

Princess Charlotte and Princess Victoria Approaching Victoria -- Photo by Shaw Bros.

The HARBOUR and CITY of VICTORIA

VANCOUVER ISLAND, British Columbia
1916

THOS. C. SORBY

Secretary, INNER HARBOUR ASSOCIATION of VICTORIA

Entered according to Act of Parliament of Canada in the year 1917, by Thos. C. Sorby at the Department of Agriculture

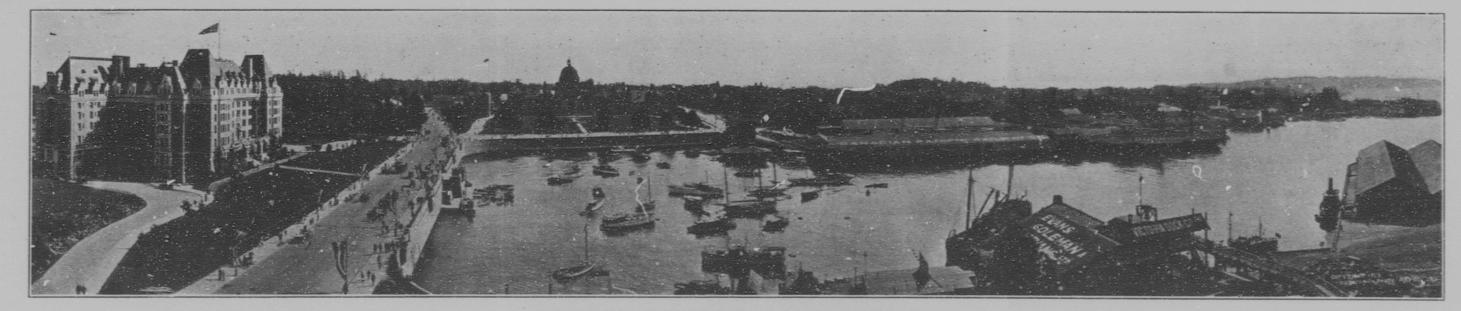
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Table of Contents

Agriculture 43	Forest Products Of	37
Associated Cement Co 39	Georgian Circuit	
Adevrtisements-Index to45	Grand Trunk Pacific Ry	
Banks 5	Grace Line Steamers	
B.C. Electric Ry. Co9, 19, 20, 32	Great Northern Ry	
Blue Funnel Line 21	Graving Dock	
Breakwater 14	Golf Links	
Beacon Hill Park 9	Gorge Park	
C.P.R. Empress S.S 21	Harrison Direct Line	
Canadian Australian R.M 22	Hotel Empress	
Canadian Pacific Ry. Co 17	Hutchinson Bros	
Cameron-Genoa Mills	Hydro-Electric Power	
(Shipbuilders) 34	Hockey	
Candian Northern Ry 18	Indian Reserve (Old)	
Car-Ferry Service (car-barge) 18-19	Industrial Sites	
Cement Industries 39	Industrial Water Powers	
Chemical Works, Victoria 29	Imports	
Climate 10	Inner Harbour	
Coastwise Steamers, C.P.R 25	Imperial Oil Co	
Coastwise Steamers, G.T.P 25	Kelp Industry	
Coastwise Steamers, Union 27	Library, Public	
Coastwise Steamers.	Lumber Industry	
Puget Sound	Lumber Products	
Coastwise Trade 18	Marine Railways	
Coal Mining39-42	Machine Shops	
Copper Mining 40	Maple Leaf Line Steamers	
Connaught Seamen's Institute 7	Market Gardening	
Dairying	Mining Industries	
Danish East Asiatic Line 23	Mining, Coal	
Dry Dock, Esquimalt 31	Mining, Copper	
Douglas Fir	Mineral Products	
Docks (new)	Mortality	
Education	Motorists' Map	
Esquimalt	Nippon Yusan Kaisha S.S. (
Esquimalt Graving Dock	Oak Bay Golf Links	
Esquimalt New Dock	Ocean Docks	
E. & N. Railway 17	Oil, Fuel	
Exports	Outer Wharf	
Empress Hotel	Osaka Shosen S.S. Co	
Excursions	Observatory Saanich Mount	
Fishing Industries 32	Observatory Gonzales Poin	
Fruit Growing		
Fuel Oil	Pacific Great Eastern Ry Pacific S.S. Co	
Fire Prevention 8	Continued on Next Page	

Table of Contents Continued

Parks 9	Silk Trade 24
Port of Call 16	Stevedoring 24
Port Charges 23	Sports in Summer 12
Poultry Raising 44	Sports in Winter 12
Puget Sound 14	Tides 16
Puget Sound Navigation Co 27	Telgraph, Wireless 16
Pulp Wood 36	Tourist Trade 10
Paper Mills 36	Tug, Victoria Co 16
Power Plants, Hydro-Electric 42	Tourist Resort 38
Quarantine Station 14	Travellers' Aid 8
Railways 7	Trade of the Port 24
" E. & N. (C.P.R.) 17	Water Powers 42
" Victoria & Sidney	Whaling Industry 32
(G.N.R.) 18	Wharf, Rithet's Outer 15
" Canadian Nor. Pacific 18	Wharves, Dallas Road (New) 15
" Grand Trunk Pacific 18	Wharves, Inner Harbour 16
" Car Ferry Barges 19	Wireless Telegraph 16
" B. C. Electric9-20	Wrecking Plant 32
" Pacific Great Eastern 18	Wood Pulp Industry 36
Royal Roads 14	United Service Club 12
Ramsay's Machine Works 29	Union S.S. Co. of B.C 27
Royal Mail S.S. Co 22	Upper Harbour 15
Rithet's Wharf 15	Vancouver-Portland Cement Co 39
Robertson Iron Works 29	Victoria Machinery Depot 28
Russian Volunteer Fleet 23	Victoria City 5
Rotary Club 6	V. & S. Railway 18
Saanich Mountain Observatory 6	Victoria Whaling Co 27
Salmon Industry	Victoria Chemical Works 29
Salvage, Government Plant 32	Victoria Tug Co 27
Seamans' Institute 7	Victoria Dock Company 27
Seagoing Vessels 21	Victoria Commercial Centre 14
Schools, Public 5	Victoria Harbour 14
Ships' Supplies4-28	Yarrows Limited, Shipyards29-31
Shipbuilding34	Y.M.C.A
Ship Repairing, etc 28	Y.W.C.A 8



THE INNER HARBOUR (James Bay,) VICTORIA, B. C.

Showing the Empress Hotel, the Causeway, Parliament Buildings, the Wharves of the C.P.R. Coast Service Laurel Point, the Wharves of the Victoria Dock Co. and the G.T.P.

-- Photo, Donaldson Photo Art Co.

The Harbour and City of Victoria, B. C.

INTRODUCTION

The Inner Harbour Association of Victoria is an organization of the owners of waterside premises, the transportation companies, mills and mercantile houses, whose interests are directly concerned in the development of navigation facilities and the trade and commerce of the port.

In 1905 this Association prepared a comprehensive plan with a view to securing the best results in the public interests. This plan was adopted by the Dominion Government and is now being carried to completion, to the great advantage of the Port and City.

This Association seeks to promote the trade and commerce of the Port, not only by securing the best facilities for navigation, but also by making known to the outside world the advantages and facilities of the Port in the matter of building, repairing and completely outfitting vessels; the nature of the trade tributary to the Port; its manufacturing and transportation facilities; its resources, industries and possible development. Hence the accompanying statement of facts.

At the same time it is opportune to direct the attentior of the outside world to the residential advantages of Victoria, as a pleasant place of refuge from the Arctic cold of the Prairies and the Eastern cities of Canada and the States. The central position of Victoria on the routes of travel, and its ready accessibility from all parts of the world, should commend it to the thoughtful traveller in search of restful enjoyment.

THOS. C. SORBY.

Secretary Inner Harbour Association.

Victoria, B.C., December, 1916.

List of Illustrations

Pa	ge.
View of Inner Harbour (James Bay)	
frontispiece, foldedIns	ert
Beacon Hill Park	9
The Gorge Park B.C.E.R.)	9
The Gorge Bridge	10
Motorists' Map	11
Map of Victoria HarbourIns	ert
Empress of Russia	21
R.M.S.S. Niagara	23
Princess Charlotte	25
Prince Rupert	26
Ship on the Ways-V.M.D.	28
Esquimalt (Yarrows' Yard)	30
Whaling in the North Pacific	33
In the Tall Timber, Alberni	35
A Giant of the Forest	38

Victoria as a Residential City

The City of Victoria is not only the chief city and port of Vancouver Island, but the Capital of the Province of British Columbia, the seat of the Provincial Government and the centre of Legislative activity.

