of these buildings, it is likely that they were constructed shortly after May 1840.[8]

The presence of these three structures in January 1859 is confirmed by the Mallandaine watercolour sketch (figure 5).

All three structures were still present in September 1862 (figure 4), and Structure D was still in place in 1867 or 1868 (figure 8). In this photograph the site of Structure C is obscured; Structure E was definitely gone. Probably all of these structures were gone or unservicable by 1871, when a "Dwelling house... for the Men" was considered so urgent that the old blacksmith shop was converted for that purpose.[9]

Indirect Evidence

Comparative information on H.B.C. gable-roof structures in the west is found in several sources. Structure M at Fort Langley, shown in figure 11 and discussed above (pp. 60-61), although a storehouse, resembled Structure C in overall configuration, and was a one and one half storey building. Structure C was taller than the other two residences shown in figure 5, so was probably of this configuration. Structure M was five bays wide, so Structures C and E, of about the same length, also were divided into five bays. The horizontal gable end infill visible in figure 5 in these buildings was probably planks, following the convention discussed earlier (pp. 64-65).

Additional information on gable-roofed H.B.C. buildings in the west may be found in the photographs of buildings at Fort Kamloops (figure 33) and Fort Colvile (figure 19). The measured drawings of the granary at Fort Nisqually (figure 21), apparently the only gable roofed H.B.C. fort structure left in the district, illustrate the style of roof framing. This is simple in the extreme, using round poles.

The photograph of the bachelors' hall at Fort Vancouver (figure 61) gives an idea of the appearance of an H.B.C. multiple dwelling, albeit a larger and more elaborate structure than the servants' quarters at Fort Langley would have been.

A good building for comparison is the reconstructed Indian tradeshop/Infirmary at Fort Vancouver (figure 71), which is a post on sill, gable roofed building with the sort of window and door sizes that would be appropriate in a residential structure. It also illustrates an alternative to brick or stone chimneys, with unobtrusive metal chimneys venting its Canadian stoves.

Information concerning the dwellings of H.B.C. servants in the west is relatively scarce. The majority of literate observers tended to socialize with the gentlemen who lived in better style. Some of the available descriptions are eye opening; on Vancouver Island the Uplands Farm accommodation for farm hands was an "unfinished log house" with "furniture none round logs for seats, bunks for bedsteads, deer, bear and sheep skins for carpet, bugs innumerable flease (sic) without limit".[10]

Another employee arriving at Nanaimo in 1851 noted:

> how roughly the houses were constructed, of the dreary look outside, and cramped space inside; how the chinks between the logs and poles... were plastered up with clay or stuffed with moss; of the interior equipage of benches, boards and bunklike bedsteads; of the Dutch ovens for baking and cooking; of the drugget rush mats and rugs made in part of dogs' hair by Indians, used for floor covering.[11]

At Fort Colvile, a "rank of officers' houses" was described as "60 x 18 feet, shingled, three chimnies and two floors, one story and a half high, partly ceiled inside with tongued and grooved boards and partly mudded and white washed".[12] This building consisted of three units under one roof; it relates well in terms of size to Structures C and E, although the level of finish would have been more elaborate in gentlemen's quarters.

The servants at Fort McLoughlin were housed in "a long building, divided into rooms" on the "right hand side of the fort".[13]

John Emmerson, a failed Cariboo gold miner, was employed by the Company at Fort Victoria in 1862-1863, and described his quarters in some detail:

> (he) went with three of my fellow - workmen into an old dilapidated wooden house belonging to the Hudson's Bay Company, who allowed us to live in it rent free. ...
>
> It consisted of two apartments, on the ground floor, each measuring 18 feet square; ... The fireplace and chimney were built of brick, but of a much more recent date than the building, and presented quite a substantial appearance. The fireplace was a very wide one, but had no grate in it. We built the fire in it on the ground, and our pans when cooking were suspended over the fire by sundry

> pieces of crooked iron, which dangled from inside the chimney. Furniture we had none, except a very small table, barely sufficient for the accommodation of my three friends, who messed together. ... We each made ourselves a bunk to sleep upon, which were placed one in each corner of the room. At the end of my bunk I erected a fixture table made of rough deal, ... one of my friends used his clothes chest as a seat, and the other two a plank of wood, resting on a couple of old bottomless nail casks. I made a sort of square stool out of huge lumps of wood for my own use, ...[14]

At Fort Rupert "Mens Houses" were built in the fall of 1849. These apparently had chimneys of stone and clay.[15] There are also references to making "Doors for Men's Garrets" "making Sleeping Berths for men", and a few weeks later "Berths for men in the garrett".[16] The second floors of these buildings were also used for storage; in March, 1850, the chief trader "Missed some wheat lately out of the store over the mens house".[17]

Dr. W.F. Tolmie described a building at Fort Nisqually in the 1830s, which although built for a gentlemen, relates well to the servants' quarters at Fort Langley, and again incorporated the storage function upstairs:

> The men have today commenced building Mr. H's house which is to be 55 ft. by 20 & divided into 3 apartments having a large storeroom above.[18]

In November 1854 upper flooring and partitions were being installed in the men's house at Belle Vue Sheep Farm, on San Juan Island, and a few years later the doors and windows of "mens houses" were being painted.[19]

At Fort Simpson the "steps and doors and window-frames" of the men's houses were painted in the fall of 1855, and the windows again in 1860, after "new mouldings for the doors and windows of the Men's House" were installed.[20]

The sketch of a building interior from the H.B.C. post at Pembina (figure 72) seems to correspond in general terms to the descriptions above, although as this post was in another Department, too many conclusions should not be drawn. Closer geographically, although not directly H.B.C.-related, is a sketch of the interior of the rectory house at Fort Hope in 1859 (figure 73), which also seems to relate well to the written descriptions.

The interior views of the servants' quarters in New Caledonia shown in the Bullock-Webster sketches from the 1870s are probably the best representation of what the servants' quarters at Fort Langley must have looked like in the late 1850s (figure 95). The remoteness of New Caledonia would compensate for the fact that these sketches were drawn 20 years after the designated year at Fort Langley.

Conclusion

The three structures which served as servants' quarters at Fort Langley in 1858 may be defined only in general terms. They probably were all post on sill structures of one or one and one half storeys, with gable roofs covered with cedar bark. Based on their size, and comparison with other buildings at Fort Langley, it is likely that all three buildings were two bays wide, with C and E five bays long, and D six bays.

Interior layout is unknown, but some hints are given by the functional requirements of the buildings. Although it seems that several of the labourers and tradesmen at Fort Langley lived outside the palisade by 1858, presumably at the time these structures were built the employees' quarters were intended to accommodate all of the men and their families, with the possible exception of those labourers associated with the farm. Judging from the Fort Langley personnel lists from this period, the three structures C, D, and E would have housed at least twelve men and their families, and perhaps as many as sixteen or seventeen.[21] If the implication is correct that Structure C, at the south end of the rank, related more to Euro-American employees than Structure E, at the north end, one would expect less crowded accommodation in the former than the latter building. The Kanaka employees were generally accorded harsher conditions of employment and accommodation than their Euro-American fellows. The number of servants housed at Fort Langley, the arrangement of chimneys shown in figure 5, the space allotted to clerks or Euro-American servants at other posts (typically around 37 square metres or 400 square feet), combined with the possible ethnic organization discussed above, suggest possible arrangements for these buildings. It is likely that Structure C contained three apartments, Structure D four apartments, and Structure E four rather smaller apartments.

At other Columbia/Western Department posts these long, narrow residential buildings were described as a "rank of houses", implying row-house configuration. This is supported by the appearance of the bachelors' hall at Fort Vancouver (figure 61), with its many doors. It is probable that the servants' quarters at Fort Langley followed this pattern, with the door and window arrangement dictated by the number of apartments.

The window openings themselves would have been larger than those in the storehouses due to the greater light requirements in a residence.

Exterior and interior finish would have been basic. The contemporary descriptions of living conditions confirm that the H.B.C. was not prone to provide extravagant servants' accommodations. Elaborations such as interior panelling, ceilings, and panel doors, while not impossible, seem unlikely, and exterior finish would have been strictly functional. Structure D still appears to have been unpainted in the 1867 or 1868 Dally photograph (figure 8).

It is likely that only the doors, windows, their frames, and stairs were painted. If mouldings were used as embellishment they probably would have been simple beads struck around the frames.

The partitions used to divide the buildings could have been made of either planed tongue and groove boards, as found in the Fort Victoria sale shop,[22] or "all upright boards planed, and the cracks battened," as described at Fort Vancouver.[23] Simple deal, or plank partitions would have been equally appropriate.

Probably the chimneys shown in figure 5 on Structures D and E were placed to correspond to partitions; in this way three partitions and two double-sided fireplaces would have served four apartments in each building. The chimneys may have been either of stone and clay, as at Fort Rupert, or of brick, given the late date and proximity to Victoria. From the comparative iconographic and documentary information, open fireplaces seem to be the most likely heating/cooking option.

However, with Structure C a further problem is presented by the absence of visible chimneys. A residence with (hypothetically) three apartments would be expected to have that number of heat sources; perhaps Canada stoves and metal pipes would have met the need in a less obvious way than fireplaces.

At Fort Rupert, the men's house contained a garret that was also used for sleeping quarters. If the structures at Fort Langley were of one and one half storey configuration, this option would seem feasible, to provide additional accommodation. It is also conceivable that the lofts in these structures served as storage space, as noted at Fort Rupert and other posts.

Life in the Servants' Quarters

The three structures under discussion were built as servants' quarters. However, there are indications that a number of the tradesmen and labourers had established private dwellings outside the palisade before 1858. Cromarty, the head cooper, had an establishment just to the west of the palisade.[24] A number of the Kanaka employees were forced off their "rancherie" when the Derby townsite, 3 or 4 kilometres away from Fort Langley, was surveyed and auctioned off in October, 1858.[25] It is possible that more of the servants also had private homes by this point; this was definitely the case at Fort Victoria and Fort Vancouver. Once there was no longer a need for security, the low level of creature comfort provided by the H.B.C. and the desire for a personal establishment would result in a pattern of nuclear settlement around the fort.

At Fort Langley, a secondary consideration in terms of housing was the provision of accommodation for transients, in particular the population associated with the brigades from the inland posts. It is known that specific accommodation was provided for the officers; perhaps similar arrangements were made for some of the inland servants as well. This would provide a possible role for the attic storeys of Structures C, D, and E during the decade that Fort Langley served as the inland depot, as well as during 1858, with the huge transient population attracted by the gold rush. Most of these were simply gold-seekers, but a substantial number were bureaucrats, military personnel and other functionaries who would have some claim on the hospitality of the Company. They would be housed in the officers' quarters, but probably some accommodation would also be provided in the servants' quarters. For instance, E. Mallandaine, whose sketches provide much of our present knowledge of the

1858 structure of Fort Langley was "by the courtesy of Mr. Yale... admitted to quarters and rations within the precincts,... shared with one of the employees".[26] This favour was granted to someone who had no formal call upon the services and accommodation provided. It is probable that Mallandaine's "quarters" were in one of the three structures being discussed.

The Residents

At the time of the start of the Fraser River gold rush, Outfit 1857, there were 23 servants at Fort Langley, and by the end of 1858, 22.[27] Salaries in these two outfits ranged from £17 to £60 per year, depending on position and seniority. A number of salaries seem to have risen substantially from Outfit 1857 to Outfit 1858, perhaps as an incentive for employees to remain with the H.B.C. rather than trying their luck in the gold fields.[28] The servants at Fort Langley at this time came from a variety of backgrounds; it is intended here to examine some of them in the light of available evidence.

Tradesmen

The tradesmen at Fort Langley were a prominent minority; they were primarily Scots, specifically Orkneymen, all had substantial terms of service at Fort Langley, and remained committed to the area even after retiring from the Company.

William Cromarty, Cooper and Fish Curer

The highest paid tradesman at Fort Langley in this period was William Cromarty.[29] A native of St. Margarets Hope, South Ronaldshay, Orkney Islands, he had been hired initially by the Company in 1843 and had come as a cooper to the Columbia Department in 1844 and to Fort Langley in Outfit 1845.[30] As well as being the cooper, Cromarty was also a central character in curing salmon for

the barrels he produced.[31] This suggests that he may have been hired on a dual function basis, as directed by the Council of the Northern Department of the H.B.C. in 1839 and 1840, when each year "2 coopers, fish curers" were to be hired in Europe at £25 to £30 per year.[32]

By Outfit 1850, Cromarty was earning £45 per year, as well as £5 extra a year "by way of gratuity or commission on casks made."[33] Cromarty's salary by Outfits 1857 and 1858, respectively, had risen to £50 and £60 per year.[34]

In the fall of 1852, Cromarty's new contract for Outfits 1852 and 1853 gave him a special gratuity:

> He is to be allowed to purchase one cow on his a/c. and to receive another as a gratuity for past services which I beg you will cause to be delivered to him.[35]

This reference would suggest that Cromarty had a private holding by 1852. As already noted, Cromarty's house was said to have been "just outside the western wall".[36] The location of this house was referred to indirectly in 1868, when a school site was selected. This site was 180 metres (200 yards) west of Allard's house (the Big House, Structure A) and 110 metres (154 yards) south of the west end of Cromarty's fence.[37] Scaling 180 metres west of Structure A on the McColl plan gives a point in line with one of the fence lines indicated in McColl's field note book (figures 74 and 75). This, in turn, corresponds to the fence shown in figure 5, just to the right of the structure to the far right (west) of the image. If this was Cromarty's west fence, it is probable that one of the two buildings to the east of it, Structures 11 and 12, was his house.

By 1870 it was reported that Cromarty had a house, garden, and cow, indicating a fairly substantial holding.[38] The existence of this establishment was confirmed in 1879, four years after Cromarty's death, when "Cromarty's Old House & Bayrn (sic)" was torn down, to allow development of a road.[39] The plan of Fort Langley drawn by Mrs. Newton in 1873 (figure 76) although not particularly accurate, did show that Cromarty's house was oriented on an east-west axis, and was quite near the former palisade.

At least one of the two possible buildings was present in early 1858. Structure 12 was distinctive due to the cupola on its roof top, and is very visible in the Dallas sketch of May 24, 1858 (figure 44). Besides the cupola, this sketch

reveals that the structure had a hipped, bark-covered roof, two windows each in the west and north walls, and vertical planking on the walls. There was also some sort of finial or mast shown on the cupola.

Figure 5 shows both Structures 11 and 12. The former was a gable-roofed one storey post on sill structure, with two windows in each of the west and north walls, central doorway in the north wall, probably a bark covered roof, and perhaps a sign over the door. Structure 12 was again identifiable because of the cupola; it was also shown with a windowless west wall, and two windows arranged around a central door in the north wall.

The roof of Structure 12 is shown in the Dally photograph of 1867 or 1868 (figure 8), which confirms the cupola and hipped, bark covered roof. There was also a large chimney in close association, which may have related to a hidden structure behind. The angle of this photograph would have placed Structure 11 approximately in this obscured position.

