

NOTES AND COMMENTS - NOUVELLES BRÈVES

THE IRON CHINK

by Duncan Stacey

Butchering machines revolutionized the salmon-canning industry on the Pacific Coast of North America in the first decade of the twentieth century. Unlike other machinery in the salmon cannery, these machines were not copies or modifications of equipment used in the vegetable- and meat-canning industries of eastern North America and Europe; they were, in fact, the only machines designed specifically for the salmon cannery.¹

Before 1900 all butchering of salmon was done by Chinese and Indian contract labour. Butchering gangs were composed of about thirty men, each of whom processed about 1,500 to 2,000 fish (by removing the heads, tails, guts, and fins) in a ten-hour day.² Before 1901 these men were paid a wage which averaged from a dollar per day to thirty-five dollars per month.³ The major problem with this manual butchering process was that when long working hours were demanded, and they often were, no consistent quality or speed of butchering was possible. As the butcher tired, more and more of each fish was wasted due to deeper cuts and production per man declined. Long hours slowed down the butcher's speed and the quality of the work he did.

Waste of salmon was not a major concern in the early years of the industry because of the abundance of the salmon resource. Because butchering was the first process on the canning line, however, a decline in the speed of the work was a problem as it slowed down the entire productive capacity. By 1900 many machines had been introduced to other parts of the canning line as aides to the workers there. The soldering machines, steam retorts (cookers), conveyors, gang knives, and filling machines had made the rest of the line too efficient; hand butchers could not keep up with it and so created a bottleneck in the processing.⁴



Fig. 1. Manual butchering at Imperial Cannery, Steveston, on the Fraser River, ca. 1915. (Photo: Provincial Archives of British Columbia, neg. no. D-5300.)

With the introduction of prototype butchering machines about 1900 this sector of the canning line could produce faster and more cheaply. These machines got rid of the butchering bottleneck and enabled the entire canning process to speed up. This innovation and the introduction of the sanitary or solderless can system in 1912 led to the establishment of the modern high-speed canning line.⁵ Many different designs of butchering machines were developed, but the Smith butchering machine, commonly known as the "Iron Chink" (a name still used today in trade circles, as is the term "Chinkman" for the operator of an Iron Chink⁶) because it replaced Chinese butchering gangs, became the best known and to this day remains the only butchering machine design in use.

The Iron Chink was invented by E.A. Smith of Seattle in 1903 and was patented in 1905. Most secondary sources credit Smith with mechanical brilliance because of his invention, but these accolades would probably not stand up under challenge. A Swedish patent was granted for a similar device in 1899 and in 1901 two other designs were patented in San Francisco. Letson and Burpee, a Vancouver, British Columbia, machinery producer, patented the

first west coast prototype in 1900 and another in 1902.⁷ In 1903 another Lower Mainland machinery firm, the Schaaque Machine Works of New Westminster, produced the Kellington fish-cleaning machine which was used in the British Columbia Packers' Cleeve Cannery on the Fraser in the same year.⁸ Three more of these machines were added to other B.C. Packers' canneries in 1905.⁹ This all happened before the introduction of the Iron Chink to the Fraser River in 1906. Not only the time sequence but also the place where these inventions were developed cast doubt on Smith's originality. Letson and Burpee developed its machine at Burpee and Letson Pacific American Fisheries in Fairhaven, Washington, the same area where Smith started work on his Iron Chink in 1903. Finally, the fact that Smith Associates hired a lawyer, Francis W.H. Clay, to investigate all possible infringements on his patent by Letson and Burpee, Kellington, and all others holding patents on butchering machines,¹⁰ leads one to believe that Fraser River canning machinery producers played a far greater role in the development of the butchering machine than previously supposed.

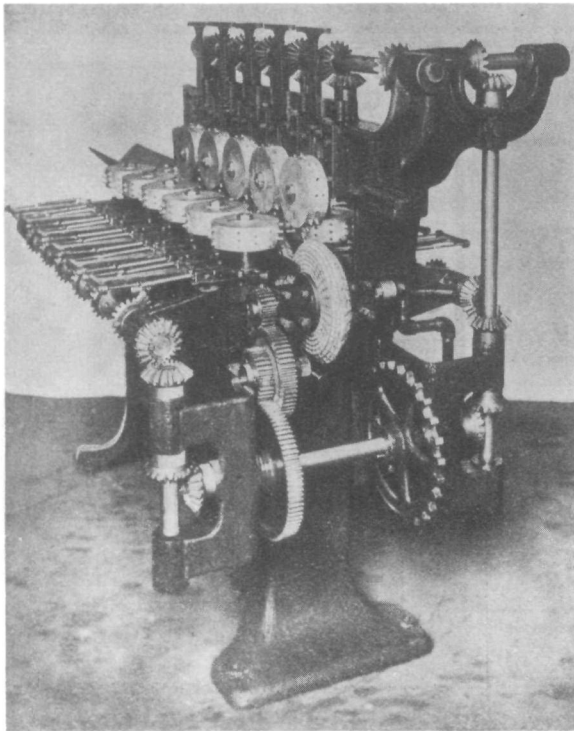


Fig. 2. Early fish-cleaning machine produced by the B.C. firm of Letson and Burpee. Note the Washington address to assist the company in entering the lucrative Alaska trade. From *Pacific Fisherman* 1, no. 5, p.20. (Photo: Provincial Museum of British Columbia, uncatalogued.)

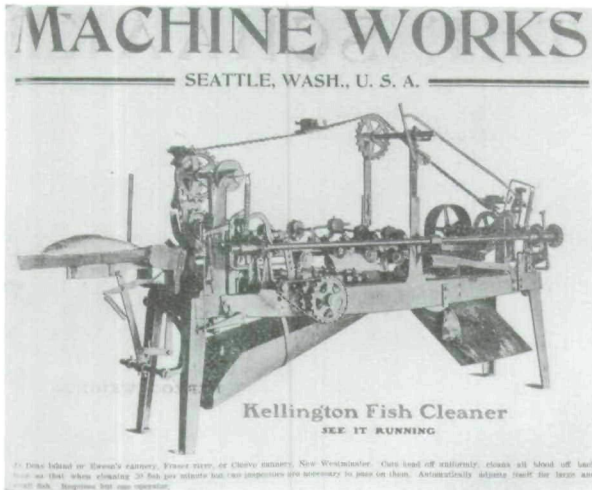


Fig. 3. Early fish-cleaning machine produced on the Fraser River by the Schaaque Machine Works of New Westminster, B.C. From Pacific Fisherman 6, no. 10, p.22. (Photo: British Columbia Provincial Museum, uncatalogued.)