The appearance of the city, as seen when approaching by the Inner Harbour, with its public buildings and the Empress Hotel in its well-kept grounds, is the most attractive approach to any town on the Pacific Seaboard. The City is exceptionally well paved, well lighted and abundantly supplied with water; its residential streets are boulevarded and well kept up by the municipality; with pretty homes on either side of the streets pleasantly situated in well kept gardens.

Victoria possesses an excellent system of Public Schools. There are twenty-one public school buildings in the city and one large high school. The latter is a particularly handsome structure, equipped with all the most modern conveniences. There are, besides, two high schools in the suburbs, one at Oak Bay and the other at Esquimalt. The total enrollment for the year ending June 30th, 1915, was 5,500, and of this number 699 were high school students.

The Public Library is centrally situated on Yates Street, at the corner of Blanshard Street. It was erected in 1904 chiefly from a grant by Andrew Carnegie at a total cost of about \$50,000, exclusive of site. It contains about 27,000 volumes, has commodious reading rooms, reference room, special children's rooms, and all the leading magazines and daily papers, including those from England and the Overse as Dominions, are found on its tables. The ordinary hours are 9 a.m. to 9 p.m., and on Sundays and holidays, 2 to 9 p.m.

The following Banks are established in Victoria, all branches of the Chartered Banks of Canada, with affiliations all over the world:

The Bank of British North America, 511 Yates Street.

The Bank of Montreal, 1200 Government Street.

The Bank of Nova Scotia, Fort Street, corner of Broad.

The Bank of Toronto, Fort Street, corner of Douglas.

The Canadian Bank of Commerce, 1022 Government Street.

The Dominion Bank of Commerce, Douglas and Yates Streets.

The Imperial Bank of Canada, 1301 Government Street, corner Yates.

The Merchants Bank of Canada, corner of Yates and Douglas Streets.

The Northern Crown Bank, 1204 Government Street.

The Royal Bank of Canada, 1601 Government Street.

The Union Bank of Canada, Government and View Streets.

In 1914 the Dominion Government erected the Gonzales Heights Observatory, situated within the City of Victoria, upon a site commanding one of the finest views in the world.

Here complete meteorological observations are taken, weather reports for all B. C. stotions are received and prepared for publication, and daily weather forecasts are issued. Astronomical observations are taken for obtaining the correct time for the Island and for shipping, also delicate instruments installed here record earthquakes that occur in all parts of the world.

Owing to the favourable climatic conditions prevailing in this vicinity, including a small annual precipitation, large proportion of clear weather, and a remarkably small daily and annual range of temperature, the Dominion Government has erected on Little Saanich Mountain a few miles from Victoria, the largest Astronomical telescope in the world. This instrument weighs 55 tons, and the great mirror which is now being completed is six feet in diameter and weighs two and one-quarter tons. This huge telescope is housed under a great revolving steel dome 66 feet in diameter, and will be used chiefly for studying the more distant stars and nebulae, now beyond the reach of the world's present great telescopes. Mr. F. Napier Denison is Dominion Resident Observer.

The Rotary Club of Victoria is an organization of representative business and professional men in close touch with 250 similar bodies in Canada, the United Kingdom and the United States. through its membership of the International Association of Rotary Clubs whose offices are at Chicago.

The Association's motto is, "He profits most who serves best." Its main object is broadening the horizon of its members by giving them opportunities to learn what is being done in spheres outside their own particular lines of business, that they may become better citizens and better members of existing organizations, and thus aiding in the upbuilding of their own communities, impressing upon them further that the common interest is identical with that of the individual. The meetings of the club take the form of weekly luncheons for members and their guests at the Empress Hotel. The Secretary, Mr. T. Goodlake, 1107 Langley Street, will answer any enquiries.

The Connaught Seamen's Institute is situated at the corner of Superior and St. Lawrence, midway between the Inner and Outer docks. It is open from 9.00 a.m. to 10.00 p.m. Every endeavour is made to make Jack feel at home. Piano, billiards, draughts, chess, dominoes, hot and cold baths are provided, also writing material for use in the Institute. Local newspapers, Old Country papers, illustrated papers and magazines are provided. Ships and steamers supplied with literature for use when at sea. Letters may be addressed to the Institute, and money deposited with the Superintendent for safe keeping. First Aid to the Injured and other classes of instruction in the season are hoped to be commenced. All seamen of every rank and nationality, steam or sail, whether in deep water or coasting vessels, are most heartily welcome.

The Superintendent, Mr. Wright-Hill, will answer any enquiries.

One of the semi-public organizations of which the City of Victoria is justly proud, is the Young Men's Christian Association, which is a branch of the world-wide organization that is doing such beneficient work for soldiers, sailors and civilians in all parts of the world.

It is housed in a splendid four-storey building on the corner of View and Blanshard Streets, just between the business and residential districts and close to several street car lines. The building contains a spacious lobby, furnished with magazines, papers, books, writing tables, piano and billiard tables; a large gymnasium equipped with modern apparatus and running track; shower baths, and an attractive white tiled swimming pool, where the water is kept at about 74 degrees the year round.

In addition to these fine appointments this Young Men's building has eighty-five comfortable and neatly furnished bedrooms, so that a young man away from home may have practically all his wans supplied under one roof.

Young men coming to Victoria as strangers are cordially invited to visit the Association Building; have their mail addressed in its care, and make it their headquarters until permanently settled.

The Secretary in charge will answer any enquiries.

Fire Prevention—During the year a new and very complete system of fire alarms has been put in operation, the high pressure linked up with Sooke waterworks and the establishment and apparatus kept up to the highest standard, giving efficient control equal to any anticipated emergency, and insurance rates are proportionately low. The total loss by fire in 1916 was under \$30,000.

The Young Women's Christian Association has a large and comfortable building on the corner of Courtney and Douglas Streets.

This building accommodates about sixty girls or young women. A former building of the Association is also used as a boarding home, and it is situated within the same block.

The main building was formally occupied by the Union Club, and the public rooms are exceptionally comfortable.

A splendid dining-room is a good feature of the work. It is open to men and women, and largely patronized by both.

A Travellers' Aid Secretary meets all boats and trains, and if addressed in care of Y.W.C.A., will always meet and care for the arriving stranger.

The Association meets the accommodation of hundreds of travellers during the year.

The Association also conducts an employment bureau, and great care will be taken in advising as to conditions in the matter of suitable employment of any one who writes the Employment Secretary.



Beacon Hill Park

Beacon Hill Park, with views over the wide expanse of the Straits of San Juan de Fuca, are a source of outdoor enjoyment and attraction.



The B. C. Electric Railway Park from the Water

A special line of cars runs to the **Gorge Park** on the Upper Victoria Arm. It is a beautiful and popular resort in summer amongst the woods, at the side of a broad expanse of quiet water with every facility to swimming and boating.

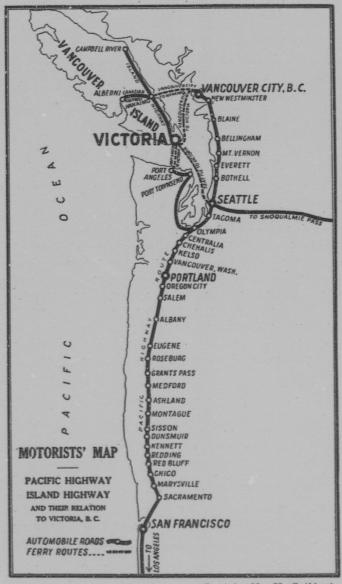
For particulars of car service see page 20.



The Gorge Bridge, Looking Towards the B.C.E.R. Park

Being almost surrounded by salt water, Victoria's climate is very equable, rarely exceeding eighty degrees in summer, with few storms, and seldom much below freezing in winter, and with very little snow. The climate, in fact, is one of the assets of Victoria, making it a desirable refuge from the cold of the Prairies in winter and from the heat of the South in summer. It is singularly free from thunder-storms and sultry heat, and in the hottest weather the nights are usually cool and pleasant. Outdoor occupation can be carried on regularly nearly throughout the year.