It is difficult to determine the size of these structures; they were probably both in the 6 by 9 metre (20' by 30') range, and were located approximately 165 metres (540') and 194 metres (635') west of Structure K.

The configuration of these structures suggests a residential role for Structure II. It corresponds closely to servants' private homes at Forts Victoria and Vancouver, and at Nanaimo (figure 77). By the same token, the cupola on Structure 12 was usually found in an agricultural context. Based on appearance and positioning, it is most probable that Structure 11 was Cromarty's house, and Structure 12 his barn.

In the target year the 44 year old Cromarty was living in this residence with his native country wife Salunimia and at least three children, Elizabeth, Ann, and William. The Reverend R.J. Staines baptised them in July of 1851, so by 1858 they were all more than seven years old.[40] Cromarty was clearly a man of some consequence at Fort Langley. Along with having a very responsible position as head cooper, he was well paid, had a private establishment outside the fort, and at the time of his death in December 1875 was eulogized as being "peaceful & industrious".[41] At the wedding of James Taylor, the blacksmith, in 1858, Cromarty, along with Samuel Robertson, the boatbuilder, acted as witnesses, showing some solidarity between the Orcadian tradesmen at Fort Langley.[42]

Samuel Robertson, Boatbuilder

Samuel Robertson (figure 96), from Landwick, was engaged by the Company at Stromness on February 22, 1843. He was contracted as a labourer for 5 years at £16 per year, and was sent to the Columbia Department for Outfit 1844.[43] Robertson was first stationed at Fort Vancouver, where he apparently learned the boatbuilding trade, and was sent to Fort Langley in 1847 to build four batteaux, prior to Langley assuming the inland depot role from Fort Vancouver.[44] As the only boatbuilder available, Robertson had the H.B.C. at something of a disadvantage. By the time of his re-engaging for Outfit 1853, Robertson's salary as "Labourer, Boat Builder, and Carpenter" had risen to £45 per year. James Douglas considered him overpaid at this salary, but because "new Boats required this year for the Interior" the cost was accepted. Yale apparently had also allowed Robertson a gratuity, "an allowance of tea and sugar, and 2 blankets for firewood".[45] In Outfit 1857 his yearly salary was still £ 45, and he was listed as a "boatbuilder".[46] Robertson did not re-engage for Outfit 1858, so only spent the first half of the year in the employ of the Company.

In the absence of any evidence to the contrary, it is most likely that until leaving the H.B.C. in June 1858, Robertson resided inside the fort in one of the men's houses. In 1858 Robertson was living with his native wife, Ktkoelts and two or three children. The eldest known, Helen was baptised in July 1851 by Staines, but was not named in Robertson's later diary. Two other children born prior to 1858 were Mary, born January 15, 1853, and Donald, born November 27, 1857.[47] In a newspaper tribute at the time of his death, Robertson was eulogized in glowing terms, among them:

> He was a diligent reader, had a deal of useful information upon general subjects as well as much sound common sense.[48]

James Taylor, Blacksmith

The third of the Orkney tradesmen was the blacksmith, James Taylor (figure 97), who had arrived at Fort Langley prior to 1856. He was listed as being from Birsay, in the Orkneys, but William Yates referred to "Jimmy" Taylor, from

"Strongness" (sic) or Stromness.[49] By Outfit 1857, Taylor was receiving £40 per year for his services at Fort Langley, and this increased to £50 when he renewed his contract for two years at the start of Outfit 1858.[50] As already noted, Taylor and Catherine Fallerdeau were married in a Catholic ceremony on July 26, 1858; there were no children prior to this date or a note would have appeared in the register about their legitimization.[51] It is entirely possible that until his marriage Taylor was living on his own as a bachelor in the servant's quarters.

Etienne Pepin, Blacksmith

The senior representative of the non-Scottish tradesmen at Fort Langley in 1858 was Etienne Pepin. He was at Fort Langley in Outfit 1827, the first year of the post's existence, and was employed until the end of Outfit 1859, in 1860.[52] Pepin was on the Cowlitz Farm for some time, but left "in disgust to return to his old quarters" in 1852. At that time he was sent to replace two farm labourers, rather than being identified as a blacksmith.[53] Although Pepin is the name used in all Hudson's Bay Company records, it seems to have been his mother's maiden name. In the religious records he is referred to as "Etienne Magice", sometimes with "Pepin" in brackets, and the marriage registry entry refers to his mother as "Marguerite Peipin".[54] The lists of Langley servants for Outfits 1857 and 1858 refer to Pepin as a blacksmith, from Yamaska, earning £30 per year, substantially less than Taylor.[55]

In 1830 "Etienne Papin" was noted as having a wife but no children.[56] When Modeste Demers arrived on his mission to the Fraser in September 1841, he baptised Marie, 6 years old, and Francois, 3 years old, the "illegitimate children of Etienne Maille, and of a Uiskwin women".[57] Considering the range of names used by Pepin/Magice, the variations in spellings and transcription, and the presence of only one man at Langley in Outfit 1841 with the first name Etienne, it is likely that the mysterious Maille was Pepin. On June 29, 1856, Simon, the son of Peipin and a "Quyslen" woman was baptised, and on July 21, 1856, the 14 month old Simon was legitimized by the marriage of his father and Isabelle, a "Keitose" women.[58] As the "Quyslen" and "Keitose" woman are one and the same, and "Uiskwin" is likely a different spelling of Quyslen, it is probable that

Pepin had been with one native wife since at least 1835, and perhaps 1830. By 1858 the children noted in 1841 were adults, but at least one infant, Simon, was still living with Pepin and Isabelle. Pierre "Renaud" (Urno on H.B.C. lists) was Simon's godfather, and Willing and Fallerdeau witnessed Pepin's wedding.[59] It would seem that Pepin's affiliations were more with his Catholic countrymen than with his professional colleagues; Urno was only a low-ranking mid-man. Pepin, his wife and children presumably lived within the servants' quarters in the fort, as remembered by Aurelia Manson:

> In the men's dwelling houses lived the caretaker, a farmer named Peppin, who was fond of the Englishman's expletive "Quit-ta-heel" (Go to hell), a name which he bore all his life to his grave.[60]

John Bell and Joseph Maayo, Coopers

On the 1858 personnel lists, two men other than Cromarty were listed as being coopers; John B. Bell and Joseph Maayo.[61] Both these men were listed as "natives", meaning they had been born in H.B.C. territory. Mayyo received £30 per year both in Outfit 1857 and Outfit 1858.[62] John Bell died on July 13, 1857, and was buried in Victoria, so was not actually employed in 1858.[63] Bell and Maayo were both second-generation servants of the Company in Columbia Department. Maayo's father was Peopeo, a fixture at Fort Langley from 1827. According to Jason Allard, Peopeo was related to the kings of the Sandwich Islands, came to Fort Vancouver at its founding, and then to Fort Langley as "Foreman of the Islanders". He then married a "sub chief's" daughter, a union that produced at least three children.[64] The country marriage of "Maillot dit Pionpion" and Catherine, a Quytlen woman, was formalized July 21, 1856, legitimizing "Maillot, about 30 years", as well as an older and a younger sister.[65] Maayo followed in his father's footsteps as a cooper; Peopeo was listed as such in Outfit 1850.[66] Mayo's place of residence is not known; it is likely he lived in the servants' quarters, but his father's claim for compensation for land in April 1859 also names "Mayou".[67] This could mean he lived at Derby with his father. Likewise it is not known if he had a wife or children by 1858. A story in the Vancouver Daily World in 1915 has some anecdotal information on Joseph

"Mayo". There was still no mention of family; he was staying with Charlie Pierre on a reserve "east of Derby". Maayo was apparently revered by the Indians for his remarkable strength, and was still fishing in 1915.[68]

Basil Brousseau, Dairyman

The only other servant identified by position in 1858 was Basil Brousseau, also referred to as "Brousseau dit Lafleur", who was the dairy man.[69] Brousseau was remembered by Aurelia Manson in the 1920s:

> Basil Brousseau kept the dairy, made the butter, and, with two or three assistants, milked the cows. I can see him yet with a pail on each arm going to the milk house.[70]

Brousseau's name first showed up on Fort Langley personnel lists in Outfit 1833.[71] By Outfits 1857 and 1858 his salary had risen to £24 and £30 respectively, and his home parish was given as Varennes.[72]

Brousseau was in a country marriage with a Cowitchan woman by 1840; in September 1841 his 3 month old son "Basile" was baptised.[73] A daughter, Rose, was baptised in June 1856. By then her "Quytlen" mother was deceased. The next month Brousseau, who was described as the widower of Rose, a Quytlen woman, married a "Nanaimok" woman, Marianne. The register states that he had been born in Pontigny, diocese of Montreal, and Willing and Fallerdeau acted as witnesses.[75]

In 1858 Brousseau had a native wife and probably at least one child living with him. His son, Basil Jr., who was living and working on the Company's Langley farm in the late 1860s, would have been old enough to assist his father in his work by 1858.[76] Aurelia Manson referred to some of Brousseau's "daughters at Langley" in the twentieth century, and Don Waite's geneologies list a Mary Brousseau who died in 1923.[77] It is not known whether or not these other daughters had been born prior to 1858. It is likewise unknown if Brousseau and his family lived in servants' quarters within the fort or in a residential structure at the dairy. At both Fort Vancouver and Fort Victoria the dairymen were stationed at their dairies, but in both cases the dairies were remote from the forts.[78] At Fort Langley the dairy was located within "commuting" distance,

just to the east of the fort. However, there was at least one residental building associated with the dairy, the structure seen nearest the fort in the 1858 watercolour by James Alden (figure 6). This building (Structure 17) was a small, one storey gable roofed building with a lean-to attached, and appears to have been painted white. Its residential role is suggested by the number and arrangement of windows shown. The 1910 photograph of Canadian Northern Railway construction through Fort Langley (figure 32) shows Structure 17 and confirms this impression. The door and window arrangement in the main structure and in the lean-to, as well as the smoke from the chimney, suggest a residential role.

The location of this residence is not clearly indicated by any of the contemporary sources. The iconographic materials and maps show it to have been towards the west end of the "panhandle" of land, perhaps 730 to 760 metres (2400' to 2500') east of Structure K. Structure 17 had a central front door in the north wall with a window to either side, four windows in the west wall, two in the main structure and two smaller in the lean-to addition, and a central chimney. If Brousseau and his family were living at the dairy, this house was probably their home.

Augustin Willing, Joseph Bonin, William Emptage, Interpreters

Another man with an job identified, although not in H.B.C. personnel lists, was Augustin Willing, described by Yale in 1856 as an "Interpreter".[79] Willing's name first appeared on Fort Langley lists in Outfit 1843.[80] He was at Fort Victoria in the early 1850s, but was sent back to Langley in December of 1852, when Yale dismissed Ovid Allard. Douglas wrote to Yale:

> (I) now send you Augustine Willing by the return canoe to replace Allard or to be otherwise employed as you may think proper. He is under engagement for two years from the first June 1852 at £22 pr. annum.[81]

By Outfit 1857, Willing was earning £30 per year.[82]

He came from Montreal, but was originally engaged at Norway House as a "Middleman" on July 17, 1841, and was sent to the Columbia Department for

Outfit 1842.[83] In July 1856, Willing formalized his country marriage with Julie, a Cowitchan woman. This legitimized his son George, who had been born July 12, 1853 and was baptised two months later. From the entry in the marriage register, it is known that Willing was born on June 4, 1819, and that Yale and George Simpson acted as witnesses.[84] This would suggest that Willing was more closely associated with the gentlemen than most of the servants. Willing and Fallerdeau witnessed most of the Canadian Catholic marriages at Fort Langley, so presumably he was a central character at the post.

In spite of his role as witness to most of the post weddings in 1856, Willing seems to have run into some problems shortly thereafter. In October of that year, Yale wrote to his son-in-law, Peers:

> My interpreter, Augustus (sic) Willing, in consequence of a rupture between his wife and other tornadoes of the fort, slipped off a few days ago, with all his property.[85]

Willing seems to have returned shortly thereafter; he was present for Outfit 1857, but not on the lists for Outfit 1858. However, he still must have been in the area, as his daughter Elizabeth was baptised at Langley on July 11, 1858.[86] Apparently Willing was assigned to the British Boundary Commission in the summer of 1858. Douglas wrote Yale on August 26:

> ...let Augustine (sic) Willing accompany Captain Haig as Interpreter and Indian trader for the party.[87]

Until the summer of 1858, Willing would have been a resident of the servants' quarters in the fort, with his native wife, young son George, and possibly infant daughter Elizabeth, depending on her age when baptised in July.

It is possible that Joseph Bonin replaced Willing as interpreter in the second half of 1858; he was listed as such in Outfit 1858.[88] Bonin was described as a native of Rupert's Land, or the H.B.C. territories, and only had one year's service at the beginning of Outfit 1858. At that time his salary was £17 per year, rising to £20 per year for Outfit 1858.[89]

When Willing deserted in 1856, William Emptage, whom Yale described as "a Jack Tar with one arm" took his place. It is not known if Emptage continued in this role through 1858; he was simply listed as a "labourer" in both Outfits. In Outfit 1857 he was paid £24 per year.[90] In the geneologies developed by Don Waite, Emptage is said to have been born in 1829, and married to a Musqueaum

woman named Louisa, born in the same year.[91] Emptage, an Englishman, had been a seaman on H.B.C. vessels until a blasting accident in the Queen Charlotte Islands resulted in the amputation of his lower arm.[92] He was at Fort Langley prior to Outfit 1856, and remained there through calendar year 1858.[93] Whether Emptage was married prior to 1858, or had children at that time, is unknown.

Midmen and Labourers

The rest of the servants at Fort Langley with classifications noted were either "midmen" or "labourers". These terms were sometimes used interchangeably, but generally Canadian or Iroquois servants were midmen and European or "country-born" servants were labourers. At Fort Langley the salary levels of both groups were the same. Perhaps the distinction was made simply on the basis of language and translation. Canadians were engaged with a French contract, developed for voyageurs, among whom midman was a specific classification, while the European servants had English contracts, less specific in their duties.

The midmen/labourers at Fort Langley in 1858 included a variety of men and backgrounds. Thomas Atariachta was a midman from Sault St. Louis who worked at Fort Langley both Outfits, earning £20 and the £30 respectively per year.[94] He had arrived at Fort Langley by 1856, and in July of that year was married to Marie, a Cowitchan women, with Willing and Fallerdeau acting as witnesses.[95] Based on his name, his parents' names, and place of birth, Atariachta was probably an Iroquois.

