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THIRTY-SEVENTH ANNUAL REPORT

OF THE

VICTORIA
BRITISH COLUMBIA
BOARD OF TRADE

1916

Provincial Parliament Buildings, Victoria

THIRTY-SEVENTH ANNUAL REPORT

OF THE

VICTORIA

BRITISH COLUMBIA

BOARD OF TRADE

TOGETHER WITH VARIOUS APPENDICES
LIST OF MEMBERS, OFFICE BEARERS
COMMERCIAL CHARGES, ETC.

OFFICE:

BOARD OF TRADE BUILDING, VICTORIA, B. C.

JUNE, 1916

INCORPORATED OCTOBER 28TH, 1878

VICTORIA, B. C.
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THIRTY-SEVENTH ANNUAL REPORT

OF THE

VICTORIA, BRITISH COLUMBIA, BOARD OF TRADE

APRIL 1ST, 1915 TO MARCH 31ST, 1916

To the Members of the Victoria, British Columbia, Board of Trade, Victoria, B. C.:

Gentlemen:—In reviewing the progress made in Canada during the past twelve months, the features that stand out most prominent are the record crops of the Prairie Provinces, and the industrial activities in the manufacture of munitions of war in the Eastern Provinces. For many previous years, Canada enjoyed prosperity in large measure, due to the expenditure of enormous sums of money upon public works, principally railways; and in the building of cities in the Western Provinces with all the latest utilities, on a scale more with a view to future requirement than for the needs of the day.

The high-water mark of these enterprises had been passed prior to the outbreak of the war, and it was apparent that a season of production in large volume would be necessary to furnish traffic for the railways and, incidentally, to utilize the accommodations provided in the cities. War conditions afforded an opportunity for production, and in the Prairie Provinces the acreage under wheat and grains was extended, and, thanks to favorable weather, the harvest was most satisfactory both in regard to quantity and quality. In Eastern Canada, the centre of manufactures, every suitable plant has been, and is, working at high pressure in turning out munitions of war.

In British Columbia, affairs have not been so favourable; for, apart from the greater distance we are from the

war zone, conditions do not so readily respond to war requirements, except in lumber for export. The foreign demand for lumber has been unprecedented, and, if it had been possible to secure vessels for making deliveries, the effect on business generally would have been very appreciable; and this Province would possibly have enjoyed its full share of Canada's prosperity.

Encouragement is found in the absence of any general complaints, which is due to the steady increase in value of production from our natural resources in minerals and fisheries, as well as timber, and the determination to develop our agriculture and industries. Construction on such sound foundations cannot fail to withstand any future disturbances, and any present depression, in years to come, will probably be regarded as a blessing in disguise.

Canada's Part In the War

While Canada has not been slow in profiting from material advantages arising from the war, she has made heavy sacrifices in the loss of some of the best of her manhood. There are few homes in which the war has not become a personal matter; especially in British Columbia, where the call to arms has been most nobly responded to, and where some relative has not been either included in the Roll of Honour, wounded or is not fighting in the trenches. Canada has already enlisted about a quarter of a million soldiers, and has set herself the task to enlist as many more. The quality of the Canadian Expeditionary Forces has been tested, and future generations will read with pride the historians' account of the part which they took, in April last, in the battles of Ypres, Festubert, Givenchy and elsewhere.

Employment of Returned Soldiers

Some of the men engaged in those actions have returned, being no longer fit for military service; and in October last this Board of Trade organized a Returned Soldiers' Employment Committee, with the object of finding

occupations for them. This committee is now working under the Returned Soldiers' Aid Commission (British Columbia).

One difficulty in British Columbia has been to get men to engage in farming. There are large areas of suitable land, the soil is fertile, the climate is excellent, and good prices are obtainable for all that can be raised. But these advantages are offset by the lure of the cities, where the hours of labour are shorter and wages good, together with more attractions for spare time than is found in sparsely settled agricultural districts. A committee of this Board of Trade, in a report as per copy herewith, has recommended a plan of closer settlement of farm lands, which, if carried out, gives promise of making farming more attractive. It is incumbent upon the Government of Canada to assist in rehabilitating her soldiers after the war, and it is gratifying to state that the recommendations of the committee have been embodied in the Agricultural Training and Land Settlement plans drafted by the Provincial Returned Soldiers Commission.

Shipbuilding Shipbuilding has been engaged in in British Columbia for many years, and some locally built vessels employed in coastwise services have proved satisfactory in all requirements. Local shipbuilders are seriously handicapped in competing with British shipyards; a British ship with full equipment being admitted to Canadian register duty free, whereas when a similar ship is built in Canada nearly everything imported for use in construction is dutiable; and the wages, especially in British Columbia, are much higher than in Great Britain.

This Board of Trade has urged upon the Dominion Government that all materials used in building a ship should be admitted into Canada duty free, or, failing this, that a bonus should be given on Canadian-built vessels equivalent to the duties paid on imported materials used in construction. These representations have not been successful; therefore, the attention of the Provincial Gov-

ernment has been called to the abnormal conditions in lack of tonnage for lumber shipment and unprecedented high freight rates. The views of this Board found expression in a resolution, as follows:

"That the Provincial Government be asked to take into consideration the desirability of assisting shipbuilding in the Province and the provision of tonnage for carrying overseas the products of British Columbia, and further, the Committee would recommend in particular

"That the Provincial Government be requested to grant a bonus, based on value and tonnage, toward the cost of construction of vessels built in British Columbia, according to the requirements of Lloyds, British Corporation, or Bureas Veritas.

"That the Dominion Government be requested, through the Provincial Government, to grant a bonus of a similar character, and also to remit the duty on the materials used in the construction of such ships.

"That the Provincial Government be requested to grant a subsidy for a term of years to all ships built in British Columbia in respect to all British Columbia products carried in such vessels, the freight charges to be approved by the Government.

"That the Provincial Government be asked to favourably consider the guaranteeing of bonds to a reasonable proportion of the cost of vessels built in British Columbia, such bonus being a first charge on the vessel, and proper provision being made for the prepayment of the bonds, and with such Government control as may seem expedient, by commission or otherwise."

The Provincial Government have announced their intention to provide for assistance to shipbuilding at this session of the Legislature.

Agriculture In October last this Board of Trade appointed five of its members a committee, with power to add to their number, to investigate and report upon the local supply of agricultural food products. The enlarged committee includes Government officials,

fruitgrowers, dairymen, poultrymen and others, and some valuable data has been obtained; but the deeper the various questions are probed, the greater their importance becomes apparent. The ground being covered is Vancouver Island and adjacent islands, and there are localities where fairly close settlement and co-operation are giving satisfactory results.

Butter made at the Cowichan and Comox Creameries commands the highest prices in our markets. At Courtenay there is a milk condensing company which is producing an article second to none. The strawberries grown near Victoria take first place in the Provincial markets, and are shipped by the carload to the adjoining Provinces. A bulb farm, near Victoria, has established proof of horticultural possibilities. On Vancouver Island, as a whole, the settlers are scattered and widely separated.

The cost to the Government in road construction for these farmers is heavy, while complaints are general that steamer and railway freights are excessive, although in some cases the carrying companies, owing to the small movements of produce, would not be compensated for their service if they received more than double their present rates. Possibly one of the greatest disadvantages a farmer encounters by not working on a co-operative plan is the high standard of packing and grading which the consumers have been educated to. Nearly everything for consumption is now standardized and attractively packed, and produce not so placed on the market necessarily suffers.

The Dominion Government is giving most valuable assistance to the farmers by furnishing, free of charge, pedigreed male stock for breeding purposes, besides educational work generally. To follow the recommendations in feeding, stock, testing cows for the purpose of ascertaining whether or not they are profitable to keep, excites an interest in farming, and raises it to a commercial plane of accounting from what, in too many cases, has been con-

fined to physical hard work and consequently small returns. On the Saanich Peninsula an experimental farm station has lately been established, and the results obtained there are given the widest publicity.

The Provincial Government also is doing everything possible to encourage farming. Experts in each of the several departments visit the various districts, where they lecture and advise generally any enquirer. Acts of the Legislature encourage co-operation in all branches, and the Agricultural Credits Act will be in operation very shortly. It is difficult to suggest what further assistance the Dominion or Provincial Governments could give to farming, still it will be found that products of the soil imported into British Columbia or received from Eastern Canadian Provinces aggregate in value an average of about twenty million dollars per annum.

The Provincial Department of Agriculture is at present administered by the Minister of Finance, but the Government have announced their intention, at this session of the Legislature, to provide a separate portfolio of Agriculture.

The following information has been kindly furnished by Mr. W. E. Scott, Deputy Minister of Agriculture:

I have the honour to submit herewith report on agricultural conditions for the past year, more especially as affecting Vancouver Island and adjacent Gulf Islands.

Home Production and Imports

The year 1915 has shown a satisfactory increase in agricultural home production. In 1914, the total volue of home produce was $30,184,100; in 1915, $30,873,700, an increase of $689,600 over 1914.

The actual increase in production, however, is much greater than these figures would lead one to suppose. Prices of farm produce in 1915 show a reduction all round of approximately 10%. Based on the same prices as prevailed in 1914, the increase in production of 1915 over 1914 would, therefore, be $689,600 plus $3,087,370, which equals $3,776,970, a very effective answer to those who say that agriculture is not making progress in our Province.

A still more satisfactory state of affairs is shown as regards importations of agricultural produce. The total value of all imports in the year 1914 was $25,199,125; in 1915, $16,402,561, or a decrease of $8,796,564.

The campaign of "Patriotism and Production" carried out early last year amongst farmers by Federal and Provincial Governments undoubtedly has had satisfactory results, and is to a certain extent responsible for our increase in production, and consequent decrease in importations.

The following comparative table shows home production and imports for the last four years:

Home Production, Agricultural Products, British Columbia, 1912 to 1915

1912 Total Value	1913 Total Value	1914 Total Value	1915 Total Value
$23,323,269	$26,222,033	$30,184,100	$30,873,700

	1915
Based on same values as 1914	$33,961,070

Imports Into British Columbia, 1912 to 1915

1912 Total Value	1913 Total Value	1914 Total Value	1915 Total Value
$15,099,885	$20,070,757	$25,199,125	$16,402,561

The following table shows agricultural production and imports along the various lines of farming:

Agricultural Production and Imports, British Columbia, 1915

Description	Home Production	Imported from other Provinces in Canada	Imported from Points Outside Canada
Live Stock	$ 8,797,875	$ 3,006,619	$ 105,078
Meats	1,864,673	2,414,195	502,754
Poultry Products	1,464,720	810,403	137,590
Dairy Products	3,034,340	2,366,136	1,081,663
Fruits and Vegetables	4,450,492	362,695	554,792
Fodders	5,816,968	181,312	44,611
Grains and Mill Stuffs	3,626,330	4,184,128	494,235
Miscellaneous	314,523	6,504	20,440
Indians (output of Indian Reserves)	1,502,980	.....	.....
Totals	$30,872,901	$13,331,992	$2,941,163

Agricultural Conditions

Crops—Crops were, on the whole, satisfactory on Vancouver and adjacent Islands, though the exceptionally dry summer lessened the yield somewhat, especially of later maturing crops—roots, potatoes and late vegetables especially suffering.

Hay and grain crops were about normal, and harvested in excellent condition.

Tree fruits were a light crop, but of excellent quality, and free from fungous diseases. Prices received were a great improvement on the previous year, and remunerative to farmers

Small fruits were slightly below average, but of good quality, and growers received very satisfactory prices, largely owing to co-operative selling, which was carried out by the organizations lately established on the Island.

Potatoes were a light crop, but of good quality. Prices were very low during the fall, but farmers who stored them till spring have secured satisfactory prices.

Vegetables were generally a good crop, but the market was over supplied, and prices received by producers unremunerative.

Fodder Crops—The past year has plainly shown the necessity for farmers growing soiling and fodder crops on their places, and also the necessity for adopting the silo. Pasturage was very light during the summer months, due to the heavy drought which prevailed. Those who were growing soiling and fodder crops and producing ensilage were able to keep up the flow of milk from their dairy cattle during the dry months.

It is satisfactory to note that the growth of fodder and soiling crops, and also the use of ensilage, is being rapidly taken up by stock breeders on the Island.

Live Stock

Dairying—I am glad to report that this important branch of farming, for which this Island is so pre-eminently adapted, is making satisfactory progress. Our creameries have had a successful year. Prices for dairy products have kept at a satisfactory level, and a marked improvement is shown in the quality of cows kept by dairymen.

Vancouver Island can grow clover and fodder crops to the very best advantage, and therefore provides ideal conditions for dairying. Every effort should be made to encourage this important phase of the live stock industry on Vancouver Island and adjacent Gulf Islands.

Sheep Raising—It is satisfactory to note that farmers are beginning to realize their farm returns by keeping a flock of well-selected sheep on their farms. Sheep do very well on Vancouver Island in small flocks, as part of a general system of mixed farming.

Panthers and dogs are the greatest drawbacks. An increase in bounty on panthers would help to solve the panther question. The dog evil is the worst menace, and it would be necessary to have more stringent regulations for the protection of the farmer against loss from this source before we can hope to see sheep raising taken up by our Island farmers to the extent to which it should be.

Registration of all dogs kept in our rural districts, and the imposition of a heavy dog tax, would undoubtedly help to mitigate this very real evil.

Hog Raising—This phase of the live stock industry is, along with dairying, making satisfactory progress. Great improvement has been effected by farmers in the quality of stock kept by them. The man who has skim milk from his cows and, in addition, grows the necessary amount of hog feed on his farm is making good returns from hog raising.

Poultry Raising—There has, unfortunately, been a very marked decrease in poultry raising during 1915, due to the large increase in the cost of grains and mill feeds during the early part of the year, which resulted in poultry raisers selling off a large proportion of their laying stock.

Present indications, however, point to this shrinkage soon being made up again, and, owing to the fact that poultry breeders naturally sold off their inferior birds, we may naturally expect to have a better class of birds take their place.

Poultrymen who produce their poultry feed on the ranch have, in spite of high prices, made satisfactory returns; but those who had to pay for all feed consumed at the stiff prices which prevailed, found that their season's operations were unremunerative. It is, however, only a temporary setback, and we may with confidence look forward to poultry raising taking its rightful place on the Island again before long.

Land Clearing

Considering the financial conditions and general hard times, land clearing has progressed in a very satisfactory manner, as indicated by the sales of Government stumping powder. The

completion of the Esquimalt & Nanaimo Railway system to Courtenay will undoubtedly help towards a more rapid development of that splendid farming district—the Comox Valley.

New districts have also been opened up and transportation facilities afforded by the completion of this line, and these will, in the near future, become producing districts.

Co-operation—Farmers are beginning to realize that co-operation along sound business lines is the keynote of success in farming, and several new co-operative organizations on the Island have recently been inaugurated.

The Cowichan, Nanaimo, Comox and Island Creameries have had a successful year.

Gordon Head and Keatings Co-operative Fruit Growers' Associations were started, and fruit growers were enabled, through these organizations, to sell their crops to far better advantage than they have done previously.

Successful public markets are being conducted at Victoria and Nanaimo, and, by this means, producer and consumer are coming together to their mutual advantage. The policy of assistance to public markets, being considered by the Provincial Government, will undoubtedly help towards the successful formation and the best management of public markets where they are necessary.

Farmers' and Women's Institute work has progressed in an eminently satisfactory manner, and co-operation is the fundamental principle of these organizations.

Patriotism, Production and Thrift—This is the slogan for the present year. Farmers are being urged to grow more and better crops, and to keep more and better stock. It is, therefore, surely the duty of all consumers to do their part by purchasing produce from the British Columbia farmer in preference to the imported article.

If we will all pull together and do our duty as patriotic citizens, and insist on being supplied with home-grown produce and home-manufactured goods, we shall quickly improve conditions in this Province. Let us endeavor to keep, in so far as possible, our own money in circulation at home, and then we shall all benefit. Every dollar we send out is lost to the Province, and we are so much the poorer. Let us remember this, and each of us do our share towards supporting the campaign for "Patriotism, Production and Thrift."

Co-operative Land Settlement—The future successful settlement of our vacant agricultural areas on Vancouver Island, and

generally throughout the Province, must undoubtedly be carried out along a co-operative land settlement plan, which will do away with the isolation caused by individual settlement, will afford better social conditions and the necessary facilities for successful co-operative effort.

The plan proposed by the Commission appointed to consider the question of taking care of returned soldiers might, with advantage, be made to apply to all future land settlement in this Province.

Agricultural Credit Act—The putting into effect of the Agricultural Act of 1915, under the provisions of which loans may, on approval of a Board of Commissioners appointed under the Act, be made to farmers for the legitimate development of their farms, and for increasing production therefrom, on a long term, and at a reasonable rate of interest, will mark an important era in agricultural development in our Province.

The two chief difficulties confronting farmers at the present day are the question of securing money on a long-term loan, and at a favourable rate of interest for the development and extension of their holdings, and the question of marketing their produce at a price which will enable them to make a satisfactory living off their places.

The Agricultural Credit Act, when put into effect, will meet the first difficulty. A carefully thought out plan of assistance towards the formation of public markets, whereby producer and consumer can be brought into close contact, will undoubtedly help solve the marketing difficulty.

Future Settlement—The conclusion of their terrible titanic conflict in Europe must inevitably witness a large influx of immigrants to Canada. British Columbia, with her unrivalled scenic, sporting and residential attractions, will attract a very large number of these immigrants. We must be ready to receive them, and have some good system whereby the immigrant may be put in touch without any unnecessary delay with those who require his services.

Reliable information must be available with regard to the different parts of the Province and the opportunities offered by each, so that land seekers may be directed towards the right part of the Province to suit their particular requirements. The establishment of Government Labour Bureaus undertaken by the Federal or Provincial Government would undoubtedly help towards a satisfactory solution of this question.

Vancouver Island especially may look forward to receiving a large influx of people who wish to settle in a country with good climatic conditions, and where they will have an opportunity of leading a quiet and peaceful existence. Let us be ready to receive these people, and to help them to find what they want.

To ensure our full meed of prosperity, every legitimate effort must be made to encourage the settlement of our vacant lands. We have just passed through an artificial period, and are now endeavouring to rectify past mistakes and to develop our Province along sound economic lines.

Our greatest source of wealth will be our agricultural industry. If it is neglected, we cannot have full prosperity. The food supply is the basis of a country's wealth. Let us use every effort, therefore, to get the right man on the right piece of land, and, when he is there, to help him to overcome the physical difficulties with which he has to contend, and to produce therefrom the fruits of the earth, which our fertile soils, with the unique climatic conditions which we enjoy, will, with right treatment, yield in greater variety and abundance than any other Province in the Dominion.

Thus will our Province come into its own destiny, and peace, plenty and contentment will reign in our Pacific Province of British Columbia.

Canadian Northern Pacific Railway

Another time mark in the history of Canada was established in October last, when the first passenger train reached Pacific Coast salt water over the Canadian Northern Railway, Canada's third transcontinental line. This train consisted of fifteen coaches, filled with Senators and Members of Parliament as guests of the Company. Fast time was made throughout the trip, but of greater importance is the fact that the train was drawn by a single engine until it reached the Fraser River bridge at New Westminster. The maximum grade of this railway is lower than any other transcontinental railway on the Continent.

Ferry System

Connection with this Island will be made by steam transfer ferries, one of which is being built. The approach to the ferry transfer slip and

a temporary wharf, with a capacity of 7,000 tons, have been constructed at Patricia Bay, and construction of the slips both there and on the Mainland will be proceeded with at an early date.

Patricia Bay Branch Tracklaying was completed last month to the City of Victoria, and early in the Summer all necessary buildings will be erected and the line put into operation.

Victoria Terminals The approach to the terminal on the former Songhees Reserve across Selkirk Water is being constructed. This structure will consist of a Scherzer rolling lift bridge of seventy feet clear opening flanked by a temporary pile trestle, the latter to be replaced in eight years by a permanent steel and concrete construction.

Until the Johnson Street Bridge is constructed the complete development of the terminals cannot be undertaken, but a partial development of the terminals will be carried on north of the Point Ellice Bridge.

Victoria-Alberni Line Grading between Victoria and mile 136.5, a point about 4.5 miles south of Port Alberni, has been completed, with the exception of some grading between mile 112 and 120, which will require two months to complete.

All timber trestles are completed as far as Mileage 112, the construction of the raminder will occupy two months for completion. No steel bridging has been erected, as these structures cannot be built until the material required be brought to each bridge site by rail.