The Tourist Trade in and out of Victoria is rapidly increasing, parties going to and from the Yukon to see the "midnight sun," the great glaciers, etc., and few tourists fail to stop off here in passing



-Lent by Mr. H. Cuthbert

either way. The C.P.R. is cultivating this trade by improving the accommodations of their vessels, and have erected at the head of James Bay on the Inner Harbour, the finest and most commodious Hotel on the Pacific Coast, situate in its own spacious grounds.

The Provincial Government, in co-operation with the various municipalities, has built and maintains splendid trunk roads for motoring, etc., opening up the scenic beauties of the Island as one of its assets. These are part of the Georgian Circuit, a great international tour of British Columbia. The famous Malahat Drive, which is the beginning of the Island Highway, connects Victoria with the northern portion of the Island, is probably one of the most famous drives on the Coast. The Island Development Association and the Island Automobile Club are working vigorously in the matter of building good roads and developing the facilities for travel.

The royal game of Golf is now looked upon as a necessity in all communities. The links at Oak Bay, three and a half miles from the centre of the city, but with direct electric railway communication have always been considered amongst the most attractive on the continent. They have, however, been found inadequate to meet the demands and another 18-hole link has been opened at Colwood, some six miles from the city. These links are open every day in the year and any member, in good standing in any recognized Golf Club, is allowed to use these links by making himself known in the proper quarters.

The United Service Club has a nine-hole course on Macaulay Plains, founded by members of the Navy and Army in 1893, and has a present membership of 60. Secretary J. W. Littleboy, Registry Office. Approached by the Esquinalt car service.

In the summer time there are lacrosse, cricket, baseball, tennis, bowling on the green, croquet, yachting, canoeing, bathing, and all forms of aquatic sports. In winter there are football and hockey, including the game played on one of the largest artificial ice rinks in Canada.

The mortality in 1915 was only 7.80 to the thousand, and longevity amongst its 60,000 inhabitants is most noticeable on the streets, and is proof apparent that it is one of the most healthy residential cities in North America.

Victoria is the centre of numerous trips and excursions to Vancouver, the Gulf Islands, innumerable attractive beaches with their pleasant hotels. There is a daily service to Seattle, Tacoma, and other Sound ports, and Portland, etc., and excursions north to Alaska, with regular service to the land of glaciers and the Midnight Sun, and South by the Pacific Steamship Line to San Francisco, Los Angeles, San Diego and the beauties of California.

THE FUTUPE OF THE PORT OF VICTORIA

It is difficult to foresee the ultimate development of the port of Victoria. We have on the Island prospective mines and forests of timber, each with busy camps—the vast wealth of the sea—the whaling industry—the fruits and produce of the farms, all of which, as industries, are yet in their infancy, and are tributary to this port in the matter of distribution and collection. Not only will these raw materials gravitate to factories, mills and shipyards situate at the margin of our Harbour and build up various other industries incidental to their being placed on the markets of the world, but they will draw most of their supplies and outfit from this port, and thus tend to develop other industries in their wake, increase the resident population and build up the concrete wealth of the City of Victoria.

Victoria as a Commercial Centre

In putting forward this brochure dealing with the commerce and industries of the Port and City of Victoria, it must be noted that Victoria is the Capital of British Columbia and the chief city and port on Vancouver Island.

Vessels inward bound from the Pacific to Vancouver, the Sound and Northern B. C. Ports, or from the sea for coal, enter through the Straits of San Juan de Fuca, all passing the entrance to Victoria Harbour.

Puget Sound and the Gulf of Georgia are large expansions, of hundreds of square miles in extent, off the Straits of San Juan de Fuca. These internal waters contain numerous islands and straits, the adjacent country being more or less hilly. The Island of Vancouver is about 260 miles long by seventy miles wide and is one (the largest), amongst the archipelago.

The Quarantine Station, at which all except coasting vessels, coming to Southern B. C. ports, are required to call, is at William Head, about eight miles south of Victoria.

The Royal Roads, which lies southwest from the entrance to the Harbour, is a good anchorage (except during southerly winds), and has an area of about three square miles in extent.

Four miles west from Victoria is the excellent Harbour of Esquimalt, the Naval Station of the Northern Pacific, referred to later. (See page 31).

THE VICTORIA HARBOUR

Victoria Harbour has its entrance between McLaughlin and Ogden Points. From the latter a breakwater about 2,700 feet in length has been constructed at a cost of about two million dollars. The total amount of rubble used in the construction being about 1,235,000 tons, and 153,800 tons of granite blocks, each weighing from to 15 tons. This breakwater shelters an area of about 90 acres from the heavy southeasterly seas. These works have been successfully carried out by Sir John Jackson (Canada) Limited, of London and Montreal.

Inside the breakwater are two concrete piers, now under construction by Grant Smith & Co., at an estimated cost of about \$2,300,000, with a berthage of about 5,000 feet, with 35 feet at low tide along the face of the wharves. It is expected that the work will be completed about April, 1917. The following statistics are available covering the progress on the piers to date: Rubble dumped, 373,000 tons; top dressing, 8,000 cubic yards; fill for cribs, 95,600 cubic yards; back fill, 330,000 cubic yards; concrete used in superstructure, 4,162 cubic yards. In the construction of the 52 cribs, 65,400 cubic yards of concrete and 4,600 tons of steel were used.

These works have been carried out under the direction of M. C. Worsfold, Dominion Government Resident Engineer.

The wharves in the harbour are divided into three groups: (1) The Outer Wharves, or ocean docks, now protected by the new breakwater, which can accommodate vessels of 20,000 tons, drawing 30 feet. (2) The Inner Harbour Wharves, or that stretch between the entrance of th inner harbour and the E. & N. Railway Bridge, which can accommodate vessels up to 350 feet in length, drawing 20 feet. (3) The Upper Harbour, or Basin (some forty acres in area), which is above the railway bridge, and can accommodate vessels of 300 feet in length, drawing 20 feet. These draughts can be increased by eight feet at high water.

THE OUTER WHARVES

The Outer Wharf, known as Rithet's Wharf, covers an area of over 16 acres; they are principally used by calling ocean-going ships to or from Vancouver or the Sound ports, and are situated on the east side of the entrance to the harbour and consist of two wharves, providing respectively 1,594 and 1,160 feet of berthage, with a large area of shed room. The general depth of water at these wharves is 33 feet at low tide. At high water the available depth is increased by eight to ten feet. The number of vessels calling at these wharves in 1916 was 700.

Inside McLaughlin Point and opposite the Outer Wharf is situate the wharf of the Imperial Oil Company, where fuel oil may be obtained at any time. The entrance to the Inner Harbour is between Behrens Island (on which is placed the lighthouse), and Shoal Point, the channel at this point is about 800 feet in width, with a depth of from 20 to 22 feet at low water.

INNER WHARVES

The wharves of the Inner Harbour have a developed frontage of about 15,500 lineal feet with a large shed area. These wharves lie along the city front and the depth of water at low tide ranges from 16 to 20 feet, the latter being the objective depth throughout the harbour.

The Spring tides rise from seven to ten feet; neaps five to eight feet, varying one or two feet under strong southerly winds. The spring tides are known as double, that is two high water periods merge into one (with a slight depression in the centre of the period of a foot or two), with a duration of high water of about 14 hours and a sharp fall to extreme low or zero level.

PORT OF CALL

Victoria is a port of call for nearly all the ocean-going ships frequenting these waters. Provisions, stores fuel oil and water may be readily obtained. It is centrally and conveniently situated for the transmission of orders for other ports, being the first port of call and the last port of departure for sea from Puget Sound, Vancouver and British Columbia ports, and all vessels coming in from sea for coal pass the Port of Victoria on their way to the bunkers at Ladysmith.

This port has communication by steamship lines with all the northern ports of British Columbia and Alaska; with United States and South American ports on the Pacific; with Australia, New Zealand, South Africa, Honolulu, China, Japan and the Malay Straits, and with New York and the European ports via the Panama Canal. Also by telegraph and cable with the mainland of British Columbia, the United States, the Orient and Australia.

There is a Wireless Telegraph station at Gonzales Hill, on the southern shore, which can communicate with vessels 250 to 300 miles distant.

It was stated by Captain Troup before the Royal Commission that there is less fog at Victoria than at any other point on Puget Sound, or on the Coast of British Columbia. The entrance to the harbour is well lighted and defined.