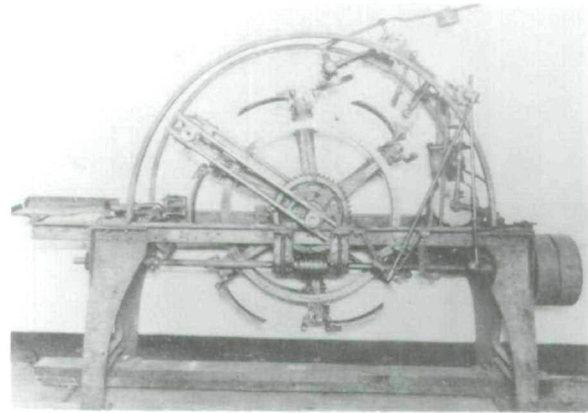


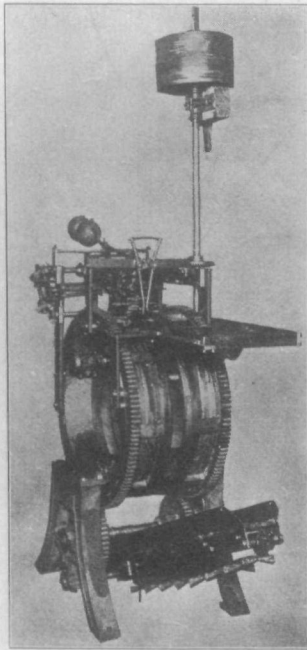
Fig. 4. One of the earliest Iron Chinks used on the Fraser River. From Pacific Fisherman Annual Edition for 1906, p.46. (Photo: British Columbia Provincial Museum, uncatalogued.)

The surge of butchering machine innovation between 1901 and 1906 was a response to two problems facing the Fraser River salmon-canning industry — overcapitalization and labour shortages.¹¹ In 1901 forty-nine canneries operated on the river; this was also the year of one of the largest salmon runs in history. As a result of these two factors there was extensive overproduction, a market glut, and a rapid decline in the price of canned salmon. The canneries were overcapitalized not in machinery but in the field of operating capital and fixed capital such as buildings. Mechanized butchering could decrease operating capital in the canneries by decreasing butchering costs and by increasing production per canning line or lines as one butchering machine could supply more than one canning line. Butchering machines occupied far less cannery floor space than that required by butchering gangs and so some canneries could be closed down and their machinery centralized in the remaining canneries. All this was done by 1906. B.C. Packers, formed in 1902, closed down fourteen of its canneries and moved the equipment into its fifteen remaining plants.¹²

After the peak run of 1901 and the ensuing centralization of plant and machinery in direct response to overcapitalization, the other recurring problem,

Triumph of the Iron Chink

Pacific Coast Cannerymen unanimously give their high endorsement to this wonderful machine which has completely revolutionized the salmon canning industry.



THE IRON CHINK
1908 MODEL

Fig. 5. The 1908 model of the Iron Chink. By 1908 the Chink was vertical rather than horizontal as the earliest models had been. From Pacific Fisherman, 1908 [reference incomplete]. (Photo: British Columbia Provincial Museum, uncatalogued.)

labour shortages, severely affected the innovation in butchering machines. This labour shortage can be traced to effective head taxes levied to keep Chinese labour out of the country. During the 1901 salmon season this head tax had been \$100 per person, but by the 1904 season it had risen to \$500. By 1901 cannery work was almost exclusively done by Chinese contract workers at wage rates between \$35 and \$50 per month, but with the raising of the Chinese head tax in 1904, the local Chinese contractors formed a combination to corner the labour market and increase wages.¹³ At first this bid failed on the Fraser as a Chinese contractor named Lee Coy broke ranks with the others and provided all the B.C. Packers' canneries on the river with his own contract workers.¹⁴ By 1905, however, the first peak season after 1901, Chinese labour for the canneries was scarce. Chinese contractors were hiring Japanese and other labour along with their Chinese in order to make up cannery gangs. Even by supplementing their gangs this way shortages were so bad that not enough help could be found to process all the fish.¹⁵ Not only was the supply of labour short, it was distinctly inferior in quality.¹⁶ This reinforced the canners' desire to use butchering machines as unskilled butchers slowed down the line and wasted fish. With the Iron Chink the canner needed only one skilled operator and one or two unskilled assistants rather than thirty trained butchers to perform the same task.

In 1906, therefore, three Iron Chinks were installed in Fraser River canneries.¹⁷ It could be that more were not installed because their usefulness was most apparent during the big runs of 1908 and 1909 when the canneries ran night and day and the men who handled the fish got tired and worn out with resulting careless prosecution of their work. Another reason was that before 1907 the Iron Chink was unable to clean the entire fish automatically. Earlier machines, such as the Letson and Burpee design, only gutted and cleaned the fish after the head, tail, and fins were removed. Also, by 1906 cannery workers' wages had risen from thirty-five dollars per month in 1901 and forty to forty-eight dollars per month in 1905 to sixty-five dollars.¹⁸

Apart from providing a faster and cheaper way to butcher fish, the Iron Chink eased the pressure of labour shortages for the canners. It also increased the profit per fish by decreasing the waste and gave a consistent quality of butchering previously unattainable under the manual butchering system. "Under the old method of hand cleaning much of the fish which was good was sliced off when the fins were removed. When hundreds of thousands of salmon are being cleaned even the smallest amount of waste is quite an item of loss."¹⁹ The saving of fish by the Iron Chink was estimated at about half a fish to the case; for every twenty-four cases mechanically cleaned an extra case was produced as compared to manual cleaning.²⁰

1906-1907-1908- **1909** -1910-1911-1912

**THE BIG YEAR
THE BIG OPPORTUNITY
ARE YOU PREPARED?**

CHINESE LABOR WILL BE SCARCE
CONTRACT PRICES WILL BE RAISED

Every cannery in the Sockeye district will operate. The far-sighted packers are preparing now. Are you one of them? Don't you know Chinese labor will be scarce and that the Chinese contractor has already advanced his price? Protect yourself by installing an "Iron Chink" and make him give you a labor saving allowance. He is now allowing enough per case to pay from 10 to 20 per cent per annum on the cost of the machine, depending on the locality and the number of cases to be packed. That is big interest on the investment, not to mention the saving of the cost of the "Iron Chink" in the fish.

