

Fire Insurance Plans and British Columbia Urban History: A Union List

FRANCES M. WOODWARD

Few cities have not had a major fire in their history, and in nineteenth century North America, with its cities constructed mainly of wood, fires were a very real danger. Among the measures taken to assess and control the risks of fire were fire insurance plans, a unique and invaluable source of information for the fire insurance companies when the maps were new, and for the researcher in urban studies now that the maps are old and out-of-date. "The object of the maps is to show at a glance the character of any building offered for insurance, without having to make a special examination."¹ The map or plan is drawn on a large scale, usually 50, 100 or 200 feet to the inch. With the aid of symbols and colours the cartographer shows the size, shape and type of construction materials, such as wood, brick or concrete, for each building; the number of floors, doors, windows, chimneys; the fire protection facilities, such as alarms, extinguishers, water sprinklers. Where fire risk is involved, he indicates the use of buildings, such as restaurant, store, bakery; for industrial buildings, such as a sawmill, the type of equipment used, the source of power and water, length of operating day, use of night watchmen. The need for and origin of insurance plans are explained in an essay entitled "The Rise and Progress of Fire Insurance Diagrams" which appeared in *Insurance and Real Estate Society* in 1883, probably written by Charles E. Goad, the "father" of fire insurance cartography in Canada:

Co-existent with the practice of fire insurance covering manufacturing risks especially, and hazardous and non-hazardous risks and occupations located at a distance from the office of the insurer as well, came the necessity for, if not the immediate use of the "survey", a description of the premises to be covered by the policy, with the accompanying "diagram" or ground plan, showing not only the internal hazard of the risk itself, by its relative position as to neighbouring structures, their classes, occupancy, etc., by which the

¹ Sanborn Map Company, *Surveyors' Manual for the Exclusive Use and Guidance of Employees* (New York, 1905), p. 4, as quoted by Walter W. Ristow in "United States Fire Insurance and Underwriters Maps, 1852-1968," *Quarterly Journal of the Library of Congress*, vol. 25, no. 3, July 1968, p. 204.

insured premises might be exposed, not only for the security of the underwriter against misrepresentations of the hazard — wilful or otherwise, — as to the hazards attending such risks, but what might also be in possession of some acknowledged data upon which to approximate a fair premium rate for the risk assumed.²

Fire insurance plans are believed to have been used since the early eighteenth century. The earliest plans were hand-drawn for a particular fire insurance company, and probably showed only one or more buildings of interest to the company. The Phoenix Assurance Company is reported to have had a plan of the centre of London drawn in 1785 by Thomas Leverton. The earliest extant plan is a “Map of London” compiled and published between 1792 and 1799 by Richard Horwood with a dedication to “the Trustees and Directors of the Phoenix Fire Office.” The individual insurance companies had manuscript plans made of North American cities on an ad hoc basis. The Phoenix Assurance Company of London had plans made of Montreal (1808, 1845), Quebec (1808, 1845), Halifax (1808) and St. John’s (1845). Advances in lithographic printing in the mid-nineteenth century made it possible to print plans fast and economically. In 1850 George T. Hope, the “godfather of American insurance cartography”³ and secretary of the Jefferson Insurance Company of New York, engaged William Perris, an English engineer in New York, to compile a large-scale map of New York City. Hope set up a committee with representatives from various insurance companies, and the format and symbolism adopted by that committee set the standards for insurance cartography. By 1855 Perris had published seven bound volumes for New York City, with a revised edition appearing in 1859. At this same time some other companies and individuals began work on fire insurance cartography including D. A. Sanborn, a Massachusetts surveyor, who later (in 1867) established the D. A. Sanborn National Insurance Diagram Bureau, which was incorporated in 1876 as the Sanborn Map and Publishing Company and became the predominant fire insurance cartography company in North America. In 1866 the National Board of Fire Underwriters was established in the United States to co-ordinate and supervise the publication and use of insurance and underwriters’ maps and atlases, and to sponsor surveys of areas not covered by commercial publishers.

² *Insurance and Real Estate Society*, vol. 3, no. 8, 1883, p. 182, as quoted by Robert J. Hayward in “Chas. E. Goad and Fire Insurance Cartography,” *Association of Canadian Map Libraries Proceedings*, vol. 8, 1974, p. 52.