The Dominion Government has, during the last few years, expended about two million dollars in the deepening and improving the Inner Harbour, which is now in first class order and well adapted to meet all the present demands of shipping frequenting the Port. These works have been carried out under the superintendence of Mr. A. F. Mitchell, Dominion Government Resident Engineer.

The Coasting Traffic has been augmented by car-transfer barges from the Mainland now running from Vancouver to Esquimalt and Ladysmith. Fifteen cars are brought across on barges, and the trip is made every day in the year, thus tending to build up the wholesale and distributing trade of the port. Cars are also brought to wharf side premises by transfer car-barges for either delivery or collection of freight, to order, so that all wharves are practically on Railway sidings. See also car ferry, page 18.

RAILWAYS

Victoria is the southern terminus of the E. & N. Railway, running from Victoria to Nanaimo and Courtney, and the coal fields on the north and Alberni on the West Coast. This line is an integral part of the great trancontinental system of the C.P.R., and cars from all parts of the American continent are delivered at the Victoria freight depot by car-barge ferries from Vancouver to Ladysmith and Esquimalt. This Railway, when all its contemplated mileage is completed, will give Vancouver Island the same splendid system of transportation to and from all parts of the Island as the Canadian Pacific Railway furnishes for the Mainland.

Passenger trains to and from all up-Island points as far as Wellington, leave Victoria twice daily, morning and afternoon; also for Port Alberni or Courtney, daily except Sunday, and semiweekly for Cowichan Lake.

The railway opens up the farm and fruit lands of the fertile Comox and Courtney Valleys, the coal fields of Nanaimo and Wellington, and the great possibilities of the Alberni district. This system also facilitates the great market for our lumber industries and orchards on the Prairies. Offices 1102 Government Street. The Victoria & Sidney Railway not only opens up the rich farming districts of the Saanich Peninsula, but is an integral part of the Great Northern Railway of the United States, one of the transcontinental systems with ramifications in all the industrial centres of the Northern States. Connection is made by car-barge from Sydney to New Westminster on the Mainland, and carload lots are delivered at its freight yards from all parts of the continent.

The Grand Trunk Pacific Steamship Company, Limited, has a wharf frontage on James Bay of about 1,450 feet, and operate five steamers, using their own piers in the Inner Harbour. Their fleet includes the "Prince Rupert" and "Prince George," making weekly trips between Seattle, Victoria, Vancouver and Prince Rupert. The Grand Trunk Pacific Railway to Prince Rupert is now completed and has been opened for traffic between Prince Rupert and points in the East. These vessels make connection with the trains at Prince Rupert in both directions. The offices are at 1000 Wharf Street.

The Pacific Great Eastern Railway, now building between Vancouver and Prince George, connecting at the latter point with the Grand Trunk Pacific Railway, has its head office in the City of Victoria, and is required by the charter to enter into traffic arrangements with other companies to ensure first-class passenger and freight facilities between the cities of Vancouver and Victoria.

The Canadian Northern Pacific Railway is preparing to open up the southern and western portions of the Island, together with the Saanich Peninsula, connecting up with their transcontinental system by car-barge going from Patricia Bay on Saanich Inlet to Port Mann on the Fraser River, as a temporary port on the Mainland until such time as the permanent port is established.

Development of the car-ferry coasting trade is having an important effect upon industries on the Pacific Coast and is doing much to assist their growth. These ferries call at various points along the Coast, bringing railway freight-cars to mills and other concerns which are not situated near a railway. The cars are either landed and loaded or loaded directly on their barges. In this way, industrial concerns that are actually a considerable distance from a railway are given direct rail connection. This service has made it possible for many mills to operate, which would otherwise not be

in business at all. At a difference of only a few cents on the freight rate they have practically the same facilities as mills on the railway line itself; with shingles, for instance, loading and unloading is quite a serious proposition, as they become loosened in their packing when being reloaded. With the car-ferry service, all these delays and expenses are avoided, and any wharf in the harbour can be placed in communication with any local or transcontinental railway in Canada or the States.

This car-barge service is maintained by the C.P.R. with four car-barges and three tugs between Victoria, Vancouver and Island points.

The pulp mills, smelters, mines and industrial concerns that may be established in the near future may all be served in a similar manner. There is no limit to the service and there is no roadbed to keep in condition or right-of-way to purchase. This Coast, with its numerous fjords and harbours will reap all the advantages of a natural and cheap means of transportation.

The B. C. Electric Railway, Limited, has a complete street railway service about 42 miles in extent, connecting up Esquimalt and the Naval Station on the West, Oak Bay on the East; and also by Interurban line (some 23 miles in length), giving rapid service to the municipalities, summer resorts and villages on the Saanich Peninsula.

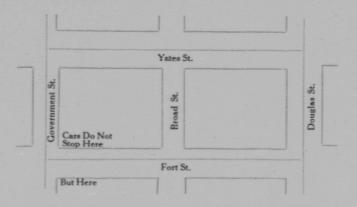
Thus it will be seen that the greater part of Vancouver Island is directly connected up with the City and Port of Victoria as the distributing centre of an Island of 16,000 square miles in area, which occupies a most conspicuous position both geographically and strategically on the map of Western Canada. This area is one of infinite and undeveloped wealth; its forests, coal mines, mineral deposits and fisheries all accessible from a lengthy coast line, or by rail, open up immense possibilities for enterprise and the investment of capital.

TABLE OF DESTINATION SIGNS AND TIME SCHEDULES

Car	Sign	Se	ervice
No.	1—Oak Bay	71/2	Min.
No.	2—Outer Wharf and Cloverdale	2	**
No.	3—Beacon Hill and Fernwood	2	- 44
No.	4—Esquimalt (passing Work Point)12	2	**
No.	5—Gorge Park (via Craigflower Road)		"
No.	6—Foul Bay (Cemetery)10		"
No.	7 and 8-Burnside and Hillside10	,	"
No.	9-Uplands (Cadboro Bay)15		**
No.	10-Mount 'Tolmie (University and Normal Schools)		
	leaving Yates Street 15 min. after the hour60		44
No.	11-Willows (Military Camp, etc)	1/2	"

ALL CARS STOP AT CORNER OF GOVERNMENT AND YATES STREETS

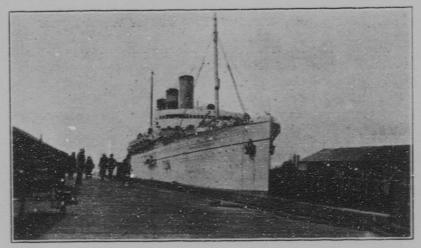
This point is practically the centre of the car system. Below is a little diagram of what may be termed the City Loop.



All cars travel over some part of this loop. The dotted lines represent the car tracks. The corner of Government and Yates is plainly shown, and at this point, practically any inward or outward bound car can be obtained.

SEA-GOING VESSELS

The following sea-going lines of steamers call at the Outer Wharf:



The Empress of Russia at the Outer Wharf
—Photo, L. W. Sorby

The Canadian Pacific Ocean Service, Limited, to and from China and Japan every two weeks. This fleet of four vessels includes the palatial steamers the "Empress of Russia," and the "Empress of Asia," vessels of 17,000 tons. The local offices of the Co.npany are at 1102 Government Street. These first-class passenger steamers carry immense quantities of tea and silk from the Oriena for trans-shipment to New York, London, Paris, etc., and connect with their main line system at Vancouver.

The Ocean Steamship Company, Ltd., China Mutual Steam Navigation Company, Limited ("Blue Funnel Line") Dodwell & Company, Limited, General Agents for North America. Sailings every twenty-eight days from Victoria to Japan, Hong Kong, Philippine Islands. Steamers now operating, S.S. "Ixion," S.S. "Talthybius," and S.S. "Protesilaus."

The Nippon Yusan Kaisha (Japan Mail S.S. Co.), every ten days to and from Japan and China, in connection with all railways. These vessels (each about 13,000 tons capacity), carry valuable

cargoes of silk inwards and manufactured goods and structural steel, etc., outwards. The local offices are at 916 Government Street. Agent W. R. Dale.

The Maple Leaf Line run to and from New York to West Pacific ports and British Columbia; thence to San Francisco and via the Panama Canal, to Swansea and Bristol. Sailings every six weeks. Local agents, R. P. Rithet & Co., 1117 Wharf Street.