THE

"Iron Chink"

IS YOUR ONLY RELIEF

The run may last only 12 or 15 days and by using an "Iron Chink" you can pack your full retort capacity. Get your cans full in the shortest possible time, and close down and save expense. Don't wait until the season is over and then figure that you could have packed as many cases as your neighbor, if you, too, had had an "Iron Chink,"--it will then be too late.

You have only been practicing during the last three years, but NOW is your opportunity to make a clean-up.

Are you going to neglect it?

Forget the cost price of the "Iron Chink" and figure results. We have doubled our output capacity but from present indications we will have to work overtime to supply the demand.

If you wish an early delivery, you must order now.

Smith Cannery Machines Company
SEATTLE, U. S. A.

Fig. 6. A 1908 advertisement for the Iron Chink. From *Pacific Fisherman* 6, no. 10, p. 22. (Photo: British Columbia Provincial Museum, uncatalogued.)

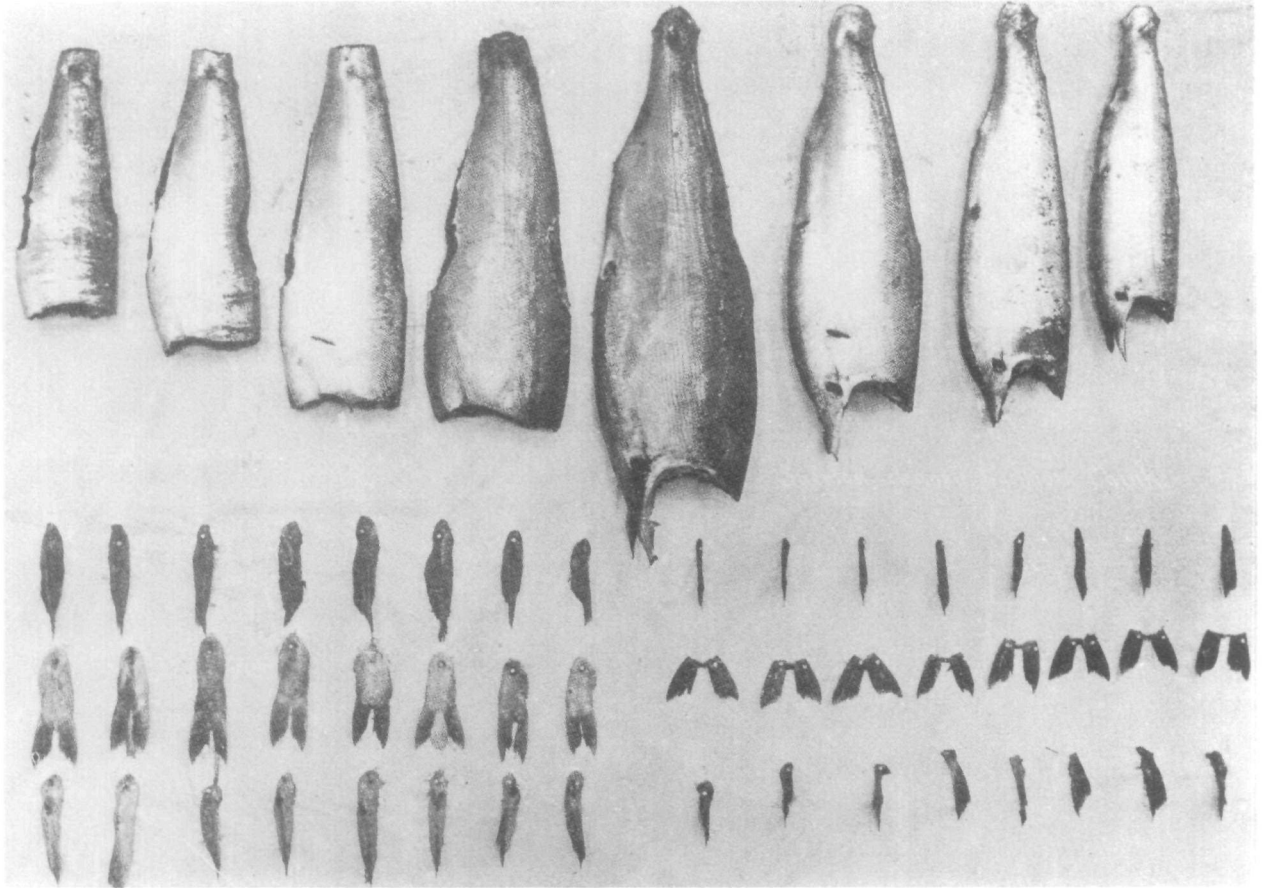


Fig. 7. A comparison of the manual cleaning process (on the left) vs. the Iron Chink (on the right). The smaller amount of wastage produced by mechanized butchering became a more important consideration as salmon stocks decreased. From *Pacific Fisherman*, Annual Edition for 1906, p. 47. (Photo: British Columbia Provincial Museum, uncatalogued.)

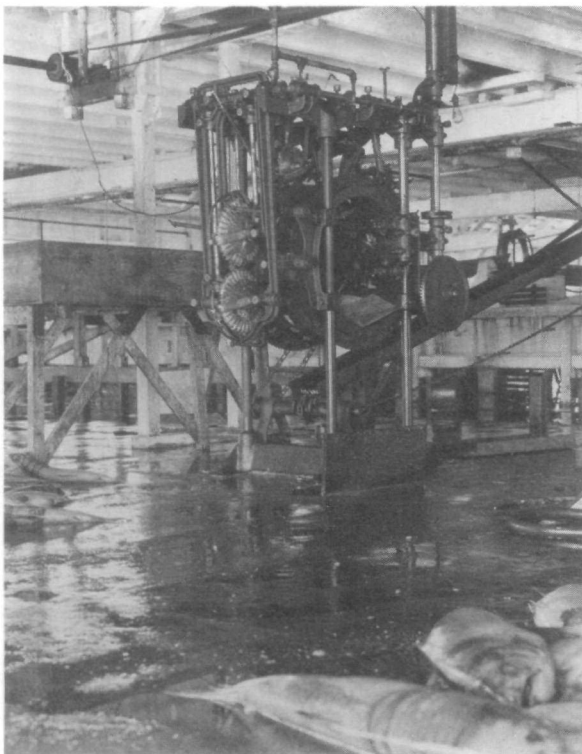


Fig. 8. Iron Chink at Imperial Cannery, Steveston, B.C., ca. 1915. (Photo: Provincial Archives of British Columbia, neg. no. E-5034.)