Esquimalt & Nanaimo Railway The Esquimalt & Nanaimo Railway, which is the Canadian Pacific Railway Company's Vancouver Island system, was not extended during the past twelve months, but some wooden bridges were renewed with concrete and steel on a permanent basis, and several miles of new heavy

steel were laid on old sections of the main line on Malahat Hill.

The Canadian Pacific Railway Company's freight cars enter Victoria over this line, and there are car ferry slips at Ladysmith and at Esquimalt.

Notwithstanding the war, logging operations have been prosecuted in the Cowichan Lake district, logs being hauled to Crofton and Chemainus over the new Cowichan Lake branch, thus opening up one of the richest timber regions on Vancouver Island.

A complete up-to-date shop terminal, ten-stalled round house, machine repairing shop, car repairing shop and store, built on concrete foundations and brick and stone superstructure, have been erected in recent years, which will form part of the Esquimalt & Nanaimo Railway terminal facilities on the former Songhees Indian Reserve, thus establishing Victoria as the general headquarters repair and rebuilding point for the Island system of the Canadian Pacific Railway, which now comprises over 200 miles of first class line.

Victoria & Sidney Railway

The Victoria & Sidney Railway, besides serving the Saanich Peninsula, is a connecting link between Victoria and the Great Northern Railway Company's transcontinental system. Freight cars are transferred between the Mainland and this Island on barges.

Ogden Point Breakwater

The superstruction of the Ogden Point Breakwater has been completed to a length of 1,800 feet, and there remains 730 feet additional to construct to finish the work. During the past twelve months 237,900 tons of rubble stone were deposited in foundations, and the concrete laid in the superstruction aggregated 17,500 cubic yards. The superstruction is protected against wave action by granite blocks, and 79,900 tons were laid during the period under review. The Sir John Jackson (Canada) Ltd., are the contractors.

Ocean Docks Messrs. Grant Smith Co. & McDonnell, Ltd., have the contract for two piers inside the breakwater. These piers are being constructed of reinforced concrete cribbing filled in with rubble. Nineteen cribs have been sunk into position on the pier site, and during the past twelve months 83,500 cubic yards of filling has been deposited between these cribs. Rubble and broken stone deposited in the foundation aggregated about 38,500 tons. The pier side, nearest the breakwater, will be 1,000 feet in length. The other side of that pier, and the sides of the adjoining pier, will be 800 feet each. Each of these piers will be 250 feet wide, separated 300 feet by water, with a minimum depth of 35 feet at low tide. The time limit of this contract is March, 1916.

Inner Harbour The improvement of the Victoria Inner Harbour has proceeded continuously. The main channel has a depth of water 20 feet at low tide, and it has been widened and straightened by dredging and the removal of rock.

It is contemplated to extend these works to give access to the railway terminals on the late Songhees Indian Reserve, where additional wharf accommodation is planned.

Railway Terminals The Provincial Government is proceeding with the development of the former Songhees Indian Reserve. The plans call for a "common user" road and railway trackage between the waterfront and the terminals of the Canadian Pacific and the Canadian Northern Pacific Railways. The work in progress is the removal of rock and filling in, to give the required grade along the waterfront. A sum of $240,000 for this work is included in the Provincial Estimates for the fiscal year beginning April 1st, 1916.

Drydock The proposed drydock at Esquimalt, to be constructed by the Government of Canada, is to be located on the north side of Lang's Cove.

The dimensions of the dock will be as follows:

Length from caisson stop to head wall	1,150 feet
Width of entrance	120 feet
Depth on sill at ordinary high water spring tides	40 feet
Width at coping of dock walls	144 feet

It will be divided into two parts, 650 feet and 500 feet respectively, each part closed by a ship steel caisson. The dock will be emptied by three centrifugal pumps, each having a capacity of 60,000 gallons per minute. The pumps and other machinery will be run by electric power generated by the dock power plant.

The dock is to be excavated out of solid rock; the walls will be built of concrete, with granite copings and alters; all keel and bilge blocks will rest on granite strips extending the full length of the dock; granite will be used for caisson stops.

On the south side of the dock a basin will be formed to allow of repairs while vessels are afloat and to unload cargoes from vessels before entering the dock; the structure around the basin will be built of reinforced concrete piles.

Fisheries The total B. C. Salmon pack for 1915 was a large one, viz., 1,133,381 cases, but only 476,042 cases of these were Sockeye fish. There was an unusually heavy pack of Humpbacks or Pink Salmon, viz., 369,352 cases, and this quantity would have been largely increased if there had been a normal run of this variety in the Fraser River, but it was much smaller than usual, which circumstance is generally attributed to the blockage of the river at Hell's Gate and the consequent diminished spawning area in 1913, as Humpbacks mature in two years, as against four years in the case of the Sockeye.

Grave apprehensions are therefore entertained by the cannery owners of Fraser River and Puget Sound, that a similar diminution will take place in the Fraser Sockeye run of 1917, which should be the big year. The Fraser

Smelter at Ladysmith, Vancouver Island

Humpback run in that year is also expected to be disappointing.

As pointed out in previous reports, prompt and effective measures were taken by both the Provincial and the Dominion Governments to clear the Fraser River of rock debris, which had fallen from the Canadian Northern Pacific Railway cuttings, and in the year 1915 the fish again had a perfectly free course.

The Sockeye run in the Fraser was also exceptionally poor, although not due to the same circumstance. Only 89,040 cases of Sockeyes were packed at this point.

On Puget Sound the pack was relatively worse, as the canners there only secured 87,465 cases, whereas they usually pack twice as many Sockeyes as the Fraser River canneries.

Absurdly large preparations were made by the Puget Sound cannerymen, with disastrous results, and in order to reduce as much as possible their stocks of empty cans, and to reach the minimum pack guaranteed under their labour contracts, they invaded the Fraser River. Fortunately for the interests of this Province they only added to their losses thereby, owing to the very high prices they paid and the very inferior, often entirely unsanitary, condition of the fish when it arrived at the Puget Sound canneries. But, a feature in this connection especially damaging to the interests of the Province, is that such unsatisfactory packs they sell as "Fraser" fish, bringing our product into disrepute by such methods. The cannerymen, too, naturally feel aggrieved that, after securing two-thirds of the fish, Puget Sound interests should be allowed to compete for the small proportion they allow to make their way to the Fraser River, and if the practice is continued, steps should be taken to protect the B. C. canning industry.

In Northern British Columbia, most unusually fine weather was experienced, with the result that at each fishing point large packs were secured.

The salmon traps in the Straits of San Juan de Fuca gave fair results, except as regards Sockeyes, and 31,320 cases were packed at Esquimalt cannery. This business is, of course, of special interest to Victoria.

Cod Cod fishing is engaging greater attention, and the catch in Fisheries District No. 3, in which Victoria is situated, totalled 21,000 cwt. This quantity will doubtless be increased as the markets for cod are extended.

Herring The Herring fisheries on Vancouver Island are important. The catch is mostly kippered, smoked or canned for consumption, and a large quantity is frozen and sold for fish bait.

Whales At the Kyuquot and Naden Harbour stations the catch was 229 whales during the season, 1st July to 2nd October, of which 132 were Fin, 78 Hump, 17 Sulphur, 1 Bottlenose and 1 Sperm.

Lumber At the suggestion of this Board of Trade, supplemented by other influences, the Honourable Minister of Trade and Commerce appointed Mr. H. R. McMillan, Chief Forester of the Province of British Columbia, a special trade commissioner. His work in England brought good results during the past year up to the time of the slide in the Panama Canal. Many million feet of lumber were taken from the mills in British Columbia by ships sent specially by the Imperial Government.

When the slide occurred it became impossible to have the ships, which were available for Government use, sent so far, and since that time the only movements of lumber from our mills to the United Kingdom have been by rail to the Atlantic Coast and from there trans-shipped.

This business has necessarily been limited to the most expensive grades, and, but for the good demand reported from Ontario and the Prairie Provinces, the business would

be at a standstill. With the good domestic demand now existing, the business would very quickly be in a flourishing condition if it were possible to obtain bottoms to carry the products of our mills to the overseas markets.

The demand in the United Kingdom, South Africa, Australia and China is urgent, and almost any price will be paid, but it seems impossible to procure tonnage of any consequence. Ships are the crying need of the lumber industry in British Columbia at the present time, and, until they are available, the industry cannot experience any great revival.

Trade After the War

The views of this Board of Trade upon trade after the war are expressed in the following resolution, which the Hon. Mr. J. H. Turner has been asked to move at the Conference called by the British Imperial Council of Commerce, to be held in London, England, in June next.

"That while it would not be desirable to copy in many respects German methods of regulating trade, it is recommended that the following proposals should receive careful consideration:

(1) "That the tariffs established in any part of the British Empire should give a preference to Allied Nations and a further preference to all parts of the Empire, without limiting, however, the right of each self-governing portion of the Empire to regulate its own fiscal laws.

(2) "That all tariffs should be so framed as to develop diversity of manufacture within the Empire.

(3) "That all Governments within the Empire should confine, as far as possible, their purchases to goods manufactured within the Empire either by private firms or in Government workshops.

(4) "That the shipping laws and regulations should favour the shipment of goods from one port to another within the Empire in vessels under the British Flag registered in some part of the Empire, or in vessels belonging to Allied powers."

Trade and Outlook

Following are the principal trade returns for the twelve months ending 31st March, 1916, compared with the preceding similar period:

	1916	1915
Imports	$ 7,279,554.00	$ 4,879,880.00
Exports	3,191,052.00	1,532,782.00
Customs Collections	988,845.96	1,242,154.41
Inland Revenue	176,758.55	192,774.05
Bank Clearings	73,462,922.00	109,668,322.00

It is probable that the returns for the past twelve months record the low-water mark of present depression, for lately there has been noticeable improvement in most wholesale and retail lines of business. There is also a demand for lumber in the Prairie Provinces, and the price of logs is equal to that of a few years ago. While there is nothing to warrant the expectation of phenomenal speed in the process of readjustment, there is every reason to look for steady expansion from now on.

The transportation companies deserve credit for the manner in which they have maintained their rail and steamer schedules. The frequency of the services has been maintained at pre-war conditions. The sense of safety, together with speed and comfort, experienced by travellers on the vessels operated by the Canadian Pacific and Grand Trunk Railway Companies, is favourably commented upon, and, thanks to weather conditions, the arrivals and departures are more in keeping with the time tables than the transcontinental trains. The Union Steamship Company gives a frequent service to numerous points on a long coast line, at which the railway companies' vessels do not call.

Street cars are an important factor in assisting the growth of cities, and the British Columbia Electric Railway Company, in Victoria, has proved no exception to the rule. The services are being efficiently maintained with clean and comfortable cars. This Company also controls the

domestic electric lighting, and supplies power to factories; the hydro-electric plant having a capacity of 30,000 horse power, and the auxiliary steam-electric plant 6,000 horse power additional.

Victoria was fortunate in having completed so much municipal work prior to the war. There is now an adequate supply of good water for domestic purposes for a much larger population. The sewer and surface draining is well up to requirements, and efficiency is reflected in the low death rate and general good health of the citizens. The streets are mostly paved and well lighted. The efficiency of the fire fighting plant is indicated by the exceedingly small losses.

These works have been costly in the aggregate, and to meet interest and sinking fund under present conditions requires effort. It is well to remember, however, that the demand for all these utilities, a few years ago, was practically unanimous, and that the citizens are now in the full enjoyment of them. Further, apart from the war, there is nothing in present conditions which could be foreseen when enthusiasm and confidence in the future of Victoria was at its highest.

Interest in the work of this Board of Trade has been maintained. The Council meetings have been well attended, and some of the Committees also are to be congratulated upon what they have accomplished.

E. G. PRIOR,
President.

C. H. LUGRIN,
Vice-President.

F. ELWORTHY,
Secretary.

APPENDICES

ADDRESS IN REPLY TO FOREGOING REPORT

The Hon. Lorne Campbell, Minister of Mines, delivered the following address on the present conditions throughout the Province, and the outlook for the future:

Mr. President and Members of the Victoria, British Columbia, Board of Trade:

Following what I believe to have been a time-honoured custom, I am here at your annual meeting to represent the Government of British Columbia. In this connection I have been asked by the Hon. W. J. Bowser, Premier, to present his compliments and to say that he was exceedingly sorry not to have been able to be present himself and speak to you, as he was so kindly invited to do, but his time is so fully occupied in the Legislature as to render that impossible. I was requested by the Premier to act in his stead, because, I presume, I am the only member of the administration who has not already had the honor and pleasure of addressing you on such an important occasion. As a dweller in the Kootenay Interior during all my residence in British Columbia, except for the few months each year when I have attended the Legislature, I cannot be expected to be as familiar with the references in your report and the conditions on Vancouver Island, of which your body is especially representative, as the other ministers. I have, however, gone carefully over an advance copy of your annual report, which your secretary was kind enough to send me, and I shall deal as briefly with its leading features as I can.

You refer to the conditions created by the war and those which existed before. You are quite correct in stating that the high-water mark was reached before the war broke out, and that is true of the whole of Canada, as well as of British Columbia. We in British Columbia, however, though perhaps the most prosperous, or apparently the most prosperous, of all the people of Canada in 1913, have been unfortunate in that since Canada has steadied itself again financially and industrially, we have been unable to get on our feet as quickly as the Provinces east of the Rockies.

Before the war the rest of Canada prospered for much the same reasons—reasons which you give—the expenditure of large sums of money on public works, the construction of railways and the building up of towns and cities—as we did, and had it not been for the war there would have been much the same conditions there as those of which we now complain here. The immense crops of last year in the Middle West, for which good prices were paid, have placed the people there for the most part on easy street again. The immense demand for munitions of war and supplies of all kinds has created unusual prosperity in Eastern Canada. We in the West, who depend largely upon the sale of the products of our natural resources, have been unable to carry those products to those splendid markets which exist for the want of transportation facilities, and for that reason and on account of the long distance to the Atlantic Coast, we can only share in a very small degree in the industrial production incidental to the war—such as munitions of war. These things are not our fault, but our present misfortune. We have done our best to overcome our disadvantages and are succeeding to some considerable extent, but in these respects we are sharing the fortunes of the entire Pacific Coast, whose conditions are very similar for similar reasons.

Outlook Hopeful

But, while we are not succeeding as we would in other circumstances, the outlook is improving and is extremely hopeful. People in hard times dispense with most things they can do without, but there are more telephones in use in British Columbia, for instance, than ever there were before. The telegraph business, which is a very good barometer in business activity, is enormously greater in the West than it was this time last year. There has been a shortage in cars to carry our shingles and lumber to the Middle West; but incidentally, I may say, the congestion of traffic is being relieved. Mining, to which I shall refer later, as we know, was never so prosperous before, and the industry has never been so productive as it is now. Our fisheries are very prosperous, especially the halibut end of it. Last year was by far the biggest year we have ever had. On account of, to some extent, the number of enlistments where employment is more abundant, we have comparatively little unemployment to deal with. My attention has been called to the fact that in some of the counties of Ontario there are more persons being relieved than in the whole of British Columbia by the Government. The things which are weighing most people down at the present time are real estate holdings and taxes on improvements. The only remedy we have is to bear the burden as we can until the business and industry

of the Province reach a stage which will make our holdings realizable on a productive basis. This is not the first or second or third time in this Province when the bottom seemed to have fallen out of things, when real estate and buildings were unsaleable. Each period of depression has been quickly succeeded by prosperous conditions. Whatever may happen in Central Europe when this war is over and, perhaps, before it is over, there will be an expansion of commerce and industry on this Coast greater by far than has ever been experienced in any previous period of prosperity. We are advised that agents, whose intentions are to buy huge quantities of lumber for France, are already on the ground looking over the situation.

Patriotic Efforts

I note with interest your reference to the part that Canada is taking in the war, which we know, both in patriotic efforts at home and in splendid and heroic work at the front, have made the name and fame of this country world-wide for patriotism and good British fighting qualities; and it is all the more gratifying to us in this part of the world to feel that in all Canada no part of it, in proportion to population, has contributed more, or so much, in men and, despite depression, in money, as British Columbia. This brings me to the question of provision for returned soldiers, dealt with in your report. This has had the earnest and close attention of the Government, and, as you will have observed from the reports of the proceedings of the Legislature, in one respect at least we are making ample provision for returned soldiers, that is, so far as land is concerned. This, of course, must be in conjunction with some scheme now being worked out for fitting them for what, to many of them, will be a new life. All returned soldiers will not care to go on the land, and some will not be fit, and in this respect there is a duty laid upon you all as business men, as well as upon the Government. We have adopted the policy of taking care of as many as we can in the Government service and to give them preference when possible; but we have 500 members of the civil service either at the front or under training, whose places are open for them when they return. In the very nature of things, for several years to come we shall not be able to provide for many more in that way. The same feeling towards returned soldiers is everywhere in Canada, whose people are grateful to those who have enlisted and fought for them. We must not forget that in fighting for the Allies we are fighting for ourselves.

Shipbuilding

I am taking the subjects in your report in the order in which they are dealt with, and I come next to shipbuilding. I am not in

a position to outline the exact policy in respect to that most important subject. The Government has still under consideration the details of the measure it proposes to submit to the House, and I cannot very well give information to which the Legislature is first entitled; but I may say that the matter has had, and is having, perhaps more careful consideration than any other matter that has come before the Government for some months past. As already stated, preliminary steps are being taken for placing "vast" shipments—"vast" is the word used in the advices to the Government—of lumber on this Coast. In anticipation of this business we are informed that $8,258,000 worth of ships are being built in Seattle, and similar enterprise is being pushed forward in San Francisco. In view of the fact that the German submarines are making such heavy inroads on the merchant marine of the world, there is likely to be a great shortage of bottoms even after the war is over. To such an extent is the destruction going on, as reported in the press, that it is likely to affect the food supply of Great Britain. The problem is, therefore, a serious one for this Province if the situation cannot be relieved.

Agriculture

In respect of agriculture, the situation is one which affords a great deal of satisfaction. Production last year was the largest on record, and for fifteen years at least it has been steadily reaching its present proportions. I am informed by the officials of the Department of Agriculture that the area of cultivated land has been considerably increased during the past two years, and particularly during 1915. The activity in clearing land is shown by the much larger amount of stumping powder being used. This is due in a measure to the collapse of the real estate business, which has forced upon people the necessity of utilizing the land for what it will produce rather than offering it for sale as a speculative proposition. In Victoria you have been carrying on a campaign of production for Vancouver Island, and the co-operation of all parts of the Province in this will bring about accumulated results of tremendous value. The Department of Agriculture has been making the utmost efforts to assist the farmer in every way possible, and, with the bringing into immediate operation of the Agricultural (Credits) Act of last session of the Legislature and supplementing by credit the programme of instruction, I cannot even estimate the effect in increased production. As Minister of Mines I naturally place the mining industry very high in the scale of importance, but I must admit that a fully developed agricultural industry in British Columbia will be our greatest mine of wealth. Before leaving this subject, I wish to point out

the great desirability of having a separate portfolio of Agriculture, which the Legislature has already provided for. A good Minister of Finance cannot be expected to always have a knowledge of agricultural requirements, and, on the other hand, a good Minister of Agriculture might make a very indifferent Minister of Finance; but the new departure is all the more necessary on account of the growing importance of agriculture and the increased responsibility of the Department on account of the introduction of the credit system and the placing of returned soldiers on the land.

Mining

I now come to a subject in which I am more particularly interested. I refer to mining. Mining, in addition to being prosperous, is taking on new phases. Zinc, for instance, is assuming an importance not before understood. Copper is almost certain to have a place in the metal markets that it never had before, and the prices to be maintained for some years to come. With Granby and other mines in the Boundary, Granby at Anyox and the Brittania Mines in Howe Sound alive, and prospective developments, we are bound to make British Columbia a factor in the markets, which, of course, has not been the case in the past. You know that when you begin to compare British Columbia's output in copper, or in any other metalliferous product, with the rest of America, not to speak of the rest of the world, our place in the sun is, as yet, very small. The production of copper in British Columbia, as compared with that of the United States, is only about as one to twenty; but, basing my estimates on known operations and mining undertakings, I am quite safe in saying that next year, if not this, the copper output will be more than double what it was last year, so that in a very few years, in copper, and in other metalliferous products as well, we shall have a place in the sun. You are more particularly interested in the mineral resources of Vancouver Island. The most recent professional estimate of coal reserves in British Columbia is 76,034,942,000 tons —a figure so vast as to be beyond our ability to conceive what it means. Of that reserve, of what is left after over sixty years of continuous mining, there are 1,060,000,000 tons left on Vancouver Island. When we remember that the total output of those over sixty years is less than 30,000,000 tons, we have a good many years to go before the reserve is exhausted, even assuming that no new discoveries are made. Coal mining on Vancouver Island has been handicapped recently, owing to the substitution of oil for fuel. Your market has always been limited to Coast consumption, and probably always will be, and, therefore, one of the problems of practical men and the Mines Department is how coal

may be utilized so as to restore it to its former status of production and possibly greatly increase it. We have to study it in connection with the development of the manufactures of iron, of which you have vast deposits. I use the word "vast" deliberately. We have to study it as to the extent and value of its many by-products. We may reasonably hope, too, that, with the increase of population and industrial establishments, notwithstanding the competition of oil fuel, the market for Vancouver Island coal will, on its present basis, very materially expand.

