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"Official Announcement"

There are official announcements and official announcements. One kind of an official announcement was that published in the Vancouver press a month or two ago that the terminal elevators of the Canadian Pacific Railway for the Pacific Coast would be located at a certain point on Burrard Inlet. About the only thing official about this announcement, on close reading, was found to be the unsupported assertion that it was an "official announcement."

The real official announcement with the right name behind it came on Saturday, Jan. 25, when Mr. George J. Bury, Vice-president and General Manager of the Canadian Pacific Railway, then in Vancouver, gave to the newspapermen, with the prestige of his name behind it, the statement that it was the intention of the railway company to locate its elevators at Coquitlam.

- ¶ The only qualification of this announcement was the statement that some improvements of navigation on the Pitt and Fraser Rivers was necessary.
- ¶ That improvement is now being made, so the question of terminal elevators for the Pacific Coast, so far as the C. P. R. is concerned, is settled. They are to be at Coquitlam.
- This is one more evidence that we knew what we were talking about when we called the attention of the investing public to the advantages of Coquitlam. All the other good things we have predicted for Coquitlam will come in time. It is the most promising new city on the Lower Mainland of British Columbia today. The recent history of Coquitlam bristles with things done and doing. Coquitlam is no dream—it is an actual and great city in the process of making. You make no mistake when you invest in Coquitlam. Clip the coupon and mail it at once.

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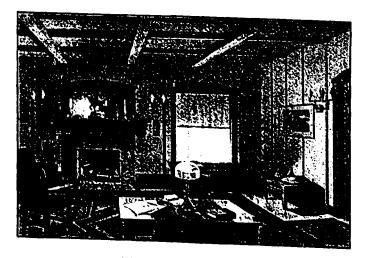
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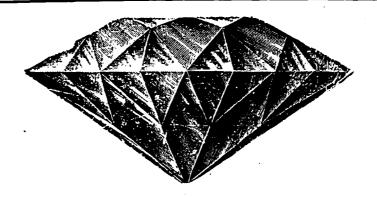
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FRANK BUFFINGTON VROOMAN EDITOR

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Ballade of the Times

These are the days of the Age of Gold,
Of lust, and lying, and warring creeds.
The conscience-pulse of the race is cold,
And Honor cowers in widow's weeds.
The mad world on in a jumble speeds,
Whirling about like a flying wheel,
While swift evolves from our sordid greeds
A soul of iron, a heart of steel.

In vain to its mammon-master sold

The stunted spectre of childhood pleads;
In vain with the martyrs are enrolled

The noble doors of nobler deeds.

A worm at the core of the nations feeds

When men at the shrine of Midas kneel,

And this is all that the present heeds:

A soul of iron, a heart of steel.

However the tragic years unfold

The tide of the spirit slow recedes,

And only the vigilant and bold

May keep their place as the sterner breeds.

For many will break like river-reeds

However their lives were pure and leal,

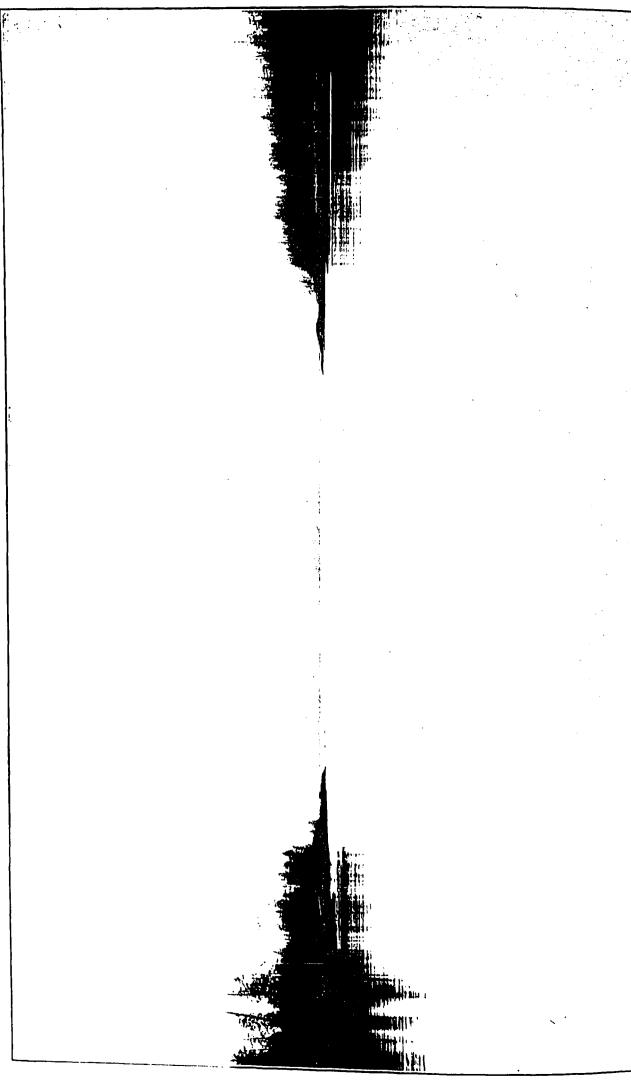
Since this must serve who the vanguard leads:

A soul of iron, a heart of steel.

ENVOY

Prince! while a Christ on Calvary bleeds
The money-changers resume their zeal,
And he who faces the future needs
A soul of iron, a heart of steel.

-Ernest McGaffey





Vol. IX MARCH, 1913 No. 3

Prince Rupert's Right Hand

THE INTERESTING DEVELOPMENT OF PORT EDWARD, B. C.

By C. L. Armstrong

"LOOK! you see that smoke rising from the shore away in there? — That's Port Edward."

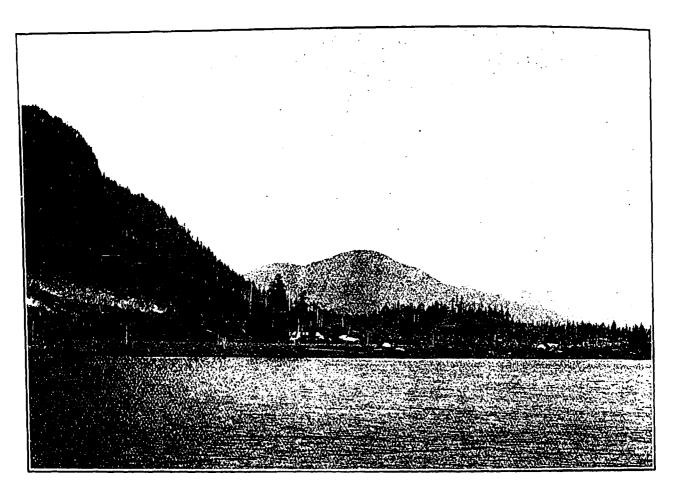
The speaker was pointing, and I looked away along his extended arm and saw smoke spirals rising straight up. I remember that it brought over me in a flash the wonder of this great West. I had heard much about Port Edward, about what this new industrial centre would accomplish, and about the part it would play in the business of Western Canada. And to think that those columns of smoke rising from the brush-wood fires in the clearings represented Port Edward! And yet in a few years—scarce time for child to grow to manhood-sane, shrewd men expected the brushwood smoke to give way to the black reek of factory chimneys mingling with the clouds from locomotive stack and steamer funnel. Had not the miracle been worked many times before in the history of the West I could not have believed it possible.

This was many months ago, and some of those who were with us knew little or nothing about Port Edward. Since that time much has been written and read about this new townsite. Port Edward is Prince Rupert's Industrial Annex, and that description fills the bill. Prince Rupert may as aid to date from May, 1909, when

property there was first offered to the public. Today it has a population in excess of 6,000, with a remarkably well-developed business district and a residential district that is growing with much rapidity.

Prince Rupert is, of course, the western terminus of the Grand Trunk Pacific Railway, but its wonderfully rapid growth and solid foundation is due to more than that fact. It is the most northerly terminal port in the Dominion; it provides the shortest available route to the Orient, and it holds a commanding position as central distributing point, not only for the immensely rich northern interior of British Columbia, but for the entire coast country of the Yukon and even Alaska.

Were Prince Rupert dependent upon its superiority as regards the route to the Orient alone its future would be assured. The following facts emphasize this statement. The distance goods must travel to go from Prince Rupert to Yokohama is about 3,800 miles. These same goods must travel 4,283 miles, or 483 miles farther, to reach Yokohama from Vancouver. From Prince Rupert to Hong Kong is a distance of about 5,400 miles. After the completion of the Panama Canal, the New York shipper, desiring to ship to the Orient by water, will have to send his wares over 10,000



SOUTH END OF TOWNSITE OF PORT EDWARD FROM HARBOR

miles to reach Yokohama, and over 11,600 to get to Hong Kong. Shipments from Eastern Canada ports will have to travel the same distance twice, plus whatever distance the Canadian port may be from the port of New York. Furthermore, ports on the eastern coast of the continent, even after the Panama Canal is completed, will require as long a time and as great ocean transportation cost to reach the markets of Asia for the single trip as Prince Rupert and the other North Pacific ports for the round trip.

Prince Rupert is admirably placed in relation to the vast natural wealth of the northern interior of the province. In the valleys of the Bulkley and its tributaries hundreds of square miles of coal lands have been taken up. The district drained by the Copper River contains immense deposits of gold, silver and copper. Great alluvial deposits of gold are found in the Omineca mining region, The Babine Range contains silver and lead of almost immeasurable value. At the confluence of the Skeena and Blackwater Rivers, one hundred and fifty miles north of Hazelton, are found the great anthracite coal fields of the Groundhog basin. Coming to the coast, valuable copper and gold deposits have been found on Queen Charlotte 130

Islands, and copper, silver and gold is being developed in large quantities on Observatory Inlet and on the Portland Canal. At Observatory Inlet, in fact, are found the mines of the Granby Consolidated Mining, Smelting and Power Co., a \$15,000,000 corporation which has already expended close to \$1,000,000 on development work and which has just now definitely decided to erect a smelter at Granby, at a cost of \$1,500,000. company furnishes employment at the present time to about four hundred and fifty men. The great placer fields of the Canadian Yukon also stand ready to send forth their gold to Prince Rupert for shipment to all parts of the world.

Large areas of most valuable timberland, containing mile upon mile of good sprace, hemlock and cedar, are contained in the district behind Prince Rupert. These great forests are awaiting the development of the coast cities they are intended to serve, and it is safe to say that the force within a radius of one hundred miles of Prince Rupert will produce timber sufficient to supply twenty-five mills with all they can cut and market for the next twenty years to come. At Swanson Bay, about one hundred miles from Prince Rupert, is incated a pulp mill, representing an invest-



MAIN LINE OF GRAND TRUNK PACIFIC, THROUGH PORT EDWARD TOWNSITE

ment of \$1,000,000 and employing hundreds of people. At Ocean Falls, about one hundred and eighty miles away, another very large pulp and saw mill has been constructed. Industries of this type as they come to be built will seek distributing yards on the coast, and will naturally look to Prince Rupert and its environs for this purpose.

The most valuable asset Prince Rupert claims is the fish which abounds in the waters within a few miles of its harbor. Great halibut banks, yielding at present millions of pounds every year, for shipment to Vancouver and Seattle, are found within a radius of twenty miles. Twelve miles south of Prince Rupert lies the Skeena River, one of the greatest salmon rivers he the entire world. Even now this river delds hundreds of thousands of cases per considerably over a Allion dollars, and this salmon industry cone, although in its infancy, gives employto over 5,000 people during the nning season.

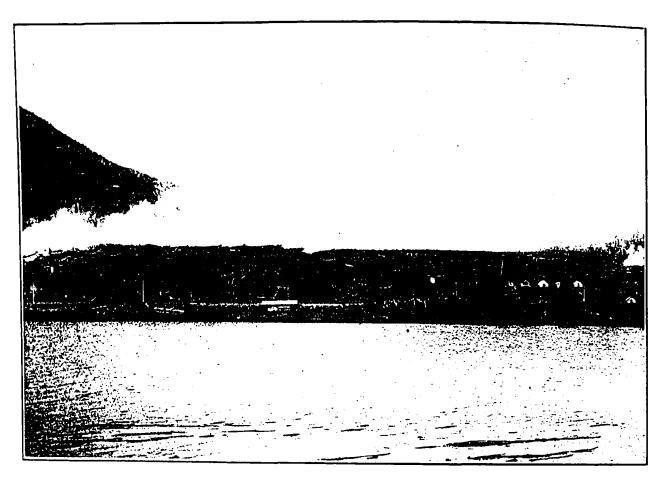
During winter months large schools of whales abound in the waters in and around lince Rupert harbor. Two whaling stations are found on the Queen Charlotte Islands, and their catch during the past seem was in excess of four hundred. Ex-

perts hold that more whales abound in these waters than in any other part of the world. On the Queen Charlotte Islands are also fisheries.

On Digby Island, on the west coast of Prince Rupert harbor, the Dominion government has erected a splendid modern marine station, quarantine station and wireless station.

It would be possible to continue for pages the enumeration of the natural resources that assure the growth and prosperity of the city of Prince Rupert, but enough has been said to show the possibilities of making Prince Rupert one of the greatest export cities on the continent.

The question now arises naturally, why does Prince Rupert require an industrial Why, with all the adcomplement? vantages enumerated above, is Prince Rupert not able to develop without the assistance of another townsite? answer is, that with all its great advantages of location and resources, there is not sufficient waterfrontage available townsite of Prince Rupert for the upbuilding of industrial enterprises, and for the construction of those warehouses, elevators, and other industrial units that are absolutely essential to the ultimate success of any great commercial port. That the need



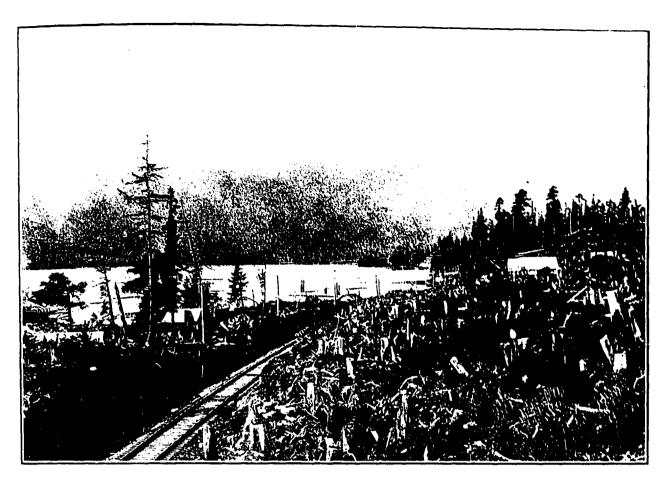
CENTRAL PORTION OF PORT EDWARD TOWNSITE, FROM HARBOR

of an industrial annex is appreciated by the city of Prince Rupert itself is evident by a quotation from the 1912 report of the Prince Rupert Board of Trade, reading as follows: "A wagon road should be built to Porpoise Harbor at the earliest possible moment. The necessity for this is apparent, seeing that this point will undoubtedly be an industrial site."

Port Edward affords Prince Rupert the waterfront industrial sites that will be required. The G. T. P. railroad main line runs along the waterfrontage of Port Edward. A hard and fast agreement with the railroad company stipulates that they shall erect a station, provide adequate sidings, permit grade crossings, and furnish all accommodations required as the traffic of Port Edward grows. The entire policy of the Grand Trunk Pacific Railway would, however, assure to Port Edward all of these things as traffic demands it, without any agreement whatsoever, for no railroad system has shown a greater desire to assist in the development of communities along its right-of-way than the G. T. P.

The Dominion government, recognizing the facilities offered by Porpoise Harbor (on which Port Edward fronts), has thoroughly sounded and buoved the harbor and its entrance, and has issued plans and charts showing the general characteristics of the harbor and coast line. Porpoise Harbor, on which Port Edward is situated, is formed by Kaien Island on the north, the mainland of the Tsimpsean Peninsula on the east and south, and Ridley Island on the west. It is practically landlocked, and is sheltered from high winds and seas. The entrance is between Ridley Island and Lelu Island.

An examination of the charts prepared by the Dominion government from soundings made by the Dominion Government Hydrographic Department and the G. T. P., shows that the whole harbor has been thoroughly sounded, including the entrance. From the outside there are two entrances, one on a straight line from Green Top Island to the mouth of the harbor, thence directly into the inside harbor, this range having a minimum depth of 334 fathoms (22 feet) at low water, or five feet deeper than Victoria inner harbor today. The range, as shown on the chart, has two turns. This entrance has a minimum depth of seven fathoms (42 feet) or a cepth accommodate the amply sufficient to draught of any type of vessel afloat. The minimum width of the harbor entrance between the six-fathom line at low water is 550 feet. At the north end or head of the harbor is found a turning basin 1,800 to 2,000 feet wide, amply sufficient to permit



ENTRANCE TO PORT EDWARD TOWNSITE FROM THE NORTH

the turning of any type of vessel. The maximum tidal currents obtained from current meter measurements in various points of the harbor in no place exceed two miles per hour. This seems a particularly good feature when we compare Porpoise Harbor with Vancouver Harbor, which has a tidal current of seven miles per hour at the Narrows, or San Francisco, which has a tidal current of seven miles per hour at the Golden Gate. When the proposed lock is put in at Zanardi Rapids, there will be practically no currents in Porpoise Harbor.

The depth of water close to the highwater mark in the Prince Rupert harbor along the shore of the present townsite makes it impossible, except in a few instances, to build pier wharves, unless the piers are constructed by a combination of cut and fill, entailing a very heavy expense. This is not the case at Port Edward. The shore line of the east side of Porpoise Harbor is such that piers at an angle of 45 regrees to the general direction of the fore line may be constructed out to a anoth of 600 feet, and these piers will have to average depth at the outer end of 36 feet low water. They will require but little stedging at the inner end to give an average with of 26 feet at low water, and may be ly deepened to a further depth of 30 at low water. Eleven of these piers are available with a combined docking length of 14,320 feet.

There is also available on the waterfront at Port Edward a site for a quay wharf 2,640 feet in length, giving a total docking length of 16,960 feet. The wharves have been projected according to modern harbor practice to serve the needs of an industrial townsite.

One pier has already been secured by the principal hydro-electric company. Prince Rupert Hydro-Electric Co. is a \$5,000,000 corporation financed by the same group of Montreal capitalists who are so successfully operating the Western Canada Power Company in Vancouver at The P. R. H. E. Co. own the present. most valuable power rights in the vicinity of Prince Rupert and have secured water powers aggregating a possible development of 80,000 horse power. This company has already commenced development of the Falls River power (located about 37 miles from Port Edward) and confidently expect to have the first unit in operation by the fall of 1913. They have purchased two industrial blocks in Port Edward, and are at present installing a Diesel oil engine plant of 1,500 h.p. capacity, from which they will sell power until their water power is in operation; then this Diesel plant will be utilized as a stand-by plant. When the Falls River plant is in operation cheap power will be obtainable in Port Edward, the company having already entered into an agreement with the townsite company stipulating that power shall be furnished Port Edward at no greater rate than that

charged Prince Rupert.

The industrial sites will all have trackage to serve their needs, as will the six warehouse blocks. The warehouse blocks are laid out to have trackage on the front and road facilities on the rear. Goods coming in by rail can be handled from cars to the first floor, then by elevator to the second or third floor, whence they can be transferred by trucks to wagons for delivery throughout the townsite. Industrial sites have also been laid out along the tide flats between Watson Island and the mainland. These will require but little fill to raise them above high-tide level, or if desired, the buildings may be erected upon piles or Further industrial sites have been laid out on the Lake Wainwright waterfront. These will become very valuable when the locks on the Zanardi Rapids are constructed, and the Zanardi Rapids bridge opened up. There are in all fifty-five industrial sites, aggregating a total of one hundred and fifty-one acres.

Throughout the planning of this harbor and townsite the aim has been to supply a want which has been keenly felt at Prince Rupert and, in fact, all along the entire north coast of British Columbia, namely, industrial sites with the most economical means of serving them with water and rail transportation, and the townsite to serve the needs of those employed in the industries. To this end, the industrial sites have been laid out to utilize all the available waterfront, and the streets and lots have been laid out to provide for inexpensive

and attractive homesites by taking advantage of the exceptionally easy lay of the ground and by minimizing the cost of such grading as may become necessary.

It is only a question of a few months until the G. T. P. will have a daily train service on their main line, and it is believed that the fifteen-minute run between Prince Rupert and Port Edward will not prevent those working in Prince Rupert from making their home at Port Edward if they find that they can obtain a homesite there with every advantage more cheaply than they can in Prince Rupert.

Mr. R. H. Thomson, A.M.Ph.D., member of the American Society of Civil Engineers, for twenty years city engineer of Seattle, and now chief engineer of Strathcona Park for the British Columbia government, was engaged as consulting engineer and all preliminary plans of the harbor and townsite were submitted to him

for alteration and approval.

Port Edward, located as it is in the midst of a hilly country, is favored by especially easy grades. It is situated on a harbor second to none on the Pacific coast, and one which offers every convenience required by It offers facilities for modern shipping. shipment east to the Atlantic coast over a railway built on easier grades and with fewer summits than any other transcontinental railway system on this continent. In short, it is a particularly fine location for industries that expect to send forth their wares either east or west, and it offers such exceptional facilities for the handling and transhipping of materials, and for the housing of the men engaged in the development of industries located on its shores, that its rapid and prosperous growth and development may be confidently looked forward to.



The Coal Situation in British Columbia

By Parker Williams, M.P.P.

THE MATTER of coal shortage in the coast cities of British Columbia is a subject for the thought of someone with both more time and knowledge than the writer will claim to possess.

The only reason which I can offer for accepting the British Columbia Magazine's invitation to discuss the matter is that to the present time practically everyone taking up the subject has been, or is, more or less adversely affected by the shortage, and has therefore predicted a non-existing principle, i.e., that the public has a right to secure coal.

If the public has a right to secure coal, why does it not exercise that right? If it cannot do so, then would not some weaker or more humble term than "a right" fit the condition better?

If, again, the owners of coal lands have a right recognized in law, to mine, or not to mine, to sell, or not to sell, coal, which of these two "rights" is likely to prevail? In a recent trial one of the British Columbia Appeal Court judges is quoted as saying, "I am here to administer law, not commonsense."

As I understand it, it is a dual problem with which we have to deal—a shortage in the amount of coal available, and what held to be an exorbitant price charged herefor. Any solution of this problem ill suggest consequences in other directors which to many will be fully as stasteful as the coal situation itself is.

The ownership of coal lands in British dumbia imposes no obligation to produce. coal is produced, it is because the mer's personal interests are best served by doing. If he chooses to produce—or other to permit miners to produce—coal, may ship it to Vancouver or to Mexico. it. in his wisdom, has the sole determination of this point again. The price he half charge therefor is also a little matter

regarding which he has himself to consult. According to the unwritten laws of commerce, he is entitled to charge therefor all that the market will permit; if there is a shortage of coal he may put the price up to the highest figure that the public will pay rather than forego the comfort of its A careful variation of the price in accordance with this principle would promptly relieve any coal shortage; for in reality this shortage was, and is, only relative to the price at which it was sold. Had the price been raised, say, to \$20.00 it is quite likely that the amount on hand would have been sufficient to meet the demands.

This may seem a brutal form of reasoning. All that I can reply is, that until we are prepared to look the situation squarely in the face we need claim no desire to understand it.

In recent years land in the coast cities has increased in price many hundred fold—coal has not doubled itself in the same period. As far as I have been able to observe it, it is right, and just, and in fact an unfailing earmark of public-spirited citizenship to force up the price of land. Is land less essential to life than coal? If not, then by what feat of mental juggling does the person who assents to the increase in the price of the former condemn the far less increase in price of the latter?

Ignoring this same set of conditions in connection with every commodity which we purchase, and assuming that the coal trade alone must be disciplined, I would say that the situation lends itself to two methods of arriving at the same solution. Either the State must limit the rights of the mine owner to do as he wills with his own property, *i.e.*, compel him to produce an amount of coal, place it in our cities, and at a certain price; or, as an alternative, the State must operate the

The first proposal would be a mines. violent breach in the rights of private property which would very quickly, and with equal logic, be applied to many other industries. As to the second proposal, State competition with private industry would only be an indirect method of doing all that the first proposal would do directly. Both proposals gallop towards State Socialism. In detail this scheme may admit of many variations, but to have any elements of permanency the State must very materially limit the right of private property. Any imposition of conditions favorable to the consumer, in the title on which coal lands should be acquired, is not possible, for the reason that, notwithstanding the vast coal-fields in reach of coast cities, the Government has very successfully divested itself of its ownership thereto.

It might, or possibly has, been suggested to give the local market a preference by means of an export or some other form of tax. This would create problems as large as those it would solve. Among other troubles, a variable market having first call on the output would be likely to accent the present variable demand for labor in the mines; and, again, this would not touch the question of price.

Regardless of the lack of justification in the matter of coal any more than any other daily necessity, I am well aware that the point those interested desire to be informed upon is that of the cost of production. Experience in and around coal mines does not grant any knowledge on this subject, the miners receive about 70c for anywhere from 2,240 to 3,000 lbs., which for some unknown reason is called a "ton." After leaving the miner's hand this coal is pushed a distance by human power, then pulled by power, next by compressed air, electric winch or main and tail rope, then by electric motor, afterwards the perpendicular lift up the shaft. As to the cost of these processes the miners can know nothing. The tipple separates the dross or slack from lump. The latter is reduced by rock picked out on the endless belts, and the former suffers a reduction in "washing." That this work may go on during the day, a large force of men is employed during the night who produce no coal whatever. Taken as a whole, the processes are so numerous and varied before the coal reaches the wharf that to quote the price paid the miner for digging a ton means absolutely nothing.