Firmin Ayotte also showed up by 1856, and was earning £20 per year as a midman in the next outfit; he remained at Fort Langley through Outfit 1858.[96] Along with many of the other Catholic servants, Ayotte was married on July 21, 1856. The register gives his place of birth as Batinan, near Three Rivers, and his wife was Suzanne, a "Keitse" woman.[97]

Cyprien Dionne was another midman employed at Fort Langley for both outfits. He had also arrived prior to Outfit 1856. On June 29, 1856 his daughter Ada was baptised; her mother was listed as a "Skames" woman, and Willing was the godfather.[98] Dionne had deserted in the spring of 1857, but must have returned prior to June of that year, as he was listed for Outfit 1857.[99]

Charles Keam was listed as a native of Rupert's Land, a midman, and was being paid £20 in Outfit 1857 and £30 in Outfit 1858.[100] If this was the same "Kea" noted in Outfit 1852 he may have been at Fort Langley for a few years.[101] The name and "native" origin of Keam could well mean that he was another Kanaka-Indian halfbreed, like Joseph Maayo. This is supported by the June 1856 baptism of Jean, the son of "Kia", a "Wahi" (Hawaiian) and a Quyslen woman.[102]

Etienne Lambert only was listed for Outfit 1857, described as a labourer receiving £20 per year.[103] He also had arrived at Fort Langley prior to Outfit 1856.[104]

Alexander Latreille initially appeared on Fort Langley lists in Outfit 1852.[105] He originally had engaged with the H.B.C. at Moose Factory in July 1845, at £17 per year as middleman and steersman. The next year he was promoted to steersman, at £22 per year before being sent to the Columbia Department.[106] In September, 1853, Emilia, the daughter of Latreille and a "Masquillon" (Musqueaum) woman was baptised.[107] In June 1856, a son, Alexandre, was baptised, with the mother listed as a Kwantlen woman.[108] In July of the same year, Latreille, who was born in Trois Rivieres, married Marguerite, Alexandre's mother; Alexandre had been born January 3, 1856.[109] Latreille was listed as labourer and midman in 1858, at a salary of £20/4/7 a year.[110] It is possible he had suffered some sort of career embarassment, as in 1857 he was at a lower classification and earning less than in 1846.

Jean-Baptiste Leonard, from Montreal, arrived at Fort Langley as a midman earning £20 per year for Outfit 1857, and apparently resigned from the H.B.C. in the late fall of 1858.[111]

Ohule, who also went by the name of Peter, was another Kanaka, who first appeared at Fort Langley in Outfit 1848.[112] Prior to 1856, he was in a country marriage with Sophie Peopeo, Maayo's younger sister. In that year their son Pierre was baptised. Robert Wavikarea, another Kanaka half-breed, acted as godfather.[113] Ohule did not renew for Outfit 1858, and like Maayo was named in Peopeo's 1859 land claim at Derby, so perhaps he was living there after resigning from company service in June.[114]

Pierre Urno was listed at Fort Langley in Outfits 1856 and 1857 as a midman from Montreal.[115] On July 21, 1856, he married Cecile, a "Pelaltoch" woman.[116]

The only other servant at Fort Langley throughout 1858 was Robert Wavikarea. He was another second-generation employee of the Company. His father, Wavikarea, was a Kanaka who first appeared on Fort Langley lists in Outfit 1830.[117] When Demers visited in 1841, he baptised Robert, 6 years old, and Adams, 5 years old, the sons of "Oevekeria (sic)" and an "Uiskwin" woman.[118] Robert "Verkeria" had a "Quyslen" country wife by June 1856, when his own son, Robert, was baptised.[119] Robert Wavikarea was earning Ł20 per year and Ł30 per year respectively in Outfits 1857 and 1858 as a labourer.[120] In a letter from Tolmie to Newton written in August 1860, Robert "Yavicarea" was described as a cooper "salting salmon at Chiloayhock".[121] This could mean that he, along with Joseph Maayo, had been working as a cooper in the preceding decade as well.

Three new men appeared at Fort Langley in June 1858, replacing some of those who had left to pursue the new opportunities which had opened up as a result of the gold rush. These men were Donald Gunn, listed as a labourer at Ł30 per year, and Edwin Kitson and Thomas Sagoywatha, both listed under "sundries" at Ł20 and Ł35 per year respectively.[122] Their classification as "sundries" seems to have meant that these men were only at Fort Langley temporarily; perhaps they normally were assigned to Fort Hope, Fort Yale, or some other post.

At least two of the men listed as Fort Langley servants were definitely at Fort Hope in 1858. Donald Walker was first engaged at age 21 in 1849 as a labourer from the "North West", meaning he was country born.[123] He was sent to the Columbia in 1851, and showed up at Fort Hope (and on Fort Langley personnel lists) prior to Outfit 1858.[124] By 1858 Walker was apparently "post master" at Fort Hope, earning Ł35 and Ł39/3/4 per year in the two Outfits.[125] Walker had at least one son, David, who was baptised in July, 1856, but no reference was made to a wife.[126] Walker seems to have been in some disgrace in the summer of 1858. Douglas wrote to Yale on July 20:

> We send nothing to Fort Hope nor intend to do so while the place is under Walker's management. We must have a more reliable man for that place.[127]

In March of 1858 Walker had "committed a violent assault" upon another servant in course of a trading trip, but in spite of his problems he was still in charge of Fort Hope in October 1858.[128]

The man who assisted Walker was William Yates, who was first engaged by the Company on June 3, 1850 for 5 years at £17 per year. He came from Lerwick in the Orkneys, and went from there to York Factory, Norway House, Fort George and Fort St. James, finally arriving at Fort Langley in 1854.[129] By Outfits 1857 and 1858 Yates, a labourer, earned £23 and £36 a year respectively.[130] In his reminiscences Yates referred to having no family in British Columbia. When he re-engaged at Fort Langley in 1855, it was due to the joint efforts of James Douglas and "Jimmy" Taylor. The latter was referred to as being "just from where I came from", so perhaps Yates and Taylor were acquainted to some extent. Yates was at the reactivated Fort Yale from October 1858 to May 1859, where he acted as assistant to Ovid Allard.[131]

Ovid Allard

In Outfit 1858, three men were listed under "Sundries"; two of whom remain relatively unknown quantities. Edwin Kitson was as earning £20 per year, and Thomas Sagoyawatha £35 per year in that Outfit.[132] The latter name is probably Iroquois, but not even this much is known about Kitson. The third man listed, Ovid Allard (figure 98), was earning £60 a year in Outfit 1858. He was on the Fraser River that year to re-establish Fort Yale as a supply post for gold miners.[133]

The men listed as "sundries" may have been associated with the "transport corps" assembled to carryout Douglas' instructions in 1858 to move goods up the Fraser and deal directly with the miners. This corps was superseded by the development of Fort Hope and Fort Yale as retail centres. The corps consisted of Company employees and Indians, and when it returned to Langley from Thompson's River on April 7, 1858, it consisted of "Kittson", Allard, Dionne, and Perrin, under the direction of George Simpson. At least two of these men were listed as sundries.[134]

Allard, and presumably the others, was based at Fort Langley from February to May of 1858. Jason Allard later recalled that during this period "my father took supplies for the miners through the canyons, along the river to Lytton and Kamloops".[135]

Allard had been at Fort Langley from 1839 to 1852, when he was dismissed and sent to Fort Victoria, supposedly because he shot one of Yale's dogs. He was then assigned to Nanaimo, where he remained as interpreter until the start of the Fraser River gold rush.[136]

Yale described Allard some six years after his arrival at Fort Langley:

> Ovid Allard otherwise called Chatelain, is still here, and acts as Interpreter &c, his habits were not very praiseworthy when he first came here but he has reformed much of late, and was always a smart fellow.[137]

Allard seems to have become literate during his stay at Fort Langley. In September 1841 he acted as godfather in many of Demers' baptisms at Fort Langley and was described as "Ovid Allard who has not known how to sign".[138] His role as godfather would point towards some religious inclination, as well as a status of some importance among the Canadians at Fort Langley.

Curiously enough, the first recorded baptism of one of Allard's own children was not Catholic, but was done by Staines on his 1851 trip to Fort Langley. The child involved was Matilda, whose mother's name was recorded as Tseeyiya.[139] Less than two years later, Allard was married in a Catholic ceremony to Justine, a Cowitchan, which legitimized their three children, Lucie, Jason, and Mathilde, respectively 8 1/2, 5 and 2 years old. Mathilde was baptised again the same day in a Catholic ceremony.[140] The marriage register gives Allard's place of birth as "St. Roch (Montreal)". Two more children were baptised during Allard's stay in Nanaimo, Eugenie, whose mother was a member of the "Taetka tribe" in January 1854 and Sara, whose mother was a "Cawtshin" women, in August, 1856.[141]

William Yates, who worked as Allard's assistant from October 1858 to May 1859, recalled that he was a bit of a handful:

> He was another Canadian. The old fellow would drink and I could not stop him. He would come in the store and drink and give everybody fits. I had to send him out dozens of times but he was an old servant of the Hudsons Bay.[142]

Dr. Carl Friesach, an Austrian academic who visited the Fraser River in 1858, reached Fort Yale on September 9, and described Allard and his environment:

> We then went to the Village to call upon the officer in command. At his residence we found a number of Indian women and children with whom we could not talk, except through signs.
>
> A quarter of an hour elapsed before we could see the officer, who welcomed us in very bad English intermixed with French;...
>
> The officer in command of Fort Yale is a French Canadian who has become half savage by living so long in the far West; he has almost forgotten his mother tongue, has never properly known the English language and makes himself best understood in Chinook. He has married a full-blooded squaw, who gave him a number of children, who in their appearance take far more after the mother than after the father.[144]

Allard must have been considered responsible by the Board of Management in Victoria, as they gave him the charge of Fort Langley in 1864; he remained in charge of that post until his death in 1874. In a bigraphical note put together by his son, Jason Allard, a letter is described. It was sent from William Charles, of the Board of Management to Jason on Ovid's death, and described the latter as "a most zealous and efficient officer".[145]

The real character of Ovid Allard was probably between that described by Yates and that perceived by Jason. Obviously Allard enjoyed life; his own 1867 reference to having danced on the hall table leaves little doubt of that.[146] By the same token, a man who rose from "not very praiseworthy" habits and illiteracy to act as postmaster at posts such as Fort Yale and Fort Langley must have been "zealous and efficient" indeed. The Hudson's Bay Company would overlook personality quirks in exchange for healthy returns and efficient management.

The Life of the Servants

Although the servants at Fort Langley came from different backgrounds and held several status levels, there were some consistent elements. With the exception of Cromarty and Brousseau, all of them probably lived in servants' quarters within the palisade. In the 1920s Jason Allard remembered that "all the employees of the company had quarters inside the fort with the exception of the Indians".[147] Every known servant's wife was a native, in most cases from one of the Fraser River Salishan-speaking bands, and a variety of half-breed families were being raised. Jason Allard commented on this practice at Fort Langley:

> It was the custom in those days to encourage marriage between the employees of the company and native women. Some were married according to the Indian custom, but afterwards, on the arrival of the priests, were remarried. ...Mr. Yale was very particular about getting the men married into good families amongst the Indians for the protection of the fort.[148]

The parameters of the lives of these men were defined by the Hudson's Bay Company and its need for labour. This extended into their personal lives, as suggested by Allard. Rule 73 of the Company's "Standing Rules and Regulations" stipulated that "no person be permitted to take a wife at any Establishment, without the sanction of the Gentleman in charge of the District". The same rule stated that in the absence of clergy, chief traders could solemnize marriages.[149] As already noted, many of the Fort Langley servants did have religious marriages, in some cases up to thirty years after the start of their country marriages. Formal wedding contracts were sometimes used at Fort Langley. One exists from 1847:

> This is to acknowledge and to certify that I Keavie do take, for better or for worse, Miss Katey Squissum for my lawful wife, and that I promise to maintain and support her as such; and further to have a marriage ceremony duly and evangecally (sic) solemnized on the earliest opportunity, where a Clerical person may be had to perform the same.

In Witness whereof I set my hand and seal, this 1st day of November in the year of our Lord one thousand eight hundred and forty seven.

Witnesses

James M. Yale (signed)

Ohia (signed).[150]

The working life of the men was equally defined by the Company, starting with the contracts they signed on engagement, and on each extension of their term.

Examples of such contracts may be seen in Appendix B. Duplicates of these contracts were kept in the departmental depots, Fort Victoria in this case, and in the district, or at Fort Langley as well.[151] The servants were normally engaged for five years initially, and for two year terms thereafter. They were paid from their date of "embarkation" until their "re-embarkation" for Europe, Canada, or the Sandwich Islands, at clearly specified yearly rates. Servants were expected to give one year's notice of their intent to resign at the end of their term; otherwise they were automatically re-engaged at their former salary. They were also subject to working their passages back to Europe, Canada, or the Sandwich Islands, without any remuneration, if so required at the end of their terms. Their engagement was considered over at the end of their voyage back to their original point of departure or engagement.[152]

Throughout their stay at Fort Langley, the day to day activity of the servants was also determined by the Company, and its representative in the person of Yale. The normal work week was twelve hours a day, from 6:00 a.m. to 6:00 p.m., with Sunday the only day off. P.N. Compton described the daily routine at Fort Simpson at the end of the 1850s:

> In summer the Bell was rung at 6 a.m. for the men to turn to work at 8 a.m. hour was allowed for Breakfast and at 1 an hour for dinner and work ceased at 6 p.m. In winter work began as soon as it was light enough to see about 8 a.m. and ceased when dark perhaps 4 p.m. with 1 hour rest for dinner at noon. At 9 p.m. all communication with the outer world ceased and the keys of the gates handed to the officer in charge after one of the other officers had seen that all gates were properly fastened.[153]

Compton also described the H.B.C. convention observed at all posts: "Every man cooked for himself, except the officers".[154] He similarly noted the distribution of rations to the men: "provisions were served out every Saturday which was a half holiday".[155] The convention of distributing rations on Saturday was noted in the journals of all western posts, including Fort Simpson, Kamloops, Belle Vue Farm, and Fort Vancouver.[156]

That these conventions were followed at Fort Langley is confirmed by the "Memories of Fort Langley" by Jason Allard recorded in the Vancouver Daily Province in 1924:

> All work started at 6 a.m. and ended at 6 p.m. rain or shine, and as a matter of fact, all were kept at work the year round with a half holiday on Saturdays, which really meant scrubbing quarters. ...
>
> On ration day (Saturday) at noon the workmen were given a gill of pure rum (gratis). They also were allowed to purchase a pint apiece for the Saturday night spree.
>
> There were bootleggers even in those days amongst the men. Those who did not drink did a flourishing business on Sundays for the sick ones purchased what rum had been saved by the non-drinkers. Fancy shirts, silk handkerchiefs and tobacco were given for the much-needed "smile".[157]

Some variations were found in the rations provided. Archibald McKinlay remembered the servants as having been generously fed:

> But until the gold excitement there were never better fed working men in any country. They had graham flour, sometimes hone-meat, potatoes, turnips, dried salmon, fresh salmon, bear-meat, geese, ducks and all other kinds of game - usually unbolted flour, never tea, coffee or sugar. They had milk and butter.[158]

However, John Tod noted the week's allowance of food at Thompson's River in 1842 as "4 days salmon, one days horse flesh and 3 days corn and flour".[159] British servants on Vancouver Island had more generous allowances. Douglas had agreed to give the miners at Fort Rupert in 1849: "14 lbs. Flour, 10 1/2 lbs. beef or venison or in lieu as much salmon fresh as should be equivalent, 1 lb. sugar, 4 oz. tea, 3 gills of rum per week, which he said was as much as any man could

destroy".[160] The basic weekly ration at Craigflower Farm in 1858 included 12 pounds of bread, 8 pounds of meat (beef and mutton) 1 1/2 pounds of brown sugar, and 2 ounces of tea. Flour, beans, white sugar, rice, potatoes, and pork were sometimes distributed.[161]

The servants' rations at Fort Langley probably resembled those noted above, with salmon and potatoes definitely included, as major local products. In the spring of 1850, Lafleur visited Fort Victoria and "spoke about getting the same allowance of provisions as the English men, which was promised him".[162] Some eight years later it is likely that the predominantly Canadian work force at Fort Langley was receiving similar treatment.