Expects Development

While at the present time the output of metalliferous minerals on this Island is relatively small, there is, I believe, good reason to expect a marked improvement in the near future. It should not be forgotten that when, from ten to fifteen years ago, the Tyee and Lenora Mines on Mount Sicker were being operated, they were productive to quite an important extent. Production figures given by Mr. C. R. Clapp, of the Geological Survey of Canada, in his Memoir 13, Southern Vancouver Island, show a total output of ore from three Mount Sicker mines, about two-thirds of it from the Tyee Mine—of approximately 250,000 tons, containing about 23,000,000 pounds of copper, 690,000 ounces of silver and 42,000 ounces of gold. Calculated at present prices of these metals, the total value of that production would be in excess of $7,000,000, all from a comparatively small area on Mount Sicker. Surely we are not justified in assuming that there are not other similar extensive and valuable deposits of ore on Vancouver Island. On the contrary, there appears good reason to expect that when conditions shall be favorable—ample money for exploration and development and low-cost transportation facilities for machinery and supplies to, and for ore from, mining properties not now easily accessible, we shall see achieved the establishment of metalliferous mining on a profitable basis. At Sooke, where there are good copper prospects; in the country about Great Central Lake, where ten years or more ago much interest was taken in the large ore showings of the Big Interior property; on Quatsino Sound, where the big deposit of low-grade ore on the Yoreka Company's claims was found; on another group, also in Quatsino division, now having the attention of Spokane mining men, and in other instances where, by reason of lack of capital and transportation facilities, little or no progress has been made—all these are decidedly encouraging indications of the occurrence of much mineral awaiting development and utilization. Now that modern methods make it possible to treat low-grade ores at a much lower cost than was the case ten to twenty years ago, there should be

found on this Island a promising field for enterprise in connection with metal mining.

Fisheries

I shall have very little to say about fisheries more than has already been said, that they are very prosperous. In 1919, the next big four-year run on the Fraser, we expect to see all former records eclipsed. Halibut fishing has been greatly stimulated by the new baiting and bonding arrangements which have placed Prince Rupert at the head of the list for the landing and shipment of halibut. This, too, has greatly stimulated the herring fishing, a matter which is of considerable interest to people on Vancouver Island. I have already dealt with conditions which will affect trade after the war, and I do not think I need say more on that score.

In your report you pay a good deal of attention to the railways of Vancouver Island, and I can quite understand that situated, as you are, upon an island, the question of communication by land and sea assumes an importance greater even than it has on the Mainland. It has always been a question of great interest and importance in Victoria, as history tells us. It is unfortunate, of course, that the proposed extensions of the Esquimalt & Nanaimo Railway and the Canadian Northern Railway to the north end of the Island have been delayed on account of financial conditions, the result of war, but you have the foundations, so to speak, laid, and I look forward to a large traffic to be earned in the carrying of timber, minerals and agricultural products, from which traffic Victoria will be the principal beneficiary. The railway undertakings referred to, soon to be completed, in connection with the improvements to the Inner Harbour, railway terminals on the Songhees Reserve, the breakwater and ocean docks, will place this city in a very enviable position to take advantage of the inevitable expansion of trade after the war. If our hopes are realized, that Pacific transportation facilities can soon be obtained, we shall have 100,000,000 odd bushels of grain from the Middle West coming this way, which would mean such a congestion of traffic as to make true the vision of Victoria and Vancouver Island of a railway from Fort George crossing over Johnstone's Strait and connecting Island and Mainland by a band of steel.

Water Power

I do not think I have anything more to say to you today except to refer to the question of the development of water power, which, on account of its importance, I have reserved to the last. Water power is the greatest thing among the factors of modern

industry. It is cheap as air as a natural product, and it is powerful enough to drive all the machinery of the world if it could be applied to it all. Especially in this Western country is it of great importance on account of the high price of labour. It may be safely estimated that a one-horse power is equivalent to the work of twenty-five men. I do not mean by this that it displaces the labour of twenty-five men, because every one-horse power utilized means the employment of labour; but water is such a cheap source of power that it enables industries to be created and made profitable that would and could not otherwise be carried on. Water power, for that reason, is the greatest producer of skilled labour. I may tell you that within practically 100 miles reach from Vancouver and Victoria there is 750,000 horse power, of which 170,000 has been developed, and of that developed at least 50 per cent. is not in use at the present time. So you see that if we could utilize profitably the available water power within the area referred to, what it would mean to the cities of Victoria, Vancouver, New Westminster and Nanaimo. Looking at the Province as a whole and taking what has been developed and what has been applied for, there is 1,500,000 horse power. In addition to that, there are many water powers in the central and northern parts of British Columbia about which little is definitely known. Let us consider the uses to which water power may be put. It is driving tramways, and is being introduced more and more in connection with railways. It is running factories of all kinds. It affords cheap power for pumping water to arid lands when the reservoir is not available; and we have a good deal of that land in British Columbia. In Norway, Sweden and Germany it is being used for extracting nitrates from the air. Germany today depends for its supply of nitrates upon the air for war munitions. Heretofore the world largely depended for its supply upon the nitrate deposits of Chile, which are rapidly becoming exhausted. Water power is a great factor in smelting, and it is one of our hopes in connection with the reduction of iron ore on this Coast. In Sweden, when the iron industry was declining on account of the cost of charcoal for the old process, it was saved by the establishment of the electrical iron and steel industry. I referred to nitrates for the purposes of munitions of war, but in times of peace their value is as a fertilizer. From an official publication of the State of Oregon, on the subject of water power, I quote:

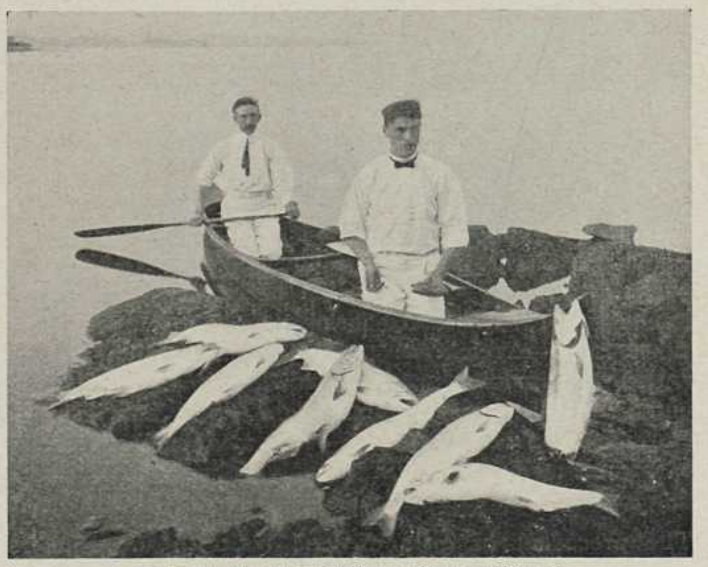
"In the mixed fertilizer trade we should have potash, nitrates, phosphates and lime. The necessary potash can be had from kelp, which grows in the ocean along the Oregon and Washington

Coast. Nitrates can be had from the air by burning in the electric furnace. Phospates can be secured from the rich deposits of Idaho and Montana, and lime from Idaho, Oregon and Washington."

One industry creates another, and the nitrate industry would turn attention to the development of your kelp beds, and so on.

I have dwelt at such length upon water power because I believe we should advertise to the world the wealth of our water power. Capitalists should have their attention directed to this in connection with our other great natural resources. We cannot do it yet, but we propose to conduct, some time in the future, an investigation by competent engineers into water powers, estuary and swamp lands, and irrigation either by artesian wells or pumping to the low-lying benches from streams or lakes.

Now, Mr. President and gentlemen, I feel that I have occupied your time quite long enough. I thank you for your kind attention and for the privilege of addressing you.



An Early Morning's Salmon Catch, Victoria

Soldiers and Immigration after the War

The President and Council,
Victoria, British Columbia, Board of Trade.

Gentlemen:—Your Committee on Immigration being impressed with the urgency of immediate consideration of ways and means for providing suitable employment for our soldiers and immigrants when the war terminates, called to our counsel the Committee on Agriculture, and we are also indebted to Messrs. H. B. Thomson and H. E. Beasley for suggestions resulting in the following recommendations:—

The importance of this question becomes more apparent at every stage of investigation, for not only will Canada have her own tens of thousands of returned soldiers to rehabilitate, but, without doubt, a greater number of immigrants from Great Britain and Europe to assimilate and make contented. The task is one of great magnitude, diversified, and of intense interest, while any labour expended upon it is lightened by the knowledge that the evolving of practical plans will make for the future prosperity of those under consideration, and add enormously to the wealth of Canada.

Holding such views, your Committee would not presume to offer these recommendations as an attempt to solve the problem, or do more on this occasion than direct attention to one point deserving serious consideration, and in the hope that other public bodies and individuals may be encouraged to offer further suggestions covering additional openings for employment.

It is not beyond the mark to state that, for fertility of soil and climate, there are parts of Vancouver Island which will rank with the best to be found on this continent. These lands are most suitable for small mixed farming and for fruit growing. On the other hand, a reference to the Board's annual reports will show that the imports into British Columbia of such products amounted to twenty-two million dollars during the year 1914. It, therefore, appears necessary that every means should be taken to make the raising of agricultural products more attractive, and it is submitted that an exceptional opportunity will soon be offered.

The precedent of gifts of land scrip to the soldiers who returned from the South African War encourages the expectation that, within bounds, the Provincial Government, assisted by the Federal Government, will be prepared to recognize the self-sacrifice of those men who return from the present war. A very

Vancouver Island Timber

small proportion of the South African War Scrip was used by the returning soldiers, most of it being sold to speculators. The idea of taking up isolated and scattered pieces of land far from transportation did not find favour with the soldiers. Therefore, instead of 160 acres, we would propose smaller areas, situated near to transportation, and social surroundings, organizations, practical advice and co-operative systems, which would, in most cases, insure success from the start.

It is believed that this could be done at a relatively small cost by, (1) utilizing lands possessed by the Crown which have been logged off under timber leases; or, (2) purchasing lands which have been logged off under Crown Grants.

In selecting such lands, preference should be given, other things being equal, to large available areas accessible to railways in operation, or arranged for, and water communication; always keeping in view ease of access by rail and water, concentration, and co-operation in the assembling and marketing of the products of the soil.

The stumping and preparation of the land could be immediately proceeded with by utilizing enemy interns.

In the planning of the areas a site should be reserved for shipping warehouses, schools, etc., and the roads would naturally lead to such a centre of the communal domain. Subdivisions should be on the basis of the support of individual families, and **leased to the ex-soldiers with option of purchase.** Such a settlement, if of suitable dimensions, would admit the appointment of resident advisors, who would be constantly on the spot and ready to point out how the maximum wealth of the soil and stock can be realized.

Your Committee have no hesitation in presenting this as the basis of an attractive land settlement scheme, which, started efficiently, if only on a small scale, would be capable of vast extension, and any reasonable initial cost would ultimately be fully repaid, while furnishing the Province with the nucleus of a general farming population of the highest standard.

It is more than likely that the hardships of the war will make many men who were previously engaged in office and other commercial pursuits seek other spheres of usefulness. Such men will have the physical ability for any work required in farming, while tempered with mental faculties and ambitions. Admitting that such men may have had no farming experience; with a taste for outdoor life developed, if surrounded with proper conditions, together with the practical guidance of expert advisors, no better

material could be found for furnishing British Columbia with the highest class of agriculturist.

The success of these plans will depend largely upon the authority under which they are developed. In such an authority should be vested the fullest possible control, unhampered by the Government, save in respect to responsibility for satisfactory results. This authority might be found in the Commission contemplated under the Agricultural Act, and in that case the appointment should be made without delay, and the necessary funds provided for commencing the preparation of at least one site for our returning soldiers.

The foregoing plan is possible of expansion to any practical degree. Your Committee have referred to lands on this Island for the simple reason that, for natural advantages, such as soil, climate and proximity to good markets, we know of no other so suitable. We would like to see the start made under these most favourable conditions, being convinced that as soon as the success of the plan is proven, the establishment of other colonies will follow.

All of which is respectfully submitted.

Committee on Immigration:

WM. AGNEW, Chairman.
W. R. DALE,
H. J. SCOTT,
L. TAIT,
T. H. SLATER.

Committee on Agriculture:

DR. S. F. TOLMIE, Chairman.
L. GOODACRE,
W. CRAWLEY RICARDO.

Some other subjects dealt with by Committees—

Trade, Commerce and Transportation

Special Trade Commissioner to South America.
Canadian Customs Officer at New York.
Steamship Freight Rates to San Francisco.
Trade with the Orient.

Harbours and Navigation

Pilotage.
Use of Esquimalt Dry Dock by Merchant Marine.
Car Ferry Slip, Outer Harbour.
Protection of Life and Shipping, West Coast, Vancouver Island.
Nitanat Inlet, Obstruction at Entrance.
Privileges of Norwegian Vessels Engaged in Coastwise Trade.

Railway Freights

Dividing Line of Canadian Pacific Railway.
Freight Rates on Lumber, Box Shooks and White Lead.
Class Rates.
Carload Weights and Mixing Privileges.

Agriculture

Marking of Eggs.
Abattoir for Victoria.

Mining

Copper Refining in British Columbia.
Zinc Reduction.

Special

Labour for Munition Factories in Great Britain.
Vessels for Lumber Shipments.
Shipbuilding.
Agricultural Food Products, Local Production.

British Columbia Mineral Production for Two Years 1914-1915

The following table, prepared by the British Columbia Bureau of Mines, shows the quantities and value of the several minerals produced in the year 1914, and the estimated production in 1915. It may here be explained that the prices used in calculating the estimated value for 1915 of silver, lead, copper and zinc are the average prices for the year, as published in "The Engineering and Mining Journal," New York, less a deduction of 5 per cent. off silver, 10 per cent. off lead, and 15 per cent. off zinc.

Minerals	Production, 1914		Estimated Production, 1915			
	Quantity	Value	Quantity	Value	Increase	Decrease
Gold, placer	.....	$ 565,000	.....	$ 745,000	$ 180,000	.....
Gold, lode .....oz.	247,170	5,109,004	244,378	5,051,293	.....	$ 57,711
Total Gold	.....	$ 5,674,004	.....	$ 5,796,293	$ 122,289	.....
Silver.....oz.	3,602,180	1,876,736	3,434,393	1,621,033	.....	$ 255,703
Lead.....lb.	50,625,048	1,771,877	45,990,372	1,917,799	145,922	.....
Copper.....lb.	45,009,699	6,121,319	57,905,488	10,006,068	3,884,749	.....
Zinc .....lb.	7,866,467	346,125	13,817,808	1,554,503	1,208,378	.....
Total Metalliferous	.....	$ 15,790,061	.....	$ 20,895,696	$5,105,635	.....
Coal, tons, 2,240 lb.	1,810,967	6,338,385	1,546,664	5,413,324	.....	$ 925,061
Coke, tons, 2,240 lb	234,577	1,407,462	248,424	1,490,544	83,082	.....
Building Materials, etc.	.....	2,852,917	.....	1,500,000	.....	1,352,917
Total Value of Production	.....	$ 26,388,825	.....	$ 29,299,564	$2,910,739	.....

NANAIMO MINING DIVISION

Texada Island

The only metalliferous mining of importance done in 1915 in Nanaimo Mining Division was that of the Tacoma Steel Company at its Marble Bay mine, near Vananda, Texada Island. Information concerning coal-mining operations in this Division has already been given. Notes on several metal mines and the lime quarries on Texada Island, comprising a report by D. G. Forbes, were printed in the Annual Report for 1913.

Marble Bay Mine.—Returns from this mine have not yet been received, but it is believed the output in 1915 was about one-quarter less than in the previous year. The quantity of ore estimated to have been shipped to the smelting works at Tacoma is about 10,000 tons, containing 1,400 oz. gold, 14,000 oz. silver, and 550,000 lb. copper. Very little has been heard regarding developments during the year, but it is believed that shaft-sinking was continued and diamond drilling and other development work carried on.

A small tonnage of ore is reported to have been shipped from the Little Billie, a property adjoining the Marble Bay and worked in former years. This tonnage was 750 tons, and the ore is gold-silver-copper ore of about the same character and grade as that shipped from the Marble Bay.

It is not believed that the Cornell, which was operated under lease in 1914, shipped during 1915.

Nothing further has been heard of the marble quarry at the south end of Texada Island.

Vancouver Island

Very little productive lode-mining has been done for some years on Vancouver Island. The only property, as far as at present known, that shipped during the year 1915 was the Willow Grouse, on Sooke Peninsula, which has been operated all the season by the Willow Grouse Syndicate, consisting of local men, and which shipped by scow to the Tacoma smelter about 530 tons of ore, averaging about 8 per cent. copper, with some 50 cents a ton in precious metals.

Other properties in this vicinity are under development.

The Kallapa, on Meares Island, which in 1914 shipped 1,200 tons of ore, was closed down all this past year, but the owner writes that probably it will be started up again the spring of 1916.

On Cowichan Lake the Blue Grouse mineral claim is under development by a local company, and a very fair body of chalcopyrite ore has been partially developed.

Some further development work has been done on the Merry Widow and Old Sport claims in the Quatsino Mining Division, where a large amount of very fair copper ore has been developed by diamond-drilling. The property is some twenty miles from navigable water, and is consequently without value until a railway can be constructed to salt water. Efforts are being made to have this railway built, but, as far as can be learned, no definite arrangements to that end have been effected.

Some development work was done by the Valdes Island Copper Company on its properties at Valdes and Steep Islands, and it was reported that a small amount of ore was shipped, but no confirmation of this nor further details have as yet been received.

The lime, cement, and clay products interests had a very discouraging year, and did not make any more than half the output of the previous years, which is to be accounted for by almost a cessation of the building trades. Further particulars of these industries have been noted earlier in this bulletin.

Coal mining has been carried on at all the Island collieries during the year, but a greatly diminished production was made. Particulars as to coal mining are given in the previous pages of this bulletin.

Other Minerals

No iron ore has been used or shipped from the Province during the past year, and, as far as can be learned, but little prospecting or development work has been done on iron claims.

A small quantity of crude placer platinum has been recovered on the Tulameen River, in the Similkameen District, estimated at about $2,000 in value. This was obtained from placer-gold workings being carried on, and the results are considered encouraging.

Prospecting for petroleum by means of boreholes has been in progress in South-East Kootenay, on the Queen Charlotte Islands, and elsewhere, but oil in commercial quantities has not yet been encountered.

Considerable interest has been evinced during the past year in molybdenite deposits, owing to the high price of this mineral, caused by demands for war purposes. This mineral, which is a sulphide of molybdenum, is used in the manufacture of special high-grade steel for guns. The actual output of molybdenite during the year was confined to a shipment from the Molly group, on Lost

Creek, in the Nelson Mining Division, which was sent to the Henry E. Woods Ore Concentrating Company, Denver, Colorado; this shipment amounted to twenty-four tons, and contained by assay 12.26 per cent. of molybdenite. Some development work was done on the property, and it is now under lease and bond to a Vancouver syndicate, which intends to erect in the spring a small concentrator. The market requirements are such that a molybdenite ore must be concentrated up to 85 or 90 per cent. molybdenite (MoS_2) before it is marketable. The Lost Creek property has several thousand tons of from 2 to 4 per cent. ore, so that, with a suitable mill, a small production could be maintained.

Another property, on Alice Arm, in the Skeena Mining Division, controlled by J. D. Ross, of Seattle, is reported to have a large showing of molybdenite, and it is said that a mill is being erected on it which will soon be producing a ton a day of high-grade concentrates. Other prospects in the Nelson, Kamloops and Lillooet Mining Divisions showing some molybdenite have been investigated, but as yet none of them have assumed any great importance.

Molybdenite ore, concentrated so as to contain 85 to 90 per cent. of that mineral, is now worth from $2,500 to $3,000 a ton, delivered in England or New York.