The Harrison Direct Line runs to and from Antwerp, Glasgow, London, Liverpool, etc., monthly, via San Diego and Panama Canal to North Pacific Coast ports. These boats carry back canned goods, lumber, etc. The local agents are Balfour, Guthrie & Co. This service has been maintained regularly though 12 of its carriers have been sunk by the German submarine craft.

The Royal Mail Steam Packet Co., monthly to and from Europe, Hong Kong, China, Ceylon, Manila, etc., and the North Pacific Coast. Findlay, Durham and Brodie, agents.

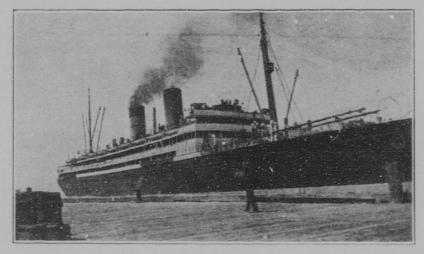
The Pacific S.S. Company, run weekly to and from San Francisco and Southern California ports; also to and from Alaska. The local agents are R. P. Rithet & Co., at 1117 Wharf Street.

The Grace Line run to and from Mexico and South American ports, via San Francisco, with large new ships of 7,000 and 10,000 tons now building. These ships carry wheat, lumber, etc., outwards.

The Osaka Shosen Kaisha run to and from Japan, Hong Kong and Manila, every two weeks in connection with the Milwaukee Railway Company. The steamers of this line have a displacement of about 12,000 tons and bring over cargoes of raw silk, tea, porcelain, etc., for trans-shipment to the East. Local agents, R. P. Rithet & Co., 1117 Wharf Street. Agent for the Chicago & Milwaukee Railway Co., Jas. C. Thomson, 1003 Government Street.

The Canadian-Australian Royal Mail, monthly to and from Auckland, Sydney, Honolulu, Suva, etc. These vessels include the splendid steamers "Niagara" 13,000 tons), and "Makura" (8,075 tons), bringing in cargoes of butter, frozen meats, hides, etc. The local agents are the C.P.R. Co., with offices at 1102 Government Street. The liners Niagara and Makura have maintained a very

fast schedule, sailing every 28 days from Sydney, the service being maintained without a break. There was a noticeable increase in the number of tourists traveling to and from Australasia during the past summer.



R. M. Steamship Niagara at the Outer Wharf —Photo L. W. Sorby

The Russian Volunteer Fleet, from Vladivostok to Northern Pacific and British Columbia ports. These vessels are doing an immense business, carrying munitions of war from Vancouver and Sound ports to Russia.

The Danish East Asiatic Line, with motor-driven boats, from Denmark, Sweden and Norway, via Genoa, Suez Canal and the Orient, returning via San Francisco and Los Angeles and the Panama Canal.

The Johnson Line and the Swedish Transportation Company cover the same route.

All these various lines of steamers have close connection at the neighboring ports of Vancouver, Seattle and Tacoma with all the transcontinental railways.

The low port charges make it possible for all these lines to call and discharge passengers and freight for the Island ports, Victoria and Vancouver. In the consideration of the Pacific Ocean carriers and their transcontinental railway connections, it must be remembered that silk and tea are the prime factors. The enormous saving that can be effected by reducing to a minimum the time that capital is locked up in transit between the Orient and New York and London, is a matter of vital importance in routing the cargo. The value of silk alone carried by these vessels varies from one and a half to four million dollars each trip. These consignments are despatched East by special trains immediately on landing; everything is done to save time in transit.

In addition to these lines of steamships there are a number of tramp steamers, bringing sulphur, nitrate of soda, superphosphate of lime, fuel oil, rice, fish, etc.

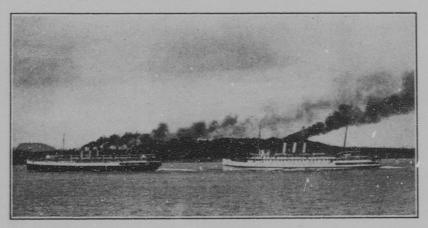
STEVEDORING

All the handling of freight between the vessels and wharves is done by the Victoria and Vancouver Stevedoring Company, who are amply equipped for all emergencies and quick despatch. Office Bastion Square. A. H. Pigott, Manager.

VOLUME OF TRADE

The total tonnage (imports and exports), handled over the wharves in Victoria Harbour during the year ending 31st March, 1916, was 107,964 tons inwards and 29,108 outwards, representing in value \$7,279,354 imports and \$2,191,052 exports.

COASTWISE STEAMSHIP LINES

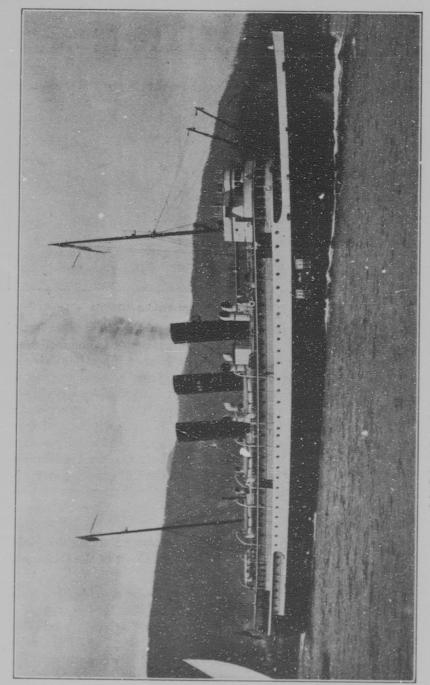


Princess Charlotte and Princess Victoria Approaching Victoria -- Photo by Shaw

The Canadian Pacific Railway Company has about 2,500 feet of wharfage in James Bay, with spacious warehouse accommodation. The B. C. Coast Steamship Service has been operating sixteen steamers out of Victoria this past year, giving a weekly service in summer, and a semi-weekly in winter, to Alaska, and a weekly service to Prince Rupert throughout the year; a regular service to the West Coast of Vancouver Island; two boats a day to and from Vancouver, the midnight boat leaving at 11:45, and a daily boat to Seattle every afternoon. These vessels all use the Inner Harbour at Victoria and make their headquarters at the Company's own piers, and connect with their main-line and continental system at Vancouver. The offices are at the wharf on Belleville Street. (See also page 17.

There is a weekly service to West Coast points on the Mainland and three trips per month to the West Coast of the Island and four trips per month to the Gulf Islands.

The Grand Trunk Pacific Steamship Company, Limited, has a wharf frontage on James Bay of about 1,450 feet, and operates five steamers, using their own piers in the Inner Harbour. Their fleet includes the "Prince Rupert" and "Prince George," making weekly trips between Seattle, Victoria, Vancouver and Prince Rupert. The Grand Trunk Pacific Railway to Prince Rupert is now completed



S.S. Prince Rupert, Grand Trunk Ry., B. C. Coast Service

and has been opened for traffic between Prince Rupert and points in the East. These vessels make connections with the trains at Prince Rupert in both directions.

The Union Steamship Co., of B.C., Ltd. Agent G. McGregor, with local office at 1003 Government Street.

The Puget Sound Navigation Company, operating twenty or more steamers on Puget Sound and adjacent waters, run daily between Victoria and Seattle, Port Townsend and Port Angeles. These vessels leave the C.P.R. Wharf, Belleville Street, daily except Sunday. E. E. Blackwood, Agent, 1234 Government Street.

The Victoria Tug Company operates several tugs with scows capable of carrying 250 to 500 tons, and undertakes all classes of towing between the Island, Mainland and Sound ports. G. McGregor, Agent. Offices, 1003 Government Street.

The Victoria Whaling Company, Ltd., have their headquarters at Grant's wharf, at the foot of Point Ellice Bridge. They own and operate nine steamers in the whaling business, and have developed this undertaking from four stations on the West Coast. (See Whaling Industry, page 33).

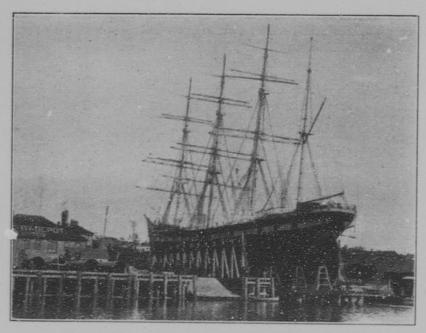
The Border Line Transportation Company, Messrs. Dodwell & Co., agents, with offices in the Belmont House, Government Street.