A critical examination of the relations of liquids to solids in the capitalization, in every case would probably show that much money is used up to pay interest on money that was not used to develop the mine. But again, this sum, if divided over the output for the year, is an insignificant amount on each ton. The writer is convinced that any examination as to the costs of production will result in very trifling, if any, comfort to the consumer.

Dealing with this matter as a temporary condition, the shortage during the present season has been caused by the close of the Canadian Collieries, owing to a strike, or lockout, which has resulted in reducing the amount of fuel available by from 2,000 to 3,000 tons daily. The responsibility for whatever suffering has been caused as a consequence of this reduction must be shared by the parliamentary representatives of the cities of Vancouver and Victoria. Briefly, the mine-workers believe that the question of their own safety while in the mine was at stake. In as many ways as possible they asked the government to make an inquiry, so that the truth or otherwise of their fears might be disclosed, but were refused. During the early weeks of February, when Vancouver was robed in white, and the Arctic winds fanned the lone streets of Victoria, a commission was asked for in the legislature. It was pointed out that if the miners' fears were found to be groundless the occasion of the dispute would vanish, and immediately sufficient additional coal would be produced to meet The representatives named requirements. voted against this. Their reasons for so doing have not yet been disclosed.

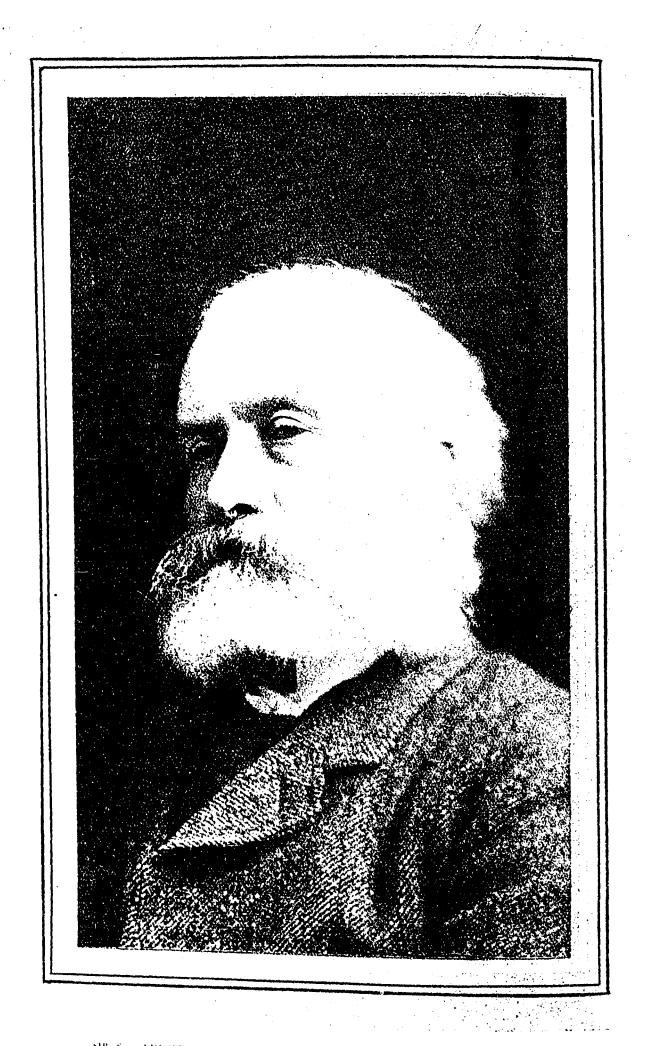
This compels me to say that, although I have endeavored to be both just and truthful in this review of the situation, I do not pretend to be any more anxious regarding the welfare of that portion of the public called the coal-consumer than that same segment of the public is regarding the welfare of the miner. Fifteen years witching the former and working with the litter causes me to say that the public of British Columbia is wholly indifferent to the too-frequent processions from the mine to the morgue, and from the morgue to the grave-

yard. Only when hell breaks loose in the mine and the black crape swings from every third door of the mining town does the "public" awake, and even then to no more logical purpose than a maudling sympathy, barren of any preventative re-

sults. I might add that there is even a suspicion that the reason why the public, through its representatives, refuse to stand for greater safety in the mines, is the belief that such might tend to increase the price of coal.



IN THE FRASER VALLEY



SIR S. ANTORD FLEMING, K.C.M.G., "FATHER OF THE PACIFIC CABLE"

The All-British Pacific Cable

By Danvers Osborn

Author of "The Value of All-British Cables"

Bamfield, British Columbia, is the actual terminus of the imperial all-British Pacific cable, which was laid in 1902, and has never suffered interruptions in any of its sections through any cause—a phenomenal record, unsurpassed in the annals of submarine telegraphy.

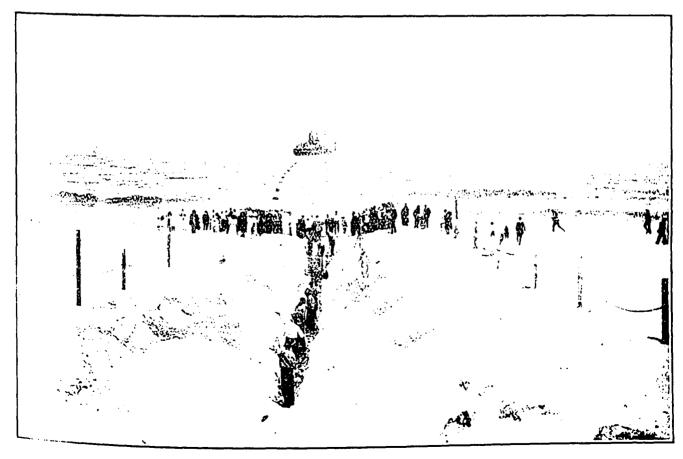
The cost of the cable was defrayed by joint contributions from the Imperial, Canadian, Australian and New Zealand Governments. The capital sum advanced by the treasury for the completion of the project is gradually being extinguished by proportionate amounts paid annually by the several partners.

A glance at the accounts published at the end of each "official" year shows large traffic increases in the number of international and intercolonial messages; the single bond of indebtedness referred to will shortly be completely wiped out, and the Empire, besides possessing an admirable strategic cable and an alternative route to India, may be inspired to put down the much-needed state-owned Atlantic cable, and, in a not far-off future, to extend the system to the British possessions in the Far East.

The return to the taxpayer of the first charges on the cable is, in one sentence, a platonic and practical demonstration of sentimental and substantial patriotism, and, moreover, pays tribute to the high order of intelligence of the administrative officials who have succeeded in making a financial success of an imperial undertaking in the face of many obstacles.

A modern dreadnought costs more to launch than the entire sum expended in laying the all-British Pacific cable a decade ago.

The former, within ten years, is within



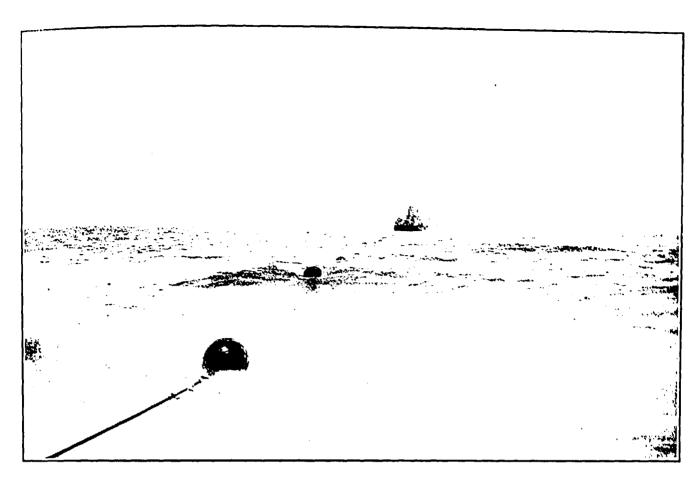
ANDING SHORE END OF CABLE TRENCH ON BONDI BEACH, S.S. SILVERTOWN IN DISTANCE



LANDING SHORE END SYDNEY-AUCKLAND CABLE. FIRST BOAT TO LAND ON BONDI BEACH.
S.S. SILVERTOWN IN DISTANCE



MR. JOHN MILWARD, "MANAGER IN THE PACIFIC" (CENTRE BACK ROW), AND MEMBERS OF CABLE STAFF WATCHING LANDING OPERATIONS



FIRST END OF CABLE COMING ASHORE

measurable distance of the scrap-heap, whereas the latter is not only in the zenith of daily prosperity, but, in the event of war, this thin red line not only greatly serves, but maybe shall save the Empire in the direst hour of extreme peril; for, after all, its the silent forces that count.

The Pacific cable system consists of a chain of stations commencing at Bamfield, thence to Fanning Island, Suva (Fiji), Norfolk Island, at which point a section bifurcates, with terminus at Southport (Queensland), and the main cable continues to Auckland, which centre has recently been connected by cable with Sydney, Australia.

The administration of the system is condiscred by The Pacific Cable Board, with beauquarters in London. The practical adrestration is directed from Sydney (N. S. We by the manager in the Pacific. Graduthe system is extending its ramificaamongst others the working and it of a direct landline between Bamand Montreal. The board maintains Bre in Vancouver, equipped with all est high-speed signalling instruments. the cable steamer Silvertown red the laying of a cable between New (N. S. W.) and Auckland, New which will augment and guarantee ater speed and accuracy.

At a dinner (given by the board) in Sydney to inaugurate the new section, the governor-general, Lord Chelmsford, and some one hundred and fifty distinguished Australians were present. In the speeches delivered on that occasion one notes the trend of unanimous opinion, declaring in favor of the immediate extension of the board's system by the laying of a state owned cable between Canada and England.

The statement may come as a revelation to the man in the street, but today there is not a single British cable across the Atlantic. The bulk of the cables are owned and controlled by two American corporations, one of which threatens to become a "merger," and gradually to absorb in its grasp the entire group of cables. "Westward the course of Empire" has become a misnomer, as far as Britain is concerned, in the serious matter of warships and cables for western waters.

The Pacific Cable Board has provided an admirable service, reducing rates and affording the general public the advantage of sending cablegrams, under certain conditions, at an almost vanishing figure. Controlling its own Atlantic cable, this truly Imperial service would speedily demonstrate to Canadians the utility and need (which today exists) for a rapid, accurate, and



MR. DANVERS OSBORN AT BAMFIELD. HOME AMID THE FLOWERS

cheaper service between the Dominion and the Mother Country.

When we take into consideration the serious fact that all the existing Atlantic cable companies are controlled by aliens inimical to the real interests of the Empire, it passeth ordinary understanding to imagine how such a gross dereliction of national needs and neglect of the demands of Imperial co-ordination ever came about.

The Empire's strategic conditions have changed. We must strike out resolutely west from the Empire's centre, "Westward, the course of Empire" is a modern truism. yet its lines are unguarded! We, in British Columbia, dwelling on the shores of the Pacific Ocean, the future cock-pit of the universe, maintain that an alternative route to India via Canada and the Pacific, supplemented by warships and cables, should be regarded as an immediate and imperative sateguard. Military and naval experts, together with civilian specialists, point proudly to the Mediterranean route, with its tortified intervals and replenishing depots at Gibraltar, Malta and Aden. But our tenure in Egypt, though doubtless conferring great benefits on that country, is always traught with danger, and liable to collapse. The sinking of one iron ship in the Suez Canal would imperil communication with the Far East. It occurred in 1882 owing to the insignificant revolt of the populace under Arabi Pasha. The then existing submarine cable route to India presented itself as insecure and unreliable to the authorities, and ultimately the all-British Imperial cable across the Pacific was laid as a strategic alternative.

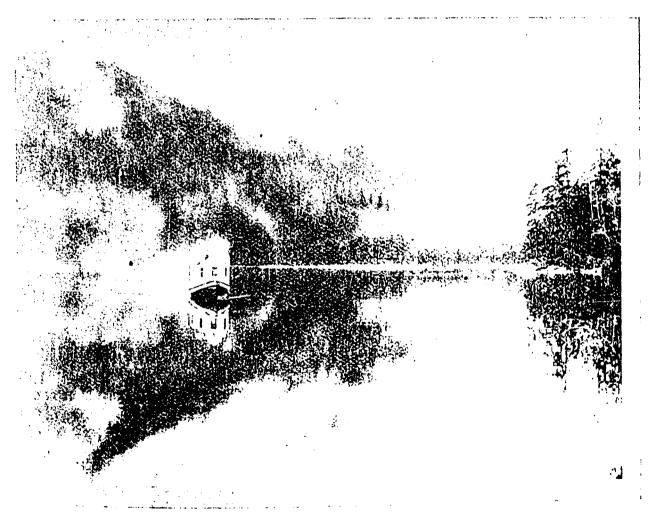
Canada, Australia and New Zealand, therefore, are united in demanding that a united Empire lose no time in fortifying the Pacific route to India by strengthening all the links in the chain, and advocate that Esquimalt, Fanning Island and Suva (194) be fortified and maintained as coal depots with little or no delay.

This valuable Imperial asset, the British Pacific cable, with its intermed to stations and staffs of highly-trained office would be rendered inoperative in the court of an enemy's successful coup do main in the Pacific, whereas, guaranteed immunity from hostile interference, it can truthfill be said that the modern cable either the first shot or upsets the plans of plotters against the Empire's peace.

The Pacific cable has performed prolifgies—record messages have been exchan a between Sydney and London in under the minutes. Its stations are always on the aicit, never closing the whole year round. The public demand that it be "all-British" throughout its entire present route from the Empire's capital to its terminus in Australia, and when the public proclaims its need the necessary concessions cannot long be delayed. An Imperial cable is an Imperial asset at the outset, and performs valuable and enormous service, and is equally at the disposal of the official in

Downing street and the humblest taxpayer dwelling in the meanest purlicus.

Three men can be mentioned as sponsors for the Pacific cable who have made it a veritable thing in being. They are Sir Sandford Fleming, the "father" of the project, Mr. John Milward, the active administrator of the system, with head-quarters in Sydney, Australia, and Sir Henry Primrose, the chairman of the Pacific Cable Board in London.



LAKE SCENE NEAR ALBERNI

Charles Hill-Tout, Anthropologist

By Alfred Buckley, M.A.

In following the history of colonial settlements in modern times two well-marked epochs may usually be discerned. First, there is the time of struggle for the bare necessities of life which is commonly rewarded in the course of time by accumulation and superabundance of these necessities. The superabundance is exchanged for currency and this we call wealth.

Next there comes a period when material needs cease to satisfy the human spirit and the longing for books, music, social converse and scientific knowledge manifests itself. This is the first sign of what we call culture, and the presence or absence of this spiritual awakening is the test of the maturity of a new civilization. It would be easy to illustrate this by recalling the history of Eastern Canada, America and Australia, or by taking for specific example some such centre of light and leading as Boston.

It would seem now as though Vancouver had finished its time of sturm und drang, its logging days. All the stumps have been cleared from Hastings Street and celestial buildings have taken their places. A sufficient number of people have made enough money to make it safe to burn their overalls and turn their attention to the things that really matter; that is, of course, books, pictures, music and other spiritual joys.

Our maturity will naturally carry with it a growing sentiment of self-dependence and pardonable pride in the products of our own hands and brains. For many of the necessities of life we have long sent away "back East"; but the creative spirit is awake, and our manufacturers, like Tubal-Cain of old, are "rushing to labor with plastic zeal" and catching nature's forces in prisoned servitude. By and by fewer of the prime necessities of life will come from "back East."

But, best of all, we are ambitious to

make, not only our own pots and pans, but also our own students and thinkers. Carlyle's magnificent tribute to the two great classes of workers swings into memory:

"Two men I honor and no third. First the toil-worn craftsman that with earth-made implements laboriously conquers the earth, and makes her man's. Venerable to me is the hard hand; crooked, coarse; wherein, nothwithstanding, lies a cunning virtue, indefeasibly royal, as of the sceptre of this planet. Venerable, too, is the rugged face, all weather-tanned, besoiled, with its rude intelligence; for it is the face of a Man, living manlike. . . . A second man I honor, and still more highly: him who is seen toiling for the spiritually indispensable: not daily bread, but the bread of life. . . . If the poor and humble toil that we have food, must not the high and glorious toil for him in return, that he have light, have guidance? . . . These two in all their degrees I honor; all else is chaff and dust, which let the wind blow whither it listeth."

For a time we may have to send "back East" even for our students and thinkers, but, please God, not for all time, unless we wish to illustrate that bitter saying: "A prophet hath honor save in his own country."

One thing, however, we cannot get "back East," even if we send, and that is, knowledge of our own country; of the history that lies buried beneath the soil of British Columbia, beneath the burial cairns and kitchen middens of extinct or moribund races. This knowledge is like other treasures of our country, to be dug up on the spot; and even then it is no use unless it is dug up with a trained intelligence behind the spade, accustomed by long years of patient investigation to catch the secret that is uncovered. To the Peter Bell of Wordsworth's poem

A primrose by the river's brim A yellow primrose was to him And it was nothing more.

To the average logger on the shores of Burrard Inlet, False Creek, Stanley Park and the banks of the lower Fraser River, digging in the kitchen midden of an Indian tribe, the domestic utensils of a vanished people would have little more significance than the tin can of an abandoned logging camp; but to Charles Hill-Tout, anthropologist, they were treasures of inestimable value and became the data for his "Native Races of British North America" and for a pile of monographs and reports that have made his name better known in London and New York than in his own town. We are gradually awaking to the fact that the vast riches of our province in land and mineral are being appropriated by strangers. It is the same story in this matter of prehistoric remains. A little time ago Mr. Hill-Tout wrote:

"The monuments of the past left us by the old-time Indians are of several kinds. The most important of these are their tumuli or burial cairns, their totem poles and commemorative columns, and their kitchen middens. The last named are formed from the ashes and other debris of camp life. Some of these heaps are of enormous dimensions, covering acres of land and having a depth of from one to twenty feet! The vicinity of Vancouver is particularly rich in these vestiges of earlier aboriginal life. shores of Burrard Inlet, Stanley Park, False Creek, and the banks of the Lower Fraser abound in them. But almost in every locality they will be found to be of two classes, namely, modern formations and more ancient formations. more ancient heaps are readily distinguished from the modern. They are invariably covered with vegetation and have some of the largest and oldest trees in the district growing upon them, plainly showing their age and their long abandonment. The writer's early investigations among these middens revealed the important fact that at the time of their formation a race physically different from the present Salish tribes had its home here. What has happened to this race we cannot say. It has been

displaced, annihilated, or absorbed by the intrusive Salish.

"These old midden piles are doubly interesting to us from the fact that they are now practically the only source left from which we may gather specimens of the tools, implements and weapons employed by the natives in pre-trading days. Extensive investigations have been carried on among these heaps by the leading museum authorities of the Eastern States. and thousands of dollars have been spent upon this work since the writer first drew attention to the archæological riches of this province, some eight years Our own provincial museum possesses some good specimens of native technology, but the finest collections of the kind are to be found in the Natural History Museum of New York and the Field-Columbian Museum of Chicago. It is to be regretted that the people of this province have allowed outsiders to carry away from our midst so many interesting relics of the past, and been so lax in securing them for ourselves. The day is not far distant when they will be wholly unobtainable."

It is now nearly a quarter of a century since Charles Hill-Tout (pronounced Hill-Too, by the way) came to this province with little to call his own except the scholarly endowment that Oxford had given him. While others were building up their fortunes he was grubbing among midden heaps and cemeteries, sharing the life of Indian tribes; methodizing their language from grunts and monosyllables; making literature of their unwritten traditions, lending his mind out, as Browning's Fra Lippo has it, that the coming race of students in British Columbia should have light and guidance concerning the first dwellers in this wonderful western land.

Now if we are to be a great civilization and to have a model university we shall have to recognize the value of the pioneer scholar, the pathfinder in knowledge, and see to it that the results of his work are not wasted or cast as rubbish to the void and that the scholars of British Columbia shall have first and best honor in their own country. Anyone can be an arm-chair student. All he needs to do is to pile up the work done by other men and pick a morsel here and a morsel there, and, by

a process of synthesis known to every student, fuse the fragments into new combinations. Andrew Lang, whose reputation as an anthropologist is world wide, used to recognize this on every possible occasion, and to deplore the fact that circumstances would not allow him to be a field-man, as he desired. But to the fieldman, and especially to Charles Hill-Tout, he paid most generous tribute. To him Hill-Tout was the author of that "American view of Totemism" which has modified so considerably the views of European students on the subject, and the chief authority on the family organization of the aboriginal tribes of British Columbia. Mr. Lang even withheld from publication his "Secret of the Totem" until he had added a lengthy and important appendix dealing with the views expressed in a recent publication by Charles Hill-Tout.

In 1895 the Royal Society published Mr. Hill-Tout's monograph on the archaeology of British Columbia under the title of "Later Prehistoric Man in British Columbia." This was the first published account of the archaeological riches of British Columbia and led to the extensive investigations carried out later by the Jessup Exploration Fund of New York. The society also published a paper by him on "The Cosmogony of the Squamish," a paper on "The Oceanic Affinities of the Salish Tribes of British Columbia"—which was very highly praised by linguistic scholars in all parts of the world—and two monographs on Totemism, the more important of which put Mr. Hill-Tout at once into the foremost ranks of students of Totemism.

Following Dr. George Dawson in the office of Organizing Secretary of the Ethnological Survey Committee, appointed by the B. A. A. S., he undertook a series of investigations into the life-history of the Salish tribes of British Columbia, which necessitated his spending lengthy periods of time among the natives and which resulted in the publication of some dozen "reports," printed verbatim by the B. A. A. S. at the first, and later by the Royal Anthropological Institute of Great Britain and Ireland. These reports are now regarded as indispensable to anthropological students and their contents have been widely quoted by anthropological writers, notably by Dr. Frazer in his monumental

"Totemism and Exogamy," many scores of references to Hill-Tout's publications being found in Dr. Frazer's four volumes, and in any volume on anthropology which aims at being authoritative now published, Hill-Tout's name will be found among the leading authorities. The new Encyclopædia Britannica contains scores of references to In addition to these his publications. works he has written numerous articles for popular and learned magazines in America and Europe. He was also chosen to write the North American volume of "The Native Races of the British Empire Series," published by Constable of London. This volume was everywhere favorably received and highly praised and is now regarded as a classic upon the subjects of which it treats.

As far back as 1900 Mr. Hill-Tout was made a Corresponding Fellow of the Royal Anthropological Institute of Great Britain and Ireland. He was elected a Fellow of the American Ethnological Society in 1908; a vice-president of the Canadian Department of the Archæological Institute of America in 1911, and also a member of the executive of the Institute in 1912. He is also a member of about a dozen other learned societies in America and Europe.

There never was such a field as ours for the pioneer scholar. Our school text-books on the fauna and flora of Canada, as every teacher knows to his sorrow, come from the east, where the climatic conditions and the phenomena are so different from our own that eastern text-books become useless and positively misleading. If any student would give our teachers a simple and trustworthy text-book on the flora of British Columbia the teachers would carry him shoulder highand if the student were a lady they would make her May Queen. Some capable and enthusiastic nature student like Mrs. Henshaw or Miss Abercrombie, late of the Normal School, Vancouver, should be commissioned by the Government to spend a year in the compilation of an authoritative text-book on the flowers of Greater Vancouver and Vancouver Island. It is no use telling our children to look for spring flowers that grow in Nova Scotia but is not grow in Vancouver. Five years ago read that the hepatica was the first Caradian flower of the spring. I have been looking for the hepatica ever since, but have never found it, and expect to be told after this confession that it does not grow here at all, but may be found in New Brunswick. And yet I have said so often, "Dear children, look for the hepatica, I can't find it."

"Oh, oh," breaks out Fra Lippo, the painter:

It makes me mad to see what men shall do

And we in our graves! and the research possibilities of British Columbia are enough to make any student wish that his rich uncle would go to heaven forthwith without any more unseemly delay that his dear nephew might drop his eastern text-books and get to the woods to tell the story of the West.

This article is a plea for an anthropological department in the new university and generally for the endowment of original research in our own province. At Oxford, Cambridge, and almost all the American universities there is an anthropological department, the students of which carry on investigations in the field. It is written without knowledge of Government plans, and may be a work of supercrogation, but it is written with distinct knowledge of the needs of the teaching profession of this province and of the unfortunate results in other countries due to a false economy on the part of the Government concerning this question of the endowment of original research.



A TYPICAL NORTHERN RANCH IN BRITISH COLUMBIA

The Central Valleys in British Columbia

By Henry Schuster

THE WORKERS on the Grand Trunk Pacific Railway in their last great task of spanning the Canadian sub-continent with a rib of steel, are approaching each other from east and west in the central parallels of British Columbia. Sometime before the end of next year, it is expected, the two parties will meet, and in doing so they will complete a main artery for the commerce of that fertile portion of our wonderful province. Report says that trains will be running from the Atlantic to the Pacific on the Grand Trunk line before the end of 1914. What this will mean for Central British Columbia—the Fort George country, the Nechaco Valley, the Bulkley Valley, and the Skeena Valley can hardly be computed; but of one thing there can be no doubt: these portions of British Columbia are all waiting to give a rich reward to those who will go in and possess the land.