Antimony is another metal which greatly advanced in price owing to demands for war purposes. Its principal use in war material is to harden the lead bullets used in shrapnel. During the war the price advanced from about 18 to 55 cents a pound for the best brands, and from 16 to 39 cents for the ordinary brands of antimony.

Antimony usually occurs in nature as stibnite, the sulphide of antimony, and is a common mineral in British Columbia, occurring in association with lead and zinc ores. It does not, however, as a rule, occur in large quantities, but attempts are now being made in a few places to sort it out from its associated minerals. Two cars of antimony ore are reported to have been shipped from the Alps-Alturas property on a fork of Carpenter Creek, in the Slocan Mining Division; this ore was shipped to Scotland, and carried from 50 to 55 per cent. antimony.

Reports of small shipments from other claims have been heard, but details have not yet been secured.

A deposit of hydromagnesite near the town of Atlin was worked to some extent this year by Armstrong & Morrison, of Vancouver. It is known that a few hundred tons were shipped, but details regarding the shipment have not yet been received.

This occurrence of magnesite was fully described by the Provincial Mineralogist in the Minister of Mines' Report for 1904.

The uses to which the mineral is put are for the manufacture of refractory brick, for furnace-linings, etc.; in the manufacture of paper stock by the sulphite process, and as a non-conducting covering for steam boilers and pipes.

Coal and Coke

It is estimated that the gross production of coal was 1,960,804 long tons, of which 414,140 tons were made into coke, leaving the net production at 1,546,664 tons. These figures show a decrease, as compared with 1914, of 205,624 tons gross and of 264,303 tons net. The quantity of coke made was about 248,424 tons, which is an increase of about 13,847 tons as compared with 1914. For purposes of comparison the following table is shown:—

	Est. 1915	1914	1913	1912	1911	1910
Coal, gross...tons, 2,240 lb.	1,960,804	2,166,428	2,570,760	3,025,709	2,297,718	3,139,235
Less made into coke "	414,140	355,461	433,277	396,905	104,656	339,189
Coal, net..... "	1,546,664	1,810,967	2,137,483	2,628,804	2,193,062	2,800,046
Coke made..... "	248,424	234,577	286,045	264,333	66,005	218,029

In these figures the output for the month of December has had to be estimated, consequently the final figures may vary from them slightly.

Summarizing the Provincial production of coal, the following table shows the estimated output:

	Tons of 2,240 lb.
From Vancouver Island collieries	1,009,779
From Nicola and Similkameen collieries ..	101,060
From Crow's Nest District collieries	849,965
Total quantity of coal mined	1,960,804
Less made into coke (calculated) ..	414,140
Net quantity of coal produced	1,546,664

In addition to the above net production of coal, there was made the coke production shown in the following table:—

	Tons of 2,240 lb.
From Vancouver Island collieries	9,246
From Nicola and Similkameen collieries ..	nil
From Crow's Nest District collieries	239,178
Total	248,424

As will be seen from the above figures, the net coal production this year is expected to have been some 264,000 tons less than it was in 1914, and less than it has been for the last eight years.

The consumption of coal in the Province during the past two years has been sadly interfered with by the war, through its retarding or stopping of many industries; this has had a reflex action on the transportation lines, which are the largest consumers of coal.

The market for the Coast collieries was seriously affected by the diminished sales of bunker coal to ocean steamers as a result of war conditions on the Pacific Ocean steamer trade.

The competition of fuel oil has been keenly felt, and the adoption of this fuel by the three transcontinental railways for use in British Columbia has removed a steady and growing market for coal.

Coke.—The total production of coke this year, amounting to some 248,424 tons, is an increase over that of 1914 of some 13,850 tons (2,240 lb.), despite the fact that the Hosmer plant—which last year made an output of over 34,000 tons of coke—was closed down. This total production, while not as great as for the years 1912 and 1913, is nevertheless 10 per cent. greater than the average output for the last ten years.

The high market price of copper has kept the copper-smelting plants of the Interior very busy, with a consequent increased demand for coke, while, on the Coast, the copper-smelting plant of the Granby Company at Anyox has occasioned the restarting of the Canadian Collieries coke-ovens at Comox, where this past year 9,246 tons of coke were made.

Lumbering

The most readily available, if not the most important, of British Columbia's natural resources is her immense timber reserve. This Province may now be said to possess the greatest compact area of merchantable timber in North America. Recent estimates place the area of Canada's merchantable standing timber at from 300 to 600 million acres, of which 120 million acres are in this Province, and the British Columbia Forest Branch credits British Columbia with 400 billion feet of merchantable milling timber, or over one-half of the forest wealth of Canada. As far north as

Alaska the coast is heavily timbered, the forest line following the indentations of the shore and the river valleys and fringing the mountain sides. The Douglas fir, the most widely distributed and valuable tree found on the Pacific Coast, grows as far north as 52 degrees, where it is supplanted by the cypress, or yellow cedar, red cedar, hemlock and spruce. The fir is very widely distributed, being found from the coast to the Rocky Mountains. On the coast it attains immense proportions, sometimes towering to a height of 300 feet, with a base circumference of 30 to 50 feet. The best average trees are 150 feet clear of limbs and five to six feet in diameter. The fir is the staple of commerce, prized for its durability and strength. Great bodies of this timber are found on Vancouver Island, on the coast of the Mainland and in the Selkirk and Gold Mountains. Next to the Douglas fir in importance is the red cedar, which is much in demand. Red cedar shingles are the standard, and are finding an increasing market in Eastern Canada. The white spruce is also much sought after by certain builders for use in the better class of buildings. Western hemlock is abundant in the Province, and possesses qualities which should make it more valued than it is. It is much superior to Eastern hemlock, and is being used to an ever increasing extent. The western species is different and much superior to the Eastern hemlock, and is as serviceable in many ways as more prized timber. There are many other trees of commercial value which are manufactured into lumber, including white pine, tamarac, balsam, yew, maple and cottonwood.

The trees indigenous to the Province are:

Coniferous

Common Name	Technical Name
Western White Pine	Pinus Monticola.
White or White-barked Pine	Pinus albicaulis.
Western Yellow or Bull Pine	Pinus ponderosa.
Limber Pine	Pinus flexilis.
Scrub or Lodgepole Pine	Pinus contorta.
Western Larch	Larix occidentalis.
Alpine Larch	Larix lyallii.
Tamarac	Larix americana.
Engelmann Spruce	Picea engelmanni.
Sitka or Tide-land Spruce	Picea sitchensis.
Black Spruce	Picea mariana.
Western Hemlock	Tsuga heterophylla.
Mountain or Black Hemlock	Tsuga mertensiana.
Douglas or Red Fir	Pseudotsuga taxifolia.

Common Name	Technical Name
Alpine or Balsam Fir	Abies lasiocarpa.
Amabilis or White Fir	Abies amabilis.
Grand or White Fir	Abies grandis.
Western Red or Giant Cedar	Thuya plicata.
Yellow, Alaska or Sitka Cypress	Chamaecyparis nootkatensis.
Juniper or Dwarf Juniper	Juniperus communis.
Rocky Mountain Cedar	Juniperus scopulorum.
Western Juniper	Juniperus occidentalis.
Western Yew	Taxis brevifolia.

Broad Leaf

Quaking Aspen	Populus tremuloides.
Black or Balsam Cottonwood	Populus trichocarpa.
Western Black Willow	Salix lasiandra.
Almond or Peach Willow	Salix amygdaloides.
Long Leaf or Sand Bar Willow	Salix fluviatilis.
Nutall or Black Willow	Salix nuttallii.
Western Birch	Betula occidentalis.
Black or Mountain Birch	Betula fontinalis.
Mountain Alder	Aluns tenuifolia.
Red Alder	Alnus oregona.
Sitka Alder	Alnus sitchensis.
Garry Oak	Quercus garryana.
Oregon Crab Apple	Malus rivularis.
Western Serviceberry	Amelanchier alnifolia.
Black Haw	Crataegus douglasii.
Bitter or Wild Cherry	Prunus emarginata.
Western Choke Cherry	Prunus demissa.
Broadleaf Maple	Acer macrophyllum.
Vine Maple	Acer circinatum.
Dwarf Maple	Acer glabrum.
Bean-berry, Coffee Tree or Cascara Sagrada	Rhamnus purshiana.
Western Dogwood	Cornus nuttallii.
Blue Elderberry	Sambucus glauca.

There are 425 saw and shingle mills in the Province (including twenty-two situated in the Dominion Railway Belt), employing about 5,000 men and producing, in 1914, 967,000,000 feet B.M. The area of Provincial timber lands alienated by Crown grant, lease, and licence, to date aggregates 12,165,134 acres. There are also over sixty shingle mills, with an aggregate daily capacity of 5,000,000 shingles. Many of the big mills are furnished with

sash and door factories, planing mills, and other woodworking machinery.

The increasing demand for lumber is illustrated by the following figures, which show the approximate cut of British Columbia mills for nine years:

1903	317,551,151	feet
1904	348,031,790	"
1905	473,713,986	"
1906	508,069,969	"
1907	846,000,000	"
1908	658,000,000	"
1909	775,000,000	"
1910	1,040,000,000	"
1911	1,201,778,494	"
1912	1,330,000,000	"
1913	1,173,647,000	"
1914	792,829,000	"
1915	1,017,683,000	"

The capital invested in the lumber industry is estimated at over 200 million dollars, furnished principally by British, United States and Eastern Canadian investors, and the opportunities for further profitable use of capital are unsurpassed, as the prices of lumber are constantly increasing, while the stumpage values are lower than in any other part of North America. In the Pacific Coast States, Washington and Oregon, the stumpage values are: Douglas fir, $2.50; cedar (red), $3.00; hemlock, $1.75; spruce, $2.50, exclusive of taxes, whilst those of British Columbia vary from 50 cents to $1, to which must be added a licence fee and royalty, amounting to about 90 cents per thousand, a total not exceeding in any case $1.90. The figures quoted for United States timber are standard prices; very choice and easily accessible timber sells at higher rates. The rates in Ontario, exclusive of a royalty of $2 per thousand feet, vary from $11.37 for white pine to $1 for Jack pine and $8.55 for spruce. In Ontario and the States the tenure of timber is limited to a few years, immediate and continuous operation being imperative.

The prices of lumber have increased from 60 per cent. to 75 per cent. in ten years, and with the rapid settlement of the vacant lands of Alberta, Saskatchewan and Manitoba, the activity in railroad building, and the increasing demands of overseas markets, further considerable advances in prices are inevitable.

The chief market for sawmill refuse is found in fuel, which production is an important side line of every sawmill in or near a

centre of population. The market for this in 1913 was (because of the coal shortage) better than ever before, the sale being estimated at 300,000 cords, valued at $900,000. Large quantities of sawmill refuse are also used under burners to produce power; and in addition, the manufacture of sawdust briquettes for fuel purposes has been started. These appear very satisfactory and sell for the same price as coal.

Wood Pulp and Paper

Possessing an immense quantity of paper-making woods, British Columbia affords a promising field for the paper maker. Pulp wood forests border the ocean and many navigable waters, simplifying transportation, and there are numerous water powers to supply motive power to the mills. The rapid denudation of the pulp areas of the United States will soon compel it to look to Canada for its supply of wood pulp, which, according to the regulations now in force, must be manufactured in the Province. There is, besides, a present demand for pulp in Japan, China and Australia, and when the industry is fairly developed, the ocean freights will enable profitable exportation to Great Britain and Europe.

Along the coast-line of the Mainland of British Columbia and Vancouver Island, practically inexhaustible areas of pulp woods can be found. South of Knight's Inlet the most abundant wood is the Douglas fir, which is successfully used for the manufacture of chemical pulp. Its suitability for mechanical pulp is not so certain. North of Knight's Inlet is the spruce and hemlock belt, affording enormous supplies of excellent pulp wood—the Sitka spruce especially being unexcelled by any other wood for pulp purposes. These woods cover large tracts immediately contiguous to the sea coast, so that logs can be landed at the mills at very low cost.

An important point in favour of the industries on the sea coast of British Columbia is the mildness of the winters, which admits of operations being carried on throughout the whole year. The forests of this Province are much more densely wooded than those of Eastern Canada, 500 cords per acre being not uncommon, while from 100 to 150 cords may be taken as a fair average of good timber lands. With proper husbanding, the forests are practically inexhaustible 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 devoted to forestry is enormous. Owing to its wealth of raw material, excellent water

powers and geographical position, British Columbia occupies a position of eminent advantage in competing for the pulp and paper trade of the Pacific. A practically unlimited market is afforded by Australia, Japan, China and the western coast of America—both North and South.

In 1901, to encourage the establishment of the paper making industry in the Province, the Government granted 21-year leases of pulpwood forests to bona fide applicants on liberal terms, and several companies were formed to take advantage of the concession. These companies selected 354,399 acres in various parts of the Province, and in 1903 the law granting pulp leases was repealed. The annual rental to be paid under these leases is two cents per acre, and a royalty of twenty-five cents per cord of pulp wood cut. The lessees are bound to build, equip and operate in the Province a mill with a daily output of not less than one ton of pulp or half a ton of paper for each square mile included in the lease. The merchantable timber on the leaseholds may be cut and manufactured under special timber licence.

The past year has been the first in which the pulp industry has fulfilled its early promise. Two mills have been in operation during the full year, the Powell River having constantly reached its daily capacity of 225 tons of newsprint. It should be noted that a small portion of this suffices to supply the Provincial market, while freight rates prevent the shipment of newsprint to points east of Alberta. A small quantity of newsprint is shipped to be distributed from Calgary and Edmonton, the balance (comprising over 75 per cent. of the output) being marketed in the Northwestern States. Newsprint from British Columbia enters the United States free of duty under the clause admitting duty free paper valued at less than 2½ cents per pound.

The other operating pulp mill of the Province, that of the B.C. Sulphite Fibre Company, on Howe Sound, has operated at capacity during the year, producing daily 40 tons of a very superior grade of fibre. The market for this product is altogether outside of British Columbia. Seventy-five per cent. of the output is sold in Japan; the remainder is sold to paper mills in the Northwestern States. The manufacture of pulp products on a large scale in British Columbia depends upon the solution of the problems of labour, transportation, and markets, the prospects for which are satisfactory. As for the prime essentials, this Province possesses natural resources of pulp wood and water power which are not equalled by any other Province in Canada, the water power on tide water alone being estimated to be 1,000,000 horse power, and

many billions of feet of pulp wood being tributary to this. When the trans-Pacific market for pulp products is developed, mills on tide water in British Columbia will thus have great advantages in seeking trade. This market will sooner or later be essential to the success of the pulp industry in British Columbia, for the section of the Canadian population which under the present basis of fixing freight rates can be supplied by the mills of British Columbia in competition with those of Central and Eastern Canada will be the limited market west of Regina, while the new mills now contemplated or under construction in Alaska and the Northwestern States will reduce the available market for the British Columbia product in the Western United States. Fortunately, after the completion of the Panama Canal, the trade routes of the Pacific Ocean will lead direct to the chief pulp and paper importing nations of the world. Asia presents a great undeveloped market for pulp and paper—a market demanding special grades produced by special machinery processes, and in time will require heavy shipments of low grade papers and high grade sulphite pulp. The Australian and South African newsprint market should also be supplied from British Columbia. The greatest pulp and paper market of the world is that extending from the Atlantic seaboard of the United States westward to Chicago. There is here at all times a keen demand for high grade sulphite pulp, which now enters the United States free of duty. It is believed that with the opening of the Panama Canal shipments will become possible to the Eastern United States.

The total value of the pulp and paper exported from British Columbia in 1914 was about $3,000,000.

This survey of the present situation shows that the expansion of the pulp industry in British Columbia depends upon the same factor as the expansion of the lumber industry—namely, the development and extension of the export market. It is recognized that this work, which is so important to the public from the standpoint of commercial prosperity, and to the Government from the point of revenue, should not be left entirely to private individuals. Already in 1914 the production of $3,000,000 worth of pulp and paper has helped in the upbuilding of our commerce.

Estimate of Value of Production, 1915

The products of the forest 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
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, mines, 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
Total	$29,150,000

This large amount is well distributed, as there are practically no districts or communities that are not directly influenced by the harvesting of the timber resources of the Province.

British Columbia, from its position relative to markets, has no large wood-working industries. This is shown by the fact that out of all the timber sawn in 1914 only 20,000,000 was used as a raw material for further manufactured articles. Of this, 18,000,000 was manufactured into boxes, 1,000,000 in sash and doors and interior fixtures, 200,000 in cooperage, and the balance in a number of smaller uses, such as caskets, cars, boats, etc. This remanufacture is an important asset to the Province and should be encouraged in every possible way. The more valuable the finished product that is sold, the more money that is left in the Province in labour, supplies, equipment, etc.

The wood-using industry of Ontario, for instance, is worth over $19,000,000 a year, according to statistics gathered by the Dominion Forestry Branch. This is made possible by the large market of Eastern Canada, which uses large quantities of wood in the manufacture of sash and doors, boxes, furniture, vehicles, implements, slack cooperage, etc.

British Columbia has not got a large market close at hand which demands these products. Moreover, in any new country the first step is to manufacture lumber which can be sold for a multitude of uses, instead of specializing on special articles of higher manufacture with a more uncertain market. It is true, however, that the very fact that British Columbia lumber product has to stand a relatively high transportation cost makes it all the more imperative that the products transported should have as high a value at the shipping point as possible. Why, for instance, should

British Columbia sell lumber to Ontario, there to be manufactured into doors? Instead of this, British Columbia should sell the doors and save freight on sawdust and shavings.

There are many articles which can be manufactured completely in British Columbia; some, like doors, in the complete condition; others, like silos, tanks, and even houses, "knocked down" for shipping."

The outstanding feature of the year 1915, so far as the lumber industry is concerned, has been the fruition of the plans laid down during 1913-14 by the Provincial Government for the extension of the market for British Columbia lumber. The appointment of the Chief Forester by the Dominion and Provincial Governments as Special Trade Commissioner to visit the principal lumber consuming countries, and vigourous representations made to the Imperial authorities, resulted in orders being received from London, five cargoes being handled by the Forest Branch on behalf of the British Government, in addition to a deck load of ties, while the loan of a prize vessel enabled another cargo of lumber to be shipped to the United Kingdom. The value of the cargoes mentioned was $166,000, and, moreover, boxes to the value of $40,000, placed through Government aid, were shipped by rail to St. John en route to England. The disastrous slide in the Panama Canal unfortunately put a stop to this business for the time being. When the Chief Forester left England in order to proceed on his mission, the Provincial Government appointed a lumber commissioner to be stationed in London in order to keep in touch with the situation. Another step of importance was the placing of lumber exhibits at the following places, in care of the Canadian Trade Commissioner at those points:

United Kingdom.—London, Birmingham, Manchester, Bristol, Glasgow.

France.—Paris.

South Africa.—Capetown, Durban, Johannesburg.

Australia.—Melbourne, Sydney, Adelaide.

New Zealand.—Auckland.

South America.—Buenos Ayres.

China.—Shanghai.

Japan.—Yokohama.

Similar exhibits were also placed in Canada at the following centres:—

Ottawa.—Department of Trade and Commerce.

Winnipeg.—Industrial Bureau.

Toronto.—Excelsior Life Building (after being shown at the Exhibition, where it was awarded a gold medal).

Rhubarb Growing, Vancouver Island

During the early part of 1916 further exhibits were placed at Hamilton and London, in Ontario, and at Montreal.

Lumber Commissioners have been stationed at Regina and Toronto to protect the interests of British Columbia in the important markets for lumber afforded by the Prairie Provinces and Eastern Canada. The Prairie Provinces afford the greatest outlet for British Columbia lumber, accounting, in normal times, for 60 per cent. of the total production. The depression in the lumber industry in recent years was largely due to the shrinkage in the prairie demand.

Three factors impressed themselves upon the Provincial Government as providing the open door for energetic missionary propaganda for the extension of the market for lumber on the prairie. They were: (1) the good crop and market prospects of 1915 and the consequent greater purchasing capacity afforded the grain growers; (2) the lack of farm buildings for the adequate housing of implements and live stock; (3) the tendency towards mixed farming, carefully fostered by the prairie agricultural organizations, a development which entails more buildings than does the mere growing of grain.

The Forest Branch was fortunate in being able to co-operate with the University of Saskatchewan during 1915 in preparing a very complete and comprehensive series of bulletins covering practically the whole range of farm buildings. This series was advertised in the prairie and farm papers, and to date close upon 10,000 applications for bulletins have been received, and 170,000 copies distributed in all.