Unlike the gentlemen, the servants received no extra rations for wives and children; anything required beyond Company allowances would either be purchased from the sale shop, traded from the natives, or hunted/fished/grown by the servants and their families. The food would be prepared in the living quarters themselves, probably over open fires. The Mallandaine sketch (figure 5) shows Structures E and F to have had the large chimneys normally associated with fireplaces, and the Dally photograph (figure 8) of 1867-68 confirms the appearance of the Structure E chimneys. It is difficult to generalize about the sort of meals that would have been prepared in the servants' quarters. The menu would have been limited to some extent by the rations provided, as well as the facilities, but it could have been Canadian, British, Hawaiian, Iroquois, or local Indian cuisine that prevailed. Cooking in Company servants' quarters in Victoria was described by John Emmerson:

> The fireplace was a very wide one, but had no grate in it. We built the fire in it on the ground, and our pans when cooking were suspended over the fire by sundry pieces of crooked iron, which dangled from inside the chimney.[163]

Presumably most of the cooking would be performed by the men's native wives, who would have been acculturated to some degree. It is worth noting that many other factors were considered in the taking of native wives. These included protection of the fort, facilitating trade with the natives, and giving employees some permanence in their adopted environment. Roderick Finlayson stated that native wives "had a tendency to keep them (H.B.C. servants) in the service of the Company".[164] Henry Warre noted the practice at Fort Victoria in 1845:

> Many of the Men employed about the Fort, have Indian Women as their Wives, and even in many instances the Bourgeois themselves are married to Natives - By this means, great influence is obtained over the tribe...[165]

Warre was less impressed at Fort Vancouver, where he described the servants' houses, mostly outside the palisade as "very small and horribly dirty":

> Nearly all the men have Indian wives, and they cannot be induced to conform to civilized notions; much preferring to sit on the floor to a chair and washing being considered a work of supererogation.[166]

Charles Wilkes, at Fort Vancouver some four years earlier, was more favorably impressed with the men's Salishan-speaking wives:

> Many of them have a dignified look and carriage: their black eyes and hair, and brown ruddy complexion, combined with a pleasing expression, give them an air of independence and usefulness that one little expects to see. As wives, they are spoken of as most devoted, and many of them have performed deeds in the hour of danger and difficulty worthy of being recorded. They understand the characters of Indians well.[167]

The "air of independence and usefulness" was more than just appearance. At Fort Nisqually the gentlemen were able to discourse with a Klallam leader "through the medium of P. Charles's wife".[168] This role as translators, although not often noted, was definitely a common one.

Independent or autonomous behavior was definitely the norm as well. In 1847 a number of native wives from Fort Victoria visited the Fraser River:

> Some of the <u>fair</u> inmates of this Estabt who had been on a visit to Langley arrived this afternoon and brought advices from that place...[169]

This commerce back and forth was not unexpected as most of the Cowitchan and Saanich bands on the Fraser River and Vancouver Island were affiliated.

In spite of this solidarity across the Gulf of Georgia, some tension existed between the individual native women of Fort Langley. Jason Allard remembered actual battles, where the women fought "in real earnest" under the influence of alcohol and the differences in their perceived rank.[170] These differences, according to Allard, related to the ethnic origins of the husbands, as well as that of the women themselves:

> The women who were married to white men were related to the chiefs and the line was drawn between them and the wives of the Kanakas. The Kanaka women were accused of passing remarks about their white sisters and then from one imaginary insult or slight the fight was on.[171]

Confirmation of this internal friction and the volatile natures of many of the servants' wives is found in Augustin Willing's reason for deserting in 1856: "...in consequence of a rupture between his wife and other tornadoes of the fort..."[172]

Although not specifically noted at Fort Langley, violence was not uncommon within these fur trade relationships. The ultimate arbiters of such activity inside the forts were the gentlemen, but often the final solution for the women was to escape into the support system waiting for them outside the palisade. Two separate instances were recorded in the Fort Simpson journal for 1856:

> Dudoniaire gave his Wife such a severe beating that <u>all</u> inside the fort cried shame, and I had to interfere and put a stop to it.[173]
>
> ...Turcot had beaten his wife unmercifully the Father struck Turcot and took his daughter away with him. I gave the Indian two Bottles of Rum or he would have done some mischief to Turcot some time or other.[174]

A few years later at Fort Simpson the roles were reversed, when "Underwood's wife, got drunk and thrashed her husband, and broke 11 panes of glass in the men's house window..."[175]

> At Thompson's River in 1843 John Tod acted as marriage counsellor: Madam Fallerdeau came to be to complain of her husband, but I refused to hear her complaint until they were both present, for as usual in such cases there are no doubt faults on both sides. She, however, seemed to have fully made up her mind not to remain longer with him.[176]

Given the option of returning to their family and band, with apparently no serious negative sanctions, native women had available a final solution for unsuccessful relationships. Sometimes the servants themselves had a contingency plan, as at Fort Simpson:

> Granted leave to Laplante to take another wife his former one having absconded. This he informed me he stipulated for when he signed his last agreement with Cap McNeill.[177]

Not all the "bootleggers" that Jason Allard referred to above were men. At Fort Simpson it was often native wives who acted in this capacity, bringing large quantities of rum back with them from Victoria, both for their husbands and for sale to other Indians.[178]

Along with the advantages provided by a native wife in dealing with the Indians came some negative repercussions. Also at Fort Simpson a servant was held to ransom through his wife when another Indian family:

> ...threatened vengeance on some of the Womans relations outside, and Darch was obliged to pay Ten 2 1/2 pt Blankets, all for the deformed beast of a Wife he has.[179]

Some problems were also created inside the posts by the servants' wives. In 1845 Yale was surprised by the appearance of one of the Fort Victoria servants at Langley, and wrote to Douglas,

> It seems he has been annoyed by a series of unrestrained illicit intercourse with his wife, imputed to your injudicious young assistants...[180]

As with Willing at Fort Langley, a native wife provoked a servant's desertion at Fort Simpson, supposedly on the basis of the women wanting white sugar in her tea rather than molasses. In the opinion of the clerk "The women of this place have some way to turn mens brains more so than I ever heard of in any other part of the world".[181]

At the same post one of the servants was stealing blankets from the shop and giving them to another Company man's wife, as well as several other women. Although he was sent to Fort Victoria for discipline "his wife took all her children and an immense quantity of property out of the Fort and went to live in one of the Indian Lodges".[182] In addition to the above hazards, there was a less direct assault on the H.B.C. workforce by their native wives. This was noted in the Kamloops journal in 1859 when one of the servants was "again invalid from excessive indulgence in matrimonial pleasures".[183] It must have been some pleasure, as it kept him away from work for seventeen days.

Besides their wives, another major threat to the labour of the servants was alcohol. As noted by Allard, the ration of rum was fairly small, and distributed on Saturday, so any hangovers ensuing from bingeing would occur on Sunday, the day off. However, like most other posts, it would be expected that Fort Langley would have had a few drunkards on staff, for whom everything else was secondary to their drinking. Fort Victoria was the source of most of the illicit alcohol received in the outlying posts. It was sometimes distributed independently, as when the servants' wives and other Indian women around Fort Simpson brought back liquor from Victoria. In other cases the liquor was purchased by the employees themselves when in Victoria, or they would simply go on "sprees" when visiting that centre. This practice of visiting Victoria on one pretext or another was a definite problem at Fort Langley. Douglas wrote to Yale in 1853:

> In reference to the Fort Langley servants who occasionally visit this place, I think it would be very desirable to keep them at home, and in the case of those who merely wish to receive explanations in regard to their accounts, an application to this place, in writing through you will answer the same purpose. That therefore should not be made a pretext for leaving their Posts and coming to this place.[184]

In 1852 Yale had described the Fort Langley servants visiting Victoria in more elaborate terms:

> Then follow a host of labourers, all in the costume of princes, and with wealth such as a few years ago would have been considered sufficient to maintain them in grandeur for an age.[185]

The sanctions imposed on the servants of the H.B.C. to ensure their continued obedience varied in severity, but in general related to the Company being the only employer, and the servants being the only "European" labour pool.

After the California gold rush began in 1849, there was a viable means of escape and an alternate labour market on the west coast, and desertion was a feasible alternative to working for the H.B.C. Desertion, one of the only alternatives for the servants if they did not approve of their treatment, sometimes occurred at Fort Langley, but was much more common at posts with more severe conditions, such as those in New Caledonia. Quite often deserters would just head for another Company post; usually one of the "metropolitan"

forts such as Vancouver or Victoria, or even Nisqually, where American ships were sometimes available for transportation out. On at least one occasion three deserters from New Caledonia appeared at Fort Langley. Douglas thought that servants would have been "hereafter deserting in crowds" as Yale had not treated them harshly enough.[186]

Punishment for the servants' transgressions varied according to the crime and the temperament or mood of the gentlemen administering the punishment. Desertions seems to have been treated lightly; the main goal was to keep the men who made up the labour force working. Napoleon Dease, who deserted from Fort Langley, was shortly afterwards the postmaster at Fort Hope, a position of some autonomy and responsibility.[187] Quite often the deserters just were sent back either to their original, or to another post, to continue working for the Company. Cyprien Dionne, who had deserted in the spring of 1857, was still employed at Fort Langley throughout Outfits 1857 and 1858.[188] The same applied to Ayotte, Lambert and Latreille, all of whom were re-engaged by Douglas in Victoria in June of 1856 "on their former terms". Their punishment was not harsh:

> I have read those fellows a severe lecture, in respect to their late misconduct, which can only be viewed as an act of desertion of the most disgraceful kind. I at first refused to admit them again into the Service, and they were humble enough before I yielded to their wishes, being more a matter of necessity on our part, for want of the hands to replace them, than of discretion.[189]

At Fort Simpson a Kanaka gatekeeper was given "a slight castigation" for "neglect of duty and insolence".[190] A servant who refused duty at the same post was simply ordered outside the fort "to act as he thought best".[191] A servant was caught stealing a bale of blankets from the Fort Simpson storehouse by the gentlemen:

> After telling him my mind on the subject I put him in Irons and locked him up in the Bastion on full allowance of food.[192]

Physical punishment was noted sometimes at Fort Simpson; a "box on the ear" for stealing some tobacco, and "thrashing" a servant for insolence to clerks. No punishment was given to a servant "laid up sik (alias shamming) (sic)".[193]

For the gentlemen in charge of a post such as Fort Langley, the goal was to keep the servants working, so discipline was of a sort that would support that end. Normally, sanctions were those that would not affect the workforce in a negative fashion.

The servants at Fort Langley and their families occupied something of a middle ground between the two cultures participating in the fur trade. The men were an ethnic mix, their wives natives, and their children a variety of hybrids raised in a fur-trade environment. The scene observed in Allard's household at Yale has already been described, and was probably typical of these families. As well as the husbands "going native" to some extent, the wives also became acculturated. The Company had rules to assist in this process. Women and children were to be given:

> ...such regular & useful occupation as is suited to their Age & capacities, & best calculated to supress vicious & promote virtuous habits.[194]

The women (and children) were also to be spoken to in the language of their husbands, either English or French, and the men were assigned some responsibility to educate their families to the best of their ability.[195]

The manifestations of this acculturation were found in costume, language, and lifestyle. Several observers, including John Dunn and Henry Warre, described the employees' wives at the major depots. Dunn was at Fort Vancouver in the 1830s, and was impressed by the native wives, who, he believed:

> ...soon learn the art of useful housewifery with great adroitness and readiness; and they are encouraged and rewarded in every way by the company, in their efforts to acquire domestic economy and comfort. These too, imitate, in costume, the dress of the officers' wives, as much as they can; but from their necessities of position, which exposes them more to wet and drudgery, they retain the mocassin, in place of adopting the low-quartered shoe.[196]

Warre also described the European dress of the native wives at Fort Vancouver and Fort Victoria and sketched one example which he saw at a ball in Victoria in 1845 (figure).

At most Western posts, presumably including Fort Langley, French seems to have been the predominant language. Dr. Helmcken was at Fort Rupert in 1850:

> There were about thirty-five all told within the fort, and a great deal more of French and Kanaka spoken than other languages.[197]

Charles Wilson described what he encountered at Fort Colvile in 1860:

> ...the men or hangers on are a curious mixture, Orkney men, French half breeds, a few Iroquois (some of the last remnants of the old Six Nations) & all kinds of mixtures; the languages are as various as the races, the more prominent one perhaps being Canadian French of the worst kind, which of all languages or dialects I ever heard offends my ears, it is murdering French with a vengeance.[198]

James Anderson, who spent most of his childhood until 1850 in New Caledonia remembered that "except to our parents, we the children spoke French Canadian to every one..."[199] He also referred to translating between the Fraser children and their mother in the summer of 1851. After a year at school in Victoria they could no longer speak the French patios that has been their only language, and so were unable to communicate with their mother.[200]

Anderson's father, Alexander, in his "History of the Northwest Coast," referred to Anglophone apprentice clerks spending their first year of service near Montreal to acquire the French Canadian patois that they needed to communicate with the servants.[201]

By the late 1850s Chinook jargon was becoming more widely used. Freisach's description of Allard using that language at Yale in 1858 has already been given. James Anderson, who was at school in Fort Victoria from 1850-1852, only saw a few natives who spoke the jargon there:

> ...it must be borne in mind that the jargon was not understood nor spoken to any extent at that period amongst the native races north of the Columbia...
>
> The jargon, even in 1858, was only spoken by the younger generation, the older people never acquired it.[202]

Although Chinook jargon was a late development, it apparently became the general language used around Fort Langley by the 1860s. In his 1867 "Report of the Langley School" the teacher, James Kennedy, described his success in teaching 26 children around Fort Langley to read and write:

> Age of the above, between 7 and 15 Years. Except my own children, none could read. With the above Exception none spoke anything but Chinook,...[203]

In the 1850s the majority of the servants were Francophone, with notable minorities of Orkneymen and Kanakas. It is probable that the "French Canadian patois" was the primary language used around the post in the early part of the decade. The reference to Allard and the Fort Langley children using Chinook in 1858 and 1867 respectively could mean that the language used was changing during that decade.