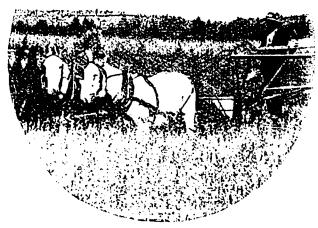
In the four valleys mentioned there is excellent agricultural land which can very profitably be brought under cultivation. Most of it is lightly timbered with small poplar, pine and spruce, and in places with alder and willow, but with many open patches of from one to fifty acres in extent. There is plenty of timber available for buildings, and in some sections, where the clearing is heavy, merchantable timber should prove a considerable source of revenue.

At present the principal crops are oats, hay, barley, rye, timothy, red clover, potatoes, turnips, cabbages, beets, etc.; in fact, fine crops can be produced of all cereals, grasses and vegetables that can be grown in the temperate zone. Some wheat is grown, and the quantity will assuredly increase year by year, this cereal having been little cultivated owing to the complete absence of flour mills in the district.

The rank growth of natural grasses,

vetch, peavine and wax-bean prove the natural fertility of the soil. These grasses attain a height of six feet and upwards in many localities, and the great variety and profusion of wild berries indicates that small fruits can be successfully cultivated. At Hazelton, indeed, strawberries and other small fruits of excellent quality and large size can be grown. The government of the province has appointed experts to report as to the varieties suitable for the different districts. Should the land prove to be adapted to the growing of sugar beets a large area would quickly be planted, and refineries would follow.

In summer the usual temperature is 70 to 75, occasionally rising to 88 or 90 in the shade. The rainfall varies slightly in the different sections, averaging about 25 to 30 inches, though this quantity is exceeded in the Skeena River valley. There are showers in the growing season, when moisture is needed, and the winters are clear and dry. About 15 to 24 inches of snow may generally be expected, and this



FARM ON THE G. T. P., CENTRAL BRITISH COLUMBIA



THRESHING BY HORSE-POWER IN CENTRAL BRITISH COLUMBIA

quantity again is exceeded in the Skeena Valley, owing to its proximity to the coast. Stock must be fed for seven or eight weeks during the average winter, but the feeding period has been known to be much shorter in duration. The prospect of a good market for farm produce is very good, owing to the development of the country which may be expected after the completion of the Grand Trunk Railway.

Not only the Grand Trunk, but also the Canadian Northern Railway is building several lines in British Columbia, and these will be connected up with lines already completed in the prairie country and in Eastern Canada. Other companies have obtained charters and practically every available route has been surveyed, thus affording the promise of ample railroad facilities in all directions from Central British Columbia.

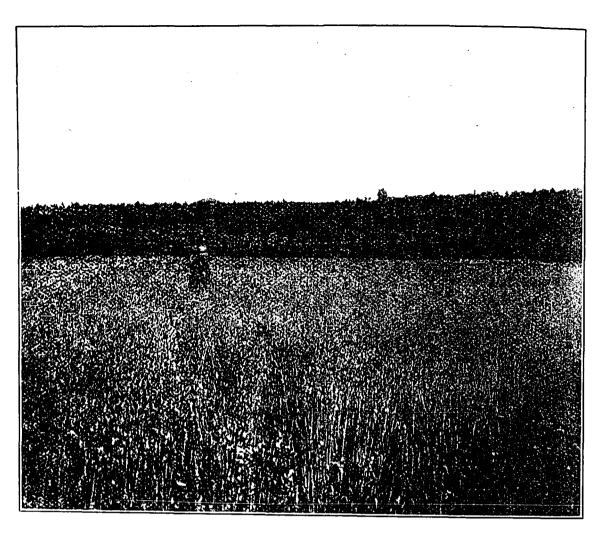
FORT GEORGE DISTRICT

What is known as the Fort George district is sometimes called the Upper Fraser Valley, and includes the Salmon River Valley. The altitude of Fort George is about 1,800 feet. At present it must be reached by road and river—the river steamers on the Fraser-from Ashcroft, but this state of things will be remedied, probably in the latter portion of this year, when trains will be running through from Edmonton. Numerous roads and trails lead from Fort George in all directions, and at certain periods the Nechaco as well as the Fraser is navigable for river steamers. Canoes can be used on all the larger rivers and creeks throughout the summer.

The soil in this district is a black or brown loam in the bottoms, and lighter sandy loam on the benches, with a clay subsoil. There is a large ferry in operation



ON THE DIAMOND D RANCH



OAT-FIELD IN NECHACO VALLEY

across the Fraser River at South Fort George, and another across the Nechaco River at Fort George. They are in commission at all times of the day and night, and take over wagons, teams and foot passengers.

As showing the agricultural possibilities of the neighborhood, it may be recalled that the first agricultural fair of Central British Columbia was held there in September last. It was attended by Mr. Grisdale, of the Dominion Department of Agriculture, who expressed his astonishment at the high quality of the grain, fruit and vegetables exhibited. The exhibits included ripened tomatoes, peas, beans, lettuce, pumpkins, potatoes and other garden products, as well as all grain in sheaf and sack.

THE NECHACO VALLEY

To the west of Fort George and along the Nechaco and Upper Nechaco Rivers lies the Nechaco Valley, the largest continuous tract of agricultural land in Central British Columbia. Its altitude is about 2,300 feet, and the whole valley is provided by numerous lakes and streams with water that is pure and free from alkali. The

warm summer weather promotes the rapid growth of vegetation, while during the winter there is very little wind and the sky is clear. The snowfall averages fifteen to twenty inches and cattle are fed from about Christmas to March. Already a large number of settlers are scattered through the valley and are engaged mainly in the growth of wheat, oats, barley, rye, timothy, clover, turnips, potatoes and all the commoner vegetables.

Of this valley the government report says: "All reports go to show that the Nechaco is one of the finest agricultural districts in the interior. The Nechaco with its level valleys and rich white silts offers special inducements to farmers. Its advantages are many; the land is level, the soil is rich and to a great extent open, the climate is milder, the principal crops can grown without trouble, and general altitude is much lower than that of the surrounding country. Although the ground is generally covered with thickets of small trees, patches of prairie often occur. These are always level and are covered with the greatest variety of nutritious grasses. The soil almost everywhere is of



TURNIPS, 15 LBS. WEIGHT, PIONEER RANCH, CENTRAL BRITISH COLUMBIA



CABBAGE-FIELD NEAR TELKWA, BULKLEY VALLEY



BARLEY IN CENTRAL BRITISH COLUMBIA

the richest quality. It is composed of a fine white silt with a clay subsoil. only is the grass very luxuriant in the open patches, but even in the wooded portions peavines and vetches of different species grow to such a height as to render traveling very difficult."

THE BULKLEY VALLEY

In the Bulkley Valley district is included all the land along the Bulkley River from Hazelton to Bulkley Lake. The natural vegetation is most luxuriant, wild berries of many kinds being extremely plentiful. In the open patches grasses often grow to a height of five feet, and excellent grazing for cattle is found in among the timber. The soil is generally a rich sandy loam with clay subsoil.

"In other words," says the government report, "the country is a farming rather than a cattle grazing district. At Round Lake, a few miles above Telkwa, and in the main valley. Mr. Lacroix has one of the most advanced settlements of the district, and he has a small but excellent herd of dairy cattle in splendid condition. The dairy, under the management of his wife, turns out excellent butter sufficient 'to keep the pot boiling.' The vegetable garden was seen filled with the more usual vegetables, such as beets, carrots, turnips, cabbage, tomatoes, peas, beans, cucumbers and such like, all ripening and doing well."

The crops in this valley comprise oats, wheat, rye, barley, timothy, clover, turnips, potatoes, and all vegetables. The rainfall is from 30 to 35 inches and the snow from 15 to 20 inches. In summer the days are long and warm, and the nights cool, while in winter clear and dry conditions prevail. At Telkwa, in this valley, the altitude is 1.700 feet.

In the adjacent Telkwa, Babine and Hudson Bay mountains the mineral deposits are believed to be immensely rich, copper, gold, silver and lead having been found. Hundreds of claims have been staked in recent years, but there is still an immense territory to be prospected. of coal have also been discovered.

All roads and trails throughout the Bulkley Valley meet at Telkwa, which on the arrival of the grand Trunk Railway probably sometime this year, will be in direct communication by rail with Prince Rupert, 235 miles away. Telkwa has already made more than a beginning towards establishing its position as an inportant town. Situated as it is at the junctions of the Bulkley and Telkwa Rivers, in the midst of a country rich its agricultural lands, mines and coal areas, its future is assured.



"CRUISERS" EXAMINING THE LAND

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THE SKEENA VALLEY

The Skeena Valley is nearer to the coast than the other valleys which have been mentioned, and is probably better known, the Grand Trunk Railway from Prince Rupert already running through it for a considerable distance. Compared with the interior valleys the climate is milder in the winter, the rainfall heavier, and the altitude lower. For the rest, let the government report speak:

"There are several hundred thousand acres of the finest kind of land eminently adapted for agricultural and horticultural purposes; the soil for the most part being a rich sandy loam with a gravel subsoil in the higher benches, and a clay subsoil on the lower-lying ground. The timber on the land is principally spruce, hemlock, willow and cedar, with cottonwood on the lower-lying ground. There is practically no underbrush except devil club, and wherever that occurs the land is of the very finest quality. . . . A great number of the settlers have already planted out a considerable number of trees which are doing exceedingly well. In the orchards of Mr. David Stuart and Mr. Thornhill, who are the pioneers of the district, are apple, pear, cherry, plum and prune trees, which have been bearing for some years. The fruit on these trees was of excellent quality, the color and size good, and freedom from blemishes was very marked. Potatoes and all garden produce grow to great perfection. I think that the Upper Skeena will become one of the garden spots of British Columbia."

In the various districts described above a large number of settlers have already made homes for themselves, and in some cases where farms have been under cultivation for several years the owners are wealthy men. Besides rich agricultural lands, the valleys contain mineral deposits of every description, and immense coal areas. Probably, also, the establishment of a thriving logging industry is only a matter There are many waterfalls capof time. able of developing practically unlimited power for electricity supply and manufactures. Another element in the outlook of the country is its attractiveness for the visitor. Its scenic grandeur, and the fact that all kinds of game are to be found within easy reach, render it certain that this will be one of the popular resorts for the wealthy and leisured traveler of the future.



Sea-hotter

By Nigel Wynter

His Majesty's very good ship "Clearwater," with a grunt, rattle, splash and roar from for'ard, came to anchor off San Quentin on the Pacific coast of Mexico.

Everybody, of course, has heard of San Quentin; the place where a large colonization company, after experimenting with the soil, and spending three years ascertaining the mean rainfall, decided that the land adjacent thereto was the finest for wheatgrowing in the world, and how, after purchasing thousands of acres, and advertising its wonderful possibilities throughout the length and breadth of three continents, they were annoyed by the fact that not a single drop of rain fell for seven years.

The town itself lies about eight miles inland, on a small stream too shallow for navigation by anything larger than a rowboat, and has a population of fifty, which does not include Padre Sebastian's lame ass, nor, indeed, the half dozen or so goats belonging to old Tia Christina, the proprictress of the only inn, La Posada del Noche Caliente.

From the sea the country looks anything but inviting. The ground appears very uneven and somewhat sandy, with here and there boulders of every size and shape strewn about. Parched and desolate, the only vegetation visible is sparse patches of scrub cactus.

Usually, when the boatswain's shrill pipe calls away the "liberty" boat, there is not the slightest difficulty experienced in crowding it with delighted and enthusiastic bluejackets, eager and thankful for the chance to go ashore.

Jack, when ashore, as a rule finds excitement or fun with scarcely an effort, but, although there had been no liberty for nearly a month, even the most optimistic of the "Clearwater's" "watch below," after a casual glance shorewards, decided in favor of "make and men" or fishing, and there was a subdued snicker when it was observed that, besides the Commander, only

the Chief Engineer and Gunner were availing themselves of the opportunity to land.

Not that there was anything ludicrous about the Commander's going—he might have to be doing it as a matter of duty; but the other two, who seldom missed going ashore, no matter where, were a source of constant amusement to the ship's company, on account of the variety and number of escapades—usually ridiculous—they were continually experiencing. There was one in which they were mixed up with a Kodiak bear in Alaska. That is another story, however.

"'Ell-of-a-nole," murmured the engineer to his friend, in a tone of disgust, one shoe full of sea water through miscalculating the distance when jumping from the bow "Think I'll go back on board. of the boat. My bloomin' rheumatics will come on if I walk about all day with a wet foot."

The Gunner laughed unsympathetically. "Never mind, that won't 'urt yer; it'll soon dry in this weather. Come on, the Old Man's waiting for us," and taking his reluctant friend's arm, hurried him, with unnecessary haste in the Engineer's opinion. up the slightly sloping beach.

Bearing away to the left upon reaching the top of the bank, they skirted the base of a small hill until they came to the stream, where they found a rough trail which followed its winding course. When they had been trudging along it for over an hour, and were beginning to feel hot and uncomfortable, being tormented by innumerable sand flies, they suddenly came upon, owing to a sharp bend in the trail. a large, well-built bungalow, with with verandahs on three of its sides, and a trip: garden in the front.

As they were approaching it, a small for terrier ran out and began to bark furiously at them, and a moment later a tall, lead man of about forty, of a distinctly military appearance, attired in riding breeches and leggings and tweed coat, appeared and, removing a huge briar pipe from between his teeth, called sharply to the dog to be quiet.

"Hallo, Carruthers!" hailed the Commander.

"Why, Bunny!" exclaimed the other, his face lighting up with pleasure, and hurrying forward to shake hands. "I hope you've brought orders for me to move."

The Engineer dug the Gunner sharply in the ribs with his elbow and whispered

hoarsely:

"Be 'anged if they don't know each other."

"Well, you don't suppose the old man dragged all the way up 'ere just for a blessed constituential, do you?" replied the Gunner in an aggrieved tone.

"Might 'a done—," began the other, but became silent upon the Commander beckoning them forward and introducing them

to Major Carruthers.

In a few minutes they were all comfortably ensconced in wicker chairs on the cool verandah, and a swarthy peon woman hovered about them with refreshments. For perhaps an hour they chatted on topics principally concerning the outside world, when the conversation turned on to the locality they were in.

Replying to a question put by the Gunner, concerning the habits of the people, their host answered in his quiet drawl:

"Lazy beggars? Rather! If they would only take the trouble to dig a few ditches they could all of them raise enough stuff by irrigating to live fairly comfortably. Instead of which, a large proportion of them are half starved a great deal of the time. Then there are other ways in which they might make some money. At a certain season of the year quite a number of seatotter appear on the coast hereabouts. Several times I have tried to impress upon the men the importance of this fact. No good, though, they simply will not bestir themselves." Major Carruthers paused to light a fresh cigar, then continued:

"Sea-otter, as you are undoubtedly aware, are extremely valuable on account of the beauty of their fur and the fact that they are fast becoming extinct. I am not quite sure, but I believe that in the States good skins sometimes fetch as high as six thousand dollars apiece. When I was in San Francisco last I was telling a chap whom I met there about the large number, considering their scarcity, that have been

known to appear here, and a few months later a sealing schooner belonging to Victoria ran in here and took away no less than sixteen in one day. Not a bad haul. What? And here are these beggars leading worse than a dog's life."

"H'm! They bloomin' well deserve to, I think!" remarked the Engineer, and Major Carruthers, rising, excused himself for a moment, and disappeared into the

bungalow.

"I suppose, sir, you'll be wanting to 'ave a chat with the Major by yourself. We may as well take a walk round and then make our way back on board," said the Engineer to the Commander.

"Yes! All right. Take care of yourselves," answered the Commander, with a

short laugh.

"Oh! There's not much danger about 'ere, sir, that I can see," and rising as Major Carruthers reappeared, the Engineer and Gunner, after thanking him for his hospitality, and declining his invitation to stop to dinner, bade him good-bye.

"Rummy pair," remarked the Major, as they disappeared round the bend in the

trail.

"They are rather. First-rate men, though. Engineer's one of the old school. No better man in the engine-room in the service," replied the Commander.

"Funny chap, the Major," remarked the Engineer, when they were out of earshot of the bungalow. "Doesn't say much about 'imself and what 'e's doing 'ere, in this Gawdforsaken 'ole. What d'you make of 'im?"

"'Ardly know. Fancy 'e belongs to the I. D. Don't quite see what they'd 'ave 'im down 'ere for, though," answered the other, and a moment later added:

"Look! There's a bit of a trail leads up over the 'ill. Let's take it an' look round the country a bit."

Arrived at the summit, they found several small hills in front of them, and further on a much larger one which it would be necessary to climb before they could hope to gain a really good view of the surrounding country.

Nothing daunted they started off, to find that where they had thought to reach it within an hour it took over three.

"Why, there's the sea," remarked the Engineer in surprise, sitting down on a large rock and beginning to fill a disreput-

able-looking old clay pipe.

"What I thought, from the lay of the land when we walked up with the Old Man to the Major's," answered the Gunner, knocking out his pipe and borrowing his friend's tobacco pouch.

After resting a few minutes they went on down the hill. Topping a knoll as they began to near the water they paused a

moment to look round.

Engineer grasped the Suddenly the Gunner's arm and cried excitedly: "Crikey! Look!" and pointed down to a small cove a short distance away, where, bobbing up and down in the water, were a number of objects somewhat resembling a man's head when he is swimming.

The same thought struck them both, and they gasped simultaneously: "Sea-hotter!"

There must be at least a dozen there!" exclaimed the Engineer, "and he said they sell for as 'igh as six thousand dollars apiece. Oh, why didn't we bring a rifle. P'raps we could 'it some of them with rocks though," he ended hopefully.

"Rock's nothing," answered the Gunner in disgust. "You'd 'ave growled if I'd wanted you to bring a rifle along. Throw rocks at them, and you'll bloomin' well frighten 'em all away. The best thing we can do is to come back 'ere tomorrer with the dinghy, and a couple of rifles."

"All_right! Let's go down an' 'ave a

look at 'em."

"No, I don't think we'd better let 'em see us, they might get nervous and clear off. Let's go back the way we came."

Reluctantly they began to retrace their steps, tortured between fear that the seaotter would be gone by the morrow, and hope that they would still be there, and that some of them might be bagged.

Arrived back on board the "Clearwater," tired, footsore and dusty, the two friends, in their anxiety not to betray the secret of their find, told such divergent stories, in their respective messes, of their adventures ashore, that grave doubts arose in the minds of their shipmates as to their veracity, and convinced one and all that there was something in the wind.

When this was confirmed the following morning by the Engineer and Gunner starting off in the dinghy with a rifle apiece, and declining with unnecessary vigor all offers of assistance, the ship's company was thrown into a high degree of excitement and began to look forward with a lively interest to their return, and many and varied were the speculations as to the nature of the game they were seeking.

After a long pull they beached the dinghy a short distance from the cove where they had seen the sea-otter the previous day, and landing took the rifles and proceeded to stalk their prey in the most approved manner.

Stealthily they moved forward, almost afraid to breathe for fear of making the

slightest noise.

They were wearing light canvas shoes, and the jagged stones of the beach hurt their feet somewhat.

The Engineer suddenly stubbed his toe against a sharp rock, and swore roundly.

"'Sh!' D'you want to scare 'em out o' their wits?" muttered the Gunner in a fierce whisper.

"Well, 'ow would you like to break your—toe?" wailed his friend.

"Should look where you're going," was

the unsympathetic rejoinder.

The last hundred yards or so they lay flat on the ground, and with many grunts and weird nautical curses wriggled painfully forward.

At last, reaching a point where they could see the whole of the cove, they scanned it anxiously, and a gasp of disappointment escaped them. Not a speck of anything could be seen on the water, much less sea-otter.

"Your blooming fault for making a row," growled the Gunner, with annoy-

"'Ow d'yer know? P'raps they don't show up till later in the day," his companion answered, feeling guilty nevertheless.

"All right! Let's find a good place where we can pot 'em from, without them seeing us," and they took up their position behind a large rock, lying down and taking turns watching.

The sun began to get very warm, and what with the swarms of sand flies and other insects, the two friends were anything but comfortable. When they been waiting a little over six hours, and doubts were beginning to rise in their mind as to whether the sea-otter would appear, a sudden exclamation from the Engineer

brought his companion instantly on the qui vive.

"Look, Tubby! 'Ere they come!"

Hastily getting their rifles ready they took up comfortable positions for firing.

"Don't shoot until they get close in, unless they turn and start to go out to sea again," cautioned the Gunner.

sea again," cautioned the Gunner.
"Righto! Oh, Chief!" answered the
Engineer jubilantly, striving to be facetious.

With exasperating slowness the hairy heads of their prey approached nearer and nearer. There were at least a dozen heads bobbing gently up and down in the water, several of them disappearing altogether at times, as their owners dived beneath the surface in search of food.

At last, satisfied that they were near enough, the Gunner gave the word, and two shots rang out simultaneously.

The animals dived, and for a moment not a thing could be seen on the water, and the friends waited anxiously to see whether they had hit anything. Then two carcasses floated to the surface, and with a shout the Engineer and Gunner, leaving the rifles, bounded down to the water's edge, and wading out brought them ashore.

Very much excited they examined their game, and the Engineer slapped his friend on the back vigorously and exclaimed enthusiastically:

"Twelve thousand dollars, Tubby, ol' boy! We'll be rich. Think I'll buy the missis that imitation marble clock, an' angora rug she's been worrying me for these five years."

The Gunner eyed the carcasses criticially and said doubtfully:

"'Anged if I can see why they're worth all that money though. Seen lots better stuff to my way of thinking."

"Pooh!" answered the Engineer, in a very off-hand and superior manner. "There's two of the finest sea-hotter skins ever been got."

"Fat lot you know about it, I expect," said the Gunner, eyeing the other with slight suspicion.

"Huh! Don't you think I know seahotter when I see 'em? They're sea-hotter, my lad, and damn good ones, too." As a matter of fact, he had never heard of seaotter until the day previous, but as he could not think what else they might be, he felt quite safe in making the assertion. The Gunner, after a glance across the water, and finding no sign of the rest of the sea-otter, started off to bring the dinghy round into the cove.

In a few moments he reappeared, concern written large on his ruddy countenance.

"Say, Moke!" he shouted, "the blinding dinghy's gone. Drifted clean away. Not a blessed sight of 'er anywheres."

"Are you shore!" enquired the other, aghast at the news.

"Shore? Course I am. Ain't blind."

Nevertheless the Engineer walked round to where the boat had been beached to satisfy himself.

There was no doubt about it, however. The tide had risen to high-water and, in receding, had taken the boat with it.

"Well, we're a fine pair of landlubbers. We shan't 'ear the last of this. Never mind though; we've got two sea-hotter, and a dinghy don't cost much when you've got twelve thousand dollars. Does it, Tubby?"

"No! Not when you've got it," the Gunner answered gloomily.

"Well, we've as good as got it, or, at any rate, even if those sea-hotter skins should be poor ones, and I know they're not, we shall easily clear more than enough to pay for an old dinghy," and the Engineer proceeded to fill his pipe with the utmost composure.

"I suppose we'd better walk to where we landed yesterday and hail for a boat. What'll we do with the sea-hotter; 'ide 'em and send the gig to fetch 'em on board?"

"No bloomin' fear," the Engineer answered hastily, "some o' those greasers might 'appen along an' pinch 'em. We'll 'ave to 'unt round an' find a pole to sling 'em on, and then we can easy carry 'em between us.

Searching among the driftwood along the shore, they succeeded in finding what had evidently once been the trunk of a small sapling, about twelve feet long, and two and a half inches in diameter. Tying the bodies of the two animals together with a piece of spun yarn, which the Gunner found in his pocket, they slung them over the middle of the pole, and taking an end of it apiece, and hoisting the load to their right shoulders, with the Engineer in the lead, they commenced the journey back to the "Clearwater."

"Not very 'eavy, is it, Tubby?" said the Engineer cheerfully, "'Ow much d'yer

think they weigh apiece?"

"'Eavy enough by the time we get aboard. They must weigh at least a 'undred pounds each," the Gunner replied with slight heat, folding his pocket-hand-kerchief and placing it between his shoulder and the pole.

In spite of the weight of their load, and the rather stiff climbing they encountered at first, the Engineer's spirits mounted higher and higher, and he began to build eastles in the air, and under his genial influence the Gunner regained his good humor, and they vied with one another in planning what they should do with the money to be procured from the sale of the sea-otter.

There was hardly a breath of wind, and they began to perspire profusely. Occasionally a sharp stone cut into their feet through the light canvas shoes. Their ankles became imbedded with numberless thorns from the prickly cactus against which they stumbled. Great swarms of flies, attracted by the carcasses they were carrying, afforded the two friends considerable annoyance. Cursing cheerfully, they plodded on, longing for a drink.

As they were forced to stop and rest every little while, owing to the increasing weight of their load, the day was drawing to a close when they reached the place where, the previous day, they had branched off from the trail which followed the Wishing to get back on board before dark if possible, they did not go up the trail to Major Carruthers' place, but after a short rest continued on down towards the coast. They began to get very footsore and weary, and became silent, the last mile or so seeming about as long as the whole of the balance of their walk. After what seemed an eternity, and when they were beginning to feel as though they were experiencing a nightmare of trudging with an elephant on their shoulders, they came suddenly onto the beach.

Night had fallen, and a slight mist hung over the water.

They dropped their burden with a sigh of relief, and glanced out across the water preparatory to hailing for a boat, and a gasp of astonishment escaped them.

"Why! The bloomin' ol' tub's gone,

Moke!" Disappointment and a vague note of alarm were blended in the Gunner's voice, and he sat down stiffly on the bank.