Addressed to a wider circle, both in Canada and in the overseas markets, the Timber Series was prepared, and a large number of the various bulletins contained in that series have been circulated.

BULLETINS

Farm Buildings Series

1. Combination or General Purpose Barns for Prairie Farms.
2. Dairy Barns, Milk and Ice House, for Prairie Farms.
3. Beef Cattle Barns for Prairie Farms.
4. Horse Barns for Prairie Farms.
5. Sheep Barns for Prairie Farms.
6. Piggeries and Smoke Houses for Prairie Farms.
7. Poultry Houses for Prairie Farms.
8. Implement Sheds and Granaries for Prairie Farms.
9. Silos and Root Cellars for Prairie Farms.
10. Farm Houses for Prairie Farms.

Timber Series

12. How to Finish British Columbia Woods.
14. British Columbia Douglas Fir Dimension.
15. British Columbia Timber for Export.
16. British Columbia Western Larch.
17. British Columbia Western Soft Pine.
18. British Columbia Red Cedar Shingles.
19. British Columbia Manufacturers of Forest Products.

Agriculture

Vancouver Island, which is about 285 miles long, with an average width of about 60 miles, is separated from the British Columbia mainland by the Gulf of Georgia and the Straits of Haro and Juan de Fuca, and bears a close resemblance to Great Britain in its geographical position, as well as in climate and certain natural characteristics. The climate, mild and moist as in England, is warmer and brighter, with less average rainfall, the summers being invariably dry, with continuous sunshine, while the winters are much less foggy, with frequent spells of crisp, bright weather. Holly, ivy, broom, gorse, box, heather, privet and other shrubs grow in perfection, and all the favourite English flowers are seen in the fields and gardens. Wallflowers, primroses and violets bloom the year round, and in the early summer the whole country is transformed into a vast rose garden, wild and cultivated varieties flourishing everywhere. The climate and the flowers are, however, far from being the most important natural assets of this favoured region. Its timber is the finest in the world and of great extent; its coal measures are practically inexhaustible; the deposits of other minerals—iron, copper, gold and silver—are vast and but slightly developed; its fisheries rival those of the Atlantic, and its soil is of wonderful fertility, capable of producing every grain, fruit, root and vegetable grown in the temperate zone.

The agricultural settlements on Vancouver Island, near Victoria, along the line of the Esquimalt & Nanaimo Railway, and at Comox, are the oldest in British Columbia, and the excellence of their products has more than a local reputation. Island poultry, Island mutton and pork, Island strawberries, raspberries, loganberries and currants, cherries, plums, apples, pears, quinces, etc., and Island butter, command the highest prices, and such is the demand that little ever crosses to the Mainland—the local markets absorb all and ask for more. Cattle, sheep, swine and poultry do well

on the Island, the climate being so mild as to permit their roaming at large and picking up an abundance of green food the greater part of the year. Dairying is a profitable and growing industry, although the local market is still far from being supplied, while the progress of mining, lumbering and fishing is constantly creating new demands, and the Oriental trade, as yet in its infancy, assures a continuance of good prices in the future. The average price of butter at first hand is 35 cents per pound.

In the Esquimalt, Metchosin, Sooke, Lake, Victoria, North and South Saanich, Goldstream and Highland Districts, which adjoin the City of Victoria, there is considerable good land suitable for poultry raising, dairying, fruit growing, and market gardening. Malahat District also contains areas of arable land, some of which is heavily timbered, which might be profitably utilized for poultry, dairying, fruit growing and sheep raising.

Farther north lies the famous Cowichan Valley, noted for its beauty of scenery and fertility of soil. Cowichan, including the districts of Comiaken, Quamichan, Chemainus, Somenos, Sahtlam, Seymour and Shawnigan, is one of the most flourishing settlements on the Island. The soil of the Cowichan Valley is of peculiar richness, being strongly impregnated with carbonate of lime, with usually a depth of two or three feet and a subsoil of blue clay and gravel. The soil is suited to all kinds of crops, but is particularly adapted to fruit, which grows in great abundance and of excellent quality and flavour. The roads throughout the district are the best on Vancouver Island—where bad roads are almost unknown —thanks to the efforts of the local Municipal Council. Very little wheat is grown, the area under cultivation being too limited, but oats are a principal crop, yielding 60 bushels to the acre. Peas produce between 30 and 40 bushels per acre, potatoes from 400 to 600 bushels, hay from two to three tons. Apples, pears, plums, cherries and small fruits give big crops. Sheep raising is carried on to a considerable extent, a ready market for sheep and lambs being found at Victoria, Ladysmith and Nanaimo. Hogs pay well and thrive, and poultry give good returns, the price of eggs and fowls being always high. One of the best conducted co-operative associations in the Dominion is located at Duncan, and handles large quantities of eggs and live poultry.

West of Duncan, in the Cowichan Valley, there is a large area of good land, that portion of the north shore of the Cowichan Lake being an almost level country admirably adapted to farming. From the lake to the Nitnat River and Barkley Sound the country is more rugged and heavily timbered, and is reported to be one

of the richest mineral sections of British Columbia. The same remarks apply to the land in the vicinity of Ladysmith, and in the Nanaimo, Mountain, Cedar, Oyster, Bright, Cranberry, Douglas, Wellington, Nanoose and Cameron Districts. Mountain is broken, with considerable good land in the Millstream Valley, and the uplands furnish excellent grazing, with large and small timbers of good quality. Cedar and Cranberry Districts very much resemble Cowichan and possess large areas of good farming land. North of these districts the character of the soil changes, inclining to be sandy and gravelly in patches, but around Qualicum it again reverts to a rich loam of the best quality. A good deal of land is under cultivation in the country lying between Nanaimo and Comox, but much of the best of it is still unreclaimed, and many thousand acres will be available when cleared of timber.

Alberni Valley, at the head of Alberni Canal, about 20 miles long and from six to eight miles wide, is destined to become an important district from an agricultural standpoint, as it is the centre and natural distributing point for a large and rich mineral district. It is 110 miles distant from Victoria and 55 miles from Nanaimo. A very large area of good agricultural land can easily be brought under cultivation by clearing and drainage. The soil generally is a clayey loam and very productive, being well adapted for fruit growing and dairying. A very considerable part of the fertile Alberni Valley lies within the Esquimalt & Nanaimo Railway Grant, and is included in the area which the Company will render fit for cultivation and offer for sale to settlers. Alberni has a steamboat service with Victoria, four sailings in each month. The Esquimalt and Nanaimo Railway branch line is now completed to Alberni.

British Columbia Agricultural Production

Calendar Year Ended 31st December

Description	Unit	1915		1914	
		Quantity	Value	Quantity	Value
Horses	No.	.....	$ 2,247,500	.....	$ 1,927,566
Beef Cattle	"	.....	3,575,000	.....	3,512,170
Dairy Cattle	"	.....	2,160,000	.....	1,976,993
Sheep	"	.....	350,000	.....	225,279
Swine	"	.....	465,375	.....	481,351
Total Live Stock	.....	.....	$ 8,797,875	.....	$ 8,123,359
Beef and Veal	Lbs.	14,320,000	1,575,200	9,000,000	999,000
Pork and Pork Products	"	1,457,370	167,598	770,000	100,100
Mutton	"	937,500	121,875	750,000	112,500
Total Meats	.....	.....	$ 1,864,673	.....	$ 1,211,600
Poultry	Lbs.	2,154,000	301,560	3,748,542	646,793
Eggs	Doz.	3,877,200	1,163,160	5,037,798	1,763,229
Total Poultry and Eggs	.....	.....	$ 1,464,720	.....	$ 2,410,022
Butter	Lbs.	1,769,998	650,540	1,609,124	571,113
Cheese	"	10,000	2,000	None	None
Milk (as fresh)	Gals.	8,963,500	2,381,800	9,058,283	2,440,887
Total Dairy Products	.....	.....	$ 3,034,340	.....	$ 3,012,000
Apples	Lbs.	39,934,337	944,523	29,448,120	524,074
Other Tree Fruits	"	12,207,763	334,441	8,734,687	238,309
Small Fruits	"	3,359,934	363,336	2,889,820	233,688
Canned Fruits and Vegetables	"		See Raw	Fruits	
Total Fruits, etc.	.....	.....	$ 1,642,300	.....	$ 996,071
Potatoes	Tons	77,272	1,643,248	.....	.....
Vegetables, N. O. P.	"	72,454	1,419,844	.....	.....
Total Vegetables	.....	149,726	$ 3,063,092	162,366	$ 3,233,542
Hay and Straw	Tons	422,322	5,791,293	393,431	6,526,371
Fodder Corn and Kale	"	22,130	107,990	10,820	51,668
Total Fodders	.....	.....	$ 5,899,283	.....	$ 6,578,039
Whole Grains	Bu.	6,585,598	3,626,330	4,402,753	2,770,985
Honey	Lbs.	200,000	30,000	300,000	51,000
Nursery Stock	$	.....	58,778	.....	106,000
Flax	Bu.	.....	.....	.....	.....
Hops	Lbs.	860,580	143,430	967,824	232,278
Total Miscellaneous	.....	.....	$ 232,208	.....	$ 389,278
Indians	$	.....	1,502,980	.....	1,459,204
Grand Totals	.....	.....	$31,127,801	.....	$30,184,100

Agricultural Imports from Other Provinces in Canada into British Columbia

Years 1914 and 1915

Description	Unit	1915		1914	
		Quantity	Value	Quantity	Value
Horses	No.	No	returns	545	$ 128,830
Beef Cattle	"	16,689	$ 1,297,203	43,918	3,505,953
Dairy Cattle	"	800	66,288	702	58,168
Sheep	"	31,333	217,498	17,311	108,208
Swine	"	82,197	1,368,840	90,326	1,382,667
Total Live Stock	.....	.....	$ 2,949,829	.....	$ 5,183,826
Beef and Veal	Lbs.	3,255,096	367,466	10,172,175	1,185,374
Pork and Pork Products	"	9,736,550	1,540,287	7,055,471	1,166,884
Mutton	"	1,221,425	176,290	1,970,041	303,949
Lard	"	1,677,498	213,249	1,538,989	174,794
Meats, Canned	"	132,975	25,630	391,104	77,668
Total Meats	.....	16,023,544	$ 2,322,922	.....	$ 2,908,669
Poultry	Lbs.	1,093,468	148,129	1,256,860	274,313
Eggs	Doz.	1,474,978	683,878	2,731,440	751,514
Total Poultry Products	.....	.....	$ 832,007	.....	$ 1,025,827
Butter	Lbs.	5,666,679	1,509,554	6,439,408	1,755,295
Cheese	"	1,834,882	307,864	1,911,335	317,386
Milk (as fresh)	Gals.	1,384,783	454,039	1,704,862	678,640
Total Dairy Products	.....	.....	$ 2,271,457	.....	$ 2,751,321
Apples	Lbs.	No	returns	None	None
Other Tree Fruits	"		"	"	"
Small Fruits	"		"	"	"
Fruits and Vegetables (Canned)	"	2,893,101	168,970	10,446,490	647,670
Total Fruits	.....	.....	$ 168,970	.....	$ 647,670
Potatoes	Tons	No	returns	No	returns
Other Vegetables	"		"		"
Total Vegetables	.....	.....	.....	.....	.....
Hay	Tons	10,315	175,367	17,483	297,232
Whole Grains	Bu.	2,274,717	1,710,067	5,686,793	3,489,932
Agricultural Seeds	$	.....	171,477	.....	163,311
Mill Stock Feed	Tons	19,644	557,269	32,740	844,347
Flour	Bbls.	364,593	2,110,459	409,655	2,398,249
Flax	Bu.	.....	.....	2,728	2,738
Malt	"	169,310	208,618	171,020	193,165
Total Grains, etc	.....	.....	$ 4,757,890	.....	$ 7,091,742
Honey	Lbs.	94,874	14,786	9,105	1,754
Hops	"	2,898	579	1,725	414
Total Miscellaneous	.....	.....	$ 15,365	.....	$ 2,168
Grand Totals	.....	.....	$13,493,807	.....	$19,908,455

Agricultural Products Imported from Foreign Points into British Columbia

Years 1914 and 1915

Description	Unit	1915		1914	
		Quantity	Value	Quantity	Value
Horses	No.	24	$ 2,213	486	$ 39,787
Beef Cattle / Dairy Cattle	"	212	5,760	399	18,696
Sheep	"	24,455	97,105	56,373	210,874
Swine	"	.....	.....	.....	75
Total Live Stock	.....	.....	$ 105,078	.....	$ 269,432
Beef and Veal	Lbs.	211,284	19,377	2,681,215	205,399
Pork and Pork Products, N. O. P.	"	733,833	112,228	1,343,300	245,275
Mutton	"	2,770,221	323,955	3,698,782	378,002
Lard	"	271,124	27,812	.....	.....
Meats, Canned	"	73,877	19,382	362,779	58,629
Total Meats	.....	.....	$ 502,754	.....	$ 887,305
Poultry	Lbs.	.....	17,713	.....	67,229
Eggs	Doz.	552,399	119,877	2,854,178	662,489
Total Poultry and Eggs	.....	.....	$ 137,590	.....	$ 729,718
Butter	Lbs.	3,970,528	1,010,723	6,906,050	1,584,512
Cheese	"	452,938	70,940	262,639	55,105
Milk (as fresh)	Gals.	.....	.....	414,895	98,113
Total Dairy Products	.....	.....	$ 1,081,663	.....	$ 1,737,730
Apples	Lbs.	8,494,800	130,297	8,019,040	168,792
Other Tree Fruits, N. O. P.	"	2,976,109	74,502	4,198,232	138,599
Small Fruits	"	1,268,563	74,681	2,092,146	133,387
Canned Fruits	"	1,179,753	59,610	2,607,805	139,643
Total Fruits	.....	.....	$ 339,090	.....	$ 580,421
Potatoes	Tons	416	12,417	.....	.....
Other Vegetables, N. O. P.	"	.....	156,298	.....	339,451
Canned Vegetables	Lbs.	696,465	46,987	1,269,120	79,361
Total Vegetables	.....	.....	$ 215,702	.....	$ 418,812
Hay	Tons	4,029	44,611	11,101	136,293
Whole Grains	Bu.	523,850	479,531	546,763	458,966
Malt	"	.....	14,704	751,642	17,209
Flour	Bbls.	.....	.....	.....	.....
Total Grains and Mill Stuff	.....	.....	$ 494,235	.....	$ 476,175
Honey	Lbs.	90,839	7,728	60,757	8,224
Hops	"	19,276	3,459	58,752	23,026
Nursery Stock	$	.....	9,253	.....	23,534
Total Miscellaneous	.....	.....	$ 20,440	.....	$ 54,784
Grand Totals	.....	.....	$ 2,941,163	.....	$ 5,290,670

Land

Provincial Government Lands

Particulars of the Provincial Government lands on Vancouver Island available for settlement will be furnished upon application to the Department of Lands, Parliament Buildings, Victoria.

No Provincial Government lands for sale on Vancouver Island.

E. & N. Lands

The Esquimalt & Nanaimo Railway Company owns 1,060,000 acres of agricultural, timber and mineral land on Vancouver Island, extending from Otter Point on the southwest coast to Crown Mountain in the Comox District, which include within their boundaries all the flourishing farming, mining, lumbering and fishing communities along the east coast and the line of the Esquimalt & Nanaimo Railway, a tract recognized to be a choice portion of Vancouver Island. This magnificent estate is being systematically explored by the Company, and in Alberni and Newcastle and Comox Districts several reliable colonization companies have cleared tracts of the land and surveyed it into parcels suitable for fruit growing, farming, poultry and dairy farms, which are for sale at reasonable prices and on favourable terms. Many miles of roads have also been constructed. As the interior is explored, it is the intention of the Company to extend the railway into the most desirable valleys, to afford easy access to the agricultural, timber and mineral lands. A branch of the Esquimalt & Nanaimo Railway is now in operation to Alberni, and another branch has been opened to Courtenay, thus giving access to the beautiful Comox Valley, well known as a farming centre.

For further particulars, apply to Esquimalt & Nanaimo Railway Land Department.

Prices of Land

Apart from the Government and Railway Companay's lands there is a great variety of desirable land owned by individuals, the price of which varies with locality, quality of soil, etc. Wild land, mostly heavily timbered, can be bought from $10 to $50 per acre. Improved land ranges from $100 to $300 and up, according to extent and value of improvement.

While some of these prices may be thought high, the cost of clearing the land of timber must be considered, also that a small farm, well located and well tilled, on Vancouver Island will produce more and return bigger profits than a much larger area of land in most other countries.

Poultry Raising

Poultry raising is an important branch of general farming which is gradually developing in British Columbia, but not to the extent which its importance warrants. The home supply is still inadequate, large quantities of eggs and poultry being imported from Manitoba, Alberta, Ontario, California, Washington, Oregon, New Zealand and China. The eggs from the latter country are very small, and are sold oftentimes as local fresh eggs. To remedy this, the poultry breeders of the Province have succeeded in inducing the local Legislature to pass an "Egg Marks Act." In 1904 the value of eggs and poultry imported amounted to over $400,000, and fairly good prices prevail at all seasons, the average wholesale price for eggs on the Coast being: Fresh eggs, 25 cents per dozen; case eggs, 22 cents per dozen; while the retail price for fresh eggs averages 30 cents per dozen, ranging from 25 cents to 70 cents. Fowls bring from $5 to $8 per dozen; chickens, $4 to $7; ducks, $5 to $11; geese, $1 to $1.50 each, and turkeys, from 28 to 30 cents per pound.

A practical poultry raiser, who has made a success of the business on Vancouver Island, says: "I have no hesitation in saying that there are good profits in the business, conducted on a strictly commercial basis by experienced persons. In fact, I know of no other branch of agriculture which is so profitable, having in view the amount of capital to be invested and the expense of conducting it. . . . Properly managed, in any number, poultry ought to reap a profit of at least $1 per head per annum."

Report on the Fisheries of District No. 3

To the Chief Inspector of Fisheries,
New Westminster, B. C.

Sir:—I have the honour to submit my annual statistical report of the fisheries of Vancouver Island and the adjacent Mainland, District No. 3, of the Province of British Columbia, for the fiscal year ended March 31, 1915; including statement of fur seals taken in this portion of the Province. The past season's operations would compare favourably with any previous year.

Salmon.—The returns in this branch of the fishing industry show an increase over the catch of the year previous, the catch taken being 365,528 cwts., as compared with 297,450 cwts., the catch of the year 1913-14. There was, however, a smaller quantity

of salmon canned than in 1913-14, the number of cases canned being 206,792, while during the previous year the number of cases reached 250,740. This difference is accounted for by the fact that a larger number of spring salmon were taken in one or two of the traps on the southwest coast of Vancouver Island than in previous years. Three of the canneries being closed down, also accounts for the decrease in the number of salmon canned. This, however, was offset in a certain measure by the erection of a new cannery at Shushartie Bay, on the east coast of Vancouver Island. This cannery is situated well to the north end of the Island, and the management are handling other fish as well as salmon, keeping their cannery operating during the greater part of the year. This is a movement in the right direction, as it will bring into the markets other valuable food fish which are to be found so plentifully on this coast, and will also give employment to the fishermen throughout the year. I am pleased to say that the trend of fishing operations is in this direction, and no doubt it will be more general in the future.

There was an advance in the prices paid for dry-salted salmon shipped to the Orient during the past season. Owing to the demand for this fish for canning purposes, however, a smaller quantity was shipped to the Orient.

Large numbers of salmon were caught by trolling during the past season. It is only within the last two or three years that trolling has been done to any extent, but now this mode of fishing is becoming general throughout the district.

One of the greatest enemies that assails the salmon and trout on this coast is the merganser, which frequents the rivers. They are terribly destructive to ova, and salmon and trout fry. These birds have two large broods in the season and live altogether up the streams, feeding continually on the small fish, and must do an immense amount of harm. The most destructive period is when the water is low in the streams, then the merganser destroys large numbers of salmon fry in the shallow pools. It has been suggested that the Fishery Officers and Provincial Game Wardens be allowed to shoot these birds during any time in the year.

Cod.—Cod fishing was more extensively engaged in than ever before, and the catch was the largest. In 1913-14, 15,325 cwts. of cod were taken, and in this year 22,485 cwts., an increase of 7,160 cwts. I would again bring to your attention the necessity of having a close season for the protection of this valuable food fish. As the cod fishing is done principally in the extensive channels between Vancouver Island and the Mainland, where the waters are sheltered, the fishing can be carried on during the whole year, and

very large quantities are taken during the spawning season, which extends from the middle of January to the end of February. For the proper conservation of the cod, operations during this period should be prohibited.