All these wharves are indicated on the sketch map which is attached as a key to the general situation.

The Victoria Dock Company has a spacious wharf on Wharf Street, in front of the Post Office, easterly of the Grand Trunk wharves, with ample shed and storage capacity.

SHIP REPAIRING FACILITIES

As having a direct bearing upon port interests, we may call attention to the facilities for ship building and general repairing directly connected with the Harbour.



A Ship on the Marine Railway, Victoria Machinery Depot

In the Upper Harbour, or Basin, are situate the works of The Victoria Machinery Depot, having a frontage of about 360 feet and covering an area of about 136,000 superficial feet. The Marine ways are fitted with a cradle 280 feet long by 60 feet beam, providing dry dockage for repairing, cleaning, etc., for vessels up to 3,000 tons dis placement. Larger vessels are docked by the firm at the Esquimalt Drydock. At the plant are situate up-to-date machine shops, boiler shops, blacksmith shop, foundry and pattern shops, and a large wharf for the receiving and storage of goods.

Hutchison Bros. & Co., Ltd., are equipped with a modern machine shop and foundry and their wharf and deep water frontage places them in an excellent position to handle marine repair work. The Robertson Iron Works, on Store Street, supply most of the heavy forgings, for which they are fully equipped with steam hammers and all appliances.

Ramsay's Machine Works are situated on Store Street, near the end of Telegraph Street, providing all classes of engine and machinery repairs, brass, iron and steel castings.

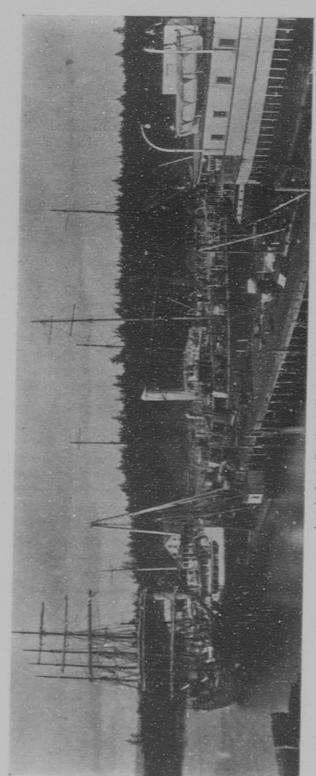
On the south side of the harbour are situate the machine shops of Armstrong Brothers, where all kinds of repairs to motors and small engines are made.

At Esquimalt are situate the Government Dry Dock and Messrs. Yarrows Marine Railway. (See pages 31 and 48.

The Victoria Chemical Company's Works at the entrance to the Inner Harbour is conspicuous. They have a water frontage of 390 feet, with a wharf frontage of 336 feet in a depth of 20 feet at low water. The wharf is double tracked from end to end to a length of 460 feet, and cargo is received from ships slinge to trucks, which carry it to the weighing machine, with a capacity of 4,500 lbs., and the material is hoisted by steam process to the overhead trackway and delivered at points required.

INDIAN RESERVE

The Provincial Government is developing the shoreline of the old "Indian Reserve," opposite the wharves in the Upper and Lower Harbour, reclaiming a large area between the railway bridge and Songhees Point, and in the upper harbour between the two bridges. This land, between the railways (common user lines), and the water, is being laid out as sites to be leased for bona fide industrial purposes. "Common user" wharves will also be built on the reach towards Victoria West. Considerable industrial developments may be expected to take place along this frontage in the near future.



Lang's Cove, Esquimait Harbour-Yarrows, Limited

-Lent by Mr. H. Cuthbert

ESQUIMALT

Esquimalt Harbour, four miles distant from Victoria, is entered from the Straits of San Juan de Fuca, the immediate entrance being from Royal Roads, a fine sheet of water, affording excellent anchorage. The entrance is three cables wide, opening out immediately to an extensive harbour having a general depth of six fathoms and extending one and three-quarters miles northwest. On the eastern side of the harbour are Constance Cove and Plumper Bay, on the shores of the former of which (built on Duntze head), is the Government Naval establishments. At about a cable's length above Dyke Point the water shoals to three fathoms and from thence to the head of the harbour is a shallow flat at low water. The tide rises from seven to ten feet at springs and five to eight feet neaps.

The firm of Yarrows, Limited (associated with the firm of Yarrow & Co., Ltd., of Glasgow, formerly of London), builders of Destroyers and shallow draft vessels, have extensive shipyards in Lang Cove, contiguous to the present Government drydock. Their marine railway is capable of accommodating vessels up to 300 feet in length by 55 foot beam, and has a hauling capacity of 2,500 tons deadweight. The wharf, over 600 feet in length, has shearlegs with a lifting capacity of 60 tons. The various departments, including foundry, blacksmith's shop, pattern shop, machine shop, saw mills and joiners' shop, are fully equipped to date.

All vessels going to or from Puget Sound. Victoria or Vancouver, and all vessels coming in from sea for coal pass the entrance to Esquimalt Harbour and Yarrows' yards.

Yarrows' Yard is adjacent to the site of the proposed New Government Drydock, the construction of which will be undertaken by the Dominion Government at an early date. The dimensions of the new Drydock will be 1,150 feet long by 120 feet wide and, when completed, will be one of the largest and best equipped in the world. In addition to the drydock there will be a wet basin in which vessels will be accommodated when undergoing such repair as can be done without going into dock.

Contiguous is the Government Graving Dock, 480 feet in length by 90 feet in width at coping level and 65 feet wide at the

entrance, with a depth of water of 26½ feet. This dock is in constant use for ship repairing when not required by the Government.

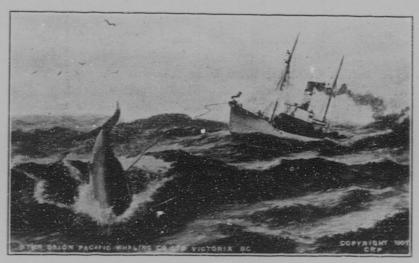
The wrecking plant of the B. C. Salvage Co., Limited, for the Coast of British Columbia (which is subsidized by the Dominion Government), has headquarters here.

Esquimalt Harbour is connected with Victoria Harbour for Customs purposes and is under the supervision of the Victoria and Esquimalt Harbourmaster.

The B. C. Electric Railway gives quick connection between Esquimalt and all parts of Victoria.

FISHING INDUSTRY

The salmon fisheries of British Columbia are a most important industry, and whose activities spread over all the rivers and inlets of the British Columbia Coast; the total pack in 1915 amounted to over one million cases. One cannery situate at Esquimalt, close to Victoria, puts up about 30,000 caess per annum. The fish are caught in traps located in the Straits of San Juan de Fuca. These are mostly shipped over the C.P.R. and other railways to the European markets. There are two or three other canneries located on the Island doing an extensive business, and many more on the mainland. The total pack in British Columbia for the season of 1916 was 995,065 cases, of which the Vancouver Island pack was 145,763 cases, made up of 13,976 sockeyes, 11,302 red springs, 35,239 were cohoes, 34,993 were pinks, the balance being chums and white springs. The present high rates on freight, due to the war, has greatly reduced the export of all fish, but in previous years the annual export of salmon has been about 150,000 tons; of cod about 1,000 tons; of herring 23,000 tons, with halibut, colachans, trout, clams in corresponding large quantities.



Whaling in the North Pacific

The Whaling Industry has recently developed into an export of considerable importance. The Victoria Whaling Company has four stations, viz., Sechart and Kyuquot on Vancouver Island and Rose Harbour and Naden Harbour, Queen Charlotte Islands, and sends out a fleet of light, specially equipped steamers, and secured last season a catch of over 400 whales, mostly Finbacks, shipping from their wharves at Point Ellice in the Upper Harbour, some 10,900 barrels of oil, 1,200 tons of fertilizer, mostly for San Pedro, 500 tons of bone meal and 25 tons of whalebone.