"Oh! She's only just shifted 'er moorin's a bit, I fancy," the Engineer answered, striving to appear unconcerned, "and on account of the mist we can't make 'er out."

"May 'a shifted two or three miles for all we know," the Gunner said with gloomy

pessimism.

They began to hail lustily, but the only return they got was the echo of their own voices from the hill behind them. The Gunner, after resting for a short time, walked for about a mile along the beach to the left, but returned without having sighted the lights of the "Clearwater." On account of the stream they could not go in the opposite direction. Gathering a heap of dry driftwood, they prepared to light a fire, only to find that they had used up all the matches for smoking.

"A nice mess for a sub-lieutenant and a warrant officer to get into, isn't it, Tubby?" The Engineer enquired with a grin which had little merriment in it.

They began to feel sharp pangs of hunger. The lunch they had brought with them had been left in the dinghy, and they had had nothing to eat since early morning.

"The only thing we can do, Moke, is to lie down and wait till daybreak."

Making themselves as comfortable as possible under the circumstances, they prepared to try and sleep.

Suddenly, quite close, a blood-curdling wail broke the stillness, and almost caused their hair to stand on end. They sprang up in alarm and seized the rifles. All became quiet again, and then another cry, but much farther off, came to their ears.

"Coyotes!" exclaimed the Gunner, "I don't think they'll bother us though; still one of us had better keep awake."

They settled themselves again, but felt small inclination to sleep, the incessant wailing of the coyotes sending icy shivers through them.

Towards morning they fell asleep, and were still sleeping when the crew of the cutter, that had been sent away to look for them, found them some hours later

Although somewhat stiff from lying on the ground all night, the two friends, as they were being rowed off to the "Clearwater," with the prospect of a good breekfast when they got on board, and the knowledge that they had safely brought their valuable game to where there would be little risk of losing it, felt their spirits rising, and were in an exceptionally good humor when they arrived proudly at the top of the gangway, with a couple of blue-jackets following them bearing their spoil.

The officer of the watch—a young second-lieutenant with a good-natured but somewhat boyish face, on which the assumption of dignity befitting his rank sat rather oddly—approached the Engineer and Gunner as they stepped on board, and, eyeing their dishevelled appearance with mild disapproval, listened coldly when they reported the loss of the dinghy whilst away shooting.

"H'm. What is that you've shot?" he enquired, endeavoring to disguise the interest he felt.

The Engineer and Gunner bent forward eagerly, and whispered in a confidential manner:

"Sea-hotter, sir!"

"Sea what?" ejaculated the lieutenant in mild perplexity.

"Sea-hotter, sir," they repeated.

"Oh! I see, yes," a light dawned on the Lieutenant, and he glanced towards the break of the quarter-deck, where a swarm of blue-jackets formed a semi-circle about the two carcasses, which had been laid down on the deck.

"Sea-otter, eh," the lieutenant remarked, then suddenly biting his lower lip, took out his pocket handkerchief and buried his face in it, and a faint smile played about the lips of the Commander, who had approached unnoticed.

The crowd of blue-jackets parted a little, and an old stoker who had spent a number of years sealing before entering the navy, pushed his way to the front.

"Wonder if ol' Jerry knows wot they are," said the Engineer, and moved across to where the carcasses were lying, followed by the Gunner and Lieutenant.

The blue-jackets had been arguing excitedly as to the nature of the animals, but became silent as the old sealer, who was a recognized authority on marine life, came forward.

Jerry removed an exceedingly short and very black clay pipe from between his teeth. The Engineer and gunner stood with bated breath. After scarcely a glance at the carcasses, Jerry remarked calmly:

"Hair seal, ch?" He spoke as though everyone present was as well informed as himself on the subject.

"Wot's that?" said the Engineer, in faint alarm.

Jerry glanced at him in mild surprise.

"Why, hair seal, sir."

"'Avn't they got another name, Jerry?"
Hope struggled with fear in the Engineer's voice.

"Not that I knows of, sir." The bluejackets all stared at the Engineer expectantly.

An overwhelming sense of disappointment swept over the Engineer and Gunner, and they glanced at one another solemnly.

Then the former, hoping against hope, inquired, striving to appear unconcerned:

"Their skins good for anything, Jerry?"
The old sealer pondered for a moment, then answered briefly:

"Well, they're not bad for making baccy pooches out of, sir."

The Engineer and Gunner turned away with a feeling of disgust, which was reflected in their faces, and made their way slowly towards the companion ladder. Neither of them had fully realized until this moment how much they had built upon the fact that they might possibly become the possessors of a fairly respectable sum of money from the sale of their game.

All their fine castles were dashed rudely to the ground, and not alone that, but besides, they had spent a most uncomfortable twenty-four hours, without a bite to eat, and had lost one of the ship's boats, which they would have to pay for.

The Gunner thought of their long, weary walk with the worthless carcasses of the hair-seal, and rubbed his chafed shoulder ruefully, muttering imprecations with whole-hearted vigor, and, as they reached the bottom of the companion ladder and were about to part in order to go to their respective messes, he quoted with bitter sarcasm:

"'There's two of the finest sea-hotter skins ever been got."

The Engineer glared resentfully at his friend, then growled savagely as he turned away:

"You go to 'ell!"

Vancouver as a Grain Port

By Thomas McKee

EDITOR'S NOTE:—In its western prairie provinces Canada possesses, potentially, the greatest grain-producing belt of territory in the world. As the opening up of that territory proceeds from year to year, the problem of transporting the grain to the world's markets will become more and more urgent. The following article is the work of one who for years has made a close study of this highly important question.

"AND HE commanded the multitude to sit down on the grass, and took up the five loaves and the two fishes, and looking up to Heaven, He blessed and brake, and gave the loaves to his disciples, and the disciples to the multitude—and they did all eat and were filled—and they took up of the fragments that remained twelve baskets full."

After the Western Canadian farmers and the community living in Saskatchewan and Alberta have eaten of the crops produced in these two provinces, there remains sufficient to feed a multitude. What happens to the twelve baskets full? How much of it does Vancouver handle?

A study of the conditions under which this surplus grain moves to the principal consuming markets of the world is not only interesting, but instructive.

To begin with, nature has created the Great Lakes, the St. Lawrence River, also the Hudson Bay Straits; and for about five months every year nature closes these routes to successful navigation, resulting in the entire country being placed upon one means of transportation—rail.

Nature also created the vast expanse of the western prairies, represented by Saskatchewan and Alberta, through which the River Saskatchewan flows.

In British Columbia she was generous in gifts of "timber"—the prairies received largely agricultural lands.

On the Pacific coast of Canada the tidewaters contrast with those referred to on the Atlantic coast, especially during the winter months, when the latter are frostbound and must await the "opening of navigation" in the spring.

The Pacific ports are not compelled to wait by nature for the coming of spring—"their next season is tomorrow morning."

Shippers via the Great Lakes and St. Lawrence routes must make twelve months' interest on their investments very largely in seven, whereas in the west interest can be made every working day of the year, so far as ocean navigation is concerned.

Throughout these provinces in the past fifteen or twenty years homesteads, farms and settlements, towns and homes have sprung up, creating a demand for building materials, of which lumber, the principal commodity required, is supplied largely from British Columbia.

RAIL AND OCEAN TRANSPORT

Next think about the construction of any railroad, with its application for charter, its surveying expenses, the initial construction, the finished railroad bed, the lines of steel, telegraph poles and wires, the siding, the county shipping depot, the round houses, bridges, the switching yards, the divisional point—in other words, the fixed charges, etc. Each mile of line must bear these expenses somehow, and each ton of freight must help to pay for it.

Then turn to the sea and the expenses of navigation per knot or per mile, compared with the same distance, even on an efficient up-to-date railroad.

In ocean transportation we have the steamer or ship, the capital investment, paint, oil and rope, port dues, pilotage, wear and tear, the wages of the captain and officers and crew—broadly speaking, that is about all.

Look at Alberta and Saskatchewan upon the map and locate Moose Jaw. The distance from Moose Jaw to Liverpool via St. John on the Atlantic coast is about 4,987 miles. Out of this about 46 per cent. is railroad haul and 54 per cent. water haul—this is by shipment eastward. Turning west, we find that from Moose Jaw to Liverpool via Vancouver and Panama Canal will be about 11,076 miles. Out of this total mileage some 10 per cent. is rail haul and 90 per cent. water.

Moose Jaw is situated 2,296 miles from St. John, against 1,080 miles from Vancouver. In other words, it is about 1,216 miles nearer the Canadian Pacific coast than the Canadian Atlantic coast, and this markedly as far as transportation is concerned, for about five months each year.

The question of rates and other interesting features will now be gone into—as the twelve baskets full of surplus grain will move in the direction of least resistance economically.

AGRICULTURAL FOUNDATIONS

The following extracts from an address given before the London Chamber of Commerce by F. B. Vrooman, B.Sc., Ph.D., F.R.G.S., covers the ground admirably:

"Some time ago I made a careful study of the economic geography of Canada north and west. I travelled many thousands of miles beyond the last railroad or steamboat through the upper waters of the Yukon and Mackenzie basin and elsewhere, and later supplemented this by an extended reading in the libraries on both sides of the water, official and otherwise. I have come to some startling conclusions which I should like to outline more fully, especially by way of concrete illustration, about those enormous, empty, and arable spaces known as the Mackenzie basin, which are fully capable of supporting a population of ten millions of the British stock, but when I travelled through them for a distance of something like three thousand miles I found not a dozen white settlers in two-thirds of that whole journey. Here is a vast economic hinterland which is not only destined to support British investment but British population. It contains enormous resources of minerals and timber, with unparalleled agricultural possibilities as regards both climate and soil, for there are a hundred million acres of good land in what is generally known as the Peace River country, which had, to begin with, a better climate than the Saskatchewan country had thirty years ago. I do not hesitate to assert that when settlers have moved into this country in any considerable numbers they will change the climate as the climate of the whole prairie country has been changed by the plough. It is likely that the Peace River climate will be as temperate as that of the northern states of the Mississippi basin.

"This reconstruction, as it were, of the climate of a third of a million square miles is one of the most interesting studies in the economic geography of the British A generation ago the farmers lived on the narrowest margin of safety from summer frosts. When in any considerable areas the prairie was broken up, instead of a green there was a black surface to absorb the heat as well as a powdered soil instead of a toughened sod. powdered soil became a heat storage warehouse and, being able to soak in the rain, which before had fallen away, it absorbed further heat in this process. At night, therefore, when it grew cold, the heat from this warehouse, improvised by the solar heat of the long summer day, was radiated into the cooling air, keeping it at a temperature above the frost line. The consequences of this simple but important fact have resulted in a change of the climate of Manitoba, Saskatchewan and Alberta, and the frost line has been pushed northward at an average width of about a township a year.

"Other things being equal, there are important elements also which help to make up the difference of the matter of mere latitude. In the first place, the further north we go we find a decrease in the altitude of about five feet to the mile on a pretty general average from Calgary to the Arctic Ocean. This in and of itself gives advantage to the country further north. Again, the further north we go the longer the days are in the summer; in other words, the greater the number of hours in the day affected by the solar heat in the summer with fewer in the winter. But inasmuch as nothing is grown or attempted in the winter time, that point is negligible, and the great summer advantages may be illustrated by the fact that wheat grown on the Canadian Pacific Railway at Indian Head takes one hundred and twenty-eight days to mature, while that in the neighborhood of Lake Athabasca matures in from eighty-six to ninety days. This means that the summer season required without frost is about forty days less around the lower Peace River than that along the line of the Canadian Pacific Railway."

ACREAGE

In Alberta it is estimated that there are 96,453,000 acres of good agricultural land, while only about 3,066,048 acres were under crop in 1911, which is roughly about 3½ per cent. of the total.

In Saskatchewan the estimated total of available land suitable for raising grain is 86,826,240 acres, while the total acreage under the plough in 1911 for wheat, oats, barley and flax was 7,951,019 acres, or say about 10 per cent. of the total available acreage.

In Alberta the acreage has increased during the last five years from 576,821 acres to 3,066,048 acres, or on an average about 61 per cent. per annum. The total crop increased from 14,588,852 bushels in 1907 to 98,795,000 bushels in 1911, or an average increase in yield per annum of 106 per cent.

In Saskatchewan the total acreage in 1907 was 3,057,401 acres, while in 1911 it had grown to 7,951,019 acres, an in-

crease of about 30 per cent. per annum. The total harvest in 1907 was 53,731,485 bushels. In 1911 it was estimated at 211,760,000, or about 52 per cent. increase per annum.

POPULATION

According to the census report of January 25, 1912, the following population was reported:

Saskatchewan	374,663 392,480
Total	,268,187

For the above-mentioned provinces this is a rate of increase of about 89,000 per annum since 1901. It is reasonable to suppose that by the end of 1913 there will be about 1,500,000 people in these provinces.

The following specially compiled tables illustrate the rapid increase in acreage and yield. They are prepared from government reports:

ALBERTA—SPRING WHEAT

Year	Acreage under crop	Acreage increase	Per cent. increase	Total yield— Bushels	Increase yield— Bushels	Per cent. increase over previous year	Decrease yield— Bushels	Per cent. decrease from previous year	Average measured yield per acre—Bushels
1907	123,935	• • • • •		2,261,610	• • • • •				18.25
1908	212,677	88,742	7 I	4,001,504	1,739,894	 76	• • • • •	••	18.81
1909	324,472	111,795	52	6,155,455	2,153,951		• • • • •	• •	18.97
1910	450,493	126,021	38	5,697,956	2,133,931	53	4.5.400		12.65
1911	1,299,989	849,496	188	28,132,000	22,434,044	•••	4 57,499	7	21.64
Average	482,313	294,013	87	Net Aver.	6,467,597	393 128		ohane	17.50
			•		0,407,597	128	12 yrs. aver.	about	17.50
		A	ALBEF	TA-WINT	ER WHEAT	r			
1907	83,965	• • • • • •				•			
1908	104,956	20,991	2.1	1,932,925		• •	• • • • •	• •	20.66
1909	102,167			3,093,422	1,160,497	60	• • • • • •	• •	29.47
1910	142,467	40,300	39	2,312,344 2,206,564	• • • • •	• •	781,078	25	22.63
1911	316,910	174,443	39 122	2,200,504	•••••	• •	105,780	4	15.48
Net Avera	age	58,236	45	8,011,000 Net Aver.	5,804,436	263	• • • • •	• •	25.28
	•	J = 1, ~ 3 =	43	Net Aver.	1,519,518	73	8 yrs. aver.	about	21.00
				ALBERTA-	-OATS				
1907	307,093				- 				
1908	431,145	124,052	 40	9,247,914	• • • • • •	• •		• •	30.11
1909	693,901	262,756	60	15,922,974	6,675,060	72	• • • • •	• •	36.93
1910	492,589	• • • • • •	• • •	24,819,661	8,896,687	62	• • • • •		35.76
1911	1,178,410	685,821	139	12,158,530	•••••	••	12,661,131	51	24.68
Net Avera	ge	217,829	*39 52	56,964,000 Nat Assau	44,805,470	368	• • • • •	• •	48.34
		(1)	5~	Net Aver.	11,929,021	112	12 yrs. aver.	about	33.00

ALBERTA—BARLEY

	Acreage under crop	ಕ್ಕು ಕ್ಷಾ ಕ್ಷಾ	Per cent. increase	Total yield— Bushels	asc yield— As	Per cent. increase over previous year	Decrease yield— Bushels	Per cent. decrease from previous year	Average measured yield per acre— Eushels
Year	Acreage under cr	Acreage increase	er c	otal ushe	Increase Bushels	er c	ecre	ri E	vera eld ushe
×	ar A	Äü	Ä.E	йÄ	Γά	P. v	Ųĕ	fro	<u>ڄ</u> .٢٣
1907	54,698	• • • • •	• •	1,082,460	• • • • •				19.78
1908		23,178	42	1,949,164	866,704	\$o	• • • • •		25.03
1909	107,764	29,888	38	3,310,332	1,361,168	69			30.72
1910	90,901	• • • • •	• •	1,889,509		••	1,420,823	42	20.79
1911	156,418	65,517	72	4,151,000	2,261,491	119			26.54
Net Aver	age	25,430	34	Net Aver.	767,135	56	12 yrs. aver.	about	25.5
				ALBERTA-	FLAX				
1907	6,488	• • • • •		50,002	• • • • •				7.87
1908	9,262	2,774	42	73,762	23,760	47			7.96
1909	12,479	3,217	34	131,531	57,769	18			10.54
1910	15,271	2,792	22	46,155			85,376	64	3.02
1911	93,662	78,391	513	973,000	926,845	2008			10.39
Net Aver	age	21,793	152	Net Aver.	230,749	517	9 yrs. aver.	about	7.00
			SASK	ATCHEWAI	N-WHEAT				
1907	2,047,724	• • • • •		27,691,601				• •	13.52
1908	3,703,563	1,655,839	80	50,654,629	22,963,028	82		• •	13.68
1909	4,085,000	381,437	10	90,215,000	39,560,371	78	• • • • •		22.1
1910	4,664,834	579,834	14	72,666,399		• •	17,548,601	19	15.68
1911	4,704,660	39,826	3/4 of 1	97,665,000	24,998,601	34	• • • • •	• •	20.75
Net Aver	. 3,841,156	664,241	26	Net Aver.	17,493,349	43	8 yrs. aver.	about	18.50
			SAS	KATCHEWA	AN—OATS				
1907	801,810	• • • • •	• •	23,324,903	• • • • •				29.09
1908	1,772,976	971,166	121	48,379,938	25,054,935	107	• • • • •		27.29
1909	2,240,000	467,024	26	105,465,000	57,085,162	117		• •	47.10
	2,082,607		• •	63,315,295	• • • • •	• •	42,149,705	39	30.40
	2,124,057	41,450	I	97,962,000	34,646,705	54			46.12
Net Ave	rage	330,561	35	Net Aver.	18,659,274	59	8 yrs. aver.	about	36.00
			SASK	ATCHEWA	N—BARLEY	•			
1907	79,339	••••	• •	1,350,265				• •	17.02
1908	229,574	150,235	189	3,965,724	2,615,459	193	• • • • •	• •	17.28
1909	244,000	14,426	6	7,833,000	3,867,276	97		• •	32.1
1910	238,394	• • • • • •	• •	5,859,018	• • • • •	• •	1,973,982	25	24.58
1911	172,253		• •	5,445,000			414,018	7	31.61
Net Ave	rage	23,228	41	Net Aver.	1,023,933	64	8 yrs. aver.	about	24.80
			SAS	KATCHEW	AN—FLAX				
1907	128,528	• • • • •		1,364,716			• • • • •	• •	10.62
1908	264,728	136,200	105	2,589,352	1,224,636	89	• • • • •	• •	9.78
1909	319,100	54,372	20	4,448,700	1,859,348	71		• •	13.9
1910	396,230	77,130	24	3,044,138			1,404,562	31	7.68
1911		553,819	139	10,688,000	6,643,862	218	· · · · · ·	 . about	11.25
Net Ave	rage	205,380	72	Net Aver.	2,080,821	86	6 yrs. aver	. acout	10.00

Acres

857,992

1,299,989

Grain Spring Wheat

ESTIMATED HARVEST 1913

Based upon the average per cent. of increase in acreage during the past five years as shown in the above tables, and for the sake of conservatism using 25 per cent. less than the averages there shown the estimated harvest of 1913 is given below, from which the possible surplus available for westbound shipment may be arrived at:

ALBERTA

1911

Year

Add increase, 87 per cent, less 25 per cent. equals 66 per cent.

1912	
1712	2,157,981
Add increase, 66 per cent	1,424,267
Add mercase, or per concernition	1,424,207
Under crop 1913	3,582,248
3,582,248 acres at 17½ bushels per acre 62,689,3.	to bushels
Grain Year	Λ
Grain 1ear	Λ cres
WINTER WHEAT 1911	316,910
Add increase, 45 per cent. less 25 per	•
ridd mercase, 45 per cent. iess 25 per	
cent. equals 34 per cent	107,749
1912	424,659
Add increase, 34 per cent	
real mereuse, 34 per center	144,384
	
Under crop 1913	569,043
569,043 acres at 21 bushels per	
agra	
acre 11,949,9	03 bushels
CACITAMOTERITA	
SASKATCHEWAN	
Grain Year	Acres

**** **********************************	4,704,660
Add increase in acreage, 26 per cent.	
less 25 per cent. equals 20 per cent.	
and any fer center equals 20 per cent.	940,932
1912	5,645,592
Add increase, 20 per cent	1,129,118
	-,,,110
Under crop 1913	<u> </u>
	0,/74,710
6.774.710 acres at 1812 bushels per	
6.774.710 acres at 1812 bushels per	
6.774.710 acres at 1832 bushels per acre 125,332,1	35 bushels
6.774.710 acres at 1832 bushels per acre 125,332,1	35 bushels
6,774.710 acres at 1812 bushels per acre	35 bushels
Applying the same process of c	35 bushels
6.774.710 acres at 1832 bushels per acre 125,332,1	35 bushels
6.774.710 acres at 1812 bushels per acre	alculation result is
6.774.710 acres at 1812 bushels per acre	alculation result is
6.774.710 acres at 18½ bushels per acre	alculation result is
6.774.710 acres at 18½ bushels per acre	alculation result is
6.774.710 acres at 18½ bushels per acre	alculation result is D HAR-
6.774.710 acres at 18½ bushels per acre	alculation result is D HAR-
6.774.710 acres at 18½ bushels per acre	alculation result is D HAR-
6.774.710 acres at 18½ bushels per acre	alculation result is D HAR-
6.774.710 acres at 18½ bushels per acre	bushels alculation result is D HAR- 3
6.774.710 acres at 18½ bushels per acre	bushels alculation result is D HAR- 3
6.774.710 acres at 18½ bushels per acre	D HAR-
6.774.710 acres at 18½ bushels per acre	D HAR- 13.536,000
6.774.710 acres at 18½ bushels per acre	D HAR- 13.536,000
6.774.710 acres at 18½ bushels per acre	D HAR- 13.536,000
6.774.710 acres at 18½ bushels per acre	D HAR- 3 13.536,000
6.774.710 acres at 18½ bushels per acre	D HAR- 13.536,000

Spring Wheat—Sask125,332,135 Spring Wheat—Alberta 62,689,340 Winter Wheat—Alberta 11,949,903	199,971,378
Grand total, say about	435,570,000
ESTIMATED DISTRIBUTION OF CROPS, HARVEST 1913	WHEAT
Spring wheat, Alberta	11,949,903
Estimated total in round figures	200,000,000
Of this crop, let us allow in place for the quantity consume by a population of 1,500,000.	
	Bushels
Annual consumption of one barrel of flour per head per annum—basis, 4½ bushels of wheat per barrel Chicken feed, pig feed, etc., in Saskatchewan, Alberta and British	6,750,000
Shipped East before the close of	7,500,000
navigation 1913, 50 per cent. of crop	100,000,000
1914: 1½ bushels per acre for 14,838,700 acres Surplus available for export West via Pacific as wheat and flour	22,258,000
Total	
This surplus of 63,492,000 nearly 32 per cent. of the total wheat harvest of Saskatchewan	estimated

This surplus of 63,492,000 bushels is nearly 32 per cent. of the total estimated wheat harvest of Saskatchewan and Alberta. If a percentage of 25 per cent. is taken as a basis to estimate the surplus available for shipment via the Pacific of barley, oats and flax out of a total of 235,600,000 bushels, there would be 58,900,000 bushels available of coarse grains for shipment west, or a total of all grains of about 122,000,000 bushels.

From the latest statistics to hand for seven months ended March 31, 1912, the Grand Trunk Pacific apparently handled during this period, judging from the quantities in bushels and the total number of cars inspected at Winnipeg and other points in the west, about 8 per cent. of the harvest, while the Canadian Northern secured about 30 per cent. and the C. P. R. 56 per cent., the balance going to American roads.

The Canadian Northern and the C. P. R. combined, then, handled roughly about 86 per cent. of the crop during this period.

Now, assuming that Greater Vancouver secures, say, 66 per cent. of the 63,000,000 bushels of wheat available for export via the Pacific—that is, allowing as much as 34 per cent. for Prince Rupert for the first few years—then the total amount of wheat which possibly might be handled through Vancouver from the harvest of 1913 would be about 41,904,720 bushels. If the same proportion is used for the other grains, the total of barley, oats and flax would amount to, say, 37,000,000 bushels, or a combined total of wheat and coarse grains of about 79,000,000 bushels.

DISTANCES

A study of the distances between the points shown in the following tables will emphasize the position which Vancouver occupies compared with the Atlantic coast, especially, be it noted, during the winter months, when the water transportation in the east is closed on account of frost and cold weather, and also at about the expiration of the period when the "wheat" has gone through the natural sweat, and is therefore in the best of condition for shipping.

From	To St. John miles	Vanc'ver	Mileage in favor of Vancouver
Fort William Winnipeg	1477	1900 1480	417
Fleming Regina Moose Jaw	2109 2248 2296	1268 1122 1080	841 1126 1216
Swift Current. Medicine Hat. Calgary	2405 2557	970 822	1435
Lethbridge Strathcona	2737 2655 2928	6.12 782	2095 1873
Edmonton	2928	834	2094

MARKETING CROPS

It it interesting to note that about 70 per cent. of the leading grain crops of Canada are grown west of Winnipeg. Winnipeg is about 400 miles nearer the Pacific than the Atlantic—therefore 70 per cent. of Canadian grain is 400 miles nearer Vancouver than St. John. With the extensive railroad mileage which is being created throughout the west, undoubtedly this percentage will remain in favor of the Pacific.