³ Ristow, p. 198.

In the 1870s and 1880s regional associations of fire underwriters were organized, and some set up bureaus or committees to inspect buildings, fire regulations and fire-fighting facilities in various cities. The descriptive reports issued as a result of the inspection were frequently accompanied by one or more fold-in maps. Inspection reports compiled by the Fire Underwriters' Inspection Bureau of the Pacific Coast, a unit of the Fire Underwriters' Association of the Pacific, are described in 1911 as containing maps "exactly the same as those made by the regular map companies."⁴ In 1890 the National Board of Fire Underwriters established a Fire Department Committee which began inspecting cities and publishing reports.

The first fire insurance plan in western North America was made in 1861 by Casper T. Hopkins for the San Francisco Board of Fire Underwriters. Fifty copies of the multi-sheet coloured lithograph "Insurance Survey of All Buildings in the Central Blocks of San Francisco" were produced and copyrighted, but no extant copy is known. The second plan would appear to be a four-column atlas of San Francisco made by D. A. Sanborn in 1875, followed in 1879 by a six-sheet plan of Honolulu by the Lion Insurance Company of London. By 1884 Sanborn had made plans for twenty-four medium-sized California cities. The following year Edward Amos Dakin founded the Dakin Publishing Company in San Francisco, which became one of the leading publishers of fire insurance plans until 1934, operating in areas covered by the Pacific Insurance Union. Ironically, in 1906 many insurance companies, boards and associations had their headquarters or regional offices in San Francisco when the city was devastated by earthquake and fire. Many organizations and public libraries, including the library of the Fire Underwriters' Association of the Pacific, second largest insurance library in the United States, were destroyed.

The earliest Canadian fire insurance plan extant is the "Boulton Atlas" of Toronto, circa 1858. William and Henry Boulton, both Dominion Land Surveyors, surveyed and compiled this work which, at the scale of 100 feet to the inch, shows six classifications of building construction and explains the fire alarms and distinctive sounds for each ward. D. A. Sanborn mapped fifteen Canadian cities, in Ontario and Quebec, at the request of some Canadian insurance company managers and agents in 1874-75. In 1875 Charles Edward Goad, an English engineer with railroad projects in Toronto and Montreal, mapped Levis, Quebec, "being

⁴ Fire Underwriters' Association of the Pacific, 35th Annual Meeting, 1911, *Proceedings*, p. 61, as quoted by Ristow, p. 203.

the largest [town] in Canada not surveyed by Mr. Sanborn of New York."⁵ Goad maintained a good relationship with Sanborn, and bought out the latter's Canadian stock and provided revisions of them. In 1885 Goad returned to England where he opened a branch (later the company headquarters) and began mapping British cities. In 1910 Goad died and his three sons took over as the Chas. E. Goad Company, with short-lived offices in Winnipeg and Vancouver. By this time 1,300 Canadian communities and numerous industrial sites had been mapped. In 1917 the Goad company withdrew from the fire insurance cartography field, and in 1931 the Underwriters' Survey bureau purchased the remaining Goad interests in Canada.

Goad and Sanborn, unlike most insurance plan publishers, undertook to supply plans of every insurable property the insurance industry wanted mapped and to revise the plans as necessary. Goad supplied all companies, thereby keeping costs to a minimum, and charged a portion of the cost of the survey based on the number of subscribers. Plans were to be used only by subscribers, and were to be returned to Goad and destroyed when no longer of use. Goad's successors maintained the same policy. In 1917 the agreement between the Goad company and the Canadian Fire Underwriters' Association, whereby the Goad company was to make and revise plans for the association exclusively, was terminated and the association established its own plan department, the Underwriters' Survey Bureau Ltd., and acquired rights to the Goad plans. The bureau produced plans for Ontario, Quebec and the Maritimes. The Western Canadian Underwriters' Association produced their own plans for the prairie communities, and the British Columbia Underwriters' Association did the same for the Yukon Territory and British Columbia. The various associations amalgamated to form the Canadian Underwriters' Association in 1960 and plan production was centralized under the Plan Division of the association. In 1974 the Canadian Underwriters' Association became the Insurers' Advisory Organization, and the following year it was decided to cease plan production and to dispose of all plans in stock by selling them off to libraries and others, rather than destroy them as in the past.