In summary, the Iron Chink was by no means the first butchering machine nor was it the only good one. Primary evidence suggests that Fraser River entrepreneurs and machinists played a far greater role than is generally recognized in the development of the only major piece of salmon-canning equipment made specifically for the West Coast. Inventions and innovations of butchering machines were in direct response to problems in the turn-of-the-century salmon fishery, specifically overcapitalization and the scarce supply of skilled labour.

NOTES

1. The same cannot be said for the salmon fishery which has numerous West Coast innovations in vessel and gear design such as Fraser River and Rivers Inlet skiffs, Columbia River boats, net drums, and puretic blocks to name a few.
2. Vancouver Province, 25 July 1906.
3. Canada, Labour Gazette, 1 (1900-1901), p. 353.
4. Duncan Stacey, "Technological Change in the Fraser River Salmon Canning Industry, 1871-1912" (M.A. thesis, University of British Columbia, 1977), chap. 1.
5. *Ibid.*, p. 6.
6. Many fishery (and logging) artifacts have trade names with racial or national overtones. Airfilled fishing bouys are called "scotchmen" and a fish-skinning machine is called a "klootchskinner" after the native hand labor it replaced.
7. "Fish Cleaning Machines, References for Smith Investigation, November 25, 1905," Sheils Papers, Western Washington State College Geography Archives, Bellingham, Wash.
8. Pacific Fisherman, Annual Edition for 1903, p. 52.
9. Pacific Fisherman 3 (June 1905), p. 23.
10. "Fish Cleaning Machines, References for Smith Investigation, November 25, 1905," Sheils Papers.
11. Stacey, "Technological Change," chap. 4.
12. "B.C.P. Association General Managers Report, July 17, 1905," Doyle Papers, Special Collections, University of British Columbia Library, Vancouver, B.C.

13. "Cuttings from Newspapers," 1903-04, Doyle Papers.
14. "Fraser River" diary, p. 248, Doyle Papers.
15. Canada, Sessional Papers, 1906-07, no. 22, app. 2, p. 29.
16. Pacific Fisherman 4 (September 1906), p. 18.
17. Pacific Fisherman 4 (May 1906), p. 13.
18. Canada, Labour Gazette 1 (1900-1901), p. 51; Canada, Department of Labour Report, 1909; Canada, Sessional Papers, 1909, no. 17, p. 105.
19. Vancouver Province, 25 July 1906.
20. "Iron Chink Machine," Doyle Papers.

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AN APPROACH TO MATERIAL CULTURE RESEARCH: THE S.S. KLONDIKE CARGO HOLD

by Richard Stuart

Introduction

The purpose of this article is to suggest an approach to researching material culture which proceeds from a historical perspective and which can provide a data base for future projects. It is based upon research undertaken to determine the contents of the cargo hold of a Yukon sternwheeler during 1937-43 for the S.S. Klondike National Historic Site in Whitehorse.

The S.S. Klondike

The sternwheeler Klondike was launched in 1937, the last vessel of its type built for use on the Yukon River by the White Pass and Yukon Route's river division, the British Yukon Navigation Company. It gave the company eighteen years of satisfactory service on the route between the head of rail at Whitehorse and the two mining camps of Dawson and Mayo. The construction of a network of all-weather roads eventually rendered river transportation redundant and the Klondike was beached in 1955, never to return to service. Today the vessel is a designated national historic site which Parks Canada is restoring to the 1937-43 period.

The testimony of former crew members, the use of technical manuals, and structural investigation of the boat itself provided much of the necessary information about the operation of the S.S. Klondike. Similarly, the material needed to restore it to its operating appearance was identified and located. What remained to complete an accurate reconstruction was information about the nature and appearance of commodities carried, the transportation of which provided the vessel's raison d'etre.

Research Problem

The sources available to initiate research on the cargo were limited. Only one contemporary photograph of the cargo hold outward bound from Whitehorse was located, but this combined with the oral testimony of crew members made it possible to determine the location of various articles in the hold. Waybills dating from the period after the Second World War and personal reminiscences helped to identify some brands. There was not, however, detailed information about products carried, the most common brands used, or the quantities involved.

There were three possible approaches to stocking the cargo hold accurately. The first was to estimate what products were used in the Yukon on the basis of artifacts held in public and private collections. As this depended upon the random survival of appropriate packaging, it would inevitably lead to anachronisms. For example, products which no longer existed in 1937 as well as those whose initial appearance postdated 1943 would be juxtaposed. The proportion of wooden to cardboard packaging would probably be inaccurate. The relationship of national to regional brands and the proportion of common to less common items would probably be distorted.

The second and more desirable approach was to represent the cargo hold exactly as it appeared on a given day, but this was not possible since completely accurate records, enabling every article to be identified, were not available.

A third approach, combining the facility of the first with the exactitude of the second, was to identify as accurately as possible the nature and quantities of products carried and to recreate a "typical" cargo from 1937-43. In fact, sufficient sources did exist to determine what was carried, and to a considerable degree the brands could be dated and their

appearance identified. Thus, a typical cargo could be assembled, reflecting not the cargo of a given day but a representative sample of those carried.

Re-creating a Typical Cargo

The approach taken was to identify what was appropriate on the basis of contemporary evidence and only then to assess the usefulness of artifacts already available or attempt to obtain ones which had been identified. Because packaging underwent dramatic changes between 1937 and 1943, from a technology of wood and burlap to one of paperboard and plastic, it became essential to date prototypes to as narrow a range of years as possible, something most accurately done from contemporary sources.