The Pacific or the west is the natural outlet for Alberta and Saskatchewan. Calgary is about 2,095 miles nearer the Pacific than the Atlantic. It is also about 100 per

cent. nearer Vancouver than Fort William, that is, about 618 miles nearer the Pacific than the lake heads.

CROP MOVEMENT

Investigation will show that from August 31 to November 30 the aggregate amount of grain shipped from Port Arthur and Fort William for 1910 was 44,396,000 bushels. About December 5th the lakes, canals, rivers and other water transportation in the east freezes up. When this occurs the relative positions occupied by St. Johns and Vancouver are forcibly brought out. If it is possible to move out this quantity before the close of navigation, it would seem that, especially as far as Alberta is concerned, with Calgary as a basing point, about 100 per cent. nearer the Pacific than to Fort William, the railroads could not only move out an equal quantity, but perhaps twice as much, on account of being only half the distance away from the terminal. If this is so, enormous inroads into the Saskatchewan crop ought to be made by the Pacific exporters before the opening of the season of navigation in the spring on the great lakes.

SHIPPING

According to the Department of Customs for the year ended March 31, 1911, the total number of British and foreign ships that entered and cleared at the port of Vancouver was 2,535, having a combined tonnage of 2,520,103 tons. Against this the total inward and outward clearances from Montreal were 836 vessels, representing 3,270,707 tons. This is the condition in Vancouver with only one Canadian railroad connection in the west. What will it be when there are three transcontinental lines and several provincial branch lines all pouring freight into its harbor?

EASTBOUND LUMBER

Broadly speaking, the prairie provinces have not much timber. Therefore every farmer, in fact every hamlet or town on the prairie (Alberta, Saskatchewan and Manitoba), creates a demand for lumber, this being one of British Columbia's natural products. A demand is created for lumber to move eastward into the grain-growing section. According to the report of Mr. E. F. Stephenson, Inspector of Crown Timber Agencies for the Dominion Gov-

ernment, the total amount of lumber marketed in the three western prairie provinces during the fiscal year ended March 31, 1911, amounted to 1,017,524,202 feet, of which the lumber mills of British Columbia contributed 620,000,000 feet, or slightly over 60 per cent., being four times as much as was shipped in from Ontario, four times as much as was manufactured within the three prairie provinces, and over five times as much as was imported from the United States.

On the basis of about 1,000 feet to the ton (2,000 pounds) this would equal an eastbound movement from British Columbia into the grain-growing sections of,

say, roughly 620,000 tons.

WESTBOUND GRAIN, FLOUR, HAY, ETC.

Now turn to the westbound movement; this appears to total at present about 250,000 tons. There is, therefore, an accommodation or difference in favor of western shipment between the eastern lumber movement and the western grain and flour movement at present of about 370,-000 tons each year, or, say, some 12,250,000 bushels of wheat. In other words, the railroad has to provide a sufficient supply of cars to move west into British Columbia to take care of the eastbound lumber business. As these cars are destined chiefly to the rapidly-growing prairie section, it can readily be seen that the most natural way to send these cars west is to send them loaded with grain.

Another factor not to be lost sight of is the possibility that in the course of a few years Canada may be called upon to supply some of the wheat required by California and the other Pacific states. A glance at the annual report of the Merchants' Exchange of San Francisco is the best illustration of the gradual decline of the California wheat crop and the steady growth of wheat imports from Oregon and Washington. In addition to imports from Oregon and Washington, a percentage of strong wheat is secured every year from Kansas by the Californian and Arizona mills.

New York, under the present conditions during the last few years, has been able to buy California barley, and the Central States of America on more than one occasion have been compelled, on account of high prices, to buy wheat on the Pacific coast. This indicates, therefore, the possibility of

the United States Pacific coast being compelled to turn to Canada in the event of shortage in their own country, and the writer is of the opinion that it may result in the American government reducing the duty on grain imported from Canada into the United States, which at present, in a general way, is 58 per cent. higher than the duty on American grain entering Canada.

EAST VERSUS WEST

On the supposition that a railroad train would move on an average of, say, 100 miles per day, and that a steamer would average about 12 knots per hour, the following will be about the time consumed on the journey from Moose Jaw to Liverpool:

Eastbound:

Lastooung.		
Rail	23	days
	8	(Č
Total	31	days
Westbound:		
Rail	II	days
Water	30	"
Total	41	days
Rates — Eastbound, winter	mo	nths,
Moose Jaw to Liverpool:		
Per		Per
roo lbs.		busk
cents		cents
Moose Jaw to Fort William. 18		10.80
Fort William to St. John, all		
rail; winter months, Dec. 5 to April 30; standard rate 30		18
St. John transfer		.5
Marine insurance, brokerage,		-
freight, exchange	say	٠5
Ocean freight—say 1-3 per		
quarter	say	3.75
Total-Moose Jaw to Liv-		
erpool		33.55
Rates-Westbound, Moose Jav	v to	Liv-

Rates—Westbound, Moose Jaw to Liverpool:

Last season Pacific Ocean steamers' freight rates were about 30 shillings per ton, or, at \$4.82 exchange, about 19.35 cents per bushel. The distance when the canal is finished will be reduced by about 37 per cent., and therefore it is natural to suppose that freight rates will be correspondingly reduced, which would make the ocean freight about 12½ cents per bushel.

According to press despatches, the United States government has decided to charge

\$1.20 per 100 cubic feet measurement, which will equal about 50 cents per ton (2,000 lbs.) weight for bulk wheat, or, say, about 1½ cents per bushel for canal tolls. After deducting all other charges the railroad freight balance is arrived at as shown below:

Pacific Ocean freight, 30s. less 37	Per	bush
per cent	1.50 0.75 0.50 0.50 0.50	"
Datance for famous freight	1/.35	

33.55

The railroad freight of 17.35 cents per bushel of 60 lbs. is equal to 28.91 cents per 100 lbs.

The present export wheat rate from Moose Jaw to Vancouver is 283/4 cents per 100 lbs., while the rate from Fleming, Saskatchewan, which is on the Manitoba and Saskatchewan border, is 32 cents per 100 lbs. to Vancouver, which seems to prove the argument.

THE PRESENT RATE SITUATION

An analysis of the present freight tariffs in connection with the grain and flour rates in Western Canada is interesting. A standard 60,000 lb. capacity car must be loaded with wheat to the marked capacity, 60,000 lbs. The same size car loaded with flour, mill stuffs, or oatmeal, however, may contain a minimum of 40,000 lbs.

In cars of 60,000 lbs. capacity for local British Columbia business flour is transported at the same freight rate as wheat, although the actual weight on which the revenue is credited to the company is about one-third less per car. The transportation service, however, is fully equal that given to wheat.

Who gets the benefit? Does the Vancouver miller, or the eastern miller?

Turning to the export trade, if the western export special flour tariffs are referred to, it will be found that the minimum weight of flour for a 60,000 lbs. capacity car is 56,000 lbs. In the 80,000 lbs. capacity cars 74,000 lbs. may be loaded. This is about 6.6 per cent. and 7 per cent. difference against milling in Vancouver, and in favor of eastern manufacturers in direct competition with the Pacific markets, the

most natural market for export which the British Columbia miller possesses.

WINNIPEG AND CALGARY

Some time ago certain interests in Winnipeg applied for rates on flour between Winnipeg and Calgary equal to the rate on flour between Calgary and Winnipeg. It was admitted that there appeared no reason why the rate between these two points in either direction on the same commodity should not be the same. This establishes the principle that between any two points the rate should be the same, on the same commodity, irrespective of whether the movement is east or west.

Now apply this principle to Vancouver and note the results.

From a point named Fleming, Saskatchewan, to Fort William, the rate eastbound on wheat is 16 cents per 100 lbs., and this rate is the same, whether the wheat is to be exported to Great Britain, or consumed locally in Eastern Canada. The distance between these points is about 632 miles.

Now, if it were desired to export wheat from Fleming via Vancouver, which is a distance of about 1,268 miles, the present rate is 32 cents per 100 lbs.

Contrast this with the rate of 24 cents per 100 lbs. from Calgary eastward to Fort William, a distance of 1,260 miles.

In other words, there is a differentiation of about 8 cents in favor of the eastward trade for practically the same distance.

But supposing the Vancouver flour miller wishes to ship to Hong Kong, China, after manufacturing the wheat in British Columbia. What happens, so far as tariffs are concerned, as between wheat milling in British Columbia and flour milling at, say, Fort William or Keewatin, Ontario. The tariffs on flour permit a rate beginning at Fort William to Hong Kong of 47½ cents per 100 lbs. via Vancouver.

The rail haul to Vancouver is about 1,900 miles, then the flour is transferred to steamers and sent across the Pacific. Now, during the past three or four years, the general export flour rates from the chief Pacific coast tidewater flour-exporting shipping ports have been from \$2.00 to \$4.00 per ton, while at present they are about \$5.50—say, an average of \$3.00 per ton, which is 15 cents per 100 lbs.

If the ocean proportion of 15c per 100 lbs. as shown above is deducted from the

through rate from Fort William to Hong Kong of 471/2 cents per 100 lbs. the balance represents what the railway earns-i.e., 321/2 cents per 100 lbs.—for 1,900 miles' haul between Fort William and Vancouver.

The Pacific Ocean rate cited is made by transpacific steamers on a waterway open to the competition of the entire shipping world. Therefore the rates are facts, not theory, and the balance earned by the railroad must be also a fact.

This is on export flour manufactured in the cast. Now let us examine the figures relating to the most easterly place from which wheat may be exported at presentthis point is Fleming, Sask. Be it remembered, however, that flour (not wheat) may be exported by the westerly route from Fort William, which is 632 miles further east than Floming. An analysis of the tariff for flour shows the proportion from Fort William to Fleming to be only onehalf cent per 100 lbs., assuming that the cost of hauling flour from Fleming to Vancouver is 32 cents per 100 lbs.—the charge actually made under the export wheat tariffs.

Kenora and Keewatin are about 1,609 miles from Vancouver. The proportion on flour manufactured at these points would be 30c per 100 lbs., which would be 2 cents per 100 lbs. less than the wheat rate from Fleming, although Fleming is some 341 miles nearer Vancouver. But the Fleming rate is a wheat rate, whereas the Fort William, Kenora or Keewatin rates are special flour rates framed to favor plants operated by eastern manufacturers in competition for Oriental trade with the Vancouver miller!

The kind of export flour which would probably move under these special tariffs is low-grade flour, which must be made by all millers in producing their best grades. If the eastern millers cannot dispose of their low grades they would either have to charge more for the high grades or curtail their output; but if they have special low flour export tariffs, then they can sell their high-grade flour in the markets of the British Columbia miller more advantageously on account of the rates enabling them to run their plants on an average longer than the Vancouver miller.

Does this seem right? Are the millers in the east entitled to concessions which work to the disadvantage of British Col-

Added to the above are umbia millers? the further concessions already cited of minimum loading of flour against wheat. say 6½ per cent. for their export flours and 33 per cent. for the high grades consumed locally in British Columbia.

Now, if the admitted principle of the same rate between two points, whether the movement is east or west, is considered and applied to Fort William, Keewatin and

Fleming, what happens?

Eastbound wheat moves from Fleming for 16 cents for 632 miles, while westbound the special export flour tariffs would permit of flour moving 632 miles for 1/2 cent per 100 lbs. in one case, and 341 miles in the other for a discount of 2 cents! Can the Vancouver people be blamed for feeling they are discriminated against? Should not a raw product move at least more cheaply than a manufactured product? Where is the most natural place from which the western surplus grain should be exported, either as grain or flour, than on the Pacific seaboard?

The export wheat rate from Fleming to Vancouver is 32 cents. If it is reduced, as this argument shows it should be, to 16 cents per 100 lbs., what about the rate from Calgary to Vancouver, at present 19½ cents per 100 lbs. from a point about 626 miles nearer Vancouver. Should not this also come down. But how much? Let us see.

The present export flour rates from Alberta to Hong Kong is 35 cents per 100 lbs., while the present transpacific ocean rate is about \$5.50 per ton, or, say, 25 cents per 100 lbs., which leaves the railway company a proportion for their rail haul from Alberta to Vancouver of just 10 cents per 100 lbs. Now, what is the export wheat rate from Alberta to Vancouver? We find it averages 22½ cents per 100 lbs. —in other words, just about 121/2 cents per 100 lbs. over the railroad proportion of the export flour rate, or 125 per cent. higher than wheat for Vancouver.

Now, it must be pointed out that China takes principally "low-grade flours"-but there are other Pacific coast markets which consume high-grade flours, to which the Vancouver miller might export—if he had freight rates which would permit him to cater for this neglected trade!

And are there not also some foreign mills located on the Pacific coast which might buy Canadian grain if the f. o. b. value at Vancouver was not above that of the principal markets of the world? Incidentally, why should the present rates, known as the local grain and flour rates from Alberta to Vancouver, remain at 32½ cents per 100 lbs. for British Columbia consumption, when grain moving eastward to the lake heads takes one rate, not two—that is, the same rate for the Eastern Canadian markets as for Great Britain or other export points? No wonder the west is interested! Is British Columbia to be taxed to support the east?

The consideration of rates again becomes interesting from another standpoint, using Moose Jaw, as before, as the point from which to make the deductions. From Moose Jaw to Fort William the wheat rate is 18 cents per 100 lbs. and the all-rail rate from Fort William to St. John 30 cents per 100 lbs., a total of 48 cents per 100 lbs., which is equal to \$4.18 per thousand tons per mile.

The rates on wheat prevailing on the Atlantic vary, of course; but, at the time these were looked into they were about 1s. 6d. to 2s. per quarter (480 lbs.) for 2,691 miles. For argument's sake, let us say a rate of 1s. 6d. One thousand tons, therefore, costs \$1,250 to move from St. Johns to Liverpool, which is about 46½ cents per mile per 1,000 tons, or about 900 per cent. cheaper than the railroad rate per mile.

The rate for moving wheat from Moose Jaw to Vancouver is 2834 cents per 100 lbs., which is equal to \$5.32 per 1,000 tons per mile. This shows a difference against the west, as compared with the east, of \$1.14 per 1,000 tons per mile, or about 2714 per cent. over eastern rates, and when the Fort William to St. John rate is cut, as it sometimes is to move traffic to meet the conditions of the world's markets, this percentage is greater.

Now Moose Jaw is about 1,216 miles nearer Vancouver than St. John. At the same rate per mile the west would be able to do some business in export grain, as only 10 per cent. of the total mileage to Liverpool westbound is rail haul, and 90 per cent. water. With ocean rates, say, 500 per cent. lower than rail rates, and 36 per cent. of rail haul in favor of the west, is it not natural to expect that something will

happen in Vancouver when the forces of economy assert themselves.

The Almighty has furnished by far the most important avenue of transportation—our waterways—which are abundant and varied, and are constant, ceaseless, everlasting competitors of every artificial form of transportation.

It has been shown that, out of the total distance to Liverpool westbound via Vancouver from Moose Jaw 90 per cent. of the distance consists of this everlasting competitor—this constant, ceaseless, cheapest form of transportation—which ranges from 500 to 900 per cent. less per mile than rail transportation.

Commerce, like water, seeks the lowest level—it rebels at unnatural restrictions. Temporary obstructions may be put in its way, just as one may dam a stream, but sooner or later over the dam or through its ruins, the stream will find its natural channel.

It might be well to point out that the tables in which Moose Jaw has been taken as a central point for the sake of argument show Pacific Ocean freights at 30s. Since these were compiled, however, freight rates on the Pacific Ocean, as on all other ocean routes, have risen very materially, those for the present season being, say, about 47s. 6d. per ton on an average, which is equivalent to about 23 cents per bushel. If, therefore, the difference in distance which the completion of the Panama Canal will make is deducted--37 per cent,--a rate of about 1412 cents per bushel from Vancouver to Liverpool is obtained, which is 214 cents per bushel, or .0375 per 100 lbs, higher than rates shown in table illustrating the movement east and west from Moose Jaw. To permit of wheat shipments via the Pacific with such high ocean rates it will be necessary for the railroad companies to reduce their rates from the prairies by this difference, 3.75 cents per 100 lbs., which would make the average export wheat rate from all Alberta points about 1834 cents per 100 lbs, instead of about 221/2 cents as at present.

Now, if a standard freight locomotive can haul about 1.750 tons on a four-tenths of 1 per cent. grade—the grade the Canadian Northern Pacific hope to obtain—then on a 1 per cent. grade it would only haul about 1,000 tons.

If we use the average export wheat rate

from Alberta, viz., 22½ cents per 100 lbs., as a basis, the gross revenue received from 1,000 tons would be \$4,500. By dividing the quantity moved over four-tenths of one per cent.—1,750 tons—into this amount, we find that a rate of about 12.85 cents per 100 lbs. could be obtained, all other things being equal, and the same gross revenue received. The difference is about 9½ cents per 100 lbs. No attempt has been made to take into consideration such matters as curvatures, condition of cars, wind or weather, coal consumption, or other items which enter into the question from an engineering standpoint.

To meet the expected situation which will obtain in the west,, the C. P. R., according to newspaper reports, will revise its grades, and also double-track between Vancouver and Calgary. This is by far the most important announcement in connection with the west that the C. P. R. have made during the last five years.

The broad facts speak for themselves. Competition between railroads bears most strongly on those things in which the community has the greatest interest. This results from the natural law of trade. The forces of competition which tend to reduce the rates of transportation co-operate in producing discrimination in favor of those things which are moved in the largest quantities. Conditions are superior to men, and while carriers are sometimes loth to recognize it, they are made aware of the fact by their inability to maintain a rate inconsistent therewith.

Herein lies the protection of a community from acts of injustice on the part of railroads—from anything more than temporary hardships. Carriers could not, if they would, combine among themselves to do an unjust thing. To combine to maintain an unfair rate would be to combine to destroy their traffic.

It is announced that the "Milwaukee" will electrify its main line from Spokane through to the coast as soon as the 450-mile electric stretch in the rockies is operating smoothly. This company is a strong United States competitor for the Oriental silk trade for New York and Europe. What will happen in Western Canada? Will the Canadian railroads sit still? I don't think so. Therefore the port of Vancouver will gain as a result.

PUBLIC STATEMENTS

The following statements made by eminent public men bear out the general argument in connection with Vancouver. Mr. James J. Hill, president of the Great Northern Railway, says: "In growth and commercial activity Vancouver has no equal on the Pacific coast today. Burrard Inlet (Vancouver's harbor) will be the greatest commercial port on the Pacific. I would venture all I own that its population will exceed 500,000 within fifteen years. I see a day coming when half a score of lines from Northern British Columbia will converge on Burrard Inlet."

Mr. A. D. Farrell, pure food commissioner of the United States, says: "Vancouver has grown to over 100,000 people in the last twenty-five years. In the next twenty-five years it will reach 1,000,000. It is the world's natural gateway for the commerce that will yet arise between the empires centring around the Great Lakes and the Orient. The Saskatchewan Valley, Yellow Head Pass, and the Fraser River have made this as certain as that the sun will rise tomorrow."

Mr. A. D. McRae, who represents Mackenzie and Mann in Vancouver, says: "A realization of the possibilities of the traffic movement prompted the management to make all sorts of provisions for future requirements. The grades secured by the Canadian Northern between the Pacific coast and the Rockies at Yellowhead Pass are the lowest yet obtained by any transcontinental railway. insure, especially after the opening of the Panama Canal, an enormous volume of The gradients reexport grain business. ferred to are water gradients, that will enable one engine to haul loaded freight trains of sixty cars each in either direction between the coast terminal and the summit without cutting the train in two."

The late Mr. C. M. Hays, president of the Grand Trunk Pacific, is reported to have stated that they were preparing to handle 100,000,000 bushels of grain annually, most of which is likely to pass through the Panama Canal.

GUARANTEE

The agreement which the British Columbian Government made with the Canadian Northern Pacific Railway Company when they guaranteed their bonds—that is,

that the government of the province should have control of the freight rates effecting British Columbia—was strengthened by one of the late rulings of the Canadian Railroad Commission—the effect being that the control of rates in British Columbia is in the hands of the British Columbian Government, through their agreement with the railroad company, the intention of Sir Richard McBride's government being that the Pacific shall secure a reasonable share of the business of the Dominion.

IMPORTS

Attention is particularly drawn to the fact that, when the Pacific secures equitable freight rates, enabling it to distribute its imports into Western Canada in competition with the Atlantic, an unbounded opportunity is presented to Vancouver as a distributing point on completion of the Canadian Northern, Grand Trunk and the Panama Canal. This is worthy of the most earnest consideration. Attention is particularly drawn to the fact that, speaking in a general way, there is no parallel between these new towns that are springing up and what prevails in settled districts, and any business organization that is prepared to grasp the opportunity presented will undoubtedly secure a large and growing business in the course of a few years.

MONIES EXPENDED

Expenditures for railroad construction during the past three years and also during

the next few years in Saskatchewan and Alberta have been and will be heavy—running into the millions.

Apart from railroads in Alberta, it is reported that the C. P. R. will spend in irrigation works in Alberta \$8,500,000. In British Columbia the estimates are:

Canadian Pacific Railway	\$60,000,000
Pacine Great Eastern Railway	80,000,000
Canadian Northern Pacific Railway	40,000,000
Grand Trunk Pacific Railway	20,000,000
Vancouver, Victoria & Eastern Ry.	25,000,000
Canadian Pacific Steamers	5,000,000

\$240,000,000

When we add to the above-mentioned figures the estimated cost of the Panama Canal, say \$375,000,000, we get a grand total of \$615,000,000.

How will the interest on the above expenditure be paid except by a large volume of business in the West? And how can a large volume be done if the freight rates remain high?

In conclusion, I hope I have made clear to the reader how the "twelve baskets full" of Western Canadian grain will eventually reach the multitude, as represented by the principal consuming markets of the world. In these articles the greatest possible care has been exercised to avoid any mistakes, misrepresentations or errors from creeping in, and so far as possible all statements or bases used were adopted from a conservative standpoint.



Japan's Aims in the Pacific

To the Editor, British Columbia Magazine.

Sir: In your issue of January I ran across the phrase, "the lonely and appalling isolation of New Zealand," and I looked twice at this to see if I had read correctly. A charm of these lovely islands lies in their remoteness. But who had thought of it as appalling? New Zealand lies, as we all know, 1,200 miles from her closest kin, and not an enemy nearer than the planet Mars. But the people of New Zealand seem to me very far from lonely, and if their isolation were really "appalling," it would be very easy for them to pick up and go home. Having never borne the burdens of war, of war's destruction of the strong, of the grinding taxes of war preparation, there are no poor in New Zealand. The people there live in New Zealand because they would rather be there than anywhere else in the world. They are like the people of British Columbia in this respect.

But I read on and learned that the "appalling isolation" is due to the fact that New Zealand is in the open sea, where her enemies can get at her from every side, but especially from the side nearest Japan. But to me the ocean about New Zealand was the great all-embracing, all-protecting sea, the highway of the commerce of the world. If it had been Servia, which is about as large as New Zealand and equal in resources, I could have understood. In Servia's isolation, surrounded thrice-deep by eager friends, there is enough that is appall-But around New Zealand are the ing. forces of nature alone.

It was no friend of Hawaii who introduced the mosquito there, and no friend of New Zealand brought there the war scare of Japan.

I know Japan and Japanese purposes pretty thoroughly. I know that not one man in a million there has ever thought of New Zealand as an outlet for Japan, and this one only from some chance contact with a Sydney or Vancouver newspaper. Japan has no designs on anything occupied by English-speaking people; she could not

have them if she would: she would not if she could. Since 1907, she has not allowed a laborer of hers to enter Canada, the United States, or Mexico. Above all else, she would avoid friction with any parts of the "Greater Britain," to which you and we belong. The war with Russia left her with a crushing debt of \$1,325,000,000. She has seven times the population of Canada, but no greater wealth, and four times Canada's debt. But hers is dead debt for past war. That of Canada, mostly for railway extension, pays living interest.

Japan has her hands more than full with her occupation of Korea. For fifty years Korea will hold all the colonists she can spare. But Japanese will not go to Korea nor even to the half-occupied northern island of Japan, as colonists. They are not pioneers by nature. They like to stay at home, where "our customs fit us like a garment." It is only the homeless rice-field hand and the "promoter" who seeks new regions, not to live there, but to get real wages.

The common laborer is over-numerous in Japan. His wages are eighteen cents a day. But he is no colonist. He cannot get a start, and those who have resources will not budge from home. Japan must fill Korea, but colonizing Japanese will not go there, and 125,000 or so of laborers and adventurers who went there at first have had to return home. Then Japan has taken costly obligations in Manchuria. She has gone just as far as she can in the matter of national expense. There are no wagon roads in Japan; Her State railways need to be made broad gauge, and need new rolling stock. It will be a hundred years at least before she will look with envious eyes on anything connected with Great Britain or America.

The Japan of the "control of the Pacific" is only a bogey conjured up by the promoters of coast fortresses and of big ships.

Turning the page, I rub my eyes again to read that "the greatest expert on strategy this generation has produced" was "the late General Homer Lea."

Homer Lea was an interesting boy, with most clever skill in cool impersonation. His title of general was given by himself—in a sort of "play." He was a sophomore in Stanford University, and when he wrote on the "Valor of Ignorance" he knew nothing of soldiers, of war, or of Japan's purposes and power save what he had read in books.

Now if my Canadian friends will pardon me, I have an unprejudiced word to say about the Canadian navy.