The first fire insurance plans in British Columbia were of five towns mapped by Sanborn in 1885: Granville (now part of the Gastown area of Vancouver), Victoria, New Westminster, Nanaimo and Yale. Dakin issued a plan of Vancouver in 1889, and Goad began producing plans in 1897. The Vancouver Board of Fire Underwriters and the British Columbia Fire Underwriters' Association had been formed about 1890, and in

⁵ Business Circular 2, 11 February 1876, as quoted by Hayward, p. 54.

June 1899 they were reorganized as the Mainland Board of Fire Underwriters and the Vancouver Island Board of Fire Underwriters. The Mainland Board of Fire Underwriters made at least four inspection reports in 1899 (Kaslo in October, Columbia, Greenwood and Vernon in November), apparently without accompanying maps or diagrams. The printed reports were standard one-page forms, which began with a statement of location, climate, population and political status, then covered the questions of Water Supply, Hydrants, Steam Fire Engines, Hose Carts, Hose, Fire Alarm, Police System, Fire Department Organized, Fire Marshal, Streets (surface and width), Building Law, Conflagration Hazard, Lighting, High Winds, Previous Fire Record, Climatic Conditions, General Construction, and concluded with Remarks. The initial report was followed by supplementary and new reports at varying intervals. With the exception of the salmon cannery reports, maps seem to have been limited to small scale diagrams showing water systems.

*Genealogical Chart of the Organization — Insurers’
Advisory Organization Pacific Region*

Vancouver Board of Fire Underwriters (Oct. 1890 - June 1899)	British Columbia Fire Underwriters’ Association (ca. 1890 - June 1899)
Mainland Board of Fire Underwriters (June 1899 - May 1905)	Vancouver Island Board of Fire Underwriters (June 1899 - May 1905)
Mainland Fire Underwriters’ Association (May 1905 - Aug. 1920)	Vancouver Island Fire Underwriters’ Association (May 1905 - Aug. 1920)
British Columbia Fire Underwriters’ Association (Aug. 1920 - Oct. 1927)	British Columbia Automobile Underwriters’ Association (1914 - Oct. 1927)
British Columbia Insurance Underwriters’ Association (Oct. 1927 - May 1939)	
British Columbia Underwriters’ Association (May 1939 - 1959)	
Canadian Underwriters’ Association — British Columbia Branch (1959 - 1974)	
Insurers’ Advisory Organization — Pacific Region (1974 -)	

In May 1905 the mainland and Vancouver Island boards became the Mainland Fire Underwriters' Association and the Vancouver Island Fire Underwriters' Association. The genealogical history of the associations in British Columbia may be more easily followed in the accompanying chart. In August 1920 the two associations merged to form the British Columbia Fire Underwriters' Association, and in October 1927 the British Columbia Automobile Underwriters' Association joined to form the British Columbia Insurance Underwriters' Association. In May 1939 the name was changed to British Columbia Underwriters' Association. After national unification in 1959, the British Columbia Underwriters' Association became the Canadian Underwriters' Association — British Columbia Branch, and it is now the Insurers' Advisory Organization — Pacific Region.

The mainland and Vancouver Island associations began producing new plans and revising old ones following the withdrawal of the Chas. E. Goad Company in 1917. From the merger in 1929 the British Columbia Underwriters' Association in its various names has been responsible for almost all the plans of British Columbia municipalities and industries until the formation of the Canadian Underwriters' Association and the centralization of the cartographic services under the Underwriters' Survey Bureau in Toronto.

The detail of a fire insurance plan provided insurance companies with a means of knowing "at a glance the amount of stake in each locality, the character of that locality and the protection supplied."⁶ Plans may be on a scale of 50, 100 or 200 feet to the inch, with a key plan drawn at one-tenth the scale of the detailed sheets. The standard plan sizes are 25 by 21 inches before 1951, and 13 by 12 inches thereafter. The extremely detailed diagrams of building location, construction and use are invaluable to the researcher, particularly in cases where a number of editions of a plan exist for a given area. Fire insurance plans do, of course, have some limitations. Insurance companies have no interest in open space; therefore there are no plans of land without buildings. Activities with no special fire risk may not be shown, and the change to small format plans was accompanied by a policy of not always depicting residential areas. Secondary use of a building, such as the commercial use of an industrial building, may not be indicated. Prior to 1951 revisions were made by pasting in slips with printed alterations. With the change to smaller format this practice was discontinued, and sheets were reprinted with revisions as needed. Agents sometimes made their own revisions by hand as well, and some put information regarding individual policy numbers on their working plans.