Research for the project was directed primarily at products identified as being available in the Yukon at the time, secondarily at the main source of supplies, the Vancouver processing and warehousing complex, and finally at national brands available during the period. This involved local, region, and national sources, cross-referenced at each stage. Yukon newspapers, the White Pass and Yukon Route holdings in the Yukon Archives, and oral informants were used to identify local availability. Public and private holdings in Vancouver and Victoria, contemporary catalogues, and a regional grocer's magazine (Kelly Douglas and Company's Nabob) provided ample information about regional and national products from the late 1930s. These were checked against local sources to determine whether or not they had been available in the Yukon. Finally, the Trade Marks Branch of the Ministry of Consumer and Corporate Affairs, company histories and archives, and national trade journals such as Canadian Grocer complemented information acquired on regional and local levels.

The data sought theoretically could have been located in the National Museums of Canada's National Inventory, but this proved impossible for two reasons. The Inventory is a recent programme with a limited pool of information and is restricted to artifacts deposited in member institutions. Secondly, it lists artifacts, but makes no provision for identifying documentary sources. Thus the Inventory cannot provide either a broad scope of data or the capacity to date items noted in contemporary photographs. There

is nothing to prevent the material identified in this study from being entered in the Inventory at a later date, but until it can include resources located in private holdings and identify contemporary sources for information, the system outlined below is more useful.

Retrieval System

The retrieval system suggested here is based upon the immediate needs of a specific project, but it can provide a data base for similar projects in the future. It retains the information acquired on a systematic basis for ease of retrieval; it can easily absorb new information; and everything in it could eventually be integrated into the National Museums' National Inventory.

Inevitably, not every product or brand researched will be completely documented nor will photographs or artifacts be available for all. However, as this is a data base, the gaps can be filled as information becomes available.

The data collected for the S.S. Klondike project were organized towards the following ends:

- a. to identify the nature of a product;
- b. to identify brands actually or most likely used in the Yukon during 1937-43;
- c. to prove the availability of such brands in the Yukon during the period under consideration, noting that while most would be available for the period 1937-43, some would not;
- d. to identify the location of either contemporary photographs of the products or possible prototypes;
- e. to provide sufficient flexibility for the inclusion of miscellaneous factors.

Sixteen variables were identified which met the needs of the Klondike project and which could be applied to other restorations or reconstructions. Those listed under "Identification" could apply to any project as they provide basic data. The information contained in the variables listed under "Location" could be added to depending on the needs of another project and period. Indeed, such additions would enhance the value of the data base. The variables under "Justification" could be changed to suit the project. All

variables are discussed below and sample entries are reproduced at the end of the paper.

- I. Identification - name of brand, owner of trade mark, dates used.
 1. Brand Name
 2. Original Owner
 3. Present Owner
 4. Product
 5. Trade Mark Registration
 6. Trade Mark Registration Date
 7. Year of First Use
 8. Example of Trade Mark

- II. Location - of artifacts or of contemporary iconographic evidence.
 9. Picture - Unit
 10. Picture - Case
 11. Artifact - Unit
 12. Artifact - Case

- III. Justification - evidence of the use of the product during the period under consideration.
 13. Advertisement - Dawson
 14. Advertisement - elsewhere
 15. W.P. & Y.R. Collection
 16. Other (e.g., oral source)

I. IDENTIFICATION

1. Brand Name - the obvious starting point for any packaging information. Most often it is the actual brand (e.g., "Aylmer," not "Canadian Cannery"), but occasionally the company name (e.g., "Pillsbury's Best" or "Robin Hood").

2. Original Owner - both the owner of the trademark and the registered user. Because such information often appears on the label of the packing case, the range of dates for a prototype can be narrowed. For example, "Shredded Wheat" breakfast cereal was manufactured by the Canadian Shredded Wheat Company which only began to use the term "Nabisco" in 1940. Photographs of Shredded Wheat packages in Nabob (Christmas 1935, p. 105, and May 1943, p. 29) show this difference. On the basis of this information, the value of a wooden "Shredded Wheat" packaging case found in the Yukon is called into question because the word "Nabisco" does not appear on it. It certainly would not be appropriate to any restoration after 1940, although it might be for the period 1937-40.

3. Present Owner - in many cases identical to the original, but a change of ownership provides a date for identification. Also, knowing the present owner would be useful for obtaining artifacts or photographs.

4. Product. In most cases there is only one. "Best Procurable" is Scotch whiskey, "Mazola" is cooking oil, but terms such as "Aylmer," "Nabob," or "Heinz" cover a range of products which appear and disappear on a variable basis. It would thus be possible to select an artifact with the correct brand but an anachronistic product.

5. Trade Mark Registration. This provides information on ownership, products (and often the dates they were introduced), the range of dates, etc. The marks are filed in the Trade Mark Registry Division of the Ministry of Consumer and Corporate Affairs, Hull. These are registered in three folio systems which are arranged on a chronological basis. However, it is not the folios but the card catalogue systems, comprising six different divisions, which are the points of entry for information. Two of these catalogues "Design" and "Trade Mark Act," relate to the main series of folios which contain a description or an example of the mark to be registered, a list of products covered, information about ownership, and references to related trade marks. There is not, however, any reference to packaging. A further division, relating to the "Unfair Competition Act," is located in a separate folio series, indicated by the letters "N.S." preceding the folio number. Similar information to that found under the "Trade Mark Act" is provided here, although descriptions rather than pictures of trade marks are used. Also, because of the importance of proving first use for purposes of proving "unfair competition," the first date of use is indicated. Two other files, "Pending" and "Expunged," refer to the Trade Mark Act folios, either for marks not yet registered or those removed from active use. Finally, a separate file for Newfoundland registrations before 1949 can be traced through the Trade Mark Act card catalogue.

Because registration was not compulsory, several anomalies in the above divisions are possible. First, brands which other sources (e.g., oral informants, W.P. & Y.R. records) identify and for which prototypes exist may not be registered. Examples include "Ormand's Biscuits," a Victoria-based company,

"Klondyke" soap, made by the Royal Crown Soap Manufacturing Company, and "Dr. Price's Baking Powder." Secondly, American manufactured products such as "Dr. Price's" were not necessarily registered in Canada. Finally, in at least one case, a product ("Hormel") which was only registered in Canada in 1979 was available through a Canadian company forty years ago in the Yukon.

6. Trade Mark Registration Date. This often, but not always, provides a reasonably accurate indication of the first date of use. "Peek Frean," for example, was registered only in 1948 (N.S. 124/31939, 2 October 1948), but the sale and distribution of "Peek Frean" biscuits go back much further. Similarly, "McCormick's" biscuits, registered in 1961 (no. 127,717), have been available since the last century.