A fishery was opened in Nanaimo this season, and cod was largely handled. Filletted cod was shipped to various parts, and found a ready market. When put up in this way, they command a good price, and I have no doubt this branch of the fishing industry will be more appreciated as the excellent quality of our codfish becomes better known. If properly prepared for the market, cod fish on this coast ought to become one of the most important branches of our fisheries.

Herring.—The herring fisheries continue to occupy a prominent place in the fisheries of this district. Last season over 23,000 tons of herring were taken. A smaller number of salteries operated, but the fishing season began much earlier, and the catches were good up to the time of spawning. There was quite an advance in the development of this branch of the fisheries this year on the west coast of Vancouver Island, where the catch reached 73,968 cwts. compared with the 1913-14 catch of 42,350 cwts.

Although as formerly the bulk of the herring taken were dry-salted and shipped to the Orient, yet I am pleased to report that more attention is now being given to preparing the herring for other markets in such a manner as to command more satisfactory prices, and place them in the position that their quality deserves. As our waters teem with these fish, and they are so easily taken, there is no doubt that an extensive industry will develop in time. The spawning areas were well stocked with ova, fishing was prohibited in good time, and ample protection was afforded the fish during the spawning season.

Halibut.—The halibut returns do not show such satisfactory results as in the previous year. This was owing to two reasons; first, the unusually unfavourable weather conditions, and secondly, the loss of one of the largest vessels engaged in this industry. This vessel operated from Victoria, and was lost on her way from the halibut banks, laden with halibut. The outlook, however, for the coming season is much brighter, as, near the end of the year, two new vessels were fitted out, and will engage in the halibut fishing on the west coast of Vancouver Island.

Oulachans.—The catch of oulachans was larger this year than ever before. Last year the catch was 550 cwts., but this year 800 cwts. were taken. These fish are nearly all taken in the waters adjacent to the Mainland part of the district.

Trout.—The past season proved a very satisfactory one for the angler, 1,149 cwts. of trout were taken, as compared with 650 cwts. taken during the previous year. The streams seem to be fairly well stocked and are well patrolled.

Clams.—5,045 cases of clams were put up by two clam canneries. The number of barrels taken this year was 9,322, as compared with 10,000 barrels for the previous year. There are extensive clam beds in the district, but, owing to their distance from the market, being well to the north, nothing has been done with them. As the country develops, however, these areas will prove valuable.

Whales.—The whaling station situated at Sechart, on the west coast of Vancouver Island, at Barclay Sound, reports taking 86 whales, comprising 4 sperm, 8 sulphur-bottom, 40 finbacks, and 34 humpbacks. The station at Kyuquot, west coast of Vancouver Island, captured 234 whales, comprising 12 sperm, 23 sulphur-bottom, 142 finbacks and 57 humpbacks. The total number of sperm whales taken was 16, which is an increase of five over last year's catch, and equals the catch of 1912-13. The success of the whaling industry depends to a great extent on the weather conditions.

Fur Seals.—The Indians along the west coast of Vancouver Island are practically the only ones who engage in the sealing operations. Their efforts during the past season resulted in the capture of 257 fur seals. This is a very favourable showing compared with the preceding year, when only 119 were captured. When it is considered that seal hunting must be done by the most primitive methods, namely with spears, the use of guns being prohibited, it displays considerable skill on the part of the native when such good results are shown. The Indians were accustomed for many years to use guns on board the various sealing schooners, and it is now a very difficult matter to compel them to revert to the old method of using spears, but the overseers have been faithful in seeing that the regulations with regard to fur seal hunting were complied with in every way by the hunters.

It is with satisfaction that I report faithful patrol by the fishery overseers throughout the whole district, in enforcing the fishery regulations. They were enabled to do this by the facilities provided by the Department in furnishing them with boats suited to their work. Although the fishing area is so extensive, and so many fishermen are engaged in the fishing operations, there were during the past year very few infringements of the fishery regulations.

I am, sir,

Your obedient servant,

E. G. TAYLOR,
Inspector of Fisheries.

Climate of Vancouver Island

Dr. Bryce, in "The Climate and Health Resorts of Canada," says: "In all this country," from the south of Vancouver Island to the Queen Charlotte Islands, "the fruits of temperate climates grow well, and farm animals live outdoors the year round. The rich bottoms of the Fraser delta have long been famous for their great hay crops and pasture lands; but here the extreme of rainfall is met, the mean for six years being 59.66 inches at New Westminster. The climate of the great Island of Vancouver, running northwest across two degrees of longitude and two degrees of latitude, presents every variety from that at the sea coast, with, as at Esquimalt, a very low daily range and no annual extremes—the lowest temperature in two years being 8 degrees F., the lowest monthly average being 20 degrees F., and the highest in summer being 82 degrees F.—to that as above Alberni on the West Coast, where the Vancouver range rises first into a plateau to 4,000 feet and even to 7,500 feet in Victoria Peak."

"Apart from the mineral wealth of Vancouver Island, its climate, with every variation possible, becomes most attractive. Its seashore climate is milder than many parts of England, with less rain and less seasonable variations."

Climate of Victoria, B. C.

There are many beautiful localities in this Grand Province of British Columbia, and the general healthiness of the various climatic conditions throughout the whole of its extensive boundaries is a point on which there is a universal consensus of favourable opinion.

Pre-eminent, however, for its natural beauty and its delightful climate, stands Victoria, the "Queen City," the capital of the Province, and the seat of its Government. Situated at the south-eastern extremity of Vancouver Island, its insular climate is considered to be the most delightful on the Pacific Coast, and has been compared to that of the south of England.

"It is spoken of as England without its east winds. In reality it is Torquay in the Pacific; a mild and even winter with rain and occasional snow; an early spring; a dry and warm summer, and a bright and enjoyable atmosphere; thunderstorms are seldom seen here; they can be heard in the interior, but are rarely experienced."

The situation of Victoria, sheltered by the Island mountain ranges, causes its rainfall to be much less than that of the cities of Vancouver and New Westminster on the adjacent Mainland. The greater portion of the moisture from the ocean has been caught and condensed on the westward side of the Island ranges, and a second heavy precipitation does not occur until the moisture-giving winds strike the highlands on the opposite coast.

Meteorological Statistics—Victoria, B. C.

Furnished by E. Baynes Reed, Chief Meteorological Agent for British Columbia

AVERAGE TEMPERATURE

	Jan.	Feb.	Mar.	Apl.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
1911 ...	36.2	39.0	43.7	45.5	52.3	56.4	62.3	60.1	55.5	50.0	42.8	41.3	48.76
1912....	40 6	43.0	42.5	48.6	56.0	59.1	61.9	59.9	57.2	48.6	45.2	41.3	50.33
1913....	36.0	38.4	41 4	48.4	53.7	59 1	61.8	62.6	56.6	48.8	44.1	42.8	49.48
1914....	42.1	42.0	46.9	50.5	55.9	55.9	59.7	59.5	53.6	52.7	45.0	39.6	50.28
1915....	40.5	43.3	48.6	51.0	53.9	57.8	59.9	62.0	56.5	51.1	43.3	41.4	50.78
1916....	29.5	40.0	42.6	48.0	50.7	....	....	....	...	....	....	...	....

HIGHEST TEMPERATURE

1911....	50.2	49.0	57.1	66.8	72.4	73.2	89.5	79.5	72.7	66.5	56.1	50.2	89.5
1912....	52.5	53 9	58.3	61.8	84.2	85.9	89.8	81 8	78.4	63.2	55.4	49.6	89.8
1913....	50.0	50.5	54.5	67.2	75.0	78.1	85.4	85 8	71.1	62.2	55.8	50.0	85.8
1914....	52.2	53.3	68.1	64.4	81.3	78.0	80.3	81 8	71.1	67.0	54.2	49.1	81 3
1915....	49.4	52.2	66.2	67.1	72.4	82.5	87.4	87.9	72.8	63.1	53.7	51.3	87.9
1916....	47.8	59.0	58.3	62.7	67.3	....	....	....	....	....	....	....	.....

LOWEST TEMPERATURE

1911....	14.9	24.4	27.2	27.7	37.5	40.2	44.7	46.2	37.8	33.5	14.2	30.0	14.2
1912....	23.5	28.5	27.2	30.2	37.9	41.2	45.5	41.2	41.7	33.0	30.3	31.4	23.5
1913....	21 0	27.0	22.7	30.7	37 2	43.3	45.3	46.0	41.5	35.0	31.3	33.7	21.0
1914....	28.0	25.6	29.4	35.2	42.0	42 5	48 2	45.9	43.8	42.0	33.2	29.9	25.6
1915....	30 9	34.0	38.0	38 8	42.0	47.9	50.0	48 9	44.8	43.0	33.2	27.0	27.0
1916....	15.0	23.8	30.8	37.2	36.1	...	....	....	....	.. .	....	....	.....

RAINFALL

1911....	3.58	0 96	1.93	0.59	1.80	0.73	0.14	0.68	2.25	0.61	6 49	2.79	22.55
1912....	3.83	3 14	1.43	1 30	1 50	0.99	1 15	2.26	0 66	2.33	5 04	5.84	29.53
1913....	4 09	1 62	1.90	0 62	0.80	1.05	0.45	0.84	1.95	3.63	4.70	1.35	23.00
1914 ...	8.11	1.53	2.04	1.04	0.18	1.67	.0	0.18	1.98	2.58	5.83	0 58	25.72
1915....	1.55	0.98	1 53	0.57	1.26	0.61	0.84	0 04	0.80	4.20	4.57	4 76	21.71
1916....	1.19	2.39	5.35	1.12	0.89	....	....	....	....	....	....	...	.....

NO. OF DAYS ON WHICH PRECIPITATION FELL

1911....	22	11	9	4	10	7	3	3	12	7	21	21	130
1912....	20	17	9	13	6	6	7	8	17	14	22	19	148
1913....	23	9	17	10	10	7	6	3	8	15	17	12	137
1914....	27	13	14	12	4	6	0	4	12	12	25	10	139
1915....	14	15	16	10	13	4	9	1	6	20	26	21	155
1916....	15	16	19	15	9	..	..	..	..	..	..	..	...

SNOWFALL

1911...	7.15	8.20	....	...	....	...	....	....	...	....	...	.	16.35
1912...	3.20	....	....	...	....	....	....	....	.	....	9.10	0.10	3.20
1913...	4.50	2.90	1.00	...	....	....	....	....	...	....	....	....	8.40
1914...	3.60	0.30	0.10	...	....	....	..	....	....	....	..	.10	4.10
1915...	....	....	....	...	...	....	....	....	...	....	....	0.20	0.20
1916...	30.20	46.40	0.20	...	....	....	....	....	....	..	....	....	.....

Bright Sunshine Registered at Victoria

Month.	1913		1914		1915		1916	
	Number of hours of Sunshine.	Mean Percentage for Month.	Number of hours of Sunshine.	Mean Percentage for Month.	Number of hours of Sunshine.	Mean Percentage for Month.	Number of hours of Sunshine	Mean Percentage for Month.
January	50.12	.18	35.06	.13	83.06	.30	67.42	.25
February	81.06	.28	65.54	.23	64.18	.23	98.48	.32
March	121.42	.33	117.24	.32	159.24	.43	89.36	.24
April	127.48	.31	178.24	.42	222.00	.54	169.36	.41
May	166.00	.35	296.12	.63	180.30	.38	230.36	.49
June	167.42	.35	279.48	.58	304.54	.63	.....	...
July	274.48	.57	328.30	68	261.06	54	.....	...
August	237.18	.53	305.30	.69	262.36	.59	.....	...
September	198.06	.53	92.00	.24	201.30	.53	.....	...
October	91.30	.27	117.24	.35	98.36	.29	.....	...
November	56.36	.20	45.00	.16	66.30	.24	.....	...
December	33 42	.13	84 30	.32	61.54	.24	...	...
Total	1606.30		1945.42		1966.24		.....	

The following comparison with British bright sunshine percentage may be of interest:

Torquay	.39	Stonyhurst	.31
Eastbourne	.39	York	.29
Plymouth	.37	London	.36
Oxford	.34	Glasgow	.25

"The rainfall is more seasonal than that of London, though greater in amount. From May to September is usually a period of small rainfall and bright skies at Victoria, while in London the summer and winter rainfall is not very different, and the percentage of bright sunshine from May to August at Victoria is largely in excess of that of London."

New Observatory, Victoria, B. C.

The following information has been kindly furnished by Dr. J. S. Plaskett, Astronomer to the Canadian Government:

The new Observatory on the summit of Saanich Hill, which is now approaching completion, will contain a telescope larger than any in existence, and will undoubtedly increase the attractiveness of Victoria for the ordinary visitor, and especially for men of culture and science.

The telescope is of the reflecting type, containing a concave mirror 73 inches in diameter, 12 inches thick, weighing nearly 2¼ tons, at the lower end of the tube, the upper end being open. This mirror has a bright coat of silver on the front surface, which reflects the light back to the upper end of the tube, where other small mirrors reflect it either to the side, or back through a hole

in the centre of the main mirror, to the lower end of the tube, where it may be visually observed or photographed.

The tube is 7½ feet in diameter, 30 feet long, and weighs about 15 tons. It is carried by the "declination" axis, a steel forging 16 inches diameter, 14 feet long, weighing 5 tons, which is attached at right angles to the tube, and which in turn is supported also at right angles by the "polar" axis, composed of three steel castings bolted together and weighing 10 tons. This "polar" axis, which is adjusted so as to be exactly parallel to the axis of the earth, is carried in ball bearings at its ends on a massive concrete pier. It is driven by a governor mechanism accurately at the same rate as the earth revolves, and hence causes the telescope tube to exactly follow the motion of the stars.

The telescope is set and guided wholly by electric power, seven motors as well as numerous solenoids and clutches being required, and the enormously heavy moving parts, about 45 tons, can be handled with as great accuracy and ease as if it were only one-tenth the size. The bearings are so beautifully made that a pressure of five pounds at the end of the tube is sufficient to set this great mass in motion.

The building is circular, 66 feet in diameter, with a wall about 35 feet high, this being surmounted by a revolving hemispherical dome, making the total height 75 feet. The whole is of steel construction with double sheet metal walls arranged to allow complete circulation of air, which enters at the bottom and passes up between the walls of building and dome, passing out through louvres at the top. The purpose of this construction is to keep the interior at the shade temperature during the day, and allow it to rapidly assume the night temperature. Only in this way can the conditions of atmospheric definition be kept at their best.

The dome has been specially designed and has many original features to assist in the operation of the telescope, and the whole equipment forms not only the largest but the most complete in every operating convenience and the most accurately and perfectly constructed of any ever built. The makers, the Warner & Swasey Co., of Cleveland, who have built the largest refracting telescopes in the world, have taken great pride in making this equipment more complete and convenient in operation than any before constructed, and Canada is to be congratulated on possessing so magnificent an instrument, which will undoubtedly markedly increase astronomical knowledge.

Victoria Vital Statistics

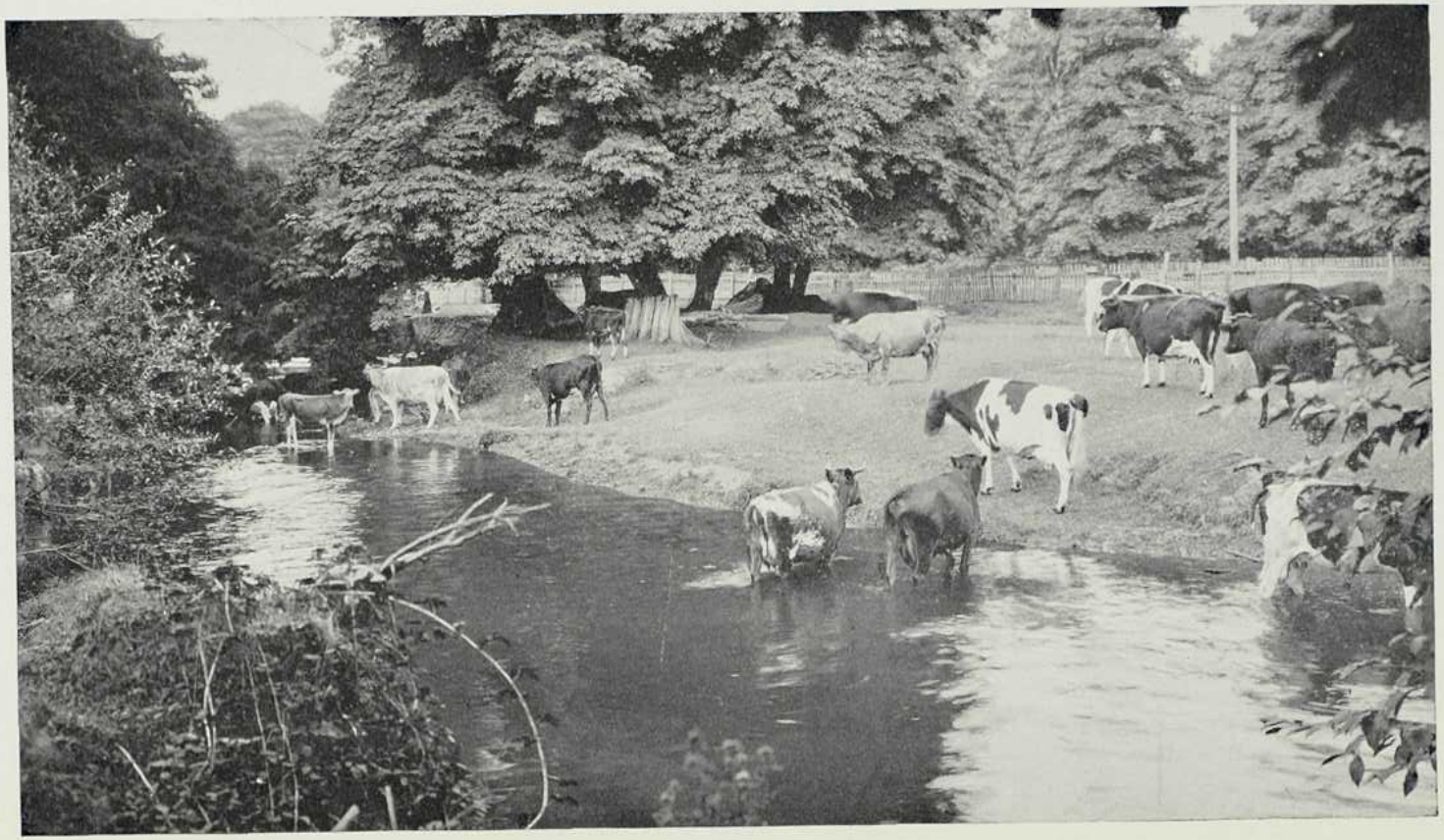
The mortality rate for the year 1915 was 7.86 per thousand, a little higher than the previous year.

Fire Losses, 1915

Buildings	$13,276.31
Contents	16,403.37
Total Loss on Buildings and Contents	$29,679.68

Insurance on Buildings and Contents

Buildings	$343,250.00
Contents	177,450.00
Total Insurance	$520,700.00



Dairy Scene, Victoria, B. C.

Victoria City—Building Permits
Years Ending 31st December

1901	$ 740,600.00
1902	326,000.00
1903	675,880.00
1904	607,150.00
1905	554,250.00
1906	699,300.00
1907	1,490,250.00
1908	1,314,240.00
1909	1,773,420.00
1910	2,373,045.00
1911	4,260,315.00
1912	8,182,155.00
1913	4,037,992.00
1914	1,616,680.00
1915	292,450.00

Victoria Customs Returns
Years Ending 31st March

	Imports	Duty Collections	Exports
1909	$4,097,834	$1,029,296.00	$1,333,155
1910	4,861,868	1,240,612.14	1,514,275
1911	6,227,700	1,544,203.63	1,161,624
1912	7,857,081	1,984,893.62	2,009,762
1913	11,393,504	2,618,025.13	1,377,971
1914	8,820,077	2,016,683.47	1,572,001
1915	4,879,880	1,242,154.41	1,532,782
1916	7,279,554	988,845.96	3,191,052

Statement of Excise Revenue
Years Ending 31st March

	1913	1914	1915	1916
Spirits	$174,426.43	$159,770.37	$104,967.56	$67,817.73
Malt	54,298.46	47,561.76	58,401.02	65,399.37
Tobacco (Manfd.)	10,449.35	7,223.40	6,683.20	10,007.10
Raw Leaf Tobacco	15,998.35	12,078.92	7,030.94	4,191.60
Cigars	5,315.30	4,080.50	3,218.35	2,280.45
Malt Liquor	.....	7,524.37	7,953.08	3,951.15
Licences	.....	.....	1,475.00	1,450.00
Methylated Spirit	.....	.....	434.75	.....
War Tax Stamps	.....	.....	2,598.50	21,463.14
Other Receipts	9,024.30	2,597.52	11.65	198.01
Grand Total	$269,512.19	$240,836.84	$192,774.05	$176,758.55

Victoria City Municipal Statistics

Victoria City Assessment, 1916—

Assessed value of land	$62,738,863.00
Assessed value of improvements	25,302,431.00
Total	$88,041,294.00

Corporation Properties—

Waterworks, schools, public buildings, etc.	$ 5,431,130.00
Property in Trust	2,318,000.00
Indian Reserve	1,500,000.00

Properties Free from Taxation—

Dominion and Provincial Governments, Hospitals, Churches, C.P.R. Hotel, etc.	8,170,410.00
Total	$105,460,834.00

Mileage of Paved Streets, Sidewalks, etc.