⁶ Business Circular 240, 6 June 1887, as quoted by Hayward, p. 67.

The Special Collections Division of the University of British Columbia Library acquired over a long period of time original lithographs and photocopies of plans from various sources, including the Map Division of the British Library. The holdings were greatly enlarged when the Insurers' Advisory Organization — Pacific Region deposited their records in 1975. The records, some thirty-nine linear feet (11.89 metres), cover the period from 1890 to 1964, and are accompanied by plans of some 150 places in British Columbia and the Yukon, and inspection reports for about 130 places, including two volumes of inspection reports of British Columbia salmon canneries. Some additional plans were acquired when the IAO's head office in Toronto disposed of its stock. About the same time the Public Archives of Canada acquired the papers of the Goad company in England, which included a large collection of plans,⁷ and a copy of every plan in the IAO stock. Many of the plans from both sources are unrevised, i.e., without pasted or manuscript revisions, but plans from other sources may be heavily revised, particularly those from the British Columbia office, which included well-worn working copies used to produce revised sheets.

The union list may show a plan as being in more than one location, but that does not mean that the copies are identical. The National Map Collection (Public Archives of Canada) may have a plan with a survey date of 1920 and sheets with a revision date of 1940, but the University of British Columbia may have that plan with additional manuscript revisions which may not be dated, and may have a second copy with different manuscript revisions, dated or undated. The manuscript revisions may reflect the interests of different insurance companies, or they may be field revisions made by the plan branch surveyor at different times.

Although most plans are lithographed and have standard sizes of 25 by 21 inches or 13 by 12 inches, there are exceptions, usually for small places of limited interest during the 1930s and 1940s, when it had become economical to use a larger sheet rather than extend to two sheets, and to produce copies on demand using a blueprint method, as in the case of Cultus Lake Park. Another exception, apparently unique, is two rolls, each consisting of six lithographed plans on the scale of 50 feet to the inch joined end-to-end to form a plan of Hastings Street in 1913 and a plan of Granville Street circa 1914. The latter has a leather cover stamped with "Compliments of Sharples & Sharples Brokers." Both rolls are in the

⁷ See Robert J. Hayward, *Fire Insurance Plans in the National Map Collection/Plans d'Assurance-Incendie de la Collection Nationale de Cartes et Plans* (Ottawa, 1977).

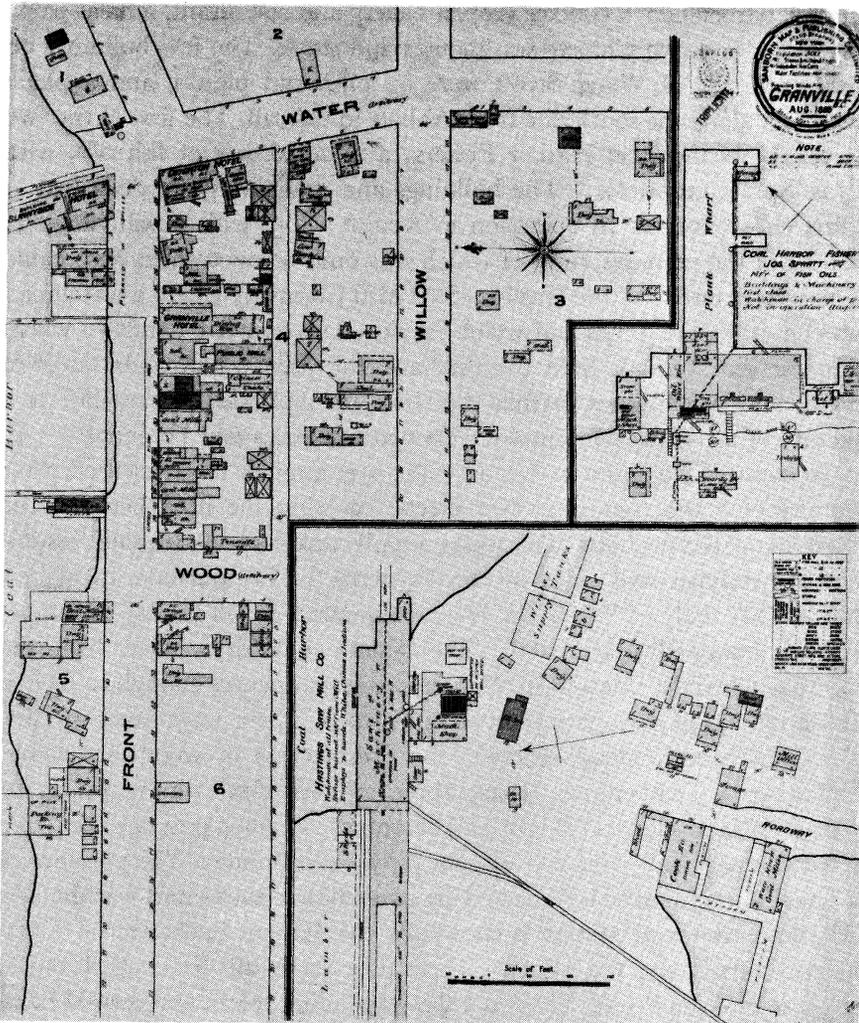
collection of the Vancouver City Archives, where the map collection has been filmed and plans made accessible on microfiche.