7. Year of First Use. This is either the date of registration or a specified date. For example, "York" brand for canned foods was only registered in 1947 (N.S. 148/37901), but the brand was first used in 1916. Similarly, the distinctive "B.C. Sugar" Company trademark with the "Rogers" signature (60/14624) was registered 1 April 1910, but was certainly in use before the turn of the century.

8. Example of a Trade Mark. In most cases this is merely a word — e.g., "Sani-Flush." In others, it is a label with distinctive figures and colours. Some labels, such as "Lux" Flakes, changed between the date of registration and the late 1930s while others like "Squirrel" Peanut Butter were the same when registered and in 1937, but have changed since.

II. LOCATION

9. Picture - Unit. Most of these came from two grocery trade magazines, the regional Nabob and the national Canadian Grocer, between 1936 and 1948, although other contemporary sources were consulted. Pictures of units such as boxes, bottles, bags, bars, and cans provide no information about packing cases, but they can be of value for the interpretation of the vessel's galley

and for the rare occasions when a label was used on a packing case.

10. Picture - Case. These provide the most valuable pieces of iconographic evidence, enabling an exact date to be placed on artifacts, serving as a model for reproduction, and showing whether wood or cardboard was used. However, there may have been products which were shipped in cardboard in southern Canada but in wood in the north. One suggestive example of this is the "Aylmer" brand. Most photographs show its products in cardboard boxes, but one, from the Hudson's Bay Collection and probably dating to the 1930s, shows a wooden case of "Aylmer" ketchup. Cardboard cases were probably used to ship goods from Vancouver to the Yukon as the White Pass route held fewer hazards for a packing case than did the Mackenzie River system, but such cannot always be assumed. Other valuable sources in addition to the two grocery trade magazines were photographs from the Vancouver Public Library, the Public Archives of Canada's National Photography Collection, Kelly Douglas Company, the Beaver magazine.

11. Artifacts - Unit. Most of these were located in the Yukon or British Columbia. By reference to photographs, these can often be dated. Unfortunately, durable packaging such as metal or glass is more likely to survive than cardboard. These were found in the same collections as the units.

III. JUSTIFICATION

13. Advertisement - Dawson. Advertisements in the Dawson News provided an accurate indication of products available, although forty years ago, as now, the amount of advertising for tobacco, beer, and spirits may have presented a distorted impression of sales volume. Similarly, companies with popular products may have needed to expend little effort in advertising them, while others attempting to establish or maintain a portion of the market advertised more extensively. Thus, there were no advertisements for "Pacific" canned milk although oral accounts and waybills suggested its pre-eminence. On the other hand, Borden's "St. Charles Milk" and "Carnation" were extensively advertised, but according to oral informants were never as popular as "Pacific."

14. Advertisements - elsewhere. These appeared in a mimeographed sheet, the Mayo Miner, and in the Whitehorse Star. Firms established in Mayo but not in Dawson would advertise products not mentioned by the Dawson News, but presumably available in Dawson too.

15. W.P. & Y.R. Collection. The most important component of this large collection was located in the "Corporate Record," Group 1, Series V, 2-A "Waybills, 1-1131, 1936-1948." Also of value was V-6, "Claims against the W.P. & Y.R. 1936-1938." The waybills, although limited to the post-war period, indicate the shippers, consigners, products, some brands, and, most important, the quantities involved. The claims indicate items available in the 1930s, but relate primarily to points in the United States.

16. Other - specifically artifacts (or photographs) of items from the Yukon and the testimonies of the managers of two retail outlets in the Yukon.

Other brands may have been available in the Yukon during the period under consideration in addition to the documented ones. Evidence for this was found in a 1937 MacDonald's Consolidated catalogue, a wholesale catalogue for the grocery trade. Other, mainly eastern "national" or American, brands were listed in Canadian Grocer, but they were not necessarily available in Vancouver and probably not in the Yukon either.

Finally, by way of annotation, miscellaneous notes can be indicated. Thus, one informant provided additional information about such varied products as baking powder, canned peaches, canned milk, and flour which no waybill or catalogue possibly could.

Research Implications

The retrieval system outlined above, based on a minimum number of variables, could be expanded to meet the needs of other similar projects. Obviously, it cannot hope to achieve the theoretically more comprehensive coverage of the National Museums' Inventory, but it does include iconographic evidence, it integrates private as well as public collections into the data base, and it is available for immediate use.

There are three possible levels of use for this proposed system. To meet the needs of immediate projects, researchers can use the same variables to systemize their research on material history. Thus, a project directed towards the restoration of a grocery store in the Gaspé in the 1920s could organize data on the same basis, using what information is common (particularly that classified under "Identification" and "Location") and adding data to the base. The information obtained using this system would probably be limited by project and by region, but with the available data base information useful to other researchers in the same region (e.g., a Dawson grocery store, ca. 1904) or time period (a museum exhibit relating to the 1930s) would be available. The research undertaken for the first project would not be lost and could provide a starting point for future projects.

Over a longer time, the system could be computerized, since all research would have been organized according to the same system, to allow for complete access to all the data gathered.

Sample entries of data collected for the S.S. Klondike project and organized according to the retrieval system discussed above are shown on the following three pages.

A Y L M E R

1/3

1. Aylmer
2. Aylmer Cannery, Aylmer and Hamilton; between 1901 and 1909 to Canadian Cannery, Hamilton
3. Canadian Cannery, Hamilton (division of Del Monte)
4. Canned and bottled fruits, vegetables, meats and condiments
5. 185/40900
6. 30-11-26
7. pre-1901 (Kelly Douglas Catalogue, 1901)
8. letters only

A Y L M E R

2/3

9. a) cans - The Nabob, Xmas 1937, p. 139; Mar. 1944, p. 10; CG 19-2-1937, p. 40, 15-10-1941, p. 11.
b) bottles - The Nabob, April 1946, p. 28; CG, 15-1-1941; 15-9-1943, p. 9.
10. a) CG, 16-10-1936, p. 15; 15-6-1941, p. 3; 1-11-1945, p. 11.
b) Kelly Douglas Photographs, "Warehouse," p. 16, photo C and M.
c) H.B.C., File T-2 (H.F.), "Mackenzie River" (wood case)
11. a) Heritage Village - cans - mushroom and condensed soup.
b) Tempo Foods - cans- various vegetables (Large cans).