One of the negative aspects of mixing cultures was the introduction of European diseases, to which the natives, and often the Kanaka employees, had no resistence. Henry Warre witnessed the aftermath of an outbreak of "fever, ague, and Dysentery" at Fort Vancouver in 1845, when "Three or Four (of the servants) died, and many of the Women, of whom little or no notice was taken".[204]

At Fort Victoria on April 12, 1848 an epidemic of measles broke out and "the women of the Estabt (sic) are daily becoming ill". The next day "a canoe arrived from Langley & brought a letter from Mr. Yale reporting that the measles are prevalent at his place".[205] The following month smallpox appeared at Fort Victoria, and in June "influensa".[206] It may be assumed that both diseases also affected Fort Langley, with the native wives of the servants among the first victims.

The leisure activities of the servants and their families were limited by their means and available time. Some of the entertainment was shared between gentlemen and servants; for instance the balls and dances on special occassions discussed in the last chapter. Hunting and riding for pleasure seemed to be the exclusive privilege of the gentlemen, but some other activities noted, such as playing cards, may well have been available to both groups. At Fort Vancouver in the 1840s, Thomas Lowe attempted many "card parties" in the evenings, usually in the private apartments of one or another of the gentlemen.[207]

As already noted, one of the main leisure activities was drinking, and this sometimes led to further trouble. Dr. William F. Tolmie described what happened at Fort McLoughlin on January 2, 1835:

> The men today received each an allowance of a Pint of Rum & in their own houses they have been carrying on the war.[208]

The next day there was "a boxing match between an Iroquois & Islander-the latter floored his opponent neatly & came off victor".[209] Tolmie also saw "putting the stone" as a sport at Fort Simpson, with "a prize of a fathom tobacco offered to the best thrower".[210] The same sort of sporting events were described by Edward Huggins at Fort Nisqually. In 1855 when the brigade from Colvile arrived, the feature event was a foot race between a "halfbreed Iroquois and french canadian" from Colvile and an English clerk from Nisqually. There was also a young Cockney at Nisqually who could play tunes on a penny whistle and a home made violin, but whose major accomplishment was staging Punch and Judy shows, to the delight of the men.[211]

Some of their husbands' amusements, such as drinking and fighting, were apparently shared by the wives at Fort Langley. A somewhat gentler form of recreation was practiced by the native wives at Fort Rupert in 1850:

> Noon a Party consisting of the Indian women of the Fort headed by Mrs. McNiel and Mrs. Blinkinsop with all necessary articles from the store and elsewhere going outside the Fort to enjoy a feast under the shade of the spreading trees which Nature has placed here in abundance 6 P.M. the party returning all with pleasant countenances...[212]

In 1861 the children of Fort Simpson participated in games such as "running in Sacks" and "climbing a pole" at a party given by missionary William Duncan.[213] James Anderson described the play of the boys at the Fort Victoria school:

> Our amusements consisted of marbles, cricket, rounders, shinny, horse riding, fighting Indian boys, worrying Indian dogs, some surreptitious shooting with our antiquated flint lock muskets, besides any occasional mischief as boys alone are capable of conceiving.[214]

Other than cricket, which required equipment that had been presented to the boys by Captain Grant, most of these games would have been possible for the children at Fort Langley as well. The marbles were home made of clay, and the balls for rounders and shinny were of deerhide stuffed with hair.[215]

The Economic Life of the Servants

The servants at Fort Langley were employed on an all-found basis, with salary, accommodation and food provided. The terms of employment usually corresponded to the H.B.C. Outfits, from June 1 of each year. At Fort Langley the servants were paid a straight salary, normally without the "gratuities", or extra allowances, which seemed more common in New Caledonia.[216] The only noted instances of such gratuities at Fort Langley were those sometimes granted to the tradesmen, such as the extra £5 paid to Cromarty for barrel production in 1850, and the "allowance of tea and sugar, and 2 Blankets for Firewood", which Yale promised to Robertson in 1853.[217] Cromarty's 1852 contract also included a cow as gratuity, confirming that the Orkney tradesmen definitely were the favoured class at Fort Langley.

With their basic needs met by the Company, the servants were able to use much of their salary as discretionary income, within the limits of the "Standing Rules and Regulations". This money would normally not be seen by the servants, but would simply be recorded in District Account Books. The goods purchased from the Hudson's Bay Company, their sole source, would also have been recorded in these Account Books, as debits. In general the Fort Langley servants would have accrued these debts in three different accounts; the Fort Victoria sale shop, the Fort Langley sale shop, and general debts on Fort Langley. In the Fort Victoria (or District) Account Books there were also classes such as "Advances in England or Oahu, Bills on London, or Total Advances in the Country", but these more esoteric accounts were only relevant to the gentlemen, and occasionally the tradesmen.[218] The Langley servants clearly did most of their purchasing either at the Fort Langley or Fort Victoria sale shops. The goods bought by the servants were of all descriptions, but generally were luxury or convenience items. Some examples may be seen in the list of servant's purchases in above, pp. 42-43.

A final condition of employment for the servants concerned their passage home at the expiration of their engagement. At the end of their terms, the servants were provided passage back to wherever they had been engaged,

whether it was Hawaii, Britain, or Canada, by the next Company vessel making the trip (see Appendix B). However, many of the Fort Langley servants decided to settle in the Fraser Valley even before 1858, rather than take advantage of this clause.

In July of 1857, Ohule, one of the two Kanakas still working at Fort Langley was returning to that post from Victoria, and was instructed by James Douglas to mention:

> ...to the free Kanakas on the route, that you would require them for the trip to Fort Hope, and to go to you for that purpose. There are seven able men among the number.[219]

This confirms that there was a substantial group of Kanaka ex-servants of the H.B.C. on the Fraser River prior to 1858, who definitely were regarded as a supplementary work force for Fort Langley. In January 1859, A.T. Bushby stopped at the site of "the new town of Langley". He found living there "a large body of Kanakas - a mixed race half Indian half Sandwich Islanders".[220]

The sale of the town lots at Derby interfered with the claim of these people to the site. In the spring of 1859 Colonel Moody wrote Douglas concerning the petition of "Pio-Pio" who "had cleared and had been in occupation of a piece of land there, from which he was ejected when the site of the town, of which it formed a part, was decided upon". He wished for about forty-seven acres of land on the other side of the river as reparation, and wanted it quickly, in order to plant that year's crop. Peopeo also had his son, "Mayou" and two sons-in-law "Peter" and "Ohier" living with him.[221] These four men were all listed as servants at Fort Langley for Outfit 1856, and two of them were still working for the Company in 1858.[222]

Later in April 1859, a newspaper account of the Langley area described an old H.B.C. building on the "Kanaka ranch" at Derby.[223] More information concerning this Kanaka population at Derby is in the baptismal record of St. John the Divine Anglican Church from the winter of 1859-1860. On December 25 John, the son of John and Pivah Owhyee and Margaret, the daughter of Timothy and Tskoyah Kliapoo were baptised, and on January 8, John and Bucie, the children of Henry and Margaret Pound. The fathers were all listed as "Kanakars" and labourers who were residents of Derby.[224]

The above sources reveal that by 1858 a substantial population of Kanaka servants and ex-servants of the H.B.C. were living at Derby (possibly in old Company buildings), had cleared land, and were raising crops. Whether the Company employees commuted each day to Fort Langley, or how long they had been in residence at Derby is unknown. Some independent settlement and development of land at Derby by H.B.C. servants was certainly underway prior to 1858.

An American visitor in 1858 summed up the employees at Fort Langley in a paragraph in Harper's Weekly:

> Most of those now in the employ of the Company at Fort Langley are men who have occupied the same position for along period, ranging from ten to thirty years. Time, whiskey, the rough and secluded life which they have led, intermingling with aboriginal society in all the everyday relations of life, have all done their work upon them, and fattened and developed the animal part of their natures to the decided detriment of their intellectual functions. There are, to be sure, some exceptions, but they are found only among those whose official positions have naturally prevented them from falling into the demoralizing and debasing habits of the employés, who seem only to live for the purpose of obeying the behests of their superiors in all things, filling up on the Sundays, and other idle intervals, by getting drunk on the Hudson's Bay lightning aforesaid. Body, soul, and existence of these people, all are part of the assets of this monster monopoly.[25]

Defence

Introduction

The defences of Fort Langley in 1858 consisted of a palisade enclosing the main retail, storage and residential structures, with extra support in the form of three bastions, and a gallery at the north end of the fort.

Location

Iconographic sources show the palisade to have totally enclosed the fort in the 1858-1862 period (figures 4, 5, 6, 7, 12, 13). Several of these images (figures 5, 7, 12, 13) show three bastions in association with this palisade, which correspond to Structures F, I, and P. This visual identification is supported by the Allard plan and "References" of September, 1920, which identified three bastions in the appropriate locations.

A gallery is shown in the c.1858 watercolour done from that vantage point (figure 6), and its presence is supported by the existence of a second storey door in Structure F, shown in figure 6. It is further confirmed by the Allard plan (figure 3), which indicates that a gallery ran across the north end of the fort and part way down both the east and west sides of the palisade.

In 1858 the defences of Fort Langley were in place and largely intact around the fort; however, there was clearly a concentration towards the north or river end of the fort.

Palisade

Direct Evidence

Iconographic information on the palisade at Fort Langley is available for the target year of 1858. Figure 44 establishes that in May 1858 the northwest side of the fort was enclosed by a high palisade. Later that year, in December, E. Mallandaine sketched sections of the south and southeast palisade, both from the exterior and interior (figures 12 and 13).

The Mallandaine sketch of the northwest corner of Fort Langley (figure 5) shows that the palisade totally enclosed the north and west sides of the fort.

The above sources all show a substantial palisade wall at all visible points. It would appear to have been about 4.3 to 4.6 metres (14' to 15') tall overall, and constructed of vertical flat-topped pickets connected by one horizontal paling towards the top. Two gate openings are shown in the Mallandaine sketches, one in the west wall towards the north end, and one in the south wall near the Big House (Structure A). These both opened below the horizontal paling; that in the west wall was apparently larger than that in the south wall, and judging by the almost square opening, was probably filled by a double (two-panel) gate.

Figure 5, a watercolour, probably painted by J. Alden c.1858, confirms the presence of both the flat-topped pickets of the palisade, and a gallery on the north palisade, at the same level as the second storey of the building in the background (probably Structure H).

An 1862 photograph of the northwest portion of the fort (figure 7) confirms the information given by the earler sketches. The palisade was formed of very closely fitted peeled logs with flat tops. The overall height of the west palisade was about 4.3 metres (14'), scaled from the northwest bastion (Structure F). The pegs fastening the pickets to the paling were about 1.1 metres (3' 6") below the tops of the pickets. The diameter of the pickets ranged fom 0.3 to 0.6 metres (1' to 2'), with most sizes in the middle of the range. A gallery on the west wall was likely, as a door opening in the south wall of Structure F under the eaves is

visible in the photographs. The top of the north palisade is visible over the west wall, showing the former to have been about 0.5 to 0.6 metres (1'6" to 2') above the latter.

The McColl plan of Fort Langley, also from 1862, (figure 4) shows a palisade location which corresponds well with the earlier sketches, particularly confirming the position of the south palisade relative to Structure A and the other buildings. This plan shows the north section of the palisade to have been 61.4 metres (201' 4") wide by 112.2 metres (368' 3") long on the west wall and 115.5 metres (378' 10") long on the east wall. The south section of the palisade was 76.0 metres (249' 6") wide by 92.1 metres (302' 3") long on the west wall and 86.9 metres (285' 2") long on the east wall. The north and south sections were joined on the west by a perpendicular section 12.5 metres (40' 11") long, and on the east by an angled section some 3.0 metres (9' 11") long.

This plan also indicates four openings in the palisade, two of which correspond directly to those shown in the Mallandaine sketches. The opening in the north wall was 27.2 to 28.2 metres (89' 1" to 92' 5") east of the west wall, those in the west wall respectively 49.7 to 51.7 metres (163' to 169' 7") south of the north wall and 49.9 to 51.7 metres (163' 8" to 169' 7") north of the south wall, and that in the south wall 47.7 to 49.7 metres (156' 5" to 163') east of the west wall.

This plan provides no evidence for a gallery, but a small structure of unknown function was shown to have been attached to the inside of the palisade directly behind Structure O. This building, Structure N, scaled to about 3.0 by 1.8 metres (9' 11" by 5' 11"). This size of building would have been appropriate for a privy, but as the building was located close to the retail and storage structures and far from the residential structures, it was more likely used for ancillary storage, perhaps as a powder magazine. It may also have been associated with the palisade/defences proper, but there is no diagnostic evidence to support any of the above hypotheses.

The Jason Allard plan and "References" of September, 1920 (figure 3) provide further evidence of a gallery at the north end of the palisade, which ran part way down both the east and west sides. Allard also described the gallery as having been five feet below "the top of the Pallisade", which relates well to the 1862 photograph (figure 7). Information derived from Jason Allard in the later 1920s and 1930s also described the palisade. For instance, in the guide

accompanying the Worral model of Fort Langley in 1925, G. F. Young described the palisade and gates:

> 2. Palisade - This was of heavy logs of split cedar, 15 to 18 inches in diameter, set close together on end in the ground, above which they extended about 18 feet. They were flattened on the inside and were held securely together by stout wooden pegs inserted in holes through the logs. A lookout and firing step extended along the north and part of west sides, inside of palisade.
>
> 3. Gates - Hung on great iron hinges, these were of the double door design and were of heavy, hand-sawn planking. They were opened only on certain days and each had a litle wicket of a size that admitted of the entering of only one man at a time.[1]

The same description was used verbatim by Denys Nelson two years later,[2] and in 1937 John Gibbard described the enclosure as "a space approximately two hundred forty by six hundred thirty feet within eighteen-foot palisades of split logs, fifteen to eighteen inches in diameter."[3]

Archaeology performed at Fort Langley between 1971 and 1979 cast some more light on the layout and construction of the 1858 palisade.

> Test excavations in 1971 and 1979 along the east palisade exposed at least 15 palisade post remains...All posts except one were round in cross-section and ranged up to 30.5 cm in diameter. The one exception was a very large longitudinally-sectioned post which was found in sub-operation 2T7J. The post was a maximum 37 cm in width and 22 cm thick. The wood was identified as cedar and represented the best preserved post remnant found on-site. The flat face of the post was to the interior of the fort.[4]

This archaeological evidence also showed that the palisade was erected in a trench ranging from 0.4 to 1.48 metres wide by 0.55 to 1.35 metres deep. The post remnants in the east wall, and similar remnants in the south wall, were "placed central to the trench or marginally off-centre toward the outside of the trench."[5]

Chronology

The archaeological report describing the 1979 excavation hypothesized that two generations of palisade were present between the April, 1840 fire and the mid-1860s demolition. The second of these (phase IV in the report), enclosed an area which increased in size only at the south end of the fort, with a minor expansion west and a larger expansion south, perhaps taking place around 1848 (figure 78).[6]

Regardless of the precise date of this final expansion, it is clear from iconographic sources that in 1858 the palisade was complete, intact, and of the same configuration as that shown in the McColl plan of some four years later. In return, the Phase IV palisade described by D. Steer et. al. confirms the validity of the information in the McColl plan.