Plans in the National Map Collection are now being filmed, as part of the Public Archives project to put all its Canadian maps on 105 mm film, and they will soon be available to users on microfiche (one map per fiche).

Map librarians and archivists have been doing their best in the last few years to collect these valuable maps and make them better known and more easily accessible to the researchers who should be using them. Despite our best efforts, many people remain unaware of this gold mine and those who have heard have made little use of the plans other than for the odd undergraduate geography or architecture assignment.

Fire insurance plans were intended to provide at a glance a detailed picture of a community for the immediate and exclusive use of the underwriter. A photograph captures a person or a place at an instant in time, but a fire insurance plan captures a whole community or industrial complex at a certain point in time, and with revisions we can see the gradual process of change caught in action.

One of the first plans of a British Columbia community is of Granville, surveyed in August 1885. Granville was one of the small communities which preceded Vancouver's incorporation in April 1886, and was located in what we now know as Gastown. The plan covers the block bounded by Front, Water, Willow and Wood Streets, now called Water, Carrall, Cordova and Abbott Streets respectively, and has two industrial insets. In the title cartouche we learn that the population was 300, the community had no steam or hand fire engine and no independent hose carts, the water facilities were not good, and the prevailing winds were northwest. All but four buildings were of wood construction, mostly single-storey, with shingle roofs. Some two-storey buildings had a ladder to the roof. Most larger buildings had a brick chimney, a few had terra-cotta, and some single-storey buildings (small dwellings, "tenements" and lodgings) had only a stove pipe. The main fuel was wood, with some small buildings designated "wood ho[use]." There were three hotels, with the Deighton Hotel on Carrall at the corner of Water Street angled facing a street now called Alexander. The plan shows the main building was divided into two parts, each with a brick chimney, a long single-storey addition on the back for a dining room, and a single-storey annex to the south. There were barrels and buckets on the roof for fire protection. Other commercial and public buildings included a telegraph office, a public hall, a jail, two saloons, three general stores, a real estate office, a drug store, a carpenter's



SPECIAL COLLECTIONS DIVISION, U.B.C. LIBRARY

shop, a barbershop, a cobbler shop, a bakery and restaurant, a meat packing plant, and two Chinese washhouses and stores. The few buildings on the north side of Water Street were on piles and planks, and a plank walk ran along the south side from Abbott to Carrall. The first of the two insets shows the Coal Harbor Fishery, a manufactory of fish oils, with "Jos. Spratt proprietor." The buildings and machinery are described as "first class" but not in operation in August 1885, with a watchman in charge of the premises, most of which was built below a thirty-foot bank. The second inset is of the Hastings Saw Mill Company where a watchman was on duty at all times and which employed seventy-five hands — white, Chinese and Indian. Both the mill and the fishery had their tanks of water and water pipes, barrels and hose in readiness. "Granville" is a picture of a frontier community with two industries and potential.