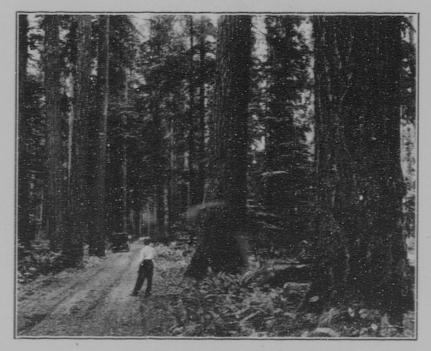
THE LUMBER INDUSTRY AND SHIPBUILDING

In British Columbia there is an inexhaustible supply of the finest timber in our forests, far above the present demand. The Douglas Fir is one of the best woods for spars and constructional purposes, and frequently squares 45 inches for a length of ninety feet. Cedar, spruce and hemlock abound, of great size, and form most important raw material for manufacturing and building purposes. About two million dollars is invested in mills, capable of supplying the markets of the world, but there is at present an insufficiency of ships available for carrying the products of this industry over the seas and thus the mills have been unable to dispose of same where the demand has been greatest. Box shooks for ammunition and spruce for aeroplanes for the use of the Imperial Government has been shipped over land by rail to Atlantic ports connecting with steamers for England, at greatly enhanced rates. Australia, New Zealand, South Africa, the British Isles and Europe, are all demanding what we have ready to supply, but the trade is blocked by want of bottoms. This demand is at present being met by the more enterprising mills in the neighboring States to the loss and detriment of British Columbia. To try and meet this condition of affairs the Cameron-Genoa Mills Shipbuilders have already laid down three keels in the upper harbour, and are building general utility schooners 260 feet long, 44 feet beam, with a 19-foot clear hold, each with a carrying capacity of 1,500,000 feet of rough lumber. These vessels are fully adapted for carrying return cargoes. The first of these ships will be launched in February, 1917. These and other vessels now building at Vancouver and New Westminster will do much to relieve the situation until the vast fleet of vessels now tied up by the demands of war is again on the open seas. Three vessels of about 8,800 tons each are now in order for Norwegian interests in yards at North Vancouver at a cost of about \$3,750,000, and the present demand is for all that can be built.

The best timber areas are as yet untouched, the mills hitherto limiting operations to Coast districts (being built on salt water) those areas further inland will be later reached by railroads. The growth of timber on the Island, it is said by Mr. Grainger, the Chief Forester, is more than keeping pace with the consumption, especially now that protective measures against forest fires are being enforced by the Government.

The Color st of the 3rd December, 1916, speaking of the value of the Douglas Fir of Vancouver Island, says in part:

"Douglas Fir is exceptionally strong for its weight, a fact more important in the shipbuilding industry than almost any other business requires. It is important that the material be as light as the desired strength will permit, since all surplus weight reduces the speed of the vessel and increases the cost of transporting commodities in them. Douglas Fir is one of the few woods whose strength is above the value set by the well established law of weight vs. strength.



Amongst the Tall Timber, Alberni, B. C. -Photo by Fleming

"In addition to the large timbers and planks obtainable from Douglas Fir trees, the stumps yield the finest and largest ship knees in the world. The knees used in the construction of the local vessels were obtained at Cobble Hill and experts who have seen them declare they are the very best known. "These knees are an important item to the shipbuilder, for as many as two hundred to three hundred are used in a single boat. Many of the knees have an angle of 90 degrees, although a few are used for special purposes that require angles greater or less than this. Nature has decreed that stumps on level ground yield knees having right angles, while the roots of those on a hill produce knees with acute angles on the up-hill side and obtuse angles on the downhill side.

"For many years the large masts and spars for vessels built in various shipyards of the world have been supplied from the Douglas Fir forests. The spars for the local ships were obtained at Cowichan Lake, and were towed down to Victoria.

"Here, as in the other parts of the vessel, the strength, weight and size of the sticks have been of inestimable value to shipbuilders in getting out these essential parts. The trees carry their form well up into the top and masts can be obtained from young thrifty trees."

WOOD PULP

Wood Pulp and paper making woods, in inexhaustible quantities, border the ocean and navigable waters within easy transportation to the mills, which are situate contiguous to water powers. The products of these mills find ready market in Australia, Japan, China, Great Britain, Europe and the Northwestern States of America. The Powell River mills have a daily capacity of 225 tons of news print. For export purposes vessels can load direct at Swanson Bay, but it is expected most of the product will be shipped by rail. The Swanson Bay Sulphite & Fibre Mills are capitalized at two and a half million dollars and have a capacity of from 30 to 40 tons per day, the product being shipped to Vancouver and Prince Rupert for rail transportation.

The total annual value of pulp exported from B.C. is about \$3,000,000.

PRODUCTS OF THE FORESTS

With reference to the value of the lumber products of British Columbia for the year 1915, the following figures for 1915, obtained from the Forest Branch of the Provincial Government, will be of interest. A large proportion of this is produced on Vancouver Island.

"The products of the forests are numerous, but they may be roughly divided into classes indicated below; the value of each product includes any transportation charge in the Province.

Lumber	\$15,500,000
(This will be considerably exceeded this year)
Pulp	3,200,000
Shingles	3,500,000
Boxes	750,000
Piles and poles	1,200,000
Mining-props and posts	400,000
Miscellaneous (cut by railroads, miners, settlers, hewn	
ties, cordwood)	900,000
Additional value contributed by wood-using industries,	
planing mills, sash and door factories, cooperage,	
wood pipes, slab fuel	1,750,000
Product of Dominion Lands	1,800,000
Lath	150,000

\$29,150,000

An important point in favor of the industries on the sea coast of British Columbia is the mildness of the winters, which admits of oeprations being carried on throughout the whole year. The forests of this Province are much more densely wooded than those of Eastern Canada, 100 thousand feet board measure per acre being not uncommon, while from 30M. to 50M. may be taken as a fair average of good timber lands. With proper husbanding the forests are practically inhaustible for pulp wood purposes. This is essentially a timber country. Atmospheric conditions are especially favourable to tree growth, which is very rapid and the extent of otherwise valueless country along the Coast that can be developed



A Giant of the Forest, Vancouver Island

to forestry is enormous. Owing to its wealth of raw material, excellent water power and geographical position, British Columbia occupies a position of eminent advantage in competing for the pulp and paper trade of the Pacific. A practically unilmited market is afforded by Australia, Japan, China and the Western Coast of America—both North and South.(See also car-ferry service, page18)

CEMENT INDUSTRY

The manufacture of Portland cement for home consumption and export is one of the important industries of the immediate neighborhood of Victoria.

The Associated Cement Company of Canada operates a million and a half dollar plant at Bamberton, Saanich Inlet, and is capable of turning out 2,000 barrels per day. This Company supplied the whole of the cement used in the construction of the new Breakwater at Ogden Point.

The Vancouver Portland Cement Company, situate at Tod Inlet, Saanich Arm, operates a plant with an invested capital of \$1,600,000, with a capacity of 3,000 barrels per day. This Company is supplying the greater part of the cement used in the new Ocean Docks at Ogden Point.

KELP INDUSTRY

Immense tracts of kelp lie along the shores of Vancouver and Queen Charlotte Islands, and a factory has been established at Sidney, as stated before the Royal Commission, for the curing, drying and grinding of about twelve tons per day of kelp and the obtaining therefrom Iodine and potassium shloride, with algin gum as a by-product, which, mixed with scrap leather as a binder, is used for sole filling; and another, mixed with straw. Thousands of tons are thrown up annually on the shores of British Columbia and left to waste.

THE COAL MINES

The annual gross product of coal for the Island is over one million tons per annum. The Comox coal is best for steamship bunker fuel on the Pacific Coast, and is supplied on the wharves at Union Bay to the majority of the steamships frequenting the Northern Pacific waters. The steaming qualities of the Vancouver Island coal is second only to the Welch steam coal. Vessels coming over from the Orient and "round-the-world" steamers are unable to carry sufficient coal to last the voyage back to the Atlantic and are, consequently, diverted here to fill their bunkers.

Of coal deposits on the Island it is estimated that there are still remaining over a thousand million tons. British Columbia is destined to be, from the possession of its coal fields, says Mr. F. W. Robertson, the Provincial Mineralogist, "the Pennsylvania of the Pacific Slops, and that at no distant date." These are, in fact, the only large fields of first-class coal on the Pacific Slope, between Alaska and Mexico. With the immense fields of coal available its treatment by distilation opens up a wider commercial prospect in the production of motor spirits, parafine wax, lubricating oils, etc.