The total mileage of paved streets at the end of 1915 was 75¾, made up as follows:

Asphalt Pavements	55
Wood Block Pavement	3½
Concrete Pavement	0¾
Macadam Pavement	12½
Tar Macadam Pavement	1
Vitrified Brick Pavement	0½
Unpaved Streets	117½
Total Mileage of Concrete Sidewalks	131½
" " " Boulevards	65¼
" " " Sewers	117
" " " Water Mains	132¾
" " " Surface Drains	82½

CORPORATION OF THE CITY OF VICTORIA, B. C.

Balance Sheet, December 31st, 1915

ASSETS

Active—		
Cash on Hand	$ 3,855 45	
Bank Balances, Schedule A, No. 1	280,864 61	
Ledger Balances, Schedule A, No. 2	424,855 30	
Construction Account, Public Works (Sewers)	614,111 56	
Construction Account, Local Improvement	898,406 76	
Westholme Lumber Co's Contract Account	1,811,514 86	
Debentures held for delivery, Schedule A, No. 3	2,081,357 65	
Tax and Other Arrears, Schedule A, No. 4	1,079,097 22	
Local Improvement Assessment Arrears	622,005 87	
		$ 7,316,069 28
Reserve—		
General Purpose Sinking Funds	1,237,612 39	
Local Improvement Sinking Funds	831,646 09	
		$ 2,069,258 48
Passive—		
Streets, Bridges and Sewers, Schedule D	2,255,955 27	
Local Improvements	6,938,016 29	
Telephone Conduits, Schedule D	72,913 94	
		$ 9,266,885 50
Fixed—		
Real Property, Schedule E	3,651,085 00	
Other Property, Schedule E	4,046,039 18	
		$ 7,697,124 18
		$26,349,337 44

LIABILITIES

Debenture Loans—		
General Purpose, Debenture Statement A	$10,877,782 00	
Local Improvement (City's Share) Debenture Statement B	1,530,154 42	
Local Improvement (People's Share) Debenture Statement B	6,239,095 08	
		$18,647,031 50
Short Loans—		
General Bank Account	10,824 60	
Construction Account	694,837 37	
Bills Payable, Sooke Lake Water Works	462,000 00	
Bills Payable, Local Improvement By-laws	41,000 00	
Treasury Bills	340,666 68	
Treasury Certificates	1,000,000 00	
		$ 2,549,328 65
Burrard Engineering Co.		4,868 67
Pacific Lock Joint Co.		10,019 94
1915 Accounts, Sundry Creditors		26,428 48
Tax Sale Surplus		991 32
Taxes for Refund		7,474 68
Deposit Accounts		8,248 49
Local Improvement Assessment Account		809,025 98
Unexpended Balances, Schedule A, No. 5		15,956 74
Local Improvement Sinking Fund Account		393,483 82
Corporation of the City of Victoria—		
Surplus		3,876,479 17
		$26,349,337 44

Shipping

Statement of vessels employed in the coasting trade of the Dominion of Canada, arrived at and departed from the Port of Victoria during the years ending 31st March, 1910, 1911, 1912, 1913, 1914, 1915 and 1916:

	Vessels Arrived			Vessels Departed		
	Vessels	Tonnage	Crew	Vessels	Tonnage	Crew
1910..	2,636	1,222,890	74,433	2,635	991,327	71,146
1911..	3,103	1,472,417	88,803	3,123	1,118,529	89,932
1912..	3,457	1,808,122	110,824	3,487	1,876,301	111,372
1913..	3,727	2,675,582	137,992	3,849	2,381,699	137,703
1914..	3,770	2,923,067	149,651	3,827	2,621,886	147,578
1915..	3,220	2,383,313	107,166	3,258	2,244,618	107,129
1916..	3,137	2,259,673	93,258	3,189	1,991,798	94,875

Vessels entered inward from sea during the years ending March 31st, 1910, 1911, 1912, 1913, 1914, 1915 and 1916:

	With Cargo			In Ballast		
	Vessels	Tonnage	Crew	Vessels	Tonnage	Crew
1910..	777	903,445	52,804	218	332,139	11,447
1911..	793	869,957	55,883	349	452,933	16,723
1912..	1,076	1,406,797	65,490	381	467,305	13,510
1913..	1,595	1,381,535	76,452	499	470,473	15,457
1914..	1,433	1,484,039	78,505	693	655,356	26,474
1915..	1,139	1,363,479	65,785	529	647,378	24,849
1916..	1,086	1,313,613	64,151	593	640,871	22,839

Vessels entered outward to sea during the years ending March 31st, 1910, 1911, 1912, 1913, 1914, 1915 and 1916:

	With Cargo			In Ballast		
	Vessels	Tonnage	Crew	Vessels	Tonnage	Crew
1910..	513	700,397	36,447	475	676,571	31,515
1911..	415	754,992	35,613	692	1,004,869	40,957
1912..	478	696,173	35,745	899	1,052,576	41,450
1913..	634	1,045,663	48,263	1,193	1,091,161	43,117
1914..	787	1,145,103	53,948	1,206	1,260,109	50,153
1915..	615	951,796	42,156	993	1,145,057	46,439
1916..	570	894,563	34,735	1,050	1,319,864	50,051

Victoria Post Office Statistics

Years Ending 31st March

	1913	1914	1915
Gross Postal Revenue.....	$ 171,533.21	$ 182,857.35	$ 158,715.52
Number of Money Orders issued.....	No. 81,284	No. 79,603	No. 56,317
Total amount of Money Orders issued.....	$1,340,407.58	$1,189,525.19	$ 793,988.47
Total amount of Money Orders paid.....	$ 731,572.34	$ 823,846.64	$ 727,447.47
Number of Money Orders paid.....	No. 32,363	No. 37,114	No. 37,818
Total amount of Postal Notes paid.....	$ 43,928.91	$ 46,577.12	$ 47,286.33

Victoria's Bank Clearings
For the Past Eleven Years

1904	Jan. to June	$15,727,588	July to Dec.	$17,342,421
1905	" "	17,824,982	" "	19,065,482
1906	" "	19,864,742	" "	25,750,873
1907	" "	25,975,821	" "	29,354,767
1908	" "	26,785,118	" "	28,570,895
1909	" "	30,886,765	" "	39,809,117
1910	" "	44,878,016	" "	56,687,058
1911	" "	66,176,400	" "	68,752,876
1912	" "	82,033,003	" "	101,511,235
1913	" "	92,302,792	" "	84,674,282
1914	" "	65,856,781	" "	55,806,491
1915	" "	39,601,826	" "	37,076,100

Education

British Columbia has, since 1872, maintained a system of free public schools, which have been conducted on strictly secular and non-sectarian principles. These public schools are free to all children between the ages of six and sixteen years, and attendance at the public schools is compulsory for all children between seven and fourteen years, inclusive. High schools have been established in all the larger centres, the latest report showing that at thirty-five centres throughout the Province high schools were in operation. The University of British Columbia opened its doors to students for the first time in the autumn of 1915, with an excellent staff and with an enrolment of about three hundred and seventy-five students. Instruction in the high schools and in the University is also free and non-sectarian.

Whenever any locality in the Province can furnish to the Department of Education the names of at least ten children of school age, the Department establishes what is known as an assisted school, by which is meant that the full salary of the teacher is paid by the Government but the people are expected to provide a building, to furnish it, and also to pay the usual incidental expenses. When a settlement grows to such an extent that it can muster the names of at least twenty children of school age, the district is gazetted as a regularly organized school district. The Government then proceeds to erect a school house free of cost to the people of the district, and to furnish it with modern school desks.

The total cost of education for the year ending the 30th of June, 1915, including the amount expended by the Provincial Government, was $3,917,446.00.

Ordinary Port Charges, Victoria, B. C.

Hospital dues, per net ton, payable three times annually ....$ .01½

Harbour dues, payable twice annually 5.00

Bill of Health 1.00

Pilotage (as per schedule below).

Port agency ..... $15.00 and up.

Dockage charge (no cargo landed), $4 for the first 200 tons and ½c. for each additional ton.

STEVEDORING—

LOADING.

Salmon or general cargo, per ton .....$ .45

Ballast (furnishing and supplying same as required, 2240 lbs.) per ton 1.20

Lumber and timber, per M feet .....$1.10 to 1.35

DISCHARGING.

General cargo (weight and measurement), per ton .....$ .45

Coal, per ton ..... .50

Ballast (2240 lbs.), (excepting mud), per ton ..... .35

Pilotage

PORTS.

The Ports of the Pilotage District of Victoria and Esquimalt shall be as follows:

(1) Port of Victoria.

(2) Port of Esquimalt.

(3) William Head Quarantine Station.

(4) The limits of said Ports shall be inside a line drawn from Clover Point to Brotchy Ledge (upon which a stone beacon electric light is placed), bearing about W. by S. ½ S.—and a line drawn from Brotchy Ledge to Fisguard Light House (outside Scroggs' Rocks and Brother's Island), bearing approximately W. by N.

(5) The limits for speaking vessels bound into either Harbour shall be at or outside a line drawn from William's Head to Trial Island, bearing N.E. and S.W. (All bearings are magnetic.)

(6) Any vessel, arriving at any Port within this Pilotage District, and not having been spoken in compliance with the Pilotage Act, it shall be optional with the Master of such vessel as to the taking of a pilot outward.

(7) Vessels calling at William's Head Quarantine Station, and immediately proceeding to the Port of Victoria, or Esquimalt, shall be subject to the charges prescribed under Clause (*b*) only.

DUES.

(*a*) Vessels bound to other Ports and coming to an anchor in Royal Roads, the pilotage shall be free, except the services of a Pilot are employed, when pilotage according to the following graduated scale shall be payable:

From Inside or North of Race Rocks to Royal Bay or vice versa, 50 per cent. of the prescribed rates under Clause (*b*), Sec. 18.

From Beechy Head to Royal Roads or vice versa, $1.00 per foot.

From Pillar Point to Royal Roads or vice versa, $3.00 per foot.

From Cape Flattery to Royal Roads or vice versa, $6.00 per foot.

(*b*) For vessels entering into or clearing from the Ports of Victoria and Esquimalt, the rates of Pilotage shall be as follows:

(1) For Regular ocean steamers, 50 cents per foot draught of water and ½-cent per net registered ton up to a maximum of 3,500 tons on the inward voyage subject to a discount of 20 per cent., and 50 per cent. of the above rates on the outward voyage.

(2) For Irregular ocean steamers, $1.00 per foot draught of water and ¾-cent per net registered ton.

(3) For Regular steamers in the coasting trade between San Francisco and Lynn Canal inclusive, the rate shall be the same as for Regular ocean steamers, as rated in Clause 1.

(4) For vessels under sail, $2.00 per foot draught of water and 1 cent per net registered ton.

(5) For sailing vessels in tow, $1.50 per foot draught of water and 1 cent per net registered ton.

(6) For all vessels entering into or clearing from William's Head Quarantine Station, the rates shall be 50 per cent. of the prescribed rates of any class of vessel for Victoria and Esquimalt, subject to exemptions in Sec. 17, Clause 7; provided, however, that all coasters between San Francisco and

Lynn Canal inclusive, when compelled by special instructions from the Dominion Government to call at William's Head Quarantine Station, shall be exempt from Pilotage dues, unless the services of a pilot are requested.

(7) For all vessels of 500 tons and under, 75 cents per foot draught of water.

NOTE.—The dues before mentioned are subject to a discount of 20%.

(*c*) GULF PILOTAGE.—For all vessels, from the limits of the Ports of Victoria and Esquimalt to the limits of all ports on Puget Sound and Gulf of Georgia and vice versa, the rate of Pilotage shall be $1.00 per foot draught of water.

(*d*) Vessels proceeding from Victoria to Esquimalt, and vice versa, and having discharged or received a portion of their cargo in either harbor, and having paid full pilotage into either harbor, if proceeding with the assistance of steam, shall pay $1.50 per foot.

(*e*) Any fraction of a foot not exceeding six inches shall be paid for as half a foot, and any fraction of a foot exceeding six inches shall be paid for as a foot.

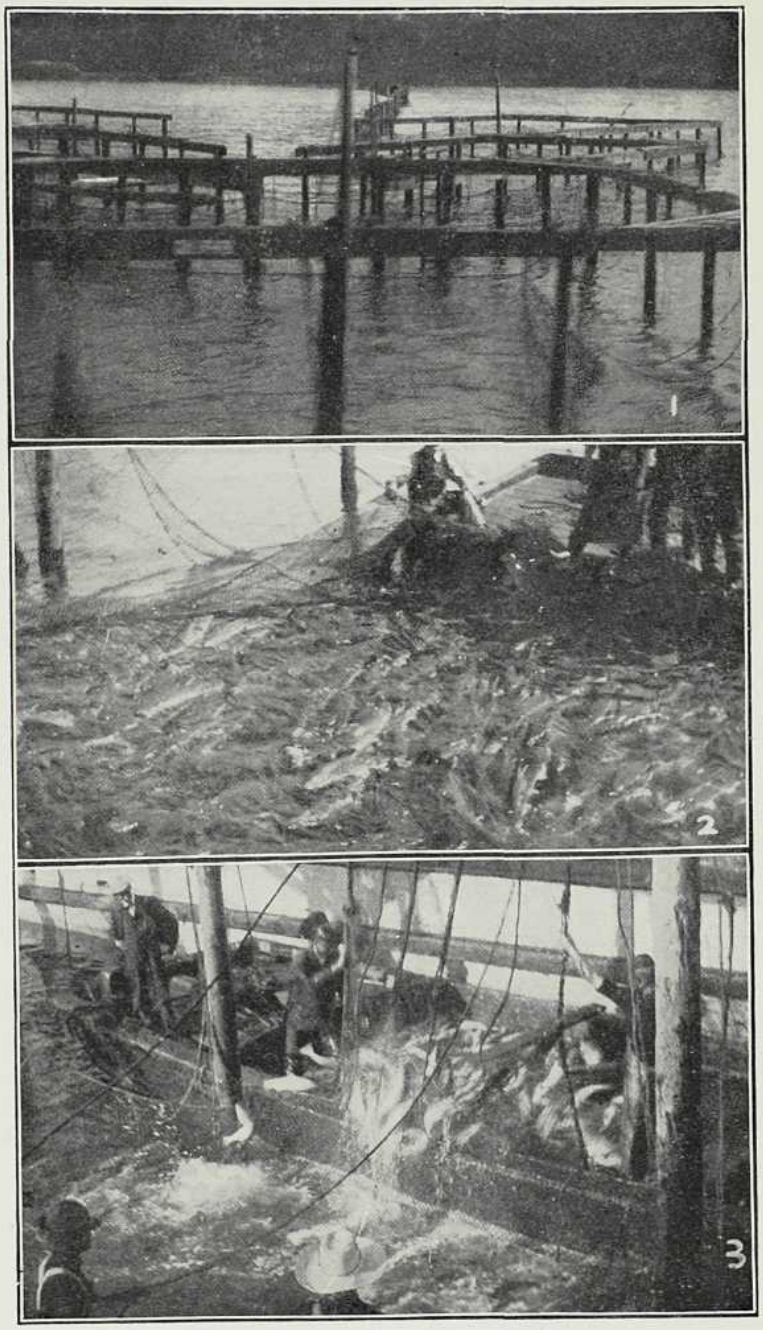
(*f*) Pilots shall, when called upon to do so, remove vessels from one part of either harbor to another part of the same harbor for the specific charge of $10.00 for each and every removal.

(*g*) The Pilotage Authority shall have power under this By-law to make such arrangements from time to time concerning the pilotage of vessels making regular trips between Victoria and Puget Sound, as to them may appear necessary or expedient in the interests of Trade and Commerce.

(*h*) Compulsory payment of Pilotage dues is not chargeable against vessels while in Royal Roads, unless such vessels shall enter either or both the harbors of Victoria and Esquimalt.

(*i*) When a vessel is bound to or from any other port in the Province, either laden or in ballast, and does not discharge or receive any cargo, passengers or mails, but simply enters it as a harbor of refuge, such vessel shall be exempt from Pilotage into and out of Esquimalt, excepting in cases where a Pilot is actually engaged by the Master for such services.

(*j*) Steamers making regular trips to Victoria and Esquimalt and having paid the prescribed rates under Clause (*b*) on the inward voyage and returning again to either of said harbors within a period of 20 days, shall only pay one-half the inward rates



The Salmon Industry of Vancouver Island

Esquimalt Graving Dock

1. Length of dock to gate, 450 feet, level with keel blocks; 480 with gate on outer kerb.

2. Width of gates, 65 feet.

3. Depth of water varying from 27 feet to 29 feet 6 inches at springs, according to season of year.

The use of this dock will be subject to the following tariff, viz.:

Gross Tonnage of Vessel	For the first day of docking	For each following day, including undocking day
For all vessels up to 1,000 tons...	$300.00	5 cents per ton
From 1,000 to 2,000 tons.....	350.00	4½ cents per ton
For all vessels above 2,000 tons...	400.00	4 cents per ton up to 2,000 tons and 2 cts. per ton on all tonnage above 2,000
Vessels from 450 to 480 ft. in length	550.00	
For cleaning and painting, exchanging or repairing propellers	200.00	5 cents per ton
Time limit 5 day, after which above tariff applies)		

YARROWS, Ltd.

MARINE RAILWAY, ESQUIMALT.

Cradle, length ..... 300 feet
Beam ..... 55 "
Capacity (dead weight) .....2,500 tons

For scale of charges, apply to the Manager, Victoria, B.C.

Victoria Machinery Depot

MARINE RAILWAY.

Cradle, length ..... 280 feet
Beam ..... 69 ft. 2 in.

For scale of charges, apply to the Company, Victoria, B.C.