A Y L M E R

3/3

13. a) DN, 6-3-1947, prune plums @ 2/45¢, or \$4.60 a case.
b) DN, 22-5-1947, boiled dinner.

14.

15.

16.

C A P I L A N O

1/3

1. Capilano
2. Sick's Breweries, Vancouver
3. Molsons' Breweries
4. Beer
5. 253/54411
6. 31-5-1932
7. 1932 (see NS 11/3611)
8. yes

C A P I L A N O

2/3

- 9.
- 10.
- 11.
- 12.

C A P I L A N O

3/3

- 13.
14. Whitehorse Star, 1 May 1942, "This famous Beer Comes to the Yukon."
- 15.
- 16.

E M P R E S S

1/4

1. Empress House of Quality
2. Empress Manufacturing Co. Ltd., Vancouver, 1901: Canada Safeway 1939 (see CG, 1-9-1939, p. 20.)
3. McDonald's Consolidated Ltd., Winnipeg (from 2-5-1957).
4. a) 1904 - coffee, tea, spices, pickles, sauces, etc.
b) 1905 - jams, jellies, extracts, marmalades, etc.
c) 1949 - proposed for canned fruit and peanut butter.
5. 39/9447
6. 20-4-1904
7. c. 1901
8. "consists of a label bearing the words 'Empress Brand' associated with a representation of a steamship in the waters of Burrard Inlet, and having a background of the mountains opposite to the City of Vancouver, B.C." (e.g. provided) - expunged 1976.

E M P R E S S

2/4

9. The Nabob, Christmas 1926, p. 111 (original label)
- 10.
11. a) Heritage Village 2 lb. can of apricot jam - small spice tins
b) Tempo Foods - small bay leaf boxes - jams and marmalades
c) A. Reilley - seville orange marmalade, 48 oz. (post 1940 label)
d) Parks Canada Branch Reserve Collection - raspberry jam can - X-77-139.5
Parks Canada Branch Reserve Collection - strawberry jam can - X-77-139.6.
- 12.

E M P R E S S

3/4

13. DN, 16-7-1942, N.C. Co. sale - Empress Black Currant Jam, 12 oz. jar, regular 35¢, now 25¢.
- 14.
- 15.
16. a) C. Taylor (see miscellaneous)
b) Two cans from Yukon - see 11.d.

E M P R E S S

4/4

Miscellaneous Notes

1. C. Taylor said a) "It was all Empress" - the most popular jam in the north
b) strawberry was the best selling flavour; Taylor and Drury would order 13 cases of it to one of any other flavour.
2. No packing cases, or even pictures of such cases have been located.
3. letter from Empress Foods to K. Lunn, Parks Canada, 5-1-1979 (file C8405-100)
"The particular label (see 8 above) enjoyed a long period of usefulness. It was eventually modified about 1930 and changed to a new label in 1940 when the Company was acquired by Canada Safeway Limited."

CONFERENCE REPORT: "THE ROLES OF DOCUMENTARY ART IN
UNDERSTANDING A CULTURAL HERITAGE"

31 October - 1 November 1980, Halifax, N.S.

by Sheila Stevenson

This conference, co-sponsored by the Federation of Museums, Heritage and Historical Societies of Nova Scotia and the Mount Saint Vincent Art Gallery, was held in conjunction with the exhibit "Great Expectations: The European Vision in Nova Scotia: 1749-1848,"¹ a substantial visual record of Nova Scotia produced during the first 100 years of British settlement after the founding of Halifax. The exhibit itself is based on the thesis of curator Mary Sparling — that the artist of that time showed only those aspects of the colony which were considered appropriate and thus the visual record reveals

the shifting fashion in artistic convention during the first hundred years of British colonial rule.... The resulting image of Nova Scotia was distorted and gave a misleading impression at home and abroad, in its own time; in the present day it is equally misleading if used by historians as a literal record of the past.²

Organized by Sparling, the conference provided an opportunity for people to consider collectively the use of this visual record as documentary evidence in understanding our cultural heritage.³ As keynote speaker Hugh Taylor of the Public Archives of Nova Scotia noted, visual material is a part of the cultural record and should be used correctly.

American art historian Jay Cantor was guest curator for "The Landscape of Change," an exhibition of pictorial material which he had identified and catalogued as source material for Old Sturbridge Village in Massachusetts. His presentation offered many images of rural, inland New England between 1780 and 1860 and the following observations:

- the views were generally dedicated to the immediate translation of observed facts;
- the views tended to concentrate on a feature rather than on spaces between things;

- most views were of harvest or tilling to illustrate industry and an economic motive;
- there were no bird's-eye views of backward-looking, recumbent towns;
- pictures bring time and space together more effectively than does text.

The images he showed were unlike those in "Great Expectations" in style and in subject matter, an exciting contrast and one which indicated that material historians have a rich source of information in evidence which has been seen to be the preserve of art historians.

Marie Elwood of the Nova Scotia Museum illustrated the same point as she presented the work of J.E. Woolford, draughtsman to George Ramsay, ninth Earl of Dalhousie, when he was Lieutenant-Governor of Nova Scotia (1816-19) and Governor-in-Chief of British North America (1819-28). As a military topographer Woolford was trained to provide for each view a precise title, the direction from which the artist viewed the scene, the location, and the time, to observe bridges, fords, and ferries, and to record whether the bridges were of wood, iron, or stone. That training imbued him as well with a knowledge of the artistic conventions for Woolford felt that if nature were wrong, "I cannot help but quote her right."

The fact that we must be mindful of artistic conventions was reiterated by Michael Bell of the National Gallery of Canada. He had decided not to discuss conventions in detail, but by that point I was longing for more detail. I felt the need for one practical session in which the delegates would have participated to see if they could sort out convention from factual information. This need may have been the best indicator that I was smitten with curiosity and must now look and read for myself.

The final presentation, by Mary Allodi of the Royal Ontario Museum, provided evidence on early printmaking in Canada. Alex Colville had the last conference word, one which was encouraging and deliberate. He suggested that museums and art galleries had a responsibility to provide more text, more supplementary information about the things that we present to our audiences, and that whereas it has been popular to believe that didacticism is an elitist activity, perhaps we are being elitist in not providing greater assistance to

our audiences so that they may know and understand more.