Of iron and other minerals we have immense deposits in British Columbia so far almost untouched, except in the Mount Sicker district, from whence some 2,500,000 tons have been obtained, carying copper, silver and gold of a total value of over \$7,000,000.

If British Columbia is to amount to anything in a large industrial way it must lie in the development of its iron ore resources, which are known to exist in quantities that warrant its development and which can be readily reduced into merchantable pig. When a sufficient supply of pig iron can be guaranteed it will not take long for steel producers to come here and erect Bessemer converters and open-hearth furnaces, with their accompanying rolling mills and other steel equipment necessary for the production of the finished steel article.

Copper mining has become the most important branch of the metalliferous mining industry of British Columbia, while zinc mining is also having much attention, though yet in its infancy. The most recent reports from the North and West Coast points all corrorborate the revival of steady and permanent development in the natural resources of the Island and in every line of industry.

Dr. A. W. G. Wilson, Chief of the Metal Mines Division of the Canadian Department of Mines, as reported in the Colonist of the 3rd December, 1916, says:

"That portion of Canada's copper production which can tentatively be considered as available for refining in Canada, is the British Columbia production." The Tyee Smelter at Ladysmith is about to be reopened to care for this product. He expresses the opinion in his survey of the British Columbia field of production that in general the districts tributary to the Coast appear to be the

most promising in regard to future development. In this connection he says: "In 1914 the interior districts produced approximately 21,000,000 lbs. of copper, while the districts tributary to the Coast produced about 24,000,000 lbs. In 1915 the interior districts produced 22,700,000 lbs. against 33,980,000 lbs. credited to the coastal district. It is not probable that the annual production of the interior, within the next few years, will much exceed this amount; the coast districts, on the other hand, give promise of at least doubling the output within the next two years."

Proceeding to the consideration of the establishment of a copper refinery, he says: "If this were dependent only on the assurance that an adequate supply of Bessemer copper can be produced, it may safely be stated that there is enough ore in sight to supply the copper necessary to keep a plant of at least fifty tons daily capacity (36,500,000 lbs. per annum) in operation for an indeterminate number of years, a period of time, however, which would be longer than the normal life of the plant."

The Granby Smelting & Refinery Co. are now smelting at Anyox, B. C., treating both B. C. and Alaskan ore. These concerns are paying large dividends.

From the annual report of the Minister of Mines for the Province of British Columbia for the year 1915, we obtain the following figures.

The total value of the products of the metaliferous and non-metaliferous mines in the province for the year 1915, was \$29,447,508, of which the produce of the Island alone was \$6,682,057. These figures are already exceeded by the returns to date of the year 1916.

The total value of the output of collieries was \$7,114,178, of which \$3,543,137 was produced on the Island alone.

The metaliferous mines on Vancouver Island yielded during 1915:

In	gold	\$	53,468
In	silver		31,168
In	copper	1,	688,290
	Total	\$1.	772.926

The output of the Collieries was much reduced during the years 1914 and 1915 by reason of labor strikes and foreign agitation, the average over the five years ending 1915 being \$7,227,011, but the output of 1916 on the Island is about 45 per cent more than that of 1915, and the production of pig iron was 33 per cent greater than in any previous year. The total dividends paid on mining has been \$17,713,024, mostly during the last 5 years on a total capitalization of \$32,814,336, showing a profitable investment.

INDUSTRIAL WATER POWERS

Vancouver Island is rich in available sources of hydraulic and hydro-electric power and this factor is one of the great natural assets of the Island. Taking Jordan River and Goldstream as strategic to Victoria, the B. C. Electric Railway Company has 25,000 horse-power developed out of an estimated capacity of 38,000 H.P., and out of the 25,000 H.P. there is still 12,000 available for prospective industrial use, over and above the present maximum demand, enough to supply the needs of Greater Victoria and the Saanich Peninsula. On the Puntledge River, near Comox, there is a development of 19,000 H.P., of which 9,500 is installed ond approximately 5,000 H.P. available over and above the present maximum load.

In the Alberni district there are about a dozen available sites of varying capacities from 1,000 to 20,000 H.P. at present undeveloped. At Quatsino some 10,000; Nanaimo River some 20,000, and at Campbell River there is upwards of 100,0000 H.P. available at one site, this latter site being specially suitable for electric transmission over a considerable area of mining country within feasible transmission distance.

On the Mainland, within a radius of 100 miles from the city of Vancouver, there is upwards of three-quarters of a million horse-power available, present development being greatly in excess of the demand. The same plenitude of available power facilities is found along the lines of railway development all over the Province, only waiting to be harnessed up for industrial purposes.

Some of these units are of very great power and well situate for electric transmission over extensive areas.

These sources of water supply are not only available for power purposes, but for the fluming of timber, mining, smelting, irrigation and domestic purposes, and form one of the leading factors of industrial development, full particulars of which can be obtained from Mr. William Young, the Comptroller of Water Rights at the Provincial Parliament Buildings.

There is a great future for many new industries in British Columbia in which cheap hydro-electric energy would be a leading factor, such as the manufacture of carbide and in many of the by-products in the manufacture of coking, gas, etc.

AGRICULTURE

A full report of the activities of the Department and the status of agricultural development in the Province is given in the annual report of Mr. W. E. Scott, Deputy Minister of Agriculture, for the year ending December 31st, 1915, recently issued and partly published in the Colonist of recent date. A striking feature of the report is the statement showing the increasing production of the Province, which, coupled with the diminishing imports of agricultural products, indicates that the much-desired goal—a self-sustaining Province—is being approached. The total value of the agricultural products of the Province in 1915 was \$31,127,801, compared with \$30,184,100 in the preceding year. Imports of agricultural products aggregated in value \$16,434,970, compared with \$25,199,-125 in 1914, a decrease of \$8,764,155.

The year 1915, the report states, was generally favorable for crop production, the yield for most crops being considerably above normal. The report gives a full survey of the results of the year for each variety of produce, grains, fodder, fruits, livestock, etc.; deals with the up-to-date methods adopted by the Department through its various branches to instruct the growers in the most modern methods; the good results following systematic and intelligent inspection, enlargement of markets for fruit and other produce, especially in the Prairie section by means of the work of the markets' commissioners in that section.

Within a short distance around Victoria, including North and South Saanich, there is considerable good land, suitable for poultry raising, dairying, fruit growing and market gardening. On the E. & N. Railway are the famous Cowichan and Comox valleys, where oats, peas, potatoes and hay are profitably cultivated, and hogs, sheep and lambs are raised in considerable quantities.

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Index to Advertisements

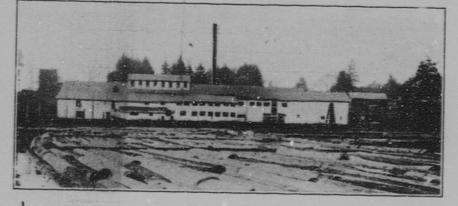
SHIP KEPAIRING	
	Page.
Victoria Machinery Depot	47
Hutchison Bros.	53
Ramsay	54
Yarrows	48
LUMBER MILLS	
Cameron Lumber Company	46
Jas. Leigh & Sons	54
Moore & Whittington	54
Lemon, Gonnason	51
Vancouver-Portland Cement	49
Associated Cement Co	50
Rithet's Wharf	50
Stevedoring	53
Pacific S.S. Co	52
Comox Coal	51
Puget Sound Navigation Company	52
Victoria Explosives	49
Victoria Chemical Works	49

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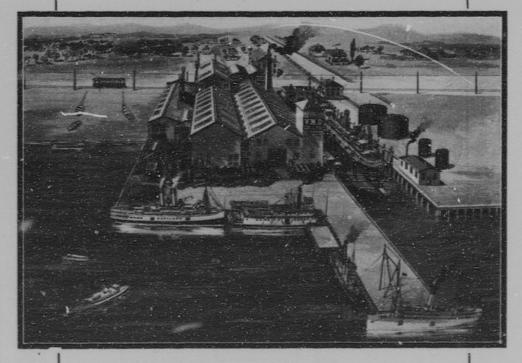
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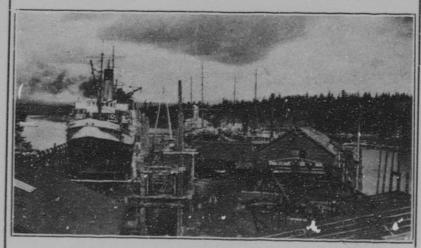
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