VICTORIA, BRITISH COLUMBIA, BOARD OF TRADE

OFFICERS 1916-1917

C. H. LUGRIN - - - - - - - - - - President
JAMES FORMAN - - - - - - - - Vice-President
F. ELWORTHY - - - - - - - - - - Secretary

COUNCIL

J. L. Beckwith	Jas. Forman	J. J. Shallcross
Beaumont Boggs	Joshua Kingham	W. J. Shortt
A. W. Bridgman	G. A. Kirk	H. B. Thomson
A. C. Burdick	Capt. W. H. Logan	Dr. S. F. Tolmie
J. O. Cameron	C. H. Lugrin	L. A. Walker
F. Elworthy	F. A. Pauline	N. A. Yarrow

BOARD OF ARBITRATION

Beaumont Boggs	L. Crease	M. B. Jackson
A. W. Bridgman	R. S. Day	J. Kingham
J. O. Cameron	Jas. Forman	J. C. Pendray
Arthur Coles	C. A. Holland	Hon. E. G. Prior

STANDING COMMITTEES

TRADE, COMMERCE and TRANSPORTATION

Hon. T. W. Paterson (Chairman) W. H. Bone C. C. Castle
John Hart J. J. Shallcross

MANUFACTURES

A. Gonnason (Chairman) D. C. Hutchison W. A. Jameson
K. A. McLennan W. E. Staneland

FISHERIES

B. C. Mess (Chairman) J. T. Deaville Robt. Dunn
C. H. French Richard Hall

AGRICULTURE

R. W. Perry (Chairman) H. A. Munn L. Stevenson
Dr. S. F. Tolmie Thos. Walker

FINANCE

J. F. M. Pinkham (Chairman) F. L. Crawford J. A. Taylor

MINING

W. Blakemore (Chairman) Richard Hall W. A. Lewthwaite
H. A. Ross W. T. Williams

IMMIGRATION

Geo. McGregor (Chairman) W. R. Dale A. W. Elliott
H. J. Scott L. Tait

PUBLIC WORKS and RAILWAYS

C. T. Cross (Chairman) H. F. Bullen R. W. Douglas
H. Humphrey Jones J. S. H. Matson

HARBOURS and NAVIGATION

F. A. Pauline (Chairman) Beaumont Boggs Capt. W. H. Logan
T. H. Slater Capt. J. W. Troup

RAILWAY FREIGHTS

J. C. Dowsett (Chairman) H. B. Davenport A. E. McLean
J. C. Pendray C. P. Schwengers

CITY AFFAIRS

Lewis Hall (Chairman) M. B. Jackson Stephen Jones
H. O. Kirkham Edwin Tomlin

LEGISLATION

A. P. Luxton (Chairman) A. T. Monteith H. W. R. Moore
H. F. Pullen R. F. Taylor

RECEPTION

J. W. Ambery (Chairman) H. E. Beasley A. W. McCurdy
R. H. Pooley W. T. Williams

AUDITORS

A. M. J. English W. S. Fraser G. W. Mitchell

Officers of the Chamber of Commerce, of Victoria, Vancouver Island

FROM 1863 TO DATE OF INCORPORATION, OCT. 28TH, 1878

YEAR	PRESIDENT	VICE-PRESIDENT	SECRETARY
1863	R. Burnaby	Jules David	A. F. Main
1864	C. W. Wallace	Jules David	A. F. Main
1865	Jules David	James Lowe	A. F. Main
1866	James Lowe	Henry Rhodes	A. F. Main
1867	Henry Rhodes	Gustav Sutro	Robert Plummer
1868	Henry Rhodes	Gustav Sutro	Robert Plummer
1869	Henry Rhodes	Gustav Sutro	Robert Plummer
1870	Henry Rhodes	Gustav Sutro	Robert Plummer
1871	Henry Rhodes	Gustav Sutro	Robert Plummer
1872	Henry Rhodes	E. Grancini	Robert Plummer
1873	Henry Rhodes	T. L. Stahlschmidt	Robert Plummer
1874	Henry Rhodes	T. L. Stahlschmidt	Robert Plummer
1875	Henry Rhodes	T. L. Stahlschmidt	Robert Plummer
1876	Henry Rhodes	T. L. Stahlschmidt	Robert Plummer
1877	Henry Rhodes	T. L. Stahlschmidt	Robert Plummer
1878	Henry Rhodes	T. L. Stahlschmidt	Robert Plummer

Officers of the Victoria, British Columbia, Board of Trade

FROM DATE OF INCORPORATION, OCT. 28TH, 1878,
TO MARCH, 1916

YEAR	PRESIDENT	VICE-PRESIDENT	SECRETARY
Oct. 28th, 1878, to July 3, '80	R. P. Rithet, J. P.	William Charles	E. Crow Baker
1880–1	R. P. Rithet, J. P.	William Charles	E. Crow Baker
1881–2	R. P. Rithet, J. P.	William Charles	E. Crow Baker
1882–3	R. P. Rithet, J. P.	Roderick Finlayson	E. Crow Baker
1883–4	R. P. Rithet, J. P.	Roderick Finlayson	E. Crow Baker
1884–5	R. P. Rithet, J. P.	Mat. T. Johnston	E. Crow Baker
1885–6	Jacob H. Todd, J. P.	Edgar Crow Baker	Wm. Monteith
1886–7	Jacob H. Todd, J. P.	Thos. Earle	Wm. Monteith
1887–8	Robert Ward, J. P.	T. R. Smith	Wm. Monteith
1888–9	Robert Ward, J. P.	Thos. Earle	Wm. Monteith
1889–90	Robert Ward, J. P.	Thomas B. Hall	Wm. Monteith
1890–1	Robert Ward, J. P.	Thomas B. Hall	F. Elworthy
1891–2	Thomas B. Hall	A. C. Flumerfelt	F. Elworthy
1892–3	Thomas B. Hall	A. C. Flumerfelt	F. Elworthy
1893–4	A. C. Flumerfelt	C. E. Renouf	F. Elworthy
1894–5	A. C. Flumerfelt	C. E. Renouf	F. Elworthy
1895–6	D. R. Ker	Gus. Leiser	F. Elworthy
1896–7	D. R. Ker	G. Leiser, G. A. Kirk	F. Elworthy
1897–8	G. A. Kirk	W. A. Ward	F. Elworthy
1898–9	G. A. Kirk	W. A. Ward	F. Elworthy
1899–1900	W. A. Ward	L. G. McQuade	F. Elworthy
1900–1	W. A. Ward	L. G. McQuade	F. Elworthy
1901–2	L. G. McQuade	C. F. Todd	F. Elworthy
1902–3	L. G. McQuade	C. F. Todd	F. Elworthy
1903–4	C. F. Todd	S. J. Pitts	F. Elworthy
1904–5	S. J. Pitts	W. T. Oliver	F. Elworthy
1905–6	W. T. Oliver T. W. Paterson	J. A. Mara	F. Elworthy
1906–7	J. A. Mara	F. A. Pauline	F. Elworthy
1907–8	F. A. Pauline	Simon Leiser	F. Elworthy
1908–9	Simon Leiser	L. A. Genge	F. Elworthy
1909–10	Simon Leiser	L. A. Genge	F. Elworthy
1910–11	H. G. Wilson	A. E. Todd	F. Elworthy
1911–12	H. G. Wilson	J. J. Shallcross	F. Elworthy
1912–13	J. J. Shallcross	Hon. E. G. Prior	F. Elworthy
1913–14	J. J. Shallcross	Hon. E. G. Prior	F. Elworthy
1914–15	Hon. E. G. Prior	C. H. Lugrin	F. Elworthy
1915–16	Hon. E. G. Prior	C. H. Lugrin	F. Elworthy

MEMBERSHIP ROLL

A

NAME	FIRM	BUSINESS
Abell, P. C.	Macey Office Equipm't Co.	Proprietor.
Agnew, Wm.		Retired Merchant.
Ambery, J. W.	Hiram Walker & Sons	Agent.
Anstie, H. K.	Can. Fairbanks Co., Ltd.	Manager.

B

Barnard, G. H.	Barnard, Robertson, Heisterman & Tait	Barrister-at-Law.
Barnard, Hon. F. S.	Lt.-Governor of B.C.	
Barnes, H. T.	R. P. Rithet & Co.	Insurance.
Barton, George	Gordons Ltd.	Manager.
Bassett, H. W.	Grant, Smith & McDonnell, Ltd.	Gen. Manager.
Beasley, H. E.	E. & N. Ry.	Superintendent.
Beckwith, J. L.		Commission Agent.
Blakemore, Wm.		J'rnalist and Min'g Eng.
Blashfield, F. H.	West. Union Tel. Co.	Manager.
Bodwell, E. V.	Bodwell & Lawson	Barrister-at-Law.
Boggs, Beaumont		Real Estate.
Bone, W. H.	Hibben & Co.	Stationery, etc.
Boultbee, A. P.	Bank of Toronto	Manager.
Brenchley, R. H.	F. R. Stewart & Co.	Wholesale Fruits, etc.
Bridgman, A. W.		Real Estate and Ins.
Brown, Edwin M.	Victoria Fuel Co.	Manager.
Brown, Guy S.		Lumber.
Brown, P. R.	P. R. Brown, Ltd.	Real Estate and Finance.
Bullen, H. F.	B.C. Salvage Co.	Shipbuilder.
Bullen, W. F.	B.C. Salvage Co.	Shipbuilder.
Burdick, A. C.	Green & Burdick	Real Estate and Ins.
Butchart, R. P.	Vanc. Portland Cem't Co.	Managing Director.

C

Callow, Henry	Royal Nurseries, Ltd.	Proprietor.
Cameron, J. O.	Cameron Lumber Co., Ltd.	Director.
Cameron, W. G.		Merchant.
Campbell, Angus	Campbell & Co.	Ladies' Outfitter.

NAME	FIRM	BUSINESS
Campbell, D. E.		Chemist.
Canavan, H. W. E.	Canavan & Mitchell	Civil Engineer.
Carlin, M.	Carlin Bros.	Contractor.
Carmichael, Alfred	Carmichael & Moorhead	Land Agent.
Castle, C. C.		Retired Merchant.
Catterall, Thomas		Contractor and Builder.
Christianson, W. D.	E. P. Charlton & Co.	Manager.
Christie, William	P. McQuade & Sons	Manager.
Coles, Arthur		Financial Agent.
Collison, J. J.	Pioneer Coffee & Sp. Mills	Director.
Cove, H. S.	Balfour, Guthrie & Co.	Agent.
Crawford, F. L.	Can. Bank of Commerce	Manager.
Crease, Lindley	Crease & Crease	Barrister-at-Law.
Cross, C. T.	Cross & Company	Real Estate and Ins.
Crotty, H. S.		Retired Merchant.
Cusack, Thos. R.		Printer and Publisher.

D

Dale, Wm. R.	Great Northern Ry. Co.	Manager.
Darling, W. Stewart	Dominion Bank	Manager.
Davies, A. Dale	Gordon Drysdale, Ltd.	Manager.
Davenport, H. B.	Dodwell & Co.	Manager.
Day, R. S.		Real Estate and Ins.
Deaville, Jno. T.		Merchant.
Dickson, Jno. F.	Victoria-Phoenix Bry. Co.	Brewer.
Dilworth, John		Retired Merchant.
Doig, D.	Bank B.N.A.	Manager.
Douglas, R. W.		Real Estate and Ins.
Dowsett, J. C.	Shore Hardware Co., Ltd.	Managing Director.
Drake, S. J.	The Drake Hardware Co.	Director.
Dunn, Robert	Times P. & P. Co.	Manager.
Dunsmuir, James		Retired.

E

Elgee, H. A.	Sir J. Jackson (Can.), Ltd.	Manager.
Elliott, A. W.		Retired Merchant.
Elliott, R. T.	Elliott, Maclean & Shandley	Barrister at-Law.
Elworthy, F.	Victoria, B.C., Bd. of Trade	Secretary.
English, A. M. J.	Royal Trust Co.	Manager.

F

Fletcher, Jas. H.	Fletcher Bros.	Music Supplies.
Floyd, J. S.		Accountant.

NAME	FIRM	BUSINESS
Flumerfelt, A. C.		Finance.
Forman, Jas.	Heisterman, Forman & Co.	Real Estate and Ins.
Fraser, A. C.	Merchants Bank of Canada	Manager.
Fraser, W. S.	W. S. Fraser & Co., Ltd.	Hardware.
French, C. H.	Hudson's Bay Company	Manager.

G

Gardiner, W. H.	E. & N. Ry.	District Freight Agent.
Genge, L. A.	R. P. Rithet & Co.	Merchant.
Gibbs, Frank B.	Brackman-Ker Milling Co.	Manager.
Giffen, J. B. (Vancvr.)	R. G. Dun & Co.	Manager.
Gonnason, A.	Lemon & Gonnason	Sash and Door Mfr.
Goodacre, Lawrence	Queen's Market	Proprietor.
Goward, A. T.	B.C. Elec. Railway Co.	Manager.
Green, A. R.	Imperial Bank of Canada	Manager.
Green, Jno. R.		Barrister-at-Law.
Green, R. F.	Green & Burdick	Real Estate and Ins.
Greenshaw, E. E.	B.C. Hardware Co., Ltd.	Hardware.

H

Hall, Lewis		Dentist.
Hall, L. W.	Hall & Co.	Chemist.
Hall, Richard		Insurance, etc.
Harlow, R. J.		Merchant.
Harrison, F. R.	Evans, Coleman & Evans	Manager.
Hart, John	Gillespie, Hart & Todd	Ins. and Real Estate.
Hayward, Chas.		Retired Merchant.
Holland, C. A.	B.C. Land & Invt. Agcy.	Managing Director.
Hunter, Jos.		Civil Engineer.
Hutchison, D. C.	Hutchison Bros. & Co., Ltd.	Electrical Engineer.

I

Innes, A. S.		Barrister-at-Law.
Izard, E. W.	Yarrows, Ltd.	Shipbuilder.

J

Jackson, M. B.	Jackson & Phelan	Barrister, etc.
Jameson, W. A.		Teas and Coffees.
Jardine, John		Retired.
Jeffries, F. S.	Bradstreet Co.	Superintendent.
Johnson, E. M.		Real Estate.

NAME	FIRM	BUSINESS
Jones, F. W.	B.C. Sand & Gravel Co.	President.
Jones, H. Humphrey		Finance.
Jones, Stephen	Dominion Hotel	Proprietor.

K

Ker, D. R.	B. & K. Milling Co.	Managing Director.
Kerr, A. J.	Imp. Canadian Trust Co.	Manager.
Ketchen, H. J.	Northern Crown Bank	Manager.
Kingham, Joshua	Kingham & Co.	Coal Dealer, etc.
Kirk, A. M.	Kirk & Co.	Managing Director.
Kirk, G. A.	Turner, Beeton & Co.	Merchant.
Kirkham, H. O.	H. O. Kirkham & Co.	Grocer.

L

Leeming, D.	Leeming Bros., Ltd.	Real Estate.
Leigh, J. L.	Jas. Leigh & Sons	Manager.
Leiser, Max	Pither & Leiser	Wholesale Liquors.
Lenz, M.		Wholesale Dry Goods.
Lewis, D. O.	Can. Nor. Pac. Ry. Co.	District Engineer.
Lewthwaite, W. A.		Mining Engineer.
Lineham, Arthur		Finance.
Lockard, J. R.	Canadian Collieries, Ltd.	Manager.
Logan, Capt. W. H.	Lloyd's (London)	Special Representative.
Lott, H. S.	H. S. Lott & Co.	Real Estate.
Lugrin, C. H.	Colonist P. & P. Co.	Editor.
Luxton, A. P.	Pooley, Luxton & Pooley	Barrister-at-Law.

M

Macneill, E. F.	Bank of Nova Scotia	Manager.
Mara, J. A.		Merchant.
Matson, J. S. H.	Colonist P. & P. Co.	Managing Director.
McArthur, James	Grand Trunk Pacific Ry.	Agent.
McCurdy, A. W.		Retired Merchant.
McGregor, George		Tug Boat Manager.
MacKenzie, A. B.		Merchant.
McKeown, Angus		Wholesale Leather Mcht.
McLean, A. E.	R. P. Rithet & Co., Ltd.	Wholesale Grocer.
McLennan, K. A.	Kelly, Douglas & Co.	Manager.
McLorie, J.	Mt. Royal Milling Co.	Superintendent.
Mess, B. C.	Findlay, Durham & Brodie	Manager.
Milne, Dr. G. L.		Physician.
Mitchell, G. W.	Mitchell Bros.	Commission Merchant.

NAME	FIRM	BUSINESS
Monteith, A. T.	B.C. Pottery Co.	Manager.
Montizambert, A.	Bank of Montreal	Manager.
Moore, H. W. R.		Barrister-at-Law.
Moore, F.	Victoria Chemical Co.	Director.
Moore, J. H.	C.P.S. Lumber Co., Ltd.	Lumber Mfr.
Munn, H. A.		Insurance Agent.
Munsie, Wm. H.	Shawigan Lake Lumber Co.	Director.

N

Nachtrieb, W. E.	Kullman, Salz & Co.	Tanners.
Nicholson, C. H.	G.T.P. Steamships	Manager.
Norris, Fred'k.		Harnessmaker.

O

Ormond, A. E.	Popham Bros.	Manager.

P

Painter, J. E., Jr.		Coal and Wood.
Palmer, E. J.	Victoria Lumber & Mfg. Co.	Chemainus.
Paterson, Frank C.	B.C. Telephone Co.	Manager.
Paterson, James	Paterson Bros.	Fruit and Produce Mcht.
Paterson, T. W.		Capitalist.
Pauline, F. A.		Retired Merchant.
Payne, Robert Horne	Sperling & Co. (London)	Financial Agent.
Pearce, Henry		Financial Agent.
Pearson, Ed.		Retired Merchant.
Pearson, O. W.	Swift Canadian Co.	Manager.
Pemberton, F. B.	Pemberton & Son	Real Estate and Ins.
Pendray, J. C.	B.C. Soap Works	Soap Mfrs.
Pendray, H. J.	B.A. Paint Co.	Paint Mfrs.
Perry, R. W.	Gt. West Perm. Loan Co.	Finance.
Pigott, A. H.	Vic.-Van. Stevedoring Co.	Manager.
Pinkham, J. F. M.	Quebec Bank	Manager.
Pither, Luke	Pither & Leiser	Liquor Merchant.
Pitts, S. J.		Retired Merchant.
Plimley, Thos.	Thos. Plimley & Co.	Autos, etc.
Plow, H. A.	Canadian Pacific Railway	District Freight Agt.
Porter, R. J.	Robt. Porter & Sons, Ltd.	Manager.
Pooley, R. H.	Pooley, Luxton & Pooley	Barrister-at-Law.
Prior, Hon. E. G.	E. G. Prior & Co., Ltd	President.
Pullen, H. F.		Journalist.

R

NAME	FIRM	BUSINESS
Rickaby, J. H. B.		Commission Agent.
Rines, L. D.	Western Pickling Works	Managing Director.
Robertson, H. B.	Barnard & Robertson	Barrister-at-Law.
Ross, H. A.	Vanc. Portland Cement Co.	Treasurer.
Ross, H. G.	Dixi H. Ross & Co.	Grocer.
Rowley, H. H.	Union Bank of Canada	Manager.

S

Sampson, W. Curtis		Chartered Accountant.
Sargison, A. G.		Finance.
Sayward, J. A.		Retired Merchant.
Scott, H. J.	Canadian Explosives, Ltd.	Manager.
Shallcross, J. J.	Shallcross, Macaulay & Co.	Merchant.
Shearer, Jas. R.	R. V. Winch & Co.	Manager.
Sheret, A.		Plumber.
Shortt, W. J.	Shortt, Hill & Duncan, Ltd.	Jeweller.
Shotbolt, Thos.		Chemist.
Slater, T. H.		Finance.
Spencer, D. S.	David Spencer, Ltd.	Dry Goods.
Spencer, J. W.	David Spencer, Ltd.	Dry Goods.
Spratt, C. J. V.	Vict. Machinery Depot	Mach'y and Shipbldg.
Staneland, W. E.	Staneland Paint Mfr.	Managing Director.
Stemler, L.	Coffee and Spice Mills	Proprietor.
Swinerton, R. H.	Swinerton & Musgrave	Insurance.

T

Tait, Leonard	Victoria Transfer Co.	Manager.
Taylor, J. A.	Royal Bank of Canada	Manager.
Taylor, R. F.	Colonial Trust Co.	Manager.
Taylor, R. R.	Drake Hardware Co., Ltd.	Secretary.
Terry, W. S.		Druggist.
Thomas, C. E.	The Dominion Bank	Manager.
Thomson, H. B.	Turner, Beeton & Co., Ltd.	Merchant.
Thomson, Jas. G.	Chic., Mil. & St. Paul Ry.	Agent.
Todd, C. F.		Merchant.
Tolmie, Dr. S. F.		Veterinary Surgeon.
Tomlin, Edwin	Associated Cement Co., (Canada), Ltd.	Manager.
Troup, Capt. J. W.	C.P. Ry. Co.	Supt. B.C. Coast Service.
Tye, T. B.	Hickman Tye Hardware Co.	Manager.

V

NAME	FIRM	BUSINESS
Vassar, (Gusty) J. S.	P. Burns & Co., Ltd.	Wholesale Meat.
Vincent, F. W.	C.P. Ry. Co.	B.C. Coast Service.

W

Walker, L. A.	Vanc. Milling & Grain Co.	Manager.
Walker, Walter	Hall & Walker	Coal Dealer.
Wallace, W. O.	Wallace & Clarke	Real Estate.
Weiler, Otto		Retired Merchant.
Wilkerson, W. H.		Jeweller.
Williams, Stewart	S. Williams & Co.	Auctioneer.
Williams, W. T.		Merchant.
Wilson, B.	The B. Wilson Co.	Ice and Cold Storage.
Wilson, H. Goulding.	Wilson Bros.	Wholesale Grocer.
Wilson, J. E.	W. & J. Wilson	Clothier.
Wilson, Wm.	W. & J. Wilson	Merchant.
White, A. Moresby		Barrister.
Wright, Andrew		Merchant.

Y

Yarrow, N. A.	Yarrows, Ltd.	Shipbuilder.
Young, J. H.	Dominion Express Co.	Manager.