The palisade was removed some time between 1862 and 1867 or 1868, when the Dally photograph (figure 8) was taken. Anecdotal references are made to the palisade being removed c.1864, and in light of the iconographic evidence, this demolition date seems reasonable.[7]

Indirect Evidence

Good information is available from photographs for the palisade at Fort Victoria, which relates very well to the direct evidence from Fort Langley. It may be seen in figure 79 that the palisade there was almost identical to that shown in figure 7 at Fort Langley. Of specific interest is the single paling, with a gate opening underneath, as shown in figure 5 at Fort Langley. The gate opening in figure 79 appears to have had a lintel placed below the paling, and two finials decorating the king posts defining the gate.

Figure 80 shows the construction details of the gate and palisade opposite that seen in figure 79. The palisade clearly was constructed with a kingpost and paling framework, and one internal brace may be seen to the right which ran up to the paling. The pickets and kingposts appear to have been full round peeled and trimmed logs, while the palings were hewn timbers. The paling for each section was fitted into a mortice in each side of the two king posts, while each of the pickets had a rebate to fit over the paling.

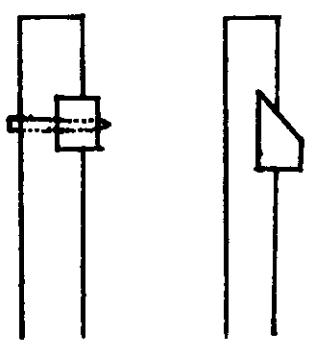
The gate opening was of almost square dimensions, and was defined by two large kingposts, each with a finial, and a second paling was used near the top of the palisade. The gate itself was of two-panel configuration, with a small "wicket" gate in the left panel, and was built of heavy planks.

Some documentary evidence is also available for the construction of the Fort Victoria palisade. In March 1843, James Douglas offered to pay the natives in the area "a Blanket (2 1/2) for every forty pickets of 22 feet by 36 inches which they bring."[8] Following the convention of the period, the 36 inches would have referred to circumferance, so 1 foot (0.3 metre) diameter logs were used.

A few years later the Fort Victoria Journal described the construction of a section of palisade: "150 feet of the stockades adjusted on the ground, barked and made ready for erection".[9] The following week: "the pickets on on (sic) the north side of the Fort taken down and hauled to their present site the King Posts put up along the front. 6 spaces of the pickets adjusted and prepared for putting up 160 feet of trench dug with the old pickets in front put upright, they having previously leant considerably outwards".[10]

P.N. Compton, a former clerk of the H.B.C., described in 1878 the palisade at Fort Simpson in the 1840s:

> The Fort was surrounded by pickets generally of Cedar about 22 feet long by 9 by 12 inches thick which were squared on two sides so as to prevent bullets passing between them and were planted about 4 feet in the ground & attached to cross pieces about 4 feet from the top either by wooden pegs or by means of an oblique notch thus
>
> the ends of these cross pieces which were about 15 feet long being morticed into stouter pickets called King posts.



By Peg By Notch

> A Gallery ran all round the inside of the pickets (about 4 feet from the top of them) reached by staircases, affording a capital promenade and a means of seeing every thing that was going on & also giving a separate entrance to the upper story of the Bastions...The gates were massive structures about 6 or 7 inches thick, studded thickly with large nails and having small doors in them so as to admit one person at a time....[11]

The Fort Simpson Journal of the early 1840s records "washing the outside of the front pickets with Lime",[12] and confirms that the gallery there was reached by a "ladder".[13] A decade later the journal at that post described using the area under the gallery for various structures, including a "water closet and salt house".[14] In 1857-58 at the same post references were made to "dressing slabs for gallery plank" and "Gallery ladders", as well as painting the "Big Gates" red.[15] In the fall of 1861 a new gallery was built at Fort Simpson, which involved "squaring gallery posts" and "laying gallery plank".[16]

The 1849-1850 journal describing the construction of Fort Rupert reveals more details of H.B.C. palisade construction: "cutting mortices in the king posts";[17] "wedging the pins of the pickets";[18] "sawing and squaring logs and wood for gallery";[19] "cutting mortices for gallery";[20] and "Blacksmith making bolts for gallery".[21]

There is also a reference to "whitewashing the front of the Fort",[22] perhaps as at Fort Simpson. Finally, a reference some years later describes how "a portion of our western pickets separated from the gallery beams and came down with a crash about 3 weeks ago".[23]

At the reconstructed Fort Nisqually, in Tacoma, Washington, one section of original palisade has been salvaged from the original site and is used in the reconstruction (figure 81). This section is approximately 6.0 metres (20') long between king posts, and uses two palings fitted into mortices in the king posts. The pickets are half logs, with the round side to the exterior, and the interior surfaces smoothed with transverse saw cuts and slabbing combined with hewing by adze or broadaxe. The pickets range from 0.2 to 0.4 metres (8 1/2 to 16") wide, and 20 to 25 centimetres (8" to 10") thick. Both edges of the pickets have

been dressed for a closer fit, with the joints being from 10° to 15° off perpendicular; from the inside the angle is to the right. The palings are also split logs dressed on three sides. They are about 25 centimetres (10") wide by 17 centimetres (7") thick. The pickets are set over the palings on rebates about 2.5 to 3 centimetres (1" to 1 1/2") deep, and fastened at each point with two angled pegs.

Conclusion

Most of the elements of palisade construction are known from the 1862 photograph (figure 7) and the 1858-1859 Mallandaine sketches (figures 5, 12, 13). This information relates very closely to the case at Fort Victoria, which is well documented photographically, and other comparable palisades suggest some conventions of palisade construction in the Western/Columbia Department.

The Fort Langley palisade was constructed using king posts and a single paling forming the main framing elements, with details like those found at Fort Victoria (figure 80) and other posts; that is, the king posts morticed to accept the ends of the palings, and the pickets fastened to the paling both with a rebate and wooden pegs. It seems that both the king posts and pickets were generally round-section peeled cedar logs; their overall length would have ranged from about 5.3 metres (17') to perhaps as much as 6.0 metres (20') in the case of the north wall, and their diameter between 0.3 to 0.6 metres (1' to 2'). As the fit between the pickets in figure 7 seems much tighter then that seen at Fort Victoria (figure 80), it is possible that the edges of the pickets were dressed, like those at Fort Nisqually. To fit neatly into the rebates in the pickets, the paling would have required squaring on at least three sides, as at Nisqually, and probably would have been of about the same dimensions. The Mallandaine sketch (figure 5), shows the northwest gate opening to have been underneath the paling, and of almost square dimensions, probably with a two-leaf gate. Granted the paling location this suggests a gate opening of about 3.0 to 3.3 metres (10' - 11') square, much like that in figure 80, and both framing and gate details may be assumed to have been identical. The south gate shown in figure 13 was somewhat narrower; the framing defining the opening would have been similar,

but the configuration of the gate itself is open to speculation. The two other gates indicated on the McColl plan remain otherwise unknown, with no further iconographic, documentary, or archaeological information available.

The presence of a gallery at Fort Langley in 1858 seems certain. As at the other forts noted above, it would have been built of hewn and sawn timber, and would have been at the same level as the paling. This would militate for the paling being one of the "gallery beams", as at Fort Rupert. It will be noted in figure 7 that the paling height, indicated by the row of pegs, and the second floor height in the bastion, indicated by the joist ends, are nearly identical. Further, the presence of a door in the south wall of this bastion indicates the presence of a gallery down the west side of the palisade, partially confirming the information in the Jason Allard plan (figure 3). It would seem that one of the "ladders" which provided access to the gallery would have been on this west wall. The c.1858 watercolour of the gallery again relates well to the data above. The gallery and second storey of Structure H were on the same level, and the gallery planking hides the paling, indicating that it formed part of the underpinnings for the structure. It is probable that the gallery also extended part way down the east wall, as noted by Allard, and another access stair would have been expected on that side as well.

The gallery framing and construction would have been like that at Fort Rupert and Fort Simpson, with hewn timbers joined with mortices, pegs, and possibly iron bolts, and a floor of whipsawn planks or dressed slabs installed on top.

Bastions

Direct Evidence:

Structure P, the southeast bastion, is shown in two Mallandaine sketches of December 1858 (figures 82, 83). It was a two-storey, straight-sided post on sill

bastion, with a three-course bark roof. Structure P, scaling from the palisade, seems to have been about 5.5 metres (18') tall to the top of the plate, and roughly 2.7 metres (9') from there to the peak of the roof, with a 1.8 metre (6') finial. Only one opening was shown in these sketches, a doorway in the west wall at approximately 2.7 to 4.9 metres (9' to 16') above ground level, about 1 metre (3' 3") in width. The pitch of the roof is shown as 1 in 1.

The sketch of "Fort Langley, N. View" (figure 5) done by Mallandaine in January of 1859 shows the other two bastions, Structures F and I. These were also straight-sided post on sill structures, conforming in general terms to the pattern of Structure P.

The McColl plan of Fort Langley (figure 4) gives sizes and locations of the three bastions. Structure F was 4 metres (13' 2") square, and was located from 35 to 39 metres (114' 10" to 128') north of Structure K and from 46.9 to 50.9 metres (153' 9" to 166' 11") west of Structure K, following the axes of that structure.

Structure I was 5 metres (16' 6") long on its north-south axis by 4 metres (13' 2") wide on its east-west axis. It was located 33.8 to 38.8 metres (111' to 127' 6") north and 1.8 to 5.8 metres (6' to 19' 2") east of Structure K.

Structure P was about 4 metres (13' 2") square, and located 128.7 to 132.7 metres (422' 3" to 435' 5") south and 4.3 to 8.3 metres (14' 1" to 27' 3") east of Structure K, following the axes of the latter building.

The best direct evidence for the construction of the bastions is found in the 1862 photograph of Structure F, the northwest bastion (figure 7). As the plan size of this building was about 4 metres square, it is possible to estimate other dimensions. Overall height was about 9.3 metres (30' 6") with 5.5 metres (18') from the bottom of the sills to the top of the plate, 2 metres (6'6") from the top of the plate to the peak of the roof, and 1.8 metres (6') for the finial. Three joist ends were equally spaced on the west wall at a height of 2.9 metres (9' 6") to 3.2 metres (10' 6"), indicating the presence and height of a second floor. Four openings were shown, three of them in the second storey. In the south wall were a doorway, on the extreme east side from second floor to plate, and a 0.5 metre (1' 6") square port about 0.3 metre (1') above the second storey joist level. Two small loopholes were present at the level of the top of the palisade on either side of the port. The west wall exhibited a similar arrangement on the second storey, with a central port of the same size and height, and two symmetrically arranged loopholes.

The first storey had one shuttered port, to the south end of the west wall, roughly 0.6 metres (2') square, at a height of some 1.6 to 2.2 metres (5' 4" to 7' 4") above the ground, and three loopholes at a lower level. There was also one loophole in the south wall.

Structure F was built of hewn timbers in post on sill style. The sills rested directly on the ground. There was no second-storey plate evident; the joists were simply set in tenons cut through the wall fill members. The roof was clearly of bark, probably cedar, with three batten boards fixing it in place. About fourteen timbers made up the wall fill between sill and plate in the south walls of widths between 0.3 metres (1') and 0.4 metres (1'3") or a little more.

The 1860 Alden watercolour view (figure 84) corresponds well with the photograph in its portrayal of Structure F. It confirms that the second storey port in the south wall was centred between the palisade and west wall of the bastion, about 0.8 to 1.3 metres (2' 7" to 4' 3") east of the west wall. It also agrees with the McColl plan that the palisade intersected the bastion roughly on its mid-line; although it does not show the door on the inside of the palisade.

The above sources agree in showing a roof pitch of about 4 in 5, and a roof overhang of 0.5 metres (1' 7") on each side.

Chronology

The bastions at Fort Langley comprised part of the 1840 reconstruction of the fort, and were clearly in place before 1858-1859, as seen in the contemporary iconographic sources. As an integral element of the defences of the post, an early construction date would seem likely. This is borne out by the journal of James Douglas. The first construction after the fire of April 1840 was a palisade enclosing an area of 100 feet by 70 feet, and by May 5, 1840, a bastion was finished, apparently the first building of the new fort.[24] It is certain that this structure would have served multiple functions such as housing or storage, and the anomalous size of Structure I compared to the other bastions could be a reflection of this diversified usage, and so indirectly hint at an early date of construction.

Steer et. al. hypothesized that the bastions were all in place in the "McColl" positions by 1848, based on their chronology of palisade development, so it is probable that the bastions were present in their known configuration well before the 1858 period.[25]

The bastions disappeared from Fort Langley at the same time as the palisade, sometime between 1862 and the Dally photograph of 1867-1868. As with the palisade, c.1864 is the anecdotal date given for this demolition.

Indirect Evidence

The available data for Structure F provide much of the comparative information for the other bastions. However, examination of bastions at other Western Department posts may clarify some details.

The simple construction of these buildings applied to their roof framing as well. John Hussey has surmised that in the Fort Vancouver bastions "the base of the ornament (finial) formed a centre block into which all the rafters were toed."[26]

The smaller bastions at western posts generally had two floors. The first phase (1827-1839) Fort Langley had "Bastions...having a lower and upper floor the latter of which is to be occupied by our artillery".[27] This pattern was also noted some years later at Fort Nisqually and in 1849 at Fort Rupert a bastion was being floored; at the latter post bastion floors were often noted.[28]

The bastion which survived at Fort Colvile into the 20th Century closely resembled those at Fort Langley (figures 85, 86). Of particular interest is the arrangement of ports and loopholes, with a central port in each of the "outside" walls on the second storey, and loopholes above.

Free movement between the galleries and second storeys of the bastions has been discussed in the section on the palisade. At the 1827-1839 Fort Langley, where the galleries were built after the bastions, there is a reference to "Cutting doors in the upper Storeys of the Bastions in order to get into them from the gallery".[29]

Some form of shuttering over the ports was present at Fort Victoria (figure 87) as well as on the extant bastion at Nanaimo. This practice was also followed at Fort Rupert, where finishing a bastion in 1849 involved "fixing the Doors and Shutters".[30] Some iron was also used in the construction of the bastions at that post, where the blacksmith made "Iron knees for Bastion" as well as "iron bands for securing the Bastions".[31] At Fort Simpson new doors were made for the upper storeys of the new bastions under construction in 1858.[32]

Conclusion

The bastions at Fort Langley were two storey, post on sill structures. The two smaller buildings, F and P, had one bay per side. Probably Structure I followed the same pattern, even on its longer sides. The bastions at Fort Rupert, which were 20 feet (6 metres) square, appear in photographs with only one bay per side. All three structures would have been constructed in the same way as Structure F. Roof framing probably followed the configuration suggested by Hussey. The presence of a floor on the first storey of Structure F is supported not only by the comparative material, but by the height of the first storey port and loopholes, as well as the second storey joists. The likely presence of two floors in all three structures would follow, those in Structure I being supported by four rather than three joists, owing to the greater length of the building. The floors themselves would be the 5 centimetre (2") roughsawn planks or deals common to utilitarion H.B.C. structures. The planks were laid in the case of Structure F (and probably I, given its longer axis) on a north-south alignment, transverse to the joists.