In contrast Nanaimo in August 1885 was a much larger, settled community of 1,500, requiring two sheets, covering the area between the slough and the harbour. The water supply was very inadequate, insufficient in summer and aided by three cisterns for fire purposes in winter, but, we are told, a "Water Co. is now organized & will furnish an ample supply of water by Jan. 1886." The engines could draw water from the harbour when the tide was in. Nanaimo was prosperous enough to have a few buildings of stone, but most were of wood. There were two churches, the Church of England of stone, the Presbyterian of wood; six hotels, including a Temperance Hotel; three saloons; four dining rooms or restaurants; two lodges (IOOF and Masonic); a newspaper, the *Nanaimo Press*; a music hall; and two schools, public and Sunday. The presence of a Chinese community is indicated by two Chinese stores and washhouses. The importance of mining is shown by the Miners Exchange on Commercial Street, and the Miners Cooperative Store and Reading Room at the foot of Nicol Street. There is a second reading room, and several halls. Town planning is evident in the use of crescents and in the square centralizing public buildings, such as the Customs House, Post Office, Land Office, Court House, Jail, Council Chambers, Savings Bank, and Church of England. The city is built on a steep hill for which compensations were made. Buildings along the harbour were partly on stilts, some with second floors on a level with the first street, Victoria Crescent, and some, across the Crescent, with the second floors opening onto a lane higher up the hill. The second street, Cavan Street, is thirty feet higher than Victoria Crescent. There were plank sidewalks in the busy commercial blocks. The citizens of Nanaimo were living in a settled community

-KEY-

COLORS
 RED = BRICK - YELLOW = WOOD (DWGS. STORES & C.)
 BLUE = STONE - GREY = WOOD (SHEDS FACTORIES AC.)
 EDGED WITH RED = BRICK-VENERED OR NOGGED
 SLATE COLOR = ENTIRELY IRON CONSTRUCTION
 N.B. ON 100 SCALE, VENERED BUILDINGS ARE COLORED RED & MARKED V.
 R.C. = ROUGH CAST OR PLASTERED. CORR. IRON CLAD.
 PROBABLE FIRE CUT OFF.

Nº OF STORIES 2
SLATE ROOF 0
METAL ROOF COMPOSITION P
SHINGLE OR BOARD ROOF X
SHINGLES IN MORTAR S
MANSARD ROOFS M
IRON OR "STANDARD" DOORS OR SHUTTERS.
STEAM BOILERS
HOISTS OR ELEVATORS.
WOOD OR LATH & PLASTER PARTITION.
PASSAGE OR DRIVEWAY UNDER

WINDOWS OR OPENINGS
 X IN 1ST STORY
 // 1ST & 3RD "
 // 2ND & 4TH "
 STROKES SIGNIFY STORIES.
 DOTS OPENINGS; READING FROM LEFT TO RIGHT FACING BUILDING.

PARAPET WALL (DOUBLE LINE)
STABLE (DIAGONAL LINES)
GALLERY OR VERANDAH
METAL CORNICE (SOLID LINE)
WOODEN " (DOTTED ")
SKYLIGHT { LINES UNDER DENOTE OPENINGS IN FLOORS.
LUMBER PILED.

FIGURES IN BRACKETS THUS (50) DENOTE RELATIVE HEIGHTS OF GROUND.
 FIGURES IN STREETS THUS 6' ARE STREET WIDTHS.
 NºS PARALLEL TO & OUTSIDE OF STREET LINE ARE EXISTING STREET NºS NºS AT RIGHT ANGLES TO OR INSIDE STREET LINE, ARE ARBITRARY NºS

☒ B.C. 100 = BRICK CHIMNEY 100 HIGH | S.P. = STOVE PIPE
 ○ I.C. 100 = IRON " " " " | S.P. = STOVE PIPE
 ○ = TOWN HYDRANT - ⊙ = PRIVATE HYDRANT - ⊙ S.P. = STAND PIPE

- ON KEY PLAN -

○ = HYDRANTS. ● = TANKS. D.D. = DETACHED DWELLINGS.
 S D = SCATTERED DWELLINGS.

Key to Symbols used on Fire Insurance Plans by
 Chas. E. Goad and Chas. E. Goad Co.

with stable incomes and time to devote to improving their way of life with religion, education, literature, music, entertainment and social clubs.