In the first place, a navy is a very costly thing. Our navy in the United States costs us more than all the universities and technical colleges of the world, and yet our naval experts tell us that it is a very feeble thing, quite inadequate for all the duties of their "ship of dreams."

These may be two good reasons for a Canadian navy, and there is certainly one bad one.

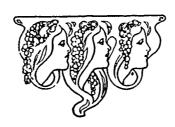
Canada may wish to help out the mother country in a costly and trying situation. She may wish to use a navy as a factor in imperial federation, or she may actually demand it for self-defense. As to the first, I believe that the present Anglo-German strain is but temporary. I am sure that it will not end in war, and that for many good reasons. And neither nation will ever be responsible for an attack which might ruin all Europe.

As to the second, I can say nothing, for that is purely Canada's business. As to defense, I can speak with certainty of conviction. Neither Canada nor Australia nor New Zealand stands in the slightest danger of attack from any quarter, navy or The land-hungry nations are no navy. hungry only for exploitable territories, not for land occupied in civilization by civilized colonists. These are not subject lands. They are not to be "owned" and are not exploitable. Great Britain may own Hong Kong or Jamaica, but she does not own, and no nation can ever own, Canada or New Zealand. Just in so far as England owns Canada, so does Canada own England. Besides, these colonial dominions of the English race have very alert and very influential blood relations, who would be heard from in any real crisis.

Now, in Japan's period of grinding taxation, the results of the Russian war, Canada is, with or without army or navy, her military equal in every way. Military efficiency depends not on fleets or soldiers, but on the reserve power back of them.

The weak spots in the series is North Australia. No people will enter these hot forests by force of arms, but some day there will be a pressure from China and India, for which Australia may do well to prepare. Not by means of army or navy, but by that statesmanship which foresces a crisis and which turns it into success.

DAVID STARR JORDAN Stanford University, California, Feb. 11, 1913.



The Burden of the Pacific

By A. N. St. John Mildmay

ARTICLE II

I HAD originally written, in the title of this series of sea letters, the word "Canadian"—so that it should stand as "The Burden of the Canadian Pacific," but I foresaw that transcontinental associations, connected with such conjunction of words, might side-track the train of thought in which I wished to safely conduct the readers of the British Columbia Magazine to a definite, or rather to an infinite, terminus, namely the sea itself.

It would be an impertinence and an injustice to describe the Canadian Pacific Railway Company as a "burden." would indeed in Vancouver be a kind of parricide. For that valiant young company, the C. P. R., was the "truly begotten father" of Gas-town, afterwards Granville, afterwards Vancouver. Perhaps, Acneas, pious Vancouver has too long carried its progenitor upon its back. Fortunately for Aeneas the time came when Anchises, his father, rode no more upon his back, but was promoted to the Isles of the Blest.

Now that the valiant "young company" has become old-established and very opulent, indeed by far the richest Company, Limited, upon earth, neither our interest nor our filial piety require us, its youngest child, to follow slavishly, as hobby-horse or pick-a-back, in the exact course of its tremendous enterprises.

Vancouver should be content to leave the mighty railroad-landlord company to possess the earth, while she herself moves forward deliberately and not without impudence to possess the seven seas, or such part of their immeasurable commerce as our position at the finger-tips of the Empire warrant us in claiming for our own. That new-found realm of ocean which is potentially Canada's (and therefore mediately Vancouver's also), but actually and at present Japan's, is no mean part of the

whole world: it may not improperly be called the world's "third hemisphere," or, to be less Irish, the watery hemisphere, the PACIFIC.

The Pacific is an island-strewn sea of savages. True. But it is not so very long ago since our province, which may now be called "Canada Felix," was not unjustly described as a "sea of mountains." It does not take much imagination to see in every one of those thousands of Polynesian, Hawaiian or Aleutian islands of this vast watery hemisphere, strategic points for civilization and commerce, the future's immediate jewels in the girdle of empire—jewels of inestimable value and romantic possibilities.

For the progress of time has annihilated ocean distances. The sea no longer sunders Victoria from Bombay, or Vancouver from Capetown, Canada from Australia, or America from China and Japan — it connects.

The rapid ocean communication of today makes the Pacific Ocean the directest, safest, most neighborly of highways between the nations; a highway soon to be tapestried with a dense web of new steamship routes, east and west, and north-east and south-west, and round-about and back again. The gradual engineering conquest of the sea, which no Titanic or Antarctic Polar disasters can permanently arrest, is making all the difference to the meaning and the possibilities of a maritime position. This and that other engineering feat, the almost completed Isthmian Canal.

No one who recognizes the splendid stamina and the immediate pluck and genius which the United States, as a government and as a working people, have shown in the prosecution of that enterprise can doubt for a moment that San Francisco, and Washington behind San Francisco, will

be just as alive as we are to the possibilities which it opens up and down the Pacific.

In the race for the Pacific Japan, China, Australia, Hindustan, Mexico, Chili (with much European capital invested at Valparaiso), California (U. S. A.), Canada, and even British East Africa and British South Africa, have a direct interest. Of all these only Japan has a place in the betting today. Certainly no state or country of America, North or South, would be in it with Japan if it were not for the fact of the sea-going and sea-mastering traditions which our British race has to fall back upon.

That congenital advantage, coupled with our well-known British capacity for muddling through successfully at the last moment, may yet countervail our dilatoriness and unpreparedness in this year of grace or disgrace 1913.

But it will only be by recognizing, as Japan has recognized now for forty-four years, that in order to get there first or get there at all the nation which is to own the Pacific in the immediate future must in the immediate present begin by emptying their whole gold reserve into the sea and throwing half their national credit after it.

If Mackenzie and Mann and the Hudson's Bay Co. and the Canadian Pacific Railway pooled their assets and drained their amalgamated treasuries (from which combination Heaven defend us!) to buy and build merchant vessels of over one thousand tons for immediate commission on these coasts, Canada might save its British Columbian heritage of the Pacific trade. Otherwise only Ottawa can save the situation. And when, in all its history, has the Canadian Parliament had a more glorious opportunity of proving its place among the great ones?

Here is what Japan has done for her people in this regard. "In 1869 and 1870," says one of the annual reports of her Minister of Commerce, "the government repeatedly announced that ship-owners would enjoy the special protection of the government in the conduct of their shipping a perprises." Then follows a list of steamship lines floated by state-aided companies or "by special orders of the government," accompanied by a list of the subsidies paid, time in all, between the years 1827 and 1836. "Thus," it sums up, "besides new

coasting lines, vessels flying the Japanese flag were for the first time to be seen on the four great routes to America, Australia, Bombay and Europe." . . . "Turning next," continues the report, "to the ship-building industry, a shipbuilding encouragement law was followed by shipbuilding regulations in 1896. Under these laws bounties are granted for the construction of iron and steel vessels of not less than 700 tons gross. . . . The encouragement given by the government has been so great that between 1896 and 1905 there were altogether two hundred and sixteen private shipyards and forty-two private docks brought into operation."

The next point treated of is the action of the government of Japan in establishing a government *steel foundry* to obviate the necessity of importing the materials for steel shipbuilding from abroad.

"With respect to harbor work," the report goes on, "large extensions at three principal ports were planned, after a careful consideration of the actual condition of harbor works in the various countries of Europe and America."

Between 1889 and 1905 the following stupendous harbor works are reported as actually accomplished by the government at these three principal points, Yokohama, Kobe and Osaka:

Stone breakwaters, aggregating 35,000 feet in length.

Iron piers, aggregate surface measurement 1,125,000 square feet of iron.

Acreage of reclaimed foreshore, 1,345 acres.

Stone quay walls, aggregate length 16,127 feet.

Acreage of newly-acquired safe anchorage—in all 450 acres.

Each of these ports were, during the sixteen-year period named, equipped with from a quarter to half a mile of iron sheds, parallel with the sea-walls.

The conditions of Canadian freedom are very different from those under a limited despotism, such as that of the Mikado. These figures from the blue book of 1907, the critical year in the forward movement of Japanese commerce since the war with Russia, give some idea of what a far from affluent people felt to be vitally necessary in capital expenditure and subsidies for the saving of her shipping.

There is no Canadian city, there are no ten Canadian cities, whose combined municipal credit could put Vancouver's merchant marine future on the footing immediately required if we are to become actually, as well as just scenically, a supreme Pacific port.

Are we then asking a paternal Ottawa to "give orders forthwith" for the building und operation of four or five lines of steamships, for the establishment of a British Columbia steel foundry, and the provision of twenty miles of sea walls with tidy and indestructible iron wharfage sheds to match?

Yes, unless our paternal government not only satisfies itself that this is going to be done speedily on our own initiative but also shows itself to be ready with substantial government aid to all and each of such enterprises.

In that case, and only in that case, will the railways which are looking to Vancouver to command the Pacific highways of commerce be saved from grievous disappointment.

The railways themselves should be kept strictly to railway business. The excitement which certain city fathers in Vancouver have shown over the offer of the Canadian Northern Railway to build and operate its own docks and steamship lines must have been amusing to those business men who are familiar with the story of the wolf and little pig.

"Little pig, little pig, let me come in" is always the cry of the railroad man, who knowing that sea-haulage costs one-ninth to one-sixteenth of the cost of railwayhaulage, is naturally anxious to gag a young scaport before he offers to serve it.

Even now, if the sea was alive with Vancouver-registered ships, we could get

our kitchen stoves and pianofortes, our steel and iron and brass and other of the heavier necessaries of life at about two-fifths of the price we have been paying during the whole of the overland epoch.

Conservation of resources indeed! Who can estimate the amount of steam coal, and railroad wages, and wear and tear of steel and woodwork and human life that has been wantonly and needlessly wasted in supplying Vancouver with flat-irons alone—think of them, in hundreds of thousands of tons, being dragged over the Rocky Mountains week by week and year by year from Nova Scotia or Ontario, when they might have come more cheaply from any, even the most distant foundry in the world, by way of the sea, because that method of transportation is from nine to sixteen times easier of accomplishment.

How is it then, a casual reader will ask, that all maritime places are not many times richer than those less fortunately situated inland?

The answer is only to be found by looking at the history of the world and its commerce, especially that of the modern The answer is that the harnessing world. of the sea costs much in thought and Most people and all backward governments and municipalities think that a little ready money is better than a great deal to come. Therefore because the sea costs money, and the looking ahead so as to secure much wealth to come costs a little ready money, the ships are unbuilt, the foreshores are unutilized, and the appaintus for wharves is unprovided, and all our spare change goes comfortably into the pockets of the prudent railroad man.

Fellows in arms, and my most living friends. Bruis'd underneath the yoke of tyranny.



World Politics

Pacific League

A PROMINENT citizen of Melbourne writes as follows to the Editor of the British Columbia Magazine, and encloses a clipping from the Melbourne Herald of January 16, 1913.

Melbourne, January 16, 1913.

Dr. F. B. Vrooman, B.Sc.

British Columbia Magazine, Vancouver, B. C.

Dear Sir: The enclosed cutting from tonight's Herald impels me to write and offer you my services to help in forming your Pacific League. I have been several times through Canada and the United States of America and in China and Japan, and believe such a sodality is vitally necessary, because the Pacific is bound to be the battleground of the twentieth century, as was the Mediterranean in the nineteenth.

Please tell me how I can help, as I have had plenty of experience in forming political societies here in my native land. Yours faithfully,

F.R.Col.Inst.; F.R.G.S.

PACIFIC LEAGUE

KEEP THE FLAG FLYING-DR, VROOMAN'S IDEA (From our London Office)

92 Fleet Street, December 13.

Dr. Vrooman, now back in Vancouver, after a period of very incisive talking in this city, is busy forming a Pacific League, in respect to which he hopes much from Australia. Some particulars are given by the Standard as follows:

Many acute students of Imperial affairs hold that the great theatre of future British development will prove to be the Empire's Pacific frontier: that Imperial gateway which faces the crowded world we call the Far East. The importance of our Pacific frontier is

accentuated, of course, by its relation to Australia and New Zealand.

This is a matter which, during the past few years, has been given close and earnest study by Dr. F. B. Vrooman, B.Sc., the editor of the *British Columbia Magazine*, who has now returned to Vancouver after a visit to the Mother Country, in which he greatly extended his circle of influence among Imperial students who are thinkers in Britain. Just now Dr. Vrooman's studies and work are taking definite shape in the form of an organization to be known at the Pacific League.

The object of this organization is the carrying on of an active propaganda for creating b Canada, Australia and New Zealand. It is hoped that branches of this League may be established throughout the three Dominions named, as well as in the Mother Country.

Dr. Vrooman and those associated with him in this movement most heartily endorse Umada's fine action in the matter of helping the Empire's naval defence, and would like to strengthen that action by securing predominance for the Flag in the Pacific; recognizing the stern necessity which exists at present for naval concentration in European waters.

This movement is one which should be certain of warm support in Australia and New Zerrand. Its Imperial value from the defence standpoint is too obvious to require elucidation. another aspect of it upon which we would like to lay some stress is the influence it d necessarily exercise in the direction of creating and strengthening lateral bonds of the union between Canada, Australia and New Zealand.

The ideal of a Greater British fleet linking up the Pacific outposts of the Empire is a specialid and stirring one, and we sincerely hope that success may attend the patriotic efforts. Vrooman and his associates in the formation of this Pacific League.--Melbourne

Recent despatches from London reveal an unusual activity among the statesmen Empire, numbers of whom seem to be adopting the same idea, since they requize the same situation.

Without comment we publish two despatches published in the News-Advertiser

Newcouver, February 26), both on the same day:

NAVAL DEFENCE OF THE PACIFIC

AUSTRALIAN MINISTER SUGGESTS THAT THE EMPIRE CONFERENCE SHOULD BE HELD IN VANCOUVER DURING THIS YEAR

Melbourne, Feb. 25.—The Minister for Defence, Senator Pearce, has made the following statement with regard to the commonwealth's suggestion for the holding of a subsidiary conference between the governments of the different parts of the empire in regard to naval defence:

"First of all, I would like to say that during the Imperial conference in 1911 the ministers of the self-governing dominions who were there were invited to attend, and did attend, a meeting of the Imperial Defence Committee, so that the presence of the Canadian minister on the defence committee is not a new thing nor in any way an innovation. The precedent was established in 1911, when Mr. Fisher, Mr. Batchelor and myself, and other Dominion ministers were present. As to the position of the defence committee on the question of foreign policy I may point out that the defence committee is essentially an advisory body. It is a semi-political body, in that the prime minister, the minister of state for war, the first lord of the admiralty, and the chancellor of the exchequer are members of it. But it also has naval and military experts connected with it, such as chief of the imperial staff and the first sea lord of the admiralty. It does not, and it cannot, formulate a foreign policy. It can only advise on naval and military matters as they affect, or are

affected by, the foreign policy.

"The question to be decided, it seems to me, is essentially one of policy, that is, a method by which the dominions shall assist in the naval and military defence of the empire and the form in which such assistance shall be given. It has to be remembered that these dominions have had conferred upon them full powers of self-government in relation to naval and military defence. Obviously, if they are to co-operate with one another, and with the United Kingdom, for the common protection for all, that is a matter of policy which can only be decided by the respective governments or their representatives. Such a conference was held in 1909, at which three different schemes of naval co-operation were drawn up as between the governments of Canada, New Zealand, Australia and the government of the United Kingdom. These schemes varied in each case. In regard to Australia it was the provision of a fleet unit in the Parific, owned and controlled by the Australian government. A somewhat similar scheme was adopted for Canada, with a slight variation, and for New Zealand it was arranged that the deministry characteristics a Decederated to the admiralty Zealand it was arranged that the dominion should contribute a Dreadnought to the admiralty, and an annual subsidy. In return for such the admiralty undertook to keep certain ships on the New Zealand coast, and send the Dreadnought on an annual cruise there.

"The Australian agreement is the only one that has been carried out. If co-operation is to be ensured, therefore, it becomes necessary for Canada and New Zealand either to carry out its schemes of the 1909 conference or propose some other to take their places. Australia, as I have said, is not in the same position. Its scheme is being carried out. There is, therefore, an essential difference between the position of Australia at the present juncture

and the position of both Canada and New Zealand.

"We have not been given any hint either by the British government or the admiralty that they have changed their minds in regard to the wisdom of the agreement with Australia. That agreement, I may say, originated with the admiralty, and was proposed to the conference in tool by the admiralty. The release of the admiralty with the ference in 1909 by the admiralty. The scheme for the fleet unit did not originate with the Australian government of that day, nor with the representatives at the conference, as the records of the conference will show.

"Having reached this position, the Australian government is of opinion that it would be advantageous if Canada and New Zealand could see their way to come to an agreement

as to the defence of British interests in the Pacific.

"Following the announcement of the visit of the Canadian minister to England and his attendance at the defence committee, this government received an invitation to send a minister also. We thought it desirable to suggest that, in order to get a complete understanding on the question of co-operation in naval defence, a subsidiary conference should be held in Australia early this year, and if that were not practicable, we were prepared to attend a conference in Vancouver and in the property of attend a conference in Vancouver, and accordingly intimated this to the Imperial government. We have received information that it is impossible to hold a general naval conference at the places and time suggested, and the question will be allowed to be revived at a later period of the year.

"I think what I have said will show there is no necessity at the present juncture to an Australian minister on the defence committee. Our policy is known, and it has the approval of the admiralty, and it can be adjusted to meet any development that may take place in the Canadian and New Zealand naval policies. We are hopeful that these countries

will yet fall into line.

"I think there can be no question that the United Kingdom could build as many ships as are likely to be required. The question that will arise if the present building programme goes on will be—Can she find the officers and men? The Australian naval policy differs from that of any of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in that it makes a property of the other deminions in the other deminions of the other deminions in the other deminions of the other deminions from that of any of the other dominions, in that it makes provision for the training of both officers and men to man the ships we provide."

Referring to the above statement the Sydney Morning Herald editorially says: "The suggestion of the commonwealth government, that a conference should take place early this year has not been adopted by the Imperial government, but it should not be long postponed. It may still be possible to hold such meeting at Vancouver toward the middle of the year and every effort ought to be made by the British admiralty to summon it without delay,

UNITY OF NAVAL ACTION DESIRED

AUSTRALIAN MINISTER HOPES THAT CANADA, NEW ZEALAND AND AUSTRALIA MAY YET BLEND NAVAL POLICIES

London, Feb. 26.—The Commonwealth authorities in London issued this morning the text of an important statement made recently by Senator Pearce, Australian Minister of Defence, on the question of Imperial naval defence.

Mr. Pearce explains the Australian government attaches no importance to being represented upon the Imperial Defence Committee because of its purely advisory capacity.

Australians were concerned in questions of policy rather than administration.

The minister then refers to the decisions arrived at at the last Imperial Conference, when Canada and Australia adopted the fleet unit scheme, and says the Australian agreement is the only one that has been carried out, as co-operation had been assured. It therefore becomes necessary for Canada and New Zealand to either carry out the scheme adopted by the conference or propose some other to take its place.

"We have not been given any hint either by the British government or the admiralty that they have changed their minds in regard to the wisdom of the agreement with Australia. That agreement, I may say, originated with the admiralty; the scheme for a fleet unit did not originate with the Australian government of the day or with the representatives at the

conference."

The importance of this scheme is found in the fact that it would seem to refute the allegation that both the Canadian and Australian governments of four years ago preferred building and maintaining their own navies than contribute, in ships or subsidies, to the Imperial navy, and that the admiralty had to accept such moral assistance as Canada and Australia were willing to offer.

The Commonwealth Minister of Defence concludes by saying his government was of the opinion it would be advantageous to the Empire as a whole if Australia, Canada and New Zealand could see their way clear to come to an agreement as to the defence of British

interests in the Pacific.

"Our policy is known and has the approval of the admiralty. It can be adjusted to meet any developments in Canadian and New Zealand naval policies. We hope these three countries may yet fall into line for the purpose of promoting this unity of action on the part of Canada, Australia and New Zealand."

The Vancouver Naval Conference is being considered by the Imperial authorities...

The following is from The Standard (London, Feb. 6, 1913), in which the Defence Minister of New Zealand adopts the plan advocated last summer in London by the Editor of the British Columbia Magazine.

PACIFIC DEFENCE

HON. J. ALLAN IN LONDON

Colonel the Hon. James Allan, who holds the portfolios of Finance, Defence, and Education in the New Zealand Cabinet, arrived in London last week on a mission which is

Partly financial and partly in connection with the naval policy of the Dominion.

To a representative of the Standard of Empire Colonel Allan spoke of the project of a Pacific fleet, supported by all the British countries bordering on that ocean, an idea which ne hopes to see translated into action at some not too distant date. "The idea of such a fleet is that the young British nationalities bordering on the Pacific must of themselves make provision for the defence of the Pacific, and for keeping open the trade routes across the ocean which washes their shores," he said. "The problem of control must work itself out in the ordinary process of evolution. Unless more or less direct control is exercised by the British nations which support such a fleet, however, it may be difficult to get them to take sufficient interest in the idea to carry it through. Eventually they must not only construct the ships but man them, though not immediately, of course. We can't expect the Mother Country to find ships and men to defend our seas. I hope to have an opportunity of consulting with the admit all the state of the said. sulting with the admiralty on the naval question during my visit,

"At the present time we are in process of organizing an expeditionary land force which would be ready to go to any part of the Empire where it might be needed. I am desirous of finding out while I am in this country what form will fit best into Imperial and Australian

desence schemes.

"We are very anxious to encourage in every way trade between Great Britain and

New Zealand, and will do anything to help that trade. We are also anxious to get more closely into touch with manufacturers here, so that they will know our wants, and be in a most favorable position to supply them. We have given a preference to British goods, and it is our policy to continue it. Any alteration in the future would probably be in the

direction of strengthening that preference.
"To my mind, New Zealand offers more excellent opportunities than any other country for certain classes of immigrants. Farmers and farm laborers who are industrious and ambitious, and wish to better their position, have a splendid opportunity in New Zealand. Girls who are willing to go into domestic service, and are ambitious and eager to get on, have also splendid chances. We are encouraging those kinds of immigrants, and we are going to continue to do so. We want them to work the lands that are now being left uncultivated because of the lack of labor of this type. We assist them in the matter of passages, and we shall probably make some alterations in our methods so as to bring the conditions in New Zealand more prominently before those classes of people in England."

The despatches from New Zealand, of February 28, report a strong speech of the Premier of New Zealand to the effect that while he is satisfied with the progress of the defence movement so far as the land forces are concerned, he was not satisfied with naval matters. The Balkan war had shown clearly the consequences of preparedness. New Zealand stood straight out for a British Pacific fleet, purely British and under Imperial control. It must be strong enough so that there should be no possible question as to the supremacy of British naval forces in the Pacific when the first shot was fired.





New Railways for British Columbia

Bills to provide for further provincial aid to enable the Canadian Northern Pacific and the Pacific Great Eastern Railway companies to carry their respective undertakings to a speedy and successful consummation have been presented to the Provincial Legislature of British Columbia by Sir Richard McBride.

The additional measure of assistance in the case of the P. G. E. line now building, to give Vancouver direct rail connection with the Grand Trunk Pacific at Fort George, is necessitated by the present general tightness of the money market, resultant primarily from the situation created by the Balkan war.

In the case of the Canadian Northern Pacific it is proposed, in the first instance, that the province guarantee both principal and interest of and on the bonds, debentures, stock or other securities of the company issued in respect and to cover the cost of terminals at Port Mann, New Westminster, Vancouver, including the tunnel, and the Victoria, Steveston and Union Bay to an amount not exceeding \$10,000,000, payable on April 2, 1950, and bearing interest payable half-yearly at 41/2 per cent, per annum, one-half per cent. higher than the already guaranteed bonds of the company covering construction of its main line and operations in chief in Brill's Columbia.

With regard to extensions of the Canadian Northern Pacific system not previously arranged for, it is proposed, by a second measure, to guarantee both principal and integer, the later at 4½ per cent, per annual of the company's securities to an amount not exceeding \$35,000 per mile for the following short lines of railway,

which the company is authorized and empowered to construct, maintain and operate:

A line from the north end of Westminster bridge to the city of Vancouver, eleven miles.

A line from the north end of Westminster bridge to Steveston, fifteen miles, prior authorization of construction of which is legislatively approved.

A line from near Victoria on the authorized line in a generally northerly direction to the Vancouver Island ferry terminal at Union Bay, Saanich district, eighteen miles and over.

Neither the terminals nor line extension enterprise may proceed until an indemnification agreement satisfactory to the province has been duly executed by the railway company.

Construction of each of the new short lines is to begin within six months of the passage of the legislation now before Parliament and be completed on or before July 1, 1914, unless an extension of time for cause shall have been previously granted by the Lieutenant-Governor-in-Council.

With reference to the P. G. E., it is proposed to authorize the building of the road from the Squamish River in a general northerly direction, by the most feasible route, instead of, as provided in the Act of 1912, northeasterly to Lillooet, on the Fraser River, and thence along the bank of the Fraser River, north to a junction with the Grand Trunk Pacific Railway.

The obligation upon the company to carry its main line through Lillooet is also abrogated, or rather varied to the extent that a point, in the vicinity of Lillooet, may be touched instead; these variations are regarded as having been proved necessary by the preliminary surveys of the company engineers and to cover a selection of route which will enable construction to

be more economically carried to completion, and at the same time open new areas, not otherwise served by a railway, and thus increase the colonization value to British Columbia of the Pacific Great Eastern.