The roof peak of Structure I would have been taller than those of Structures F and P, granted its greater dimensions and similar roof pitch. This would also have meant an extra course of bark on the roof of the larger structure.

The structures' openings and access are less definite. The second storey ports in Structure F clearly were intended for cannon; they are at the appropriate height above the second storey joists. Granted the limited armament at Fort Langley (probably one nine-pounder and one swivel gun in each

bastion), a large number of gun ports were not required. The examples of the two visible sides of Structure F and the similar bastion at Fort Colvile (figures 85, 86) suggest one second storey port on each side. Those in the "outside" walls would have been centred, and those in the walls abutting the palisade offset to give a line of fire down the outside of the walls.

Two or three loopholes, as seen in Structure F and the Fort Colvile bastion, were probably cut on all sides of both floors. Some simple form of shuttering over the gunports would have been expected.

The first storey port in Structure F may have been intended for obervation, as it is far too high to have serve as a gunport. Given the presence of a gallery on the north, west and probably east sides of the fort, this type of port seems superfluous, and so the presence of similar openings in the other bastions should not be assumed.

Structures F and P definitely had second storey doorways, presumably to provide access to and from the galleries. In the case of Structure P, the McColl plan (figure 4) shows it located in such a way on the palisade that the only internal face long enough for a door is the west side, clearly shown in figure 82. This suggests that no first-storey access was provided in this building. The positioning of the second storey doorway points to the prior existence of a palisade with associated gallery extending to the west of this bastion. Such a palisade was confirmed by the archaeology performed at the site in 1979.[33] It seems likely that all the bastions had gallery access, and those at the north end of the fort, Structures F and I, presumably had two second storey doorways each. Ground floor doorways in these two structures are likely, but by no means certain, given the iconographic evidence.

Figures 6, 7, and 82 show no doors in the second storey doorways; perhaps unimpeded access to and from the defensive features was paramount. The comparative evidence from Fort Rupert and Fort Simpson supports the presence of doors on the second storeys of H.B.C. bastions. If first-storey doorways were present on Structure F and I, it would have been reasonable to have controlled them with doors. Regardless, the two floors would have been connected internally by a steep stairway, or "ladder", of simple pattern.

Role of the Defences

The first part of the fort rebuilt after the fire of April 1840 was defensive palisade and bastion(s). However, by the 1850s there was little requirement for this capability. The defences, with their lockable gates, still served a major role in controlling access to the interior of the fort. This was described by an 1858 visitor from California:

> At six o'clock in the morning the massive bolts and bars are unlocked from the entrance to the stockade which surrounds the buildings of the Hudson's Bay Company.[34]

A normal part of this spatial control was the employment of a watchman, responsible for minding the gate during the day as well as patrolling at night. Compton noted the practice at Fort Simpson:

> There was a watchman always at the gate to admit Indians, also one at night walking around in the gallery, which extended around the pickets, and who rang a bell at intervals.[35]

John Dunn described a similar arrangement at Fort McLoughlin, with a gallery around the fort with "a watchman continually kept on look out, and a one-pound swivel plaed over the gate: this protects the gate-way".[36]

J.R. Anderson also observed the practice when he was a boy at school in Fort Victoria:

> There was a watchman attached to the Fort, a Kanaka, whose duties were to lock and unlock the gates, to ring the bell for rising, for meals and for divine service on Sundays. He paraded the Fort during the night and at stated intervals would call out "All's well".[37]

Anderson described the duties of the watchman, as seen by him and his schoolmates on returning from an outing:

> Before being allowed to enter the Fort, the Kanaka watchman demanded our business, whence we had come and who we were; the small gate was then partly opened and after a careful scrutiny we were admitted.[38]

The gatekeeper or watchmen seem to have quite often been Hawaiians; this was noted at Fort Simpson as well as at Fort Victoria.[39]

Utimately, as with all other aspects, the gentlemen were responsible for the security of the post. Compton described the routine at Fort Simpson:

> At 9 p.m. all communication with the outer world ceased and the keys of the gates handed to the officer in charge after one of the other officers has seen that all gates were properly fastened.[40]

At Fort Stikine in the early 1840s the "Key of the Fort...was on a table between two Pistols" in the bedroom of the gentleman in charge.[41]

At Fort Langley Ovid Allard, although not an officer, apparently had some part in this process. Aurelia Manson described his role in her "Reminiscences".

> (Ovid Allard) had charge of the Indian shop, and the keys of the fort. Many a time I have heard him calling out the time for the people to go out, and of course all strangers would hurry out.[42]

Jason Allard remembered his father paying a "daily visit to Yale's quarters to return the keys of the store".[43] If Yale's daughter was right, this visit could have involved the keys to the fort gates as well. It would not have been impossible for a senior servant such as Allard to have been entrusted with this responsibility. After Allard left in 1852 it is probable that either the clerks or another senior servant assumed the task.

Yale himself apparently took some part in overseeing the security of his fort. Jason Allard, in his "Plan and References" (figure 3) said that "Mr. Yale was certainly a faithful lookout man for he was there (on the gallery) at all hours of the day".

The two north bastions, Structures F and I, were probably still usable as defensive elements, in conjunction with the north gallery, as late as 1858. If the only access to Structure P, the southeast bastion, was from a gallery which had disappeared prior to December 1858, this building would have been of marginal defensive use. If the hypothetical chronology of Steer et. al. is correct, and the final expansion of the palisade to the south was in c.1848, it may have been ten years since this was a viable bastion.[44]

The arms available for the defence of the fort were fairly basic "Articles in Use" in the inventory of 1848 included:

3 carronades 9 pounders

3 Swivels

11 Muskets and Bayonets

1 cwt. 6 lb shot

1 cwt. Grape shot[45]

The presence of three cannon and three swivel guns suggests that in 1848 each bastion contained one of each, as well as three or four muskets, a portion of the shot, and presumably some powder. Aurelia Manson remembered "five of the seven guns from the big cannon of the Fort" having been fired to celebrate the weddings of Bella and herself in 1857.[46] Charles Wilson, an officer with the British Boundary Commission at Fort Langley in October 1858, did not find the defences very impressive:

> ...a rough stockade, with a small bastion, mounting a very old 6 pounder, which I would rather anybody fired off but myself.[47]

Although this cannon did not quite correspond to those earlier noted on Company inventories, the marginal condition of the weapon is worth noting. At Fort Simpson the "Big Guns" were mounted on "Trucks"; no hint of configuration was given.[48] The height of the second floor gunport in figure 7, roughly 0.3 metre (1') to 0.8 metres (2'6") above the second floor, provides some information pertinent to the gross configuration of the trucks used at Fort Langley.

Besides the cannon, the main defensive furnishing of the bastions would have been "arm chests". These were present in the bastions at Fort Nisqually and Fort Simpson. At Fort Nisqually two "arm chests" were built in 1849 to furnish the two bastions, and at Fort Simpson in 1856 the "Arm Chests in Bastions" were painted, and more built in 1858.[49] These chests presumably would have held the muskets and ammunition required in the bastions. At Fort Simpson by 1856 the charges for the guns were apparently prefabricated; there was a reference to "making Cartridges for Big Guns and small arms".[50]

The bastions at Fort Langley may have been used for purposes other than defence; this would apply particularly to the southeast bastion, which by the late 1850s seems no longer to have been part of the other defensive features. At Fort Rupert a bastion was constructed with provisions made for "hoisting Cargo to the upper story (sic)".[51] At Fort Simpson the bastions were used for storing potatoes and housing a "Corn Mill".[52] This storage role would have been equally plausible at Fort Langley. A bastion also served as temporary housing at Fort Langley in 1840; the man who started the fire which destroyed the fort that spring had been sleeping in a bastion.[53]

Besides employees, H.B.C. bastions were sometimes used to house fowl. Jason Allard said that at Langley there was "a pigeon house on each of the four bastions of the fort".[54] One of the two bastions at Fort Nisqually was also "used as a dove-cote the other seemed to be empty".[55]

Bastions were also commonly used as places of incarceration. At Fort Victoria and Fort Simpson, a servant stealing blankets was put in irons and locked in the bastion on full rations.[56] At Fort Rupert two of the H.B.C. miners were punished for striking in 1850. They were told they would be in irons on bread and water for two years, with one in the "upper Bastion", the other in the lower.[57] In this case the gallery provided the exercise yard for the prisoners: "some days we got a walk on the Gallery and some days not".[58] The galleries could also be used for more pedestrian tasks, such as "beating the Bearskins", at Fort Simpson.[59] The primary function of the Fort Langley defences by 1858 was the control of business traffic, consistent with the mercantile emphasis of that year. By simply being there the palisade and bastions were capable of serving a defensive function, as well as any secondary roles, such as storage, accommodation, or airing furs.

However, even by 1858 the defences were viewed as something of an anachronism by the gold rush and colonial population. One year after the proclamation of the colony the New Westminister Times reported that:

> The Fort of Upper Langley is one of the most notable features, and recalls old times when such protection was deemed necessary.[60]

Conclusion

Fort Langley was notable among fur trade posts for its diversification, and the range of activities undertaken. However, it must be remembered that most of these activities also occurred at the other posts in the district. The diversification at Fort Langley was due to the wide range of economic possibilities presented by the local environment, most of which were also available elsewhere. The Hudson's Bay Company had extensive fisheries on the Columbia and San Juan Island, as well as on the Fraser. Farming on a large scale was present at many locations, primarily around Fort Vancouver, Cowlitz Farm, Fort Nisqually and San Juan Island is what is now the State of Washington, and all across the south end of Vancouver Island.

It is important to recognize that Fort Langley was simply one small component of a huge mercantile organization. Ultimately, its existence was dependant on the profit produced each year by the post, and this economic fact determined all of the activities described above. The decisions affecting the fate of the network of posts in the Western Department were made by the Board of Management in Victoria, and by the London management of the Company. The enterprises and the very existance of Fort Langley were determined in response to the overall commercial needs of the H.B.C.

The significance of Fort Langley was largely as an example of the many aspects of the Hudson's Bay Company operations on the Pacific Slope. The activities of the Company at Fort Langley represent a microcosm of the pre-colonial European economic interests on the Pacific Slope. It was due to these interests that permanent British mercantile bases, such as Fort Langley, were maintained, in turn keeping the territory under British control, and allowing the eventual extension of Canada to the Pacific coast.

Appendix A[1]

Population. The Indian population in this part of the world is very great, and were it not for the continual variance among themselves, especially the Warlike Tribes, would have been extremely dangerous to a handful of whites. Beginning on the South side of De Fucas Straits - rounding the Sound and following the East Shore to the mouth of this river; then ascending it to the point where my return made on this head from Thompson's River in 1826/27 in that direction discontinued: from Simpson's Falls keeping the N.W. Bank again to the Sea - Coasting it to about Lat. 50 and then crossing over to the Island and following that shore until we come again to the Sts. the following general Abstract is the attempt we have made to arrive at something near the number of men inhabiting that space. vizt. (Editor's note: the format of the following table has been changed.)

Tribes	No. Men	Names of Chiefs
Halams W. of Sound		
1st division		
Tlalams	200	Stukeenum
Toannis	50	Soukeenum
Squams	60	Awnastum
	310	
E. Shore South of Frasers River		
2nd division		
Nisquallies	40	
Pyullaps	40	
Sinanamus	50	
Sinnohooms	100	Waskalatcha
Skewhams	50	are inland
Scatchads	90	Neetulum
Soquimmy	50	inland
Smallons	40	inland
Sumamy	50	
Whullumy	50	
Ossaaks	40	Interior
Noheums	30	
Nahews	20	
Summcamus	40	
	640	

1. Archibald McDonald, "Report on Fort Langley 1830", cited in Mary K. Cullen, The History of Fort Langley 1827-96, Occasional Papers in Archaeology and History #20, Ottawa, Parks Canada, 1979, pp.83-85.

S.E. bank of river to Falls & from thence both sides to Forks of Thom. R.

3rd division		
Quaitlims	60	Nicameus
Smaise	40	
Tchulwyhooks	60	Koomilus
Pellaults	50	Tchoops
Skam & Swatch	100	Tamulston
Honillaque	90	
Kakumlatch	80	
Whuaquum	70	Kemwoon
Hukesmumns	150	
Teitton	200	Sopitchin
Natchustons	160	
Kullulluctons	170	
Asnons	130	
Harvanos	70	
Specum	110	
Yalluachs	70	
Icquillus	200	
Skochuk	130	
Whee y kum	240	
	2180	

N.W. bank from Falls to Coast

260

E. shore N. of Fraser's R.

5th division		
Hoomus	90	
Shu-Challs	50	
Squaltes	60	
(Interior)		mix. with the above
Tloohooses	40	
Nonowuss	30	
	270	

Vancouver's Island

6th division		
Tchulhutts	50	Squages &
Nanemoos	100	Pinuns
Cowaitchins	200	Josua
Sanutch	60	Tcheenuk
Tchanmus	40	
Soaks	50	
	500	

4160 Indians tho' a great number would not be considered incredible were the number but better proportioned and it did occur to myself as rather curious that the 50 or 60 miles between the Falls and Forks of Thompson's River (and the Fraser) should accomodate nearly 1/3 of the whole. It is however the fact proved by the repeated examination of the Indians themselves and in particular the last mentioned chief of the 3rd division, who is mostly a resident here & whose acct. of the lower Indians we knew to be correct. - When Gov. Simpson & myself came down 2 years ago & when our speed gave them but little time to shew themselves, the number appeared uncommon, & the nature of the river & manner of living account for it. There is a perceptible difference between them and those of the Coast, & altho' they are perhaps fully as fond of property & of pilfering they have not I believe the same savage thirst for taking mans life. The Summcamus are the only Indians that come near us from the 2nd division; but the Skins of the four last Tribes came thro' the medium of Traders. - of those of the 5th the first Tribe only, and that in the Salmon Season but are no hunters. - Beyond the Nonuwuss on one side the Channel & the Tchulhutts on the other are the formidable Yewkaltas that may be about 300 men, but armed and equipped in a superior style. All but the first and last Tribes on the Island came this way in the summer season. The Tlalums we never see.

Appendix B

Four engagement contracts of servants at Fort Langley.

1. Etienne Pepin; French form contract, n.d.[1]
2. William Cromarty; English holographic contract, 1850; note gratuity.[2]
3. Kea; French form contract, 1852.[3]
4. Ohia; English form contract, 1854.[4]

1. Fort Langley National Historic Park, LL 71.8.3.
2. Provincial Archives of British Columbia, Add. Mss 105, J.M. Yale, folio 3, pp.14-15.
3. Fort Langley National Historic Park, LL 71.3.2.
4. ibid., LL 71.8.3.