Resources based on the conference and the exhibit include a catalogue² and a series of three radio programmes based upon twelve of the images reproduced on the exhibition poster (which was designed to be used in conjunction with the programmes). The exhibit catalogue is available for \$6.00 and the poster for \$1.00 from the Art Gallery, Mount Saint Vincent University, Halifax, N.S., B3M 2J6. The conference proceedings were taped and a copy can be obtained by sending ninety minutes worth of blank tape to Education Media Services, 5250 Spring Garden Road, Halifax, N.S., B3J 1E8.

NOTES

1. Exhibition schedule: Art Gallery, Mount Saint Vincent University, Halifax, 17 October - 23 November 1980; Canadiana Gallery, Royal Ontario Museum, Toronto, 16 January - 23 February, 1981; McCord Museum, Montreal, 25 March - 3 May 1981. Financial assistance was provided by the Museum Assistance Programmes of the National Museums of Canada.
2. Mary Sparling, Great Expectations: The European Vision in Nova Scotia 1749-1848 (Halifax: Art Gallery, Mount Saint Vincent University, 1980), p. 7.
3. The delegates included historical researchers, museum curators and interpreters, art gallery curators, art historians, public school art teachers, a film maker, a university history professor, a magazine editor, archivists, and historical society members.

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A SOURCE BOOK FOR THE ANALYSIS AND REPRODUCTION OF TEXTILES

Reproducing Nineteenth Century Handwoven Fabrics: A Weaver's Technical Guide to Accurate Reproductions by Adrienne Dora Hood (copyrighted 1980) is a source book for the accurate reproduction of handwoven, utilitarian textiles of Canadian provenance from collections in Eastern Canada. This work is the result of an extensive research project funded by the Canada Council's Explorations Programme. It contains twenty-two separate studies of original

textiles used in clothing and household textiles, as well as a general introductory section, a list of yarn suppliers, and an annotated bibliography. The author is an accomplished spinner and weaver with valuable experience as a curatorial assistant in the Textile Department of the Royal Ontario Museum.

Each study includes slides, historical documentation and technical analysis of the original artifact, detailed comments on the weaving and finishing of the reproduction yardage, and a six-by-seven-inch sample of the reproduction. These comprehensive studies make accurate reproductions possible for any experienced weaver who is interested in historical textiles or is working in a museum or historical restoration. As a technical guide this work-book should be useful to anyone involved in demonstrating traditional hand weaving or reproduction costuming. If reproduction fabric is beyond one's budget, the slides and samples give a good representation of construction, colour, texture, and weight to help in selecting commercially available fabrics.

The author has produced four copies of this source book and deposited one at each the following:

Nova Scotia Museum, Halifax, Nova Scotia,
Historic Section, (902) 429-4610

National Historic Parks and Sites, Ottawa, Ontario,
Interpretation Division, (613) 993-0071

National Museum of Man, Ottawa, Ontario,
History Division, (613) 995-2981

Royal Ontario Museum, Toronto, Ontario,
Textile Department, (416) 978-3655

Patricia Young

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SYMPOSIUM ON THE ARCHAEOLOGY OF HISTORIC TECHNOLOGY

For a theoretical and methodological work on the archaeology of historic technology in North America, I would like to correspond with all archaeologists currently conducting research on the techniques, processes, and behaviour associated with the acquisition, growth, manufacture, and repair of material culture during the historic period. Such research would include aspects of

survey, sampling, excavation, documentation, ethnography, experimentation, re-creation, interpretation, and explanation of such particularistic technologies as glassmaking, ceramic manufacture, blacksmithing, weaponry repair, woodworking, mining, husbandry, agriculture, lumbering, fishing, fur trapping, shipbuilding, canal building, and road construction.

A Symposium on the Archaeology of Historic Technology in North America, to be held at the January 1982 Society for Historical Archaeology conference in Philadelphia, has the expressed goal of publishing an academic/educational work on this subject, with individual case studies written by each symposium participant. If you would be interested in participating in this symposium or in contributing a case study for publication please contact, no later than 15 June 1981: Lester A. Ross, Research (Archaeology) Division, Parks Canada, 1600 Liverpool Court, Ottawa, Ontario, K1A 1G2 (613-993-9717).

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RESEARCH ON THE MUSICAL INSTRUMENT TRADE

For the past several years research has been underway on the history of the musical instrument trade in Canada. Manufacturers and retailers are being traced through census data, business directories, contemporary newspapers and journals, municipal and county histories, and archival sources. A future survey will be undertaken to locate the instruments and company trade catalogues, sales brochures, and promotional literature. It is hoped that the information on production, sales, and advertising will provide insights on the domestic market-place and on social attitudes towards these leisure goods in household inventories regionally and over time. Ultimately I hope to examine how regional and chronological developments in the Canadian musical instrument trade might reflect the larger socio-economic contexts of Canadian society. A word from anyone who shares these interests would be most welcome. Please write: Frances Roback, Cultural History Department, Glenbow Museum, 9th Ave. & 1st St. S.E., Calgary, Alberta, T2G 0P3.

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RESEARCH ON LAWN-MOWERS

Sources of information are requested for Canadian-made, nineteenth-century, hand-powered lawn-mowers (otherwise known as pushmowers); photographs, sketches, availability, dates, manufacturers are all of interest. Send information to Linda Dicaire-Fardin, Restoration Services Division, Engineering and Architecture Directorate, Parks Canada, Les Terrasses de la Chaudière, Ottawa, Ontario K1A 1G2.

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CORRECTION: Martha Eckmann Brent, "A Stitch in Time: Sewing Machine Industry of Ontario, 1860-1897" Material History Bulletin 11: 1-30.

Dr. G.T. Bloomfield of the University of Guelph has drawn the editors' attention to information from Leo A. Johnson, History of Guelph, 1827-1927 (Guelph, Ont.: Guelph Historical Society, 1977), p. 295, which indicates that the acquisition of the Raymond Sewing Machine Company by the White Sewing Machine Company did not take place until 1916 and that the production of sewing machines in Guelph lasted until 1922. Dr. Bloomfield suggests that the terminal year of the Ontario-controlled sewing machine industry should be moved forward to 1916.