To Bridge the Pitt River

THE Provincial Government is to expend \$200,000 in the construction of the substructure of the Pitt River bridge, just north of the present C. P. R. bridge. The structure is to be a combined railway and traffic bridge, and by the time it is completed in 1915 will represent an expenditure of some \$700,000. The Burrard, Westminster, Boundary Railway and Navigation Company have agreed to start work this spring on about twenty miles of railway between the works of the Western Canada Power Company at Stave River to the Pitt River bridge. The remainder of this company's proposed line, according to the agreement entered into with the Provincial Government, will be built from Mission City along the north bank of the Fraser River to Vancouver as soon as the Pitt River bridge is open for traffic

Our Growing Needs

With the development of British Columbia, and the constant increase of its activities in every direction, comes the growth of its expenditure on the various public services. The Provincial Minister of Finance, the Hon. Price Ellison, in his budget for 1913 announced that the expenditure for 1913 will be the largest on record. Thus, the civil service vote has been increased from \$899,852 to \$1,-412,666. The largeness of the increase is to a considerable measure accounted for by the fact that only the salaries of the lands branch were chargeable to the lands department. Three other branches-surveyor-general's, forestry and water-were formerly paid out of a lump appropriation, but are now included under this head. These alone make a difference of \$230,000.

The balance of \$293,000 of increase is the allowance made by the government to the civil service on account of the higher cost of living, and also includes the statutory increase and the salaries of new officials. Among the last named are those of the government agency at Vancouver, which was established last year.

Public institutions (maintenance), has been increased from \$406,700 to \$496,020, due principally to the increased requirements and the mental hospitals at New Westminster and Essendale and the colony farm at the latter place. The voted sums for hospitals and charities have been increased from \$426,200 to \$704,000.

Under the head of public works the expenditure has been increased from \$8,236,-363 to \$9,657,600, an increase of nearly one million dollars and a half. It is explained that the rapid development of the province everywhere, and especially in the parts being opened by the Grand Trunk Pacific and the Canadian Northern, is making unusual demands on the treasury. In order to have settlement there must be works and buildings, roads, streets, bridges and wharves; subsidies to steamboats, ferries and bridges and many unusual contingencies. It will be noted that there is provision for erecting provincial government buildings in London, England, for which there is a vote of \$250,000.

The appropriation for roads, streets, bridges and wharves is greater by \$900,000 than last year, the total sum being \$5,961,500. This sum includes \$150,000 for the development of Strathcona Park, which is destined to be one of the great pleasure resorts of America. Railway development is affecting the expenditure in such districts as Cariboo, Comox, Cranbrook, Lillooet and Skeena, in all of which large new requirements are being created.

The various royal commissions—laboragricultural, better terms, etc., which are undertaking most important investigations have been provided for to the extent of \$150,000.

Vancouver Leads

THE figures relating to building permits in Vancouver for the first two months of 1913 are worthy of more than passing notice. The total of these returns is \$2,995,248. For the first month of the year Vancouver swept all Canadian cities aside in her onward race for supremacy and was easily first with a total of \$1,950,044. Toronto came second with \$1,276,084, Montreal

third with \$458,600, and Winnipeg fourth with \$382,100.

Not content with outstripping her rival Canadian cities, Vancouver during the first month of the year came sixth among the great cities of the continent. Of the cities along the Pacific coast she issued permits for buildings greater than the combined building operations of Portland, Seattle, Tacoma and Spokane.

Among the permits for February in Vancouver are included the following: dwelling houses, 140; apartment and rooming houses, 11; factories and warehouses, 14; offices and store buildings, 34.

Returns from the other municipalities immediately surrounding Vancouver give South Vancouver a total for February of \$103,000 in 130 permits, as compared with \$223,387 in a total of 206 permits for the same month last year. Point Grey shows an increase for the month over the same period of last year. The total for February, 1913, is placed at \$130,000, while last year it was \$108,900. In New Westminster the permits for the month just closed amounted to \$191,735; in February of last year they were \$112,650.

Mining Claims Near New Hazelton

ATTENTION has been directed recently to the several groups of claims on Rocher de Boule Mountain, near to New Hazelton, or more correctly speaking, New Hazelton Heights.

There are the Daily West, which is only 700 feet from the boundary of New Hazelton Heights, the Ingeneca group, the Colin Munro and Dempsey group adjoining, Gervais group, and the Reservoir group owned by Halleron and Thompson. All these groups are within a mile and a half of the railway at New Hazelton and every one of them can land their ore at the railway by tram.

In the Daily West group there are four claims with good big veins carrying high-grade copper. Munro has samples taken from the surface which run \$70, including \$8 in gold. This ore is the same as found on Rocher de Boule group on the other side of the mountain and farther west.

In the Ingeneca group there are nine claims, and considerable work has been

done on them. This group was located two years ago, and it will be worked rather extensively this summer and early spring. There are seven distinct leads that have been uncovered. The main lead is fifty feet wide and the average assay gives a return of \$17.43 per ton with about \$5 in silver and 80 cents in gold. Another five-foot lead gives assays of \$24.46 with over \$8 in silver.

When this property was first located the surface outcrop gave a return of only \$1.20, but it was traced over the length of two claims. It will average five feet in width.

Then west of the Daily West group and adjoining New Hazelton Heights is the group owned by McIntagert and Ryan. On this property some very high assays were taken. There is a good showing of grey copper.

All the properties are easily reached and situated in an excellent position for shipping or for concentrators or smelters. Many mining men are coming into New Hazelton this year.

Records in Ore Production

For the week ending February 25 the ore production in the Kootenay and Boundary districts totalled 52,707 tons, a record for the year, and the Consolidated Mining and Smelting Co.'s smelter at Trail treated 9,098 tons, which is also a record for the year and one of the largest weekly totals ever handled by the company.

A third new record established during the week was by the Queen Victoria mine, near Nelson, which shipped 1,060 tons of low grade copper ore to the British Columbia Copper Co.'s smelter at Greenwood. This property's previous high record was 999 tons, produced a few weeks ago.

Dredging Plant for the Fraser

THE New Westminster district is to receive an important industry by the advent on the banks of the Fraser of the Pacific Dredging Company, which is putting down an initial dredging plant to cost in the neighborhood of half a million dollars. This will be increased as business warrants. The company has purchased nine acres of land on the Pitt River adjoining the

Coquitlam Shipbuilding and Marine Co. It will there build marine shops, marine slip and office buildings. An immediate dredging plant of three large dredges is

already available.

The powerful hydraulic dredge Beaver is the first of the company's fleet of dredges to arrive on the Fraser. This big machine has a capacity of 100,000 to 150,000 yards per month. One of the first contracts to be undertaken will be the dredging of the bar at the junction of the Fraser and Pitt Rivers.

Pottery Clay in Fraser Valley

An expert from the Anerly district of Staffordshire, the centre of the English potteries, recently arrived from England, and it is understood that efforts are being made by Mr. C. H. Stuart-Wade, publicity commissioner of New Westminster, to induce him to organize a local company and establish pottery works to develop and utilize the clay deposits of the Fraser Valley.

Some time ago Mr. Wade had some of this clay cast in the east, but without success. The expert who recently came to the city, however, unhesitatingly states this report to be erroneous, giving his opinion that the clay is of excellent quality and well adapted for modelling and baking.

Several extensive deposits of suitable clay are known to exist in the district, together with an abundance of suitable sand

and aluminum.

A Big Herring Catch

Up to the end of February the herring catch for the season at Nanaimo was reported to be one of the greatest in the history of the fishing industry on the British Columbia coast and prospects of bait being plentiful for the halibut fishermen of British Columbia are excellent. The catch up to date represented 12,000 tons of herring, valued at \$300,000.

This condition in the affairs of the fishing industry shows a marked improvement over the past two years. The greatest number of seines in operation this year is fourteen, and the most successful of the two companies has taken 2,000 tons of fish. The

run of herring at Cowichan Gap has been very good this season, and at Nanoose during the early part of the season large catches were taken. Big catches were also secured off the entrance to Nanaimo harbor.

The quality of herring taken this season is exceptionally good, and they are much larger than in previous years. There will be no closed season for herring in 1913, but fishing within the spawning area will be prohibited.

Dominion Trust Company

A Highly satisfactory record of progress is shown by the Dominion Trust Company, Limited, in its statement covering the year 1912. During the twelve months the total assets of the company increased from \$3,004,341 to \$4,973,161; the paid-up capital from \$1,500,188 to \$2,000,000; and the reserve from \$550,000 to \$800,000. Apart from these figures, the company is handling funds under will or investing the moneys of individuals to the extent of \$6,217,983, and is acting as trustee for bondholders to the amount of \$25,308,000.

Site of Lillooet's Depot

THE people of Lillooet are much elated as a result of an arrangement with the Pacific Great Eastern Railway respecting the location of a station for the town. A committee of the citizens, accompanied by Chief Engineer Calaghan of the railway, recently went over the survey, and selected a site for a depot a few minutes' distance from the centre of the town.

New Post Offices

SEVEN new post offices were established in the province of British Columbia during the month of February. They are: Cultus Lake, which will be served from Savona every Friday; East Arrow Park, which will be served from R. & A. R. P. O. North on Mondays and Thursdays; Kettle Valley, which will be served from Midway and Rock Creek daily except Sundays; Newtonia, which will be served from Trail on Tuesdays, Thursdays and Saturdays; Squilax, which will be served from C. &

V. R. P. O. train 3, daily including Sundays: Tatla Lake, which will be served from Alexis Creek monthly; Waconda, which will be served from Coquitlam daily except Sunday. The office at Pitt River has been reopened and will be served from C. & V. R. P. O. trains 724 and 14, daily including Sundays.

Three post offices have been closed. These are: Falkland, closed from March 1, matter to be sent to Armstrong; Hullcar, closed from March 1, matter to be sent to Armstrong; Reiswig, closed February 7, matter to be sent to Lumby. As from March 1, the name of the post office Slahaltkan is to be known as Falkland.

City-building in Canada

Some interesting facts about city-building in Western Canada are thus tersely put by the Hon. Robert Rogers, Minister of the Interior for the Dominion:

"Two or three hundred towns have come into existence during the past two or three years, and many more during the past year.

The station house, the blacksmith shop, the boarding house, the store of April are dwarfed in August by a hundred or more dwellings, by large hotels, by splendid stores, and a half-dozen implement warehouses, not forgetting the two or three churches and the excellent public school building; and in a few years there is a town with well-paved and electric-lighted streets, market, and all modern equipment.

There are cities of from ten to fifteen thousand people where five or six years ago there was but the bare prairie and the lone section post.

"The change of the Canadian West during the past eight or ten years has been marvellous; and it is no idle tale to say that the development in number and growth of the cities, towns and villages there in the past decade has eclipsed anything in the history of the building of a new country."

Conserving Water Power

A Good example of what can be done in developing and, at the same time, conserving water power resources is given by the Jordan River plant of the British Columbia Electric Railway Co., on Vancouver Island. Although the average precipitation over its watershed reaches the excessive figure of eighty inches, the Jordan River, like the majority of our streams, has a wide variation between summer and winter flow. The company has had the flow of this river systematically gauged since 1907 and the results obtained justified the building of large storage reservoirs for the purpose of impounding waters which would otherwise go to waste. The total capacity of these reservoirs, of which there are five, is 1,500,000,000 cubic feet, and they provide ample storage, within reasonable cost, for an ultimate maximum plant output of 24,000 h.p. to 36,000 h.p.

Preparations are well under way at the present time for the protection of the forests in the coming fire season. It is felt that the season will be one of the most difficult yet encountered, as colonization without adequate fire protection is going

Own a Farm in Matsqui, British Columbia THE LOWER FRASER VALLEY

Prairie land ready for the plough. Healthful climate. Fertile soil. An abundance of water. Good roads. Excellent transportation facilities. Thirty-eight miles southeast of Vancouver. For maps, price list and detailed information apply

JOHN J. BANFIELD

327 Seymour Street

(ESTABLISHED 1891)

VANCOUVER, B.C.

ahead at a phenomenal rate throughout the length and breadth of the province, and the wetness of the past season caused a particularly luxuriant growth of grass, weeds and shrubs, which, being dry during the coming months, will constitute a dangerous fire hazard.

According to Mr. J. T. Bealby, owner of a commercial orchard on Kootenay Lake, cherries are coming to be the most profitable product in the fruit-growing industry, although involving possibly the most labor. Mr. Bealby's cherry orchards show a gross production of from \$1,200 to \$1,500 per acre. After the first four years merely ordinary care is required, with a little spraying and trimming. Apples give an average return of \$250 per acre gross.

THE PROVINCIAL DEPARTMENT OF AGRI-CULTURE has sent a circular letter to all the boards of trade and similar organizations throughout the province, notifying them that space can be rented in the Vancouver Progress Club's chambers for \$2 per foot. A recently-concluded arrangement between the Provincial Government and the club has made this low price possible. It is expected that many cities will avail themselves of the opportunity to advertise by means of exhibits the agricultural, lumbering and mineral possibilities of the districts in which they are located.

MESSRS. A. S. RANKIN and J. W. Schneider have erected a box factory in Mission City. They will enlarge the plant later in order to manufacture sashes and doors and all kinds of Mission furniture.

THE AMERICAN CAN Co. will immediately start the erection of a four-storey factory in Vancouver for the manufacture of all kinds of cans, including salmon, fruit, coffee, spice, milk and baking cans. The company, which is incorporated in British Columbia for \$250,000, has taken over the business of the Western Canadian Can Co.

REMEMBER HOW PRINCE RUPERT VALUES JUMPED!

Make Sure of a Lot in

PORT EDWARD, B.C.

Prince Rupert's Industrial Annex

Port Edward supplies the waterfrontage sites for great industries and the finest harbor on the Pacific Coast. The townsite and waterfront have been laid out by expert engineers in such manner as to provide the greatest efficiency. Nothing haphazard or undetermined. Port Edward has already been selected by several important industries. Its success is assured. The prices of property now are as low as they will ever be and the time to buy is as soon after reading this as possible.

Lots Can Be Had Now for Less Than \$1,000 Each on Good Terms

WRITE FOR COMPLETE DETAILS AND PRICE LISTS TODAY TO

Joint Directing Sales Agents

HARRISON, GAMBLE & CO., PRINCE RUPERT, B. C.

HALL & FLOYER. VICTORIA, B. C.

In response to numerous applications for information

British Columbia Magazine

will, in connection with its development department, maintain A FREE BUREAU OF INFORMATION for intending settlers in British Columbia. All enquiries must be plainly written and addressed to the Development Editor, British Columbia Magazine ∞

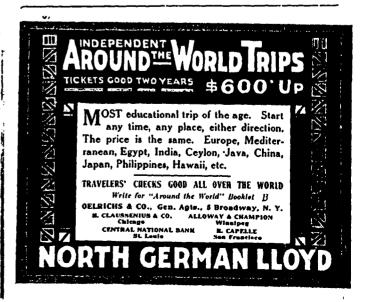
and will manufacture no less than 18,000,000 salmon cans in the next six months in its temporary factories at Vancouver and New Westminster. The company employs between 125 and 150 men.

THE BANK clearing returns for Canadian cities for the month of February include the following: Vancouver \$50,641,407; Victoria, \$13,950,000; New Westminster, \$2,170,915. The corresponding figures for February, 1912, in Vancouver and Victoria were respectively \$45,351,107 and \$12,610,627.

DR. ELLIOTT S. Rowe, commissioner of the Vancouver Progress Club, has received many enquiries recently as to the possibilities of establishing industries in Vancouver. One in particular asks about the consumption of cement in British Columbia and the number of firms engaged in its manufacture, and goes on to state that a firm is contemplating the erection of a large plant, which will employ several hundred men.

THE EMPRESS MANUFACTURING Co., LTD., of Vancouver, has purchased a site in Mission City, on which they will erect a building for the manufacture of all kinds of jams, jellies, pickles, etc. The building will be completed by June 1st.

IT IS expected that a daily steamer service between New Westminster and Victoria will be inaugurated within a few weeks and that regular freight and passenger service will be maintained.



Port Alberni, B. C.

Anyone who is at all familiar with the history of British Columbia can readily see that an investment in Port Alberni property now, whether city or suburban, will net him handsome returns before any great length of time. Manufacturing sites with the most excellent facilities may be had, there being a very large potential water-power in the falls of the Somass River, close to the harbor. On the waterfront splendid sites are also procurable at reasonable prices, these offering every advantage in the way of trackage and shipping. The C. P. R. has a fine modern depot in the town, and trains connect each day with Victoria, and thence by boat to Vancouver. Port Alberni lies at the head of the Alberni Canal, a long indentation on the west coast of Vancouver Island and at the mouth of the Somass River. It is backed and flanked by Copper and Arrowsmith Mountains, which, however, offer no impediment to entering railroads. The site of the town is a gradual slope from the waterfront, opening into the magnificent Alberni Valley, which is already extensively farmed and is one of the best districts on the Island. A short distance from the townsite are Buttles, Cameron and Sproat Lakes, some of the most beautiful bodies of inland waters in the province. These lakes offer splendid opportunities for hotels and resorts for the tourist, and the Canadian Pacific has already constructed some chalets in close proximity to the lakes and mountains. On the ocean, and but a short distance from Port Alberni, stretches twenty miles of magnificent sandy beach, the famous Long Beach, which is the resort and delight of thousands of tourists every summer. It is the intention of the C. P. R. to erect a chalet here, which alone will be a distinct advantage to the town. It is the gateway to a paradise for the hunter, fisherman and tourist, in addition to being one of the most advantageous sites for a great city ever laid out. Excellent motor roads now reach every part of the Island, and there is no difficulty in reaching the Port in a short time from Victoria over the famous Pacific Highway, for which this town is the terminus.

As to climate: The rainfall is less here than in Vancouver, which is less than in many parts of the eastern provinces. Severe winters are unknown on account of the proximity of



STANDING TIMBER, PORT ALBERNI DISTRICT

the Japan current, and the summers are i...Jescribably delightful. In summing up the advantages of Port Alberni, it is seen that it has the natural advantages of a harbor unexcelled, a townsite of ideal location, excellent water-power resources of incalculable value behind it for which it is the natural port; a busy, progressive administration which is engrossed in making it one of the most attractive towns to the homeseeker and manufacturer, as well as investor, in this fast-growing country; banks, schools, business houses, hotels, wharves, factories, railroad, shipping facilities, and in fact every component of a manufacturing and shipping centre. There can be no doubt but that for every dollar invested in Port Alberni the investor will gain manifold in the next ten years.

On Vancouver Island

In the Alberni, Nanoose and Newcastle Districts, splendid farming land at

\$35 per Acre

in 10, 20, or 40-acre tracts, on terms of one-fifth each and one-fifth each year.

This is Your Golden Opportunity

Get some land on Vancouver Island, with its delightful mild climate, productive soil, and the best market in the world for farm and garden products, and you will certainly be independent.

Good land at \$35.00 per acre will soon be a thing of the past.

Write for further particulars and information regarding this land.

CARMICHAEL & MOORHEAD, LIMITED

Offices: VICTORIA, B.C.
Franco-Canadian Trust Company Limited

PORT ALBERNI

PARKSVILLE, B.C

Rogers Building, Vancouver, B.C., Canada

Cranbrook, B. C.

Population, now close to 5,000, is rapidly increasing

CRANBROOK is a divisional point of the C. P. R., whose payroll is over \$75,000 a month.

Railways: From east and west, the C. P. R., and from middle and eastern States and Pacific coast point, the Soo-Spokane-Portland.

Great Northern, via Lethbridge, Alta., or Elko, B. C., connects with British Columbia Southern (known as Crows Nest Branch of the C. P. R.).

Kootenay Central Branch of the C. P. R. connects with all points north. And the North Star branch of the C. P. R. reaches Kimberly and Marysville districts.

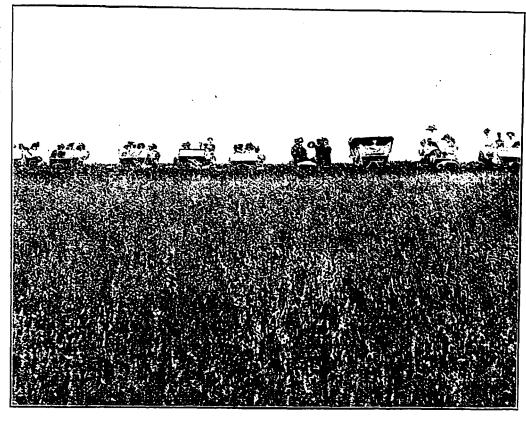
In the vicinity are twenty-five sawmills, five planing-mills.

five planing-mills, three sash and door factories, mining camps and many other industries, employing a large number of men the year around.

The climate of CRANBROOK approaches the ideal as near as may be found in Canada. The scenery is unsurpassed in variety and grandeur. Large and small game is found in abundance. It is the centre of a district 100 miles square, rich in timber, minerals, etc. From an agricultural standpoint the land in general is well suited to mixed farming.

The fruit-raising industry is as yet in its infancy owing to the fact that up to the last few years the chief attention was given to mining and lumbering. However, experiments have proven so satisfactory, and the markets are so great, that land is rapidly increasing in value.

The different points in the district are connected by first-class roads, in fact the roads



ACTOS IN A TILLO OF GRAIN NEAR CRANBROOK

are so good that Thomas N. Wilby, while here on his pathfinding trip from coast to coast, said: "The roads out of this city look as if they had been gone over with a flat-iron, they are so smooth."

This city has a municipal hall, new \$75,000 post office, six churches, three banks, three theatres, large hospital, two rinks, several places of amusement, five schools, large Y. M. C. A. building, Masonic Temple, I. O. O. F. and K. of P. halls, and eight hotels with excellent accommodation. Also electric lighting, gravity water and sewer systems. Magnificent natural power facilities await development. Large mercantile establishments and wholesale houses meet the needs of a rapidly growing community.

The C. P. R.'s new transcontinental line from Winnipeg to Vancouver will go via CRAN-BROOK and the Crows Nest Pass.

Fruit and Vegetable Land

Near the big markets, in a delightful climate, a mile and a half from the prosperous, growing CRANBROOK, B. C., is what the sensible farmer is looking for.

There is a 3,000-acre tract at APPLELAND that is just waiting to grow the best fruits

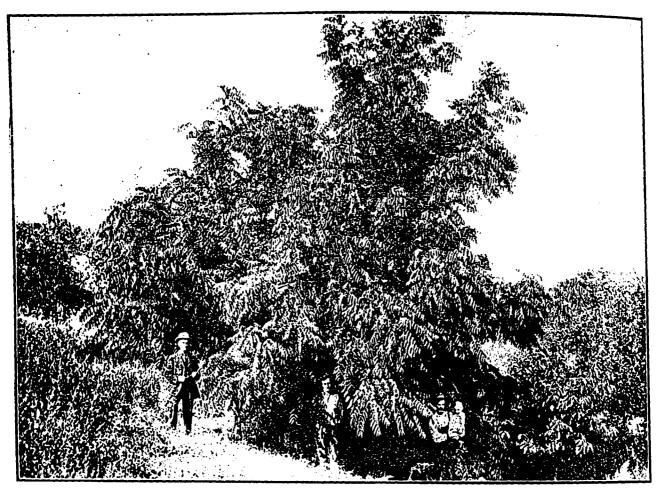
and vegetables in British Columbia. All perishable products can be disposed of readily. Your product picked at noon is eaten by the consumer for supper.

Ask us about the 5-acre tracts for \$500.00; one-quarter down.

THE CHAPMAN LAND & INVESTMENT CO.

CRANBROOK, BRITISH COLUMBIA

Creston, B. C.



EIGHT-YEAR-OLD BLACK WALNUT TREE, CRESTON, B. C.

CRESTON is a new town in the heart of Kootenay Valley, commonly known as "Creston Fruit District," and comprising that portion of land lying between Kootenay Lake and the International boundary line.

The valley is twelve miles wide and covers an area of over one-fifth of the genuine fruit dands of British Columbia. One of the most pleasing features of the valley—especially to old residents of the province who have visited Creston for the first time—is the mild climatic conditions in winter and summer. Kootenay Lake never freezes up, wild fowl can be seen on the water all winter, and there are no damaging winds or summer frosts.

The fruit-growers are cheerful and appear satisfied that they have located the home of all homes in the valley. Besides having a cheerful home, they have also a cheerful revenue from berries, tomatoes (that ripen in the open fields from July to late in October), apples, pears, peaches, apricots, nectarines, plums, prunes and vegetables.

While not one per cent. of this great block of land is under cultivation, yet we can easily see where Creston farmers are sure to win, being especially favored with a mild climate, rich soil, no irrigation required, the production of high-class fruit and vegetables, favorable transportation facilities, and one day nearer the great market than any other fruit district in the province.

The present population consists principally

of Anglo-Saxon origin.

INVESTMENTS AND HOMES IN CRESTON FRUIT DISTRICT

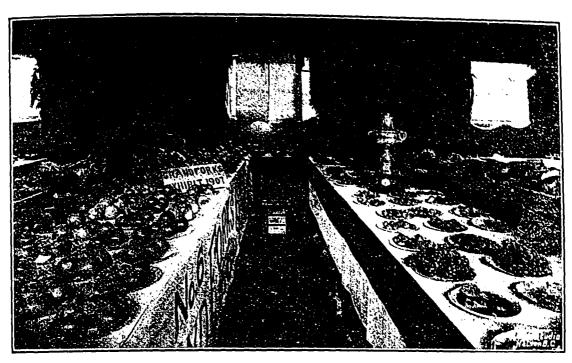
Are Safe, and Sure to Increase in Value

R. LAMONT, CRESTON, B.C.

Buys and sells Creston Fruit Land in large or small blocks

REFERENCE: Canadian Bank of Commerce, Creston, B. C.