The insurance industry has always paid particular attention to businesses in which fire risk is high, and in British Columbia sawmills, mines and salmon canneries at times dominated the map, while their communities were treated as addenda or simply ignored. In 1897 Goad produced a series of plans of canneries along the Fraser River in which Steveston appeared as an extension of the canneries. In 1915 Port Essington was treated similarly in a series covering the canneries on the north coast (the earlier edition of this series has not been located). The industrial plans are interesting not only for the layout of the plan and indications of the process and equipment used, but also for the insights into the social life of the working community — often quite isolated, as were the northern canneries. The Kildada Packing Company's Manitou Cannery at Kimsquit had Indian, Japanese, Chinese and white employees. The Indians lived in large houses separated by the mess house and the store from the "Fishermen's House," "Jap House" and "Chinese House." The Japanese and Chinese houses had two storeys, the Japanese smaller with a separate single-storey annex. J. H. Todd's Beaver Cannery on Rivers Inlet had a one-and-one-half-storey Chinese house separated by the cannery itself from the manager's house, a large mess house, a "White House," two Japanese houses, a "Fishermen's House" and a group of Indian huts extending off the plan.

The Fraser Mills plan of 1922 is actually a plan of Canadian Western Lumber Company and Fraser Mills Sash, Door and Shingle Company, which appear to have been operated together. The townsite is shown only in an inset on Sheet 1. The two sheets give an interesting picture of a small one-industry community based on wood from the entry of logs into the mill to the finished product in the sash and door factory. The work force appears to have been East Indian, with a Hindu temple and an "Oriental Village," including a number of wooden bunk- and boarding-houses, a bathhouse, and outbuildings for chickens, pigs and cows.

Much more could be said about all of these plans. As will be seen from the union list, there are some places for which we have a number of editions of plans, while for others we have only one, whether through the loss of other editions or through the decline of the community. Larger cities tended to change more rapidly and required more frequent editions of fire insurance plans, providing a greater chance of survival of the superseded editions. "Gastown" can be traced from the Granville of 1885

to the last edition of the Vancouver plan in its Sheet 112 dated January 1955. It is hoped that this introduction to fire insurance plans will spark the interest of researchers to use their rich resources.

BIBLIOGRAPHY

- HAYWARD, Robert J. "Chas. E. Goad and Fire Insurance Cartography," Association of Canadian Map Libraries *Proceedings*, vol. 8 (1974), pp. 50-72, *ill.*
- . *Fire Insurance Plans in the National Map Collection / Plans d'Assurance-Incendie de la Collection Nationale de Cartes et Plans*. Ottawa, National Map Collection, Public Archives of Canada, 1977. xxvi, 171 p., *ill.*
- HOEHN, R. Philip. "The Dakin Publishing Company and its Fire Insurance Maps," Western Association of Map Libraries *Information Bulletin*, vol. 7, no. 3 (June 1976), pp. 47-59, *ill.*
- MOODY, Eric N. "Urban History in Fire Insurance Maps: Nevada as a Case Study," Western Association of Map Libraries *Information Bulletin*, in press.
- REES, Gary, and Mary Hoeber. *A Catalogue of Sanborn Atlases at California State University, Northridge*. (Occasional Paper No. 1.) Santa Cruz, Western Association of Map Libraries, 1973. xxi, 122 p., *ill.*
- RISTOW, Walter W. "United States Fire Insurance and Underwriters Maps, 1852-1968," *Quarterly Journal of the Library of Congress*, vol. 25, no. 3 (July 1968), pp. 194-218, *ill.*
- TESSIER, Yves. "Les plans d'assurances," *Cartologica*, no. 5 (mai 1978), pp. 3-4.
- Union List of Sanborn Fire Insurance Maps held by Institutions in the United States and Canada: Volume 1 (Alabama to Missouri) by R. Philip Hoehn; Volume 2 (Montana to Wyoming; Canada and Mexico) by William S. Peterson-Hunt and Evelyn L. Woodruff, with a Supplement and Corrigenda to Volume 1 by Philip Hoehn. (Occasional Paper Nos. 2-3.) Santa Cruz, Western Association of Map Libraries, 1976-77. 2 vols. (xvii, 178 p.; xv, 201 p.)*