 Pardevant les Temoins Soussignes a

Fort Langley

Fut présent

Etienne Pepin

Lequel s'est volontairement engagé et s'engage par ces présentes, à l'Honorable Compagnie et Société de la Baie d'Hudson

à ce présent, contractant, stipulant, et acceptant pour icelle Compagnie de la Baie d'Hudson, pour à leur première requisition partir de

en qualité de Voyageur et Bouti

dans un des canots, barges, et batteaux de la dite Compagnie de la Baie d'Hudson, pour voyager et servir dans les Pays Sauvages tant en montant qu'en descendant à Montréal, et de demeurer dans les Pays Sauvages

pendant

ans en hivernement. Que le dit Etienne Pepin

s'oblige par cet engagement de voyager, monter et hiverner à tels endroits ou Poste qui lui seront indiqués ou ordonnés par le représentant ou ~~représent-~~ ants de la dite Compagnie et Société de la Baie d'Hudson

Que le dit s'oblige aussi de travailler dans les canots, barges, et batteaux, et aider à porter les Marchandises, Pièces, Balots, Pacquets, et tous autres effets, la charge et agrès des dits canots et les canots mêmes, dans tous les lieux qui lui seront indiqués. Et dans les Terres Sauvages ou Postes d'hivernement, il travaillera à faire tout ce que lui sera ordonné, et ce que doit faire un bon et fidèle Engagé, suivant la coutume des Pays Sauvages.

Et le dit s'oblige par ces présentes d'avoir bien et duement soin sous sa responsabilité personnelle pendant la route, et en tous temps et en tous lieux, de toutes les Marchandises, Vivres, Pelletries, Ustensiles et effets, de toutes les choses nécessaires pour le voyage, servir, obéir, et exécuter fidèlement tout ce que la dite Compagnie et Société de la Baie d'Hudson, et celles auxquelles ils pourroient transporter le présent engagement lui commanderont de licite et honnête ; faire leur profit, éviter leurs dommages, les avertir s'il vient à sa connoissance qu'il leur en soit fait, et généralement faire tout ce qu'un bon et fidèle serviteur et Engagé doit et est obligé de faire, sans pouvoir sous aucun prétexte quelconque, faire aucun traite ou commerce particulier avec les Sauvages ou aucune personne ou personnes quelconques, ni de s'absenter ni quitter le dit service sous les

peines portés par les loix ou ordonnances et de la perte de ses gages. Et il est expressément convenu entre les dites parties par ces présentes que si le dit Engagé contrevenoit ou manquoit aux devoirs et obligations auxquelles il est tenu par ces présentes, ou aucun d'eux, il sera loisible à la susdite Compagnie et Société de la Baie d'Hudson, ou celui ou ceux qui les représenteront de congédier immédiatement le Engagé, et de retenir comme forfait les gages qui lui auroient été alors dues s'il eut fait son devoir et rempli ses obligations.

Cet engagement est ainsi fait pour et à raison de la somme de £17 Stirl livres ou chelins, ancien cours de la Province de Québec, égal à livres chelins deniers Sterling, pour la première année

Et il est de plus convenu que les dits gages, et les devoirs et services de l'Engagé doivent commencer depuis le et doivent être continués jusqu'au temps de son embarquement ou départ de York Factory pour s'en retourner à Montréal. Et que le dit Engagé soit tenu comme dit est de travailler et de servir en descendant, jusqu'à son arrivée à Montréal sans qu'il aie droit en conséquence d'exiger ou de reclamer aucune récompense ou gages, en sus et au de la de la somme qui pourra lui être due au moment de son départ de York Factory pour se rendre à Montréal, ou cet engagement se trouvera terminé et accomplis.

Le dit Engagé reconnoit avoir reçu d'avance sur ses dits gages la somme de

Fait et passé à susdit l'an mil huit cent vingt le jour du mois de et ont signé à l'exception du dit Engagé, qui ayant declaré ne le sçavoir faire de ce enquis a fait sa marque ordinaire, après lecture faite.

Fait et passé en présence des Témoins Soussignés.

Etienne his mark Pepin

Lord gave notice of his intention not to renew the Engage

An Agreement made this 12th day of February 185
Between William Cromarty on the one part
and James McGale acting for the Hudson
Bay Company on the other part as follows

The said William Cromarty contra
and agrees to enter into the service of the sa
Company in the capacity of Cooper for the
~~[illegible]~~ years, to be computed from the
of date hereof and faithfully to devote the
whole of his time and labour in their serv
and for their sole benefit and that he will a
his duty as such and perform all such
work and service by day or by night for the
said Company as he shall be required to a
and obey all orders which he shall receive
from his officers for the time being, and tha
he will with courage and fidelity defend the
property of the said Company, and will no
absent himself from the Service nor engage
or be concerned in any trade or employmen
whatsoever except for the benefit of the sa
Company and according to their orders, and
he generally agrees to abide by all the term
and conditions set forth and contained in th
printed forms of agreements, signed by himse
and other persons entering the Company's serv

The terms of this agreement are that the
said William Cromarty shall receive from
the said Company in consideration of his
due and faithful services, but not otherwise
after the rate of ~~Forty Pounds~~ Forty Five Pounds Sterling pe
annum to commence on the 1st June 1850

In witness whereof the said Parti
have

have hereunto set their hands at Fort Langley date aforesaid

William Bromarty

James M Yale

Note The said William Bromarty shall also receive Five pounds, over and above the sum mentioned in the above articles, by way of gratuity or commission on sales made-

James Douglas-

Pardevant les Tenus ci dessignés Fut Present

Rea

Lequel s'est volontairement engagé et s'engage par ces presentes à L'Honorable Compagnie et Société de la Baie d'Hudson par James Douglas

dument constituée de la dite Honorable Compagnie et Société de la Baie d'Hudson à ce present, stipulant et acceptant pour icelle Compagnie de la Baie d'Hudson, pour aller, première requisition travailler en qualité de Milieu dans un des Canots, Barges ou Bateaux de la dite Compagnie de la Baie d'Hudson, pour faire voyage dans les Pays Sauvages tant qu'en descendant à Montréal et de demeurer dans les Pays Sauvages pendant ans en hivernement, Que le dit s'oblige par cet engagement de voyager, monter, et hiverner à tels endroits ou poste que lui seront indiqués ou ordonnés par le représentant ou représentants de la dite Compagnie et Société de la Baie d'Hudson.

Que le dit s'oblige aussi de travailler dans les canots barges, et bateaux et aider à porter les Marchandises, Pièces, Balots, Paquets et tous autres effets, la charge et agrès des dits canots et les canots mêmes dans tous les lieux qui lui seront indiqués Et dans les Terres Sauvages ou Postes d'hivernement, et travaillera à faire tout ce que lui sera ordonné et ce que doit faire un bon et fidèle engagé suivant la coutume des Pays Sauvages. Et le dit s'oblige par ces presentes, d'avoir bien et dûment soin sous la responsabilité personelle pendant la route et en tous temps et en tous lieux, de toutes les Marchandises, Vivres, Pelleteries, Ustensiles et Effets et de toutes les choses necessaires pour le voyage, servir, obéir, et exécuter fidèlement tout ce que la dite Compagnie et Société de la Baie d'Hudson, ou toute autre personne ou personnes représentant la dite Compagnie et Société de la Baie d'Hudson, à celles auxquelles elles pourroient transporter le présent Engagement lui commanderont de faire et honnêtement faire leur profit, éviter leurs dommages, les avertir s'il venoit à sa connaissance qu'il leur en soit fait, et généralement faire tout ce qu'un bon et fidèle serviteur et Engagé doit et est obligé de faire sans pouvoir sous aucune prétexte quelconque faire aucun trafic ou commerce particulier avec les Sauvages ou aucune personne ou personnes quelconque ni de s'absenter ni quitter le dit service, sous les peines portées par les loix ou Ordonnances de la Province du Bas Canada, et de la perte de ses gages — Et il est expressement convenu entre les dites parties par ces presentes que si le dit engagé contrevenait ou manquait aux devoirs et obligations auxquelles il est tenu par ces presentes ou aucun d'eux il sera loisible à la susdite Compagnie et Société de la Baie d'Hudson ou celui ou ceux qui les représenteront de congédier immédiatement le ou engagé et de retenir comme forfait les gages qui lui auront été alors dus s'il ont fait son devoir et remplis ses obligations

Cet engagement est ainsi fait pour et moyennant la somme de - Dix sept Livres Sterling

Que la dite Compagnie et Société de la Baie d'Hudson promet payer ainsi que le dit Sieur Agent s'y oblige, au dit Engagé un mois après son retour à Montréal, ou le dit Engagé après qu'il aura livré toutes les Marchandises, Pelleteries, et Effets commis à ses soins en bon ordre sera libre et le présent engagement terminé, mais il est bien entendu et expressément convenu entre les dites parties, que les années pour lesquelles ce marché est fait ne sera accomplie que dans l'automne de la ou dernière année d'hivernement, et que le dit Engagé ne pourra pas demander ou avoir aucune augmentation des dits gages pour le surplus des années ci dite sommes étant donné pour compléter le voyage tant Hivernant comme dit est et descendant qui ne peut être accompli que dans l'Automne de 1852 -

Car ainsi, Des promettant, Des obligeant, Des renoncant, &c.

Fait et passé à Fort Langley - l'an mil huit cent cinquante le 22me jour du mois de Juillet - midi, et ont signé à l'exception du dit Engagé qui ayant déclaré ne le savoir faire de ce requis a fait sa marque ordinaire, après lecture faite.

Rea his X mark

James Douglas

An Agreement,

made this [illegible] day of [illegible]

in the Year of Our Lord One Thousand Eight Hundred and fifty [illegible]

BETWEEN Chia

in the Parish of in the County of

of the one Part, and The Governor and Company of Adventurers of England, Trading into Hudsons Bay, by James Murray [illegible] their Agent, of the other Part, as follows.—

The said Chia hereby engages to enter into the Service & Employment of the said Company in North America in the capacity of Cooper and that he will embark when thereunto required on board such Ship or Vessel, as shall be appointed by or on behalf of the said Company and proceed to and for the Term of two years to be computed from the said Embarkation, and for such further time as hereinafter mentioned and faithfully serve the said Company as their hired Servant in the capacity of Cooper and devote the whole of his time and labour in their Service and for their sole benefit, and that he will do his duty as such and perform all such work and service by day or by night for the said Company as he shall be required to do and obey all the orders which he shall receive from the Governors of the Company in North America or other their Officers or Agents for the time being. And that he will with courage and fidelity in his said station in the said service defend the property of the said Company and their Factories and Territories and will not absent himself from the said Service nor engage or be concerned in any Trade or Employment whatsoever except for the benefit of the said Company and according to their Orders. And that all Goods obtained by Barter with the Indians or otherwise which shall come to the hands or possession of the said Chia shall be held by him for the said Company only, and shall be duly delivered up to the said Governors or other Officers at their Factory or Trading post without any waste, spoil, or injury thereto. And in case of any wilful neglect or default herein he shall make good to the said Company all such loss or damage as they shall sustain thereby to be deducted out of his Wages. And that the said Chia will faithfully obey all laws, orders, and regulations, established or made by the said Company for the good government of their Settlements and Territories — And at all times during the residence of the said Chia in North America he will defend the rights and privileges of the said Company and aid and support their Officers and Agents to the utmost of his power — And the said Chia further engages and agrees that in case he shall omit to give notice to the Governor or Officers of the said Company in North America one year or upwards before the expiration of the said Term of two Years of his intention to quit their service and return to Europe, then that he hereby promises and engages to remain one year longer and also until the next Ship in the Service of the said Company shall sail from thence to Europe as their hired Servant in North America upon the like terms as are contained in this Contract. And the said Chia also engages and agrees that in case the said Company shall not have any Ship which will sail from North America for Europe immediately after the expiration of the said term of two Years or of such further term as herein before mentioned then he hereby promises and engages to remain in the Service as a hired Servant of the said Company in North America until the next Ship of the said Company or some Ship provided by them shall sail from thence to Europe upon the like terms as are contained in this Contract, provided always that the said Chia further agrees to keep watch, ward and perform such other work in the navigation of the Ship of the said Company in which he shall be embarked on the outward and homeward voyages as he shall be required to perform by the Commanding Officer of the said Vessels.

And the said James Murray [illegible] on behalf of the said Company hereby engages that upon condition of the due and faithful Service of the said Chia as aforesaid but not otherwise the said Chia shall receive from the said Company after the rate of

[illegible] per annum also an allowance of [illegible] per diem for his board per annum to commence on the day of his embarkation for as aforesaid and up to the day of his embarkation from thence for Europe in one of the Ships of the said Company's Service or in any Ship provided by them.

Provided always, and it is hereby expressly agreed between the said parties hereto, that it shall be lawful for the Governor or Governors or other Officers of the said Company in North America at any time during the said term of two Years or such additional term as aforesaid to dismiss the said Chia from their Service and direct his return from thence to Europe in one of the Ships in their employment or in some Ship provided by them and in such case his wages are to cease from the day of his embarkation for Europe — And further that in case the said Chia shall at any time during this Contract desert the Service of the said Company or otherwise neglect or refuse duly to discharge his duty as such hired Servant as aforesaid then he shall forfeit and lose all his wages for the recovery whereof there shall be no relief either in Law or in Equity —

In Witness whereof the said parties have hereunto set their hands.

Signed in the presence of [illegible]

Chia

(1000 June 1849)

Appendix C

"Chanson du Voyageur"
a Canadian Boat Song[1]

1.

A la claire fontaine
M'en allant promener;
J'ai trouve l'eau si belle,
Que Je m'y suis baigne.-
Il y a longtemps que Je t'aime
Jamais Je me t'oublierai.-

2.

J'ai trouve l'eau si belle
Que Je m'y suis baigne;
Assis au pied d'un chene;
Je me suis repose.-
Il y a long temps &c.

3.

(No. 2 without the Chorus)
Sur la plus haute branche,
J'entends le rosignol chanter;
Il y a long temps que Je t'aime
Jamais Je me t'oublierai.-
chante, Rosignol chanter
Lorsque J'ai le coeur gai;
Il y a longtemps &c.

4.

(No. 3 repeated) without "Il y a" &c.
Tu as le coeur a rire!
Moi Je l'ai, a pleurer;
J'ai perdu ma Maitresse,
Je ne pourrai chanter;
Il y a longtemps &c.-

5.

J'ai perdu ma Maitresse
Je ne pourrai chanter;
J'ai pourtant rien fait,
Que pourrai Je l'offender;
Il y a longtemps &c.-

1. Public Archives of Canada, MG 24/F71, Vol. 16, Sir Henry J. Warre Papers, pp.1909-1911.

6.

J'ai pourtant rien fait,
Que pourrai Je l'offender
Q'un seul bouton de Rose
Que Je lui refusai!
Il y a &c.-

(6)

J'ai perdu ma Maitresse
Je ne pourrai chanter,
Tu as le coeur a rire!
Moi! Je l'ai, a pleurer!-
Je voudrais que la Rose
Fut encore au Rosier
Il y a longtemps que Je t'aime
Jamais Je me t'oublierai.
Tu as le coeur a rire,
Moi! Je l'ai a pleurer!
Il y a longtemps que Je t'aime
Jamais Je ne t'oublierai.