Grand Forks, B. C.



GRAND FORKS' FRUIT EXHIBIT

WITH seven separate lines of three railways, each built and in operation, radiating from this city, Grand Forks has already held an unrivalled position on the railway map of British Columbia. With further assured railway importance in its creation as divisional point and joint terminal by the Canadian Pacific and Kettle Valley Railways, Grand Forks is not only on the eve of great development but will continue to hold in an unmistakable way the premier position in the interior of the province from a railway standpoint, and is destined to be one of the hubs of the West.

In consideration of the concessions granted by the city of Grand Forks, the Canadian Pacific and Kettle Valley Railway Companies agree to:

Make Grand Forks a joint passenger terminal and divisional point for the Canadian Pacific and Kettle Valley Railways.

Commence construction forthwith, within the city limits, of a round-house of at least a tenstall capacity, a machine shop and all other necessary buildings and plant for maintenance of same; and maintain same for a period of ten years.

Establish a joint passenger station on site of present Kettle Valley Railway depot, on Third street, and make necessary additions thereto to properly care for transportation business. Maintain such depot for a period of ten years.

Run all passenger trains through the city over the present route of the Kettle Valley Railway for a period of ten years.

Establish an industrial spur for delivery of carload freight at convenient point within a quarter of a mile of the Kettle Valley depot.

The by-law further requires that actual construction work be commenced within three months and be completed within one year.

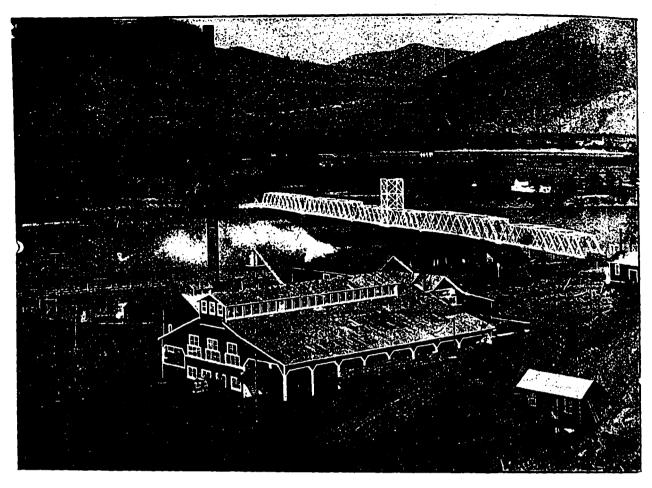
INVESTMENTS: Sound, safe, profitable INVESTMENTS. Grand Forks, Central Interior point of British Columbia, and Kettle Valley, the ideal fruit and agricultural district, afford exceptional opportunities to investors. FRUIT LANDS, TOWN LOTS, MORTGAGE LOANS, TIMBER, MINES. Enquiries solicited.

Boundary Trust & Investment Co. Ltd.

Established 1901

GRAND FORKS, B.C.

Kamloops, B. C.



BRIDGE OVER THOMPSON RIVER AT KAMLOOPS

SOME FACTS

KAMLOOPS was started one hundred years ago as a fur trading post.

Kamloops has a mayor and six aldermen. Kamloops was incorporated in 1893.

Kamloops is recognized as one of the best kept cities in the West.

The derivation of the word Kamloops is from the Indian language, meaning "Meeting of the waters."

Eight years ago no man thought Calgary, Edmonton, Lethbridge, Saskatoon, or Regina would become large cities. Their location favored them, and they are among the leading cities of Western Canada today. Kamloops was nicely chosen as a location, being the centre of a number of fertile valleys branching out in various directions, with roads running north, south, east and west, and steamboats running east, west and north. For these reasons Kamloops will surprise the most sanguine of today.

Kamloops is conceded to have as fine a climate as can be found.

Kamloops' streets are carefully looked after both in the business and residential districts, and in consequence are always in a sanitary condition.

Kamloops is recognized as the commercial centre of southern British Columbia.

EVANDER McLEOD

Real Estate, Insurance, Investments

References : Dun's

KAMLOOPS, B.C.

Imperial Bank of Canada

Write me about Improved Irrigated Lands at \$30.00 per acre RANCH AND FRUIT LANDS MY SPECIALTY

Kelowna, Okanagan Valley, B. C.



Not only does Kelowna grow the best apples in British Columbia, but we also produce that whole-hearted enjoyment of outdoor life, assisted by our surroundings, as depicted above. This makes for the best that is in mankind.

All of these things we are anxious to share with thousands of others. Washington and Oregon fruit lands are three and four times as expensive as ours. This year's net result to their growers has been far less than ours have received. In open competition with American apple exhibits, Kelowna has taken the best prizes.

Come and see for yourself. For any information or illustrated booklet write: G. A. Fisher, Secretary Publicity Department, Board of Trade, Kelowna, B. C.

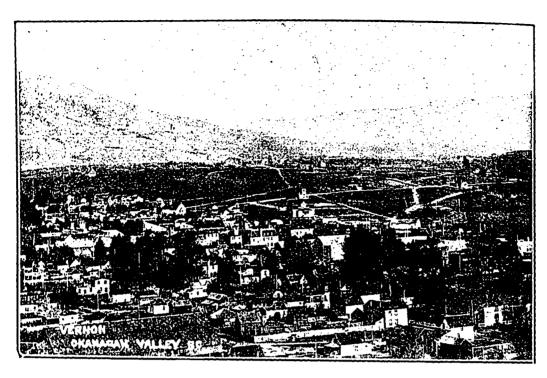
BELGO-CANADIAN FRUIT LANDS CO.

First-class Fruit Lands in the Kelowna
District for Sale

KELOWNA B. C. 290 Garry Street WINNIPEG

11 Place Leopold
ANTWERP

Vernon, B.C.



BIRD'S-EYE VIEW OF VERNON

VERNON is the principal city and centre of the Okanagan Valley, with a population of over 3,000 people, and is located about 45 miles south of Sicamous Junction on the Canadian Pacific Railway, with which there is daily train communication. Fruit-growing, mixed farming, dairying and poultry-raising are the principal industries of the district.

The average net profits of an apple orchard in this district are about \$200 per acre. The cost of a ten-acre orchard, with the land purchased at \$250 per acre, will amount to about \$4,500 at the end of five years, and thereafter paying returns may be reasonably expected.

Vernon is equipped with all the necessities of modern life. There are six hotels, a modern lighting system, an ample supply of pure water and an excellent public school system. The Canadian Northern Railway has practically completed the surveys and will shortly start the construction of a branch line from Kamloops, on their main transcontinental line, to Vernon, Lumby and Kelowna, and according to charter it will be completed on the first of July, 1914; and have also acquired the waterpower rights from the Couteau River and will also be in a position to supply electric power in a year or so.

The present post office and customs house are jointly located in a fine new building erected at a cost of over \$50,000 on the main street.

A new court house and government offices are also in course of construction at a cost of about \$200,000 and when erected will be one of the finest buildings in the interior of British Columbia.

R. FITZMAURICE

Fruit and Farm Lands in Vernon District, Okanagan Valley; also Vernon City Property Financial Broker Real Estate
Notary Public
Fire, Life, Accident and Automobile Insurance

Guarantee Bonds

Cable Address: "Fitzmaurice"

Box 15

Phone No. 46

VERNON, B.C.





135



"KODAK"

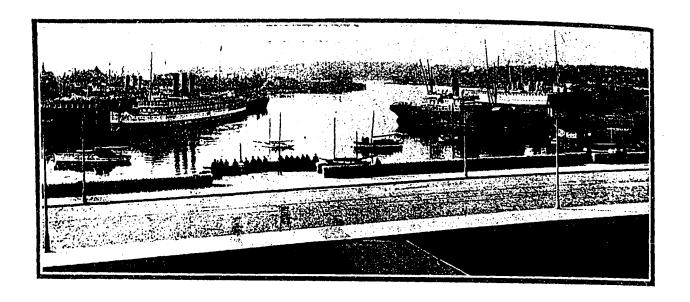
Is our Registered and common-law Trade Mark and cannot be rightfully applied except to goods of our manufacture.

If a dealer tries to sell you a camera or films, or other goods not of our manufacture, under the Kodak name, you can be sure that he has an inferior article that he is trying to market on the Kodak reputation.

If it isn't an Eastman it isn't a Kodak

CANADIAN KODAK CO.

Toronto, Canada



Victoria, British Columbia, Canada

The Leading Port in the Dominion

THE City of Victoria, B. C., Canada, the Capital City of the province of British Columbia, is the first port in the Dominion of Canada. That is one reason why the Dominion Government is equipping it with the present-designed splendid outer harbor. When it is recorded that during the six months of the first fiscal year ending September 30, 1912, a total of 5,747 vessels, foreign and coastwise, in and out, came and went from local wharves, the magnitude of the shipping trade from Victoria is impressed upon even the most unthinking.

Not one of the eastern ports an show anything like the record of shipping as does Victoria. And the increase in the shipping grows steadily and surely. Examine these figures.

1909-10—Total number of ships arriving and departing, 7,254; total tonnage, 4,826,769.

1910-11—Total number of ships arriving and departing, 8,475; total tonnage, 5,673,697.

1911-12—Total number of ships arriving and departing, 9,778; total tonnage, 7,207,274.

While the coastwise trade is advancing rapidly, it is in the foreign trade that the greatest advances are being made. Last year the foreign trade of Montreal, inward and outward, totalled 845 vessels, with 3,385,951 tons, as compared with 2,834 vessels with 3,522,851 tons at Victoria. At St. John the foreign shipping inward and outward in the same time was 2,442 vessels, with 2,012,425 tons; while Halifax had 2,344 vessels in and out, foreign, with 3,111,535 tons. Freight landed by foreign vessels at Victoria has trebled in the last three years.

TAKE NOTICE, MANUFACTURERS, INVESTORS, RAILWAYS, STEAMSHIP LINES, SHIP-BUILDERS AND CAPITALISTS—ALL ROADS AND ALL PORTS LEAD TO AND CONNECT WITH VICTORIA.

For free booklet, fully illustrated, on Canada's Greatest Port, address VANCOUVER ISLAND DEVELOPMENT LEAGUE, Victoria, B. C. Room 44.

Shoal Harbor, Saanich Peninsula

WE have several eight to twelve-acre pieces on this beautiful harbor, cleared and in orchard, all ready for that summer home. Splendid view. Ideal boating, fishing and hunting. Safe anchorage and sandy beach. The loveliest spot on Vancouver Island. The price and size of the plots and natural location make this an exclusive summer home colony. There are only fourteen plots and two of these have been sold to wealthy residents.

Western Dominion Land and Investment Company, Limited Fort and Broad Streets, VICTORIA, B.C.



Taylors INFANTS-DELIGHT Toilet Soap

Filtered oils of cocoanut and olive — these form the basis of Infants-Delight Toilet Soap.

Can you imagine anything purer, more delightfully cleansing, or better for a delicate skin?

Even the perfume is antiseptic and healing. Ask your dealer for a cake — it's 10c. every-Where.

JUHN TAYLOR & CO. LIMITED Toronto

OTHEST AND LARGEST PER-PUBLIERS AND TOILET SOAP MAKERS IN CANADA

COMOX VALLEY

Vancouver Island

The Valley of Opportunities The Oldest and Best Farming District on the Island

For the Settler

MPROVED farms, logged off lands, bush lands, sea and river frontage, small tracts suitable for fruit and poultry, on easy terms. Good climate. Good markets.

For the Investor

OWN lots, business chances. The C. P. R. and C. N. R. building here; the two largest coal and lumber companies in British Columbia spending millions in development work. Get in line with them and make their money make

you money. We want your enquiries. Write us now.

CAMERON & ALLAN

The Comox Valley Specialists COURTENAY, B. C.

The Key Note

of the

Mutual Life

of Canada

For Forty-two Years

HAS BEEN FAIR DEALING WITH ITS POLICYHOLDERS, ITS AGENTS AND THE CANADIAN PUBLIC.

PAST ACCOMPLISHMENTS AND NOT FUTURE PROMISES HAVE BEEN ITS SURE PASSPORT TO POPULAR FAVOR.

ASSETS \$18,750,000

CONSULT YOUR OWN BEST INTERESTS BY CALLING ON OR WRITING

WILLIAM J. TWISS, Manager

317-319 Rogers Building VANCOUVER,

The PEACHCLIFF FRUIT FARMS



Okanagan Falls British Columbia

offer the investor the very best opportunity to get the choicest fruit land, in the healthiest climate in Canada, at the lowest price, before the railway arrives. The Great Northern Railway is surveyed by it, and the station will be within three-quarters of a mile. There is a daily boat and mail service at present. There are about 800 acres for sale, in lots from one to ten acres, or would prefer selling in block. Land is irri-Good water gated. records.

Price from \$10 to \$150 an acre for unplanted land, and \$250 up for planted land. Part is planted, and some of it bearing. Two houses on it.

A. J. SMYTH

976 Seventh Avenue W.

Vancouver, B.C.

NOTICE

Patrons of the Pantages and Orpheum Theatres will be presented with a popular song hit every week free of charge.

At considerable expense we have contracted with Harry L. Stone, composer of "Vancouver Town," the latest song hit, to furnish us with the latest song and instrumental music every week. Watch Pantages and Orpheum programmes. If you don't attend these playhouses, write us enclosing two-cent stamp for free copy.



Theatrical Printing and Publishing Company

Phones: Seymour 4108 and 824

409 Dunsmuir Street

Forty-third Financial Statement

OF THE

MUTUAL LIFE OF CANADA

Head Office

Income

WATERLOO, ONTARIO

Disbursements

For the year ended 31st December, 1912

CASH ACCOUNT

Net Ledger Assets, 31st December, \$17,301,687.83 1911	Death Claims \$440,453.96 Matured Endowments 335,867.00 Surrendered Policies 212,530.57 Surplus 277,631.29 Annuities 9,403.62 ————————————————————————————————————				
\$21,002,252.84	\$21,002,252.84				
BALANCE SHEET					
Assets	Liabilities				
Mortgages \$11,051,716.34 Debentures and Bonds 5,058,053.96 Loans on Policies 2,516,639.88 Premium Obligations 10,523.08 Real Estate 229,351.59 Cash in Banks 280,961.83 Cash at Head Office 2,151.01 Due and Deferred Payments (net) 433,711.10 Interest due and accrued 488,236.01	Reserve, 3½ p.c. and 3 p.c\$16,161,753.55 Reserve on lapsed policies on which surrender values are claimable 5,294.93 Death Claims unadjusted67,360.67 Matured Endowments unadjusted 4,566.00 Present value of amounts not yet due on matured instalment policies 114,317.81 Dividends due Policyholders 8,247.43 Deferred Dividends 19,570.79 Premiums and Interest paid in advance 17,043.94 Taxes due and accrued 18,505.01 Due for medical fees and sundry accounts 15,063.81 Credit Ledger Balances 38,864.97 Surplus, 31st December, 1912 3,600,755.89				
\$20,071,344.80	\$20,071,344.80				
Audited and found correct. J. M. SCULLY, F.C.A. Auditor. Waterloo, January 28, 1913.	GEO. WEGENAST, Managing Director.				
New business (Canadian) written in 1912 \$11,121,424 Assurance in force, December 31, 1912 77,921,144 Assets, December 31, 1912 20,071,345 Surplus Government standard, Dec. 31, 4,388,361 Surplus carned in 1912 838,875	Increase over 1911 \$1,094,050 Increase over 1911 6,900,374 Increase over 1911 1,209,498 Increase over 1911 735,238 Increase over 1911 136,818				
Surplus earnings for the year amounted	to 31.16 per cent. of premiums received.				
WM. J. TWISS, Manager, Suite 31	8, Rogers Bldg., Vancouver, B.C.				



WHITE ROCK BEACH

Read This Over Carefully Then Call On Us

Greatest offer ever made in Canada. Building lots 33x124 feet free for your subscription to the British Columbia Magazine for one year, and small fee to cover cost of deed, etc.

LET US EXPLAIN THIS GRAND OFFER TO YOU

The British Columbia Magazine is looking for more circulation, and we feel sure this grand premium lot offer will secure us many hundreds of new subscribers. That's all we want.

WHITE ROCK HEIGHTS BY SEA

A place where YOU and PLEASURE and PROFIT can meet. This beautiful summer resort—on Great Northern Railway—only sixty brief minutes away—Sea Beach, Bathing, Boating, Fishing, Hunting, Woods and Streams.

British Columbia Magazine

PREMIUM DEPARTMENT
525 Pacific Building 744 Hastings St. W.
Vancouver, B. C.

British Columbia Magazine,
Premium Dept., 525 Pacific Bldg.
Vancouver, B. C.

I read your offer of free lots in White Rock Heights in the British Columbia Magazine. Let me know more of your offer, without obligating myself in any way.

Name .	 			• • • • • • •
Address	 			

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Is

Hard

To

Beat



Is

Hard

To

Beat

■ You can take your choice of any of these Pianos or Player-Pianos and be positively certain of getting the best value for your money in the country. Here they are:

Steinway & Sons Pianos
Mason & Hamlin Pianos
Brinsmead Pianos
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Vancouver Island, B. C.

Canada

Its Principal Cities Outside of Victoria

In all the various districts of Vancouver Island the tokens of development and progress continue to multiply. Railway activities and the steady work of extending and improving the island roads and highways have a great deal to do with this, and the constant influx of settlers to the country communities, the towns and the cities continues to widen the sphere of action both as to urban and agricultural potentialities.

The Alberni District, with the promising and energetic little cities of Port Alberni and Alberni, is progressing with sure strides, and the incoming of the Canadian Northern Railway into the neighborhood is the latest move which is adding impetus to the already live condition of affairs. Not the least important feature of this district's future is the coming opening of Strathcona Park and its world-heralded beauties. That thousands of visitors will come through in this way to reach the park is assured, and that numbers of them will fall in love with the district and remain there is also an undisputed fact.

Nanaimo is fast coming to the front because of its geographical position, fine harbor, and vast natural resources. It has always been a great coal-mining centre, and yet this is in reality only one of its commercial factors. The lumbering and fishing industries, and more lately, manufacturing, promise to rival the mining interests in time to come, for year by year the trend of capital to Nanaimo and the signs of the financial zodiac point to very large industrial developments at this point. Nanaimo is now and has for some years past been agitating for a tramway system. That this will be installed does not admit of a doubt, and it will go far towards metropolitanizing the city. Its harbor is a splendid one, and its shipping trade considerable. A few years hence and this centrally located and thriving place will have gained greatly in population and commercial importance.

Cumberland and Ladysmith are both up-to-date, virile and go-ahead little cities, remarkable for their civic spirit and systems of municipal government. Each has rivalled the other in the matter of enthusiasm for the betterment of existing conditions, and the result has been of the greatest possible benefit to the citizens. Both are in the heart of the coal measures of their districts, and Ladysmith has a fine harbor, thus affording rail as well as sail transportation for its mining output, her situation on the main line of the E. & N. Railway giving through connection with all island points on this line. Cumberland connects by rail to Union Bay, and is moving energetically for further rail service by way of the Canadian Northern Railway. Their future is a bright one, and founded on solid advantages.

Duncan and Sidney are centres for agricultural districts, Duncan being especially favored as the trading metropolis of the famous Cowichan Valley. This recently incorporated little city has one of the finest general stores in Canada, a flourishing Creamery and Egg Association, and its reputation for the finest of butter and eggs is terminus of the Victoria and Sidney Railway, may yet become an important terminal manufacturing point as well as an agricultural centre. All of these cities have their every possible manner.



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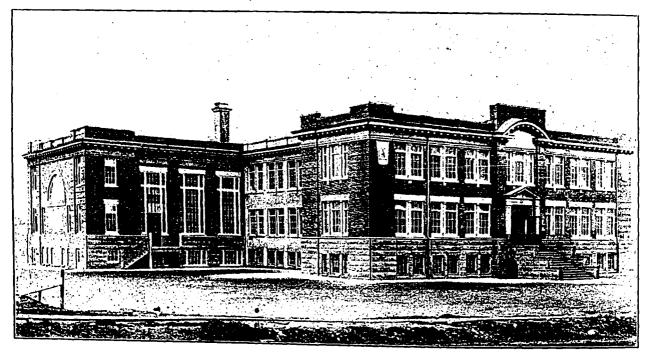
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In addition to the university the Angless.

October, 1913.

In addition to the university the Anglican, Presbyterian and Methodist Church bodies maintain denominational schools for theological students, and McGill University College' gives instruction in the first three years in arts and two years in science along the lines pursued at McGill University in Montreal.

There are ten private schools for boys and girls where special attention is paid to music, languages, and matriculation subjects prescribed by the leading universities of Canada, Great Britain and the United States.

The School Board of Vancouver has jurisdiction over a normal school, a model school, two high schools, five manual training schools, and twenty-seven public schools. In addition there are five public school and four manual training school buildings included in the programme of construction for 1913.

During 1912 there were enrolled 12 392 public

During 1912 there were enrolled 12,393 pupils

in the schools of the city, exclusive of private schools, and 340 teachers assisted by 67 special instructors were employed. One of the important departments of school work in Vancouver is the night school system. During 1912, 1,972 pupils and 62 instructors were in attendance in this work, and a vast number of technical and scientific subjects were included in the curriculum. By midsummer accommodation will have been provided for class-room and teaching purposes aggregating an attendance of 20,000. The chief difficulty that has confronted the Vancouver School Board in past years has been the problem of providing adequate accommodation for the rapidly increasing enrolment of city children of school age.

vancouver's population has been increasing at the rate of 10,000 a year for the better part of a decade, a fact to which the increasing demand for educational facilities bears striking testimony. There are many obvious reasons for this remarkable growth. May we send you fuller particulars able growth. May we send you fuller particulars under separate cover? Write Department C.



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why it is a safe place to invest, and that is why we are recommending it to you. We are not handling townsites, although some of them have merit. We are telling you of a city—a city with a present and with a big future. We want you to investigate. The more thorough the investigation the more you will be convinced that this is the place.

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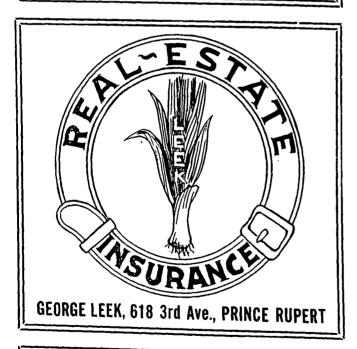
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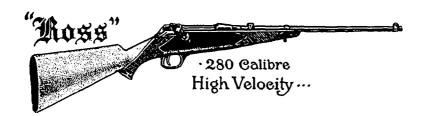
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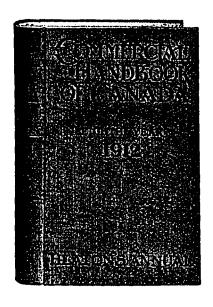
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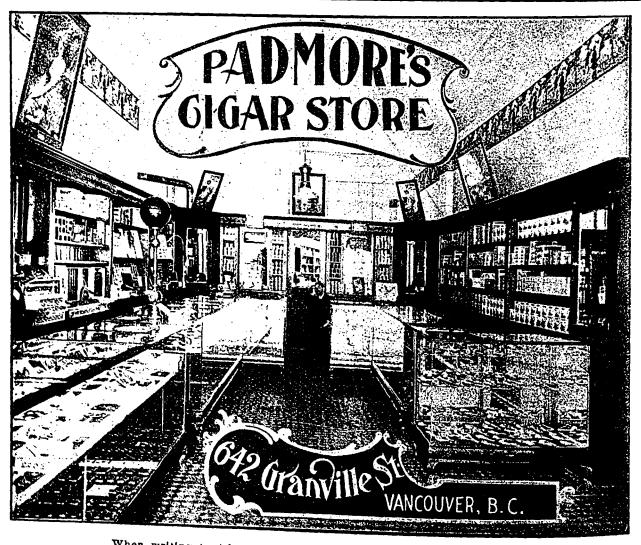
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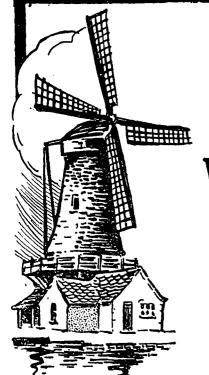
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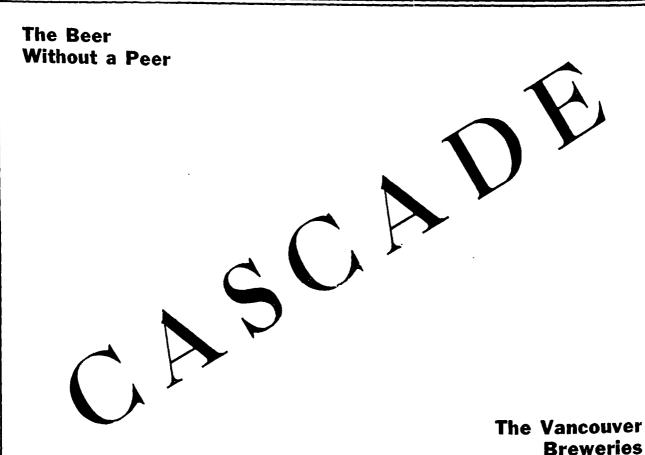


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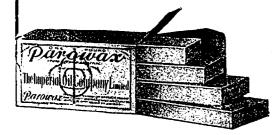
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