

PROPOSED NEW GOVERNMENT BUILDINGS, VICTORIA, B.C.

SPECIAL SUPPLEMENT OF

THE COMMERCIAL,

RELATING TO

VANCOUVER ISLAND,

The Adjacent Coast and Northern Interior

— OF —

BRITISH COLUMBIA.

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JUNE 24th, 1893.

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British Columbia Supplement.

WINNIPEG, JUNE 24TH, 1893.

INTRODUCTORY.

THE following pages deal with a portion of British Columbia which heretofore has never had comprehensive treatment in the form attempted in this volume. A good deal has been written in a desultory and general way about the "resources" and "possibilities" of British Columbia as a whole, and about the cities of the Coast. Numerous "write ups" have appeared at so much a column, which, however, have aimed largely to appeal to personal vanity, and depended for success upon advertising patronage. As business ventures these publications no doubt were profitable to the publishers, but as efforts to enlighten the outside public on the natural wealth of the country, pictures of business blocks, biographical notices and vague generalities, are not calculated to accomplish the objects for which the public support such undertakings. The cities and their leading citizens have had as much attention paid to them as is desirable. They have been, if anything, too extensively advertised.

In the present volume the object has been to present a fair, readable exposition of the resources of a section of the Province heretofore largely neglected and on lines uniform with the policy of a commercial paper such as *THE COMMERCIAL* is, the special field of which has been to deal with the resources entering into the industrial and business life of the country. While not leaving out of sight entirely personal factors and individual interests, an honest effort has been made to deal practically and somewhat in detail with the subjects treated of in a way that will be useful to those

endeavoring to make up their minds about this country, or are seeking reliable information regarding it.

It is impossible, without assuming an expense altogether unjustifiable in view of the possible return, to deal with the whole of the Province in this way at once; so it was decided to confine the description to Vancouver Island, the coast as far north as Alaska, including adjacent islands; and the Northern Interior. Last year the special number of *THE COMMERCIAL*, on the Kootenay county, was received with so much satisfaction by the general public and contributed so largely to the knowledge concerning that country that a request was made for a special number dealing similarly with the districts just referred to, and its publication has been undertaken with the sincere hope that the effort, which has been made at the considerable expense of both time and money, will not be less useful or highly appreciated.

The indications are that enterprises of great moment will be shortly set on foot whereby this vast region will be ultimately brought into touch with the world's commerce, whereby the fisheries will be developed, minerals and construction materials brought into requisition, electric communication extended up and down the coast, the extensive interior plateaux colonized and tapped by railways, and cities, towns and villages not now dreamed of will spring into life.

There are few people who thoroughly appreciate the aggregate wealth of this now almost wholly unorganized territory. It is with justifiable pride that the people of this Province point to the richness of the Fraser Valley, Old Cariboo, the two Kootenays, and the districts included in Yale, but there is a country in British Columbia greater in area than all these put together, out of which, from coal, timber and fish, arise the principal revenues of the Province at present, and for mineral and agricultural possibilities is destined to rank with the great producing areas of this continent.

UP THE COAST.

Description of the Grandest Holiday Trip on the American Continent.

IF a business man, worried by the ceaseless demands on your attention and mentally and physically exhausted by close application to office work; if a student whose cheek has paled under the light of the midnight oil; if a man of leisure whose routine of social responsibilities and pleasurable pursuits has produced *ennui*; if a lover of sport and travel keen for adventure and your spirit restless for fresh trophies and a new arena; if a pupil in nature's school, eager to witness the operation of her laws in other and wider forms; if an artist in whose soul burns the desire for subjects of sublime beauty and massive grandeur; if a collector of rare and interesting objects; if you belong to the *litterati* and are thirsting for fresh fields and unhackneyed topics; if plunged in statescraft and wearied for the nonce of the ceaseless jar of opposing parties; if a professional man with brain and nerves tired and overworked; if no matter who—and can afford two or three weeks holidays, let us invite you to a pleasure excursion the attractiveness of which among the many opportunities advertised for this season, is unequalled for novelty, healthfulness, interest and picturesque outlook—the trip *par excellence* of the American continent.

Come for a two weeks voyage along the west coast of British Columbia to Alaska, free from the cares and conventionalities of every day life and breathing the very air of heaven itself you burst like the Ancient Mariner, into an unknown sea filled with untold beauties and sail over a bosom of waters unruffled as glass; among myriads of islands; through deep, rugged rock-walled channels, past ancient Indian villages, mediæval glaciers, dark, solemn pine-clothed shores, snow-capped peaks, dashing cataracts, yawning mountain gorges, spouting monsters and sea whelps—away to the North a thousand miles almost to mix with the ice-bergs that once floated under the sovereignty of the Czar of all the Russias, but now drop peacefully from ancient glaciers over which the American eagle holds watchful guard—a continuous panorama in which the most beautiful, the purest, the rarest, the wildest and the grandest forms of nature are revealed.

All this may be enjoyed under auspices of ease and comfort equal to that of your own home. After seeing the sights which Vancouver and Victoria afford, board the steamer and away.

It may be well to remark here, parenthetically, that for some years there have been excursions run to Alaska and well patronized, especially by wealthy Americans, but strange to say for 600 miles north of Victoria no stoppages have been made, the long stretch of coast deeply indented and skirted by innumerable islands, the whole constituting one continuous archipelago, has practically remained a blank to tourists, except in so far as the rapid and most direct course northward has admitted of passing glimpses. All the tourist and guide books jump over this wonderful section of the route with even greater care than the Alaska steamers do, leaving an unaccountable hiatus

in the description. Alaska has been the first, last and only feature of interest; whereas Alaska, with all the halo that surrounds it from an excursionists' point of view is barren compared with the attractions of 600 miles and more of adjacent coast. What does Alaska possess that British Columbia has not? Do tourists seek Haida totem poles, if so the Alaska Haida is not more remarkable for his art than his cousins of Queen Charlotte Island. For marine ideals, landscape and mountain views, startling and impressive natural effects, Indians and their relics, or interest attaching to the natural resources of the country Alaska may be described as in the *diminuendo* of what finds its greatest perfection along the British Columbia Coast.

STARTING ON OUR JOURNEY.

The starting point is Victoria and one ship, *The Islander*, a fast, luxurious yacht-built steamer, the finest on the coast and admirably adapted for excursion trips. The passage from Victoria to Vancouver affords only an inkling of the scenic effects that will be obtained for the next 14 days. Leaving the inner harbor the boat swings out into the Straits of Fuca and you get the first smell of the ocean, westward for 50 miles. To the right is passed the historic island of San Juan. To the left Vancouver Island is in view. The Strait of Georgia is crossed at its greatest width and after San Juan is a succession of beautiful low lying and timbered islands. Midway is Plumpers Pass, always a point of great interest and beauty and where a fine summer hotel is being erected. Passed Point Roberts, the mouth of the Fraser River, Pt. Grey and through the Narrows into Burrard Inlet, Vancouver City is reached in about five hours easy sailing. Right under the bold, high bluff of Brockton Point promontory is the remains of the old Beaver, the first steamer on the Pacific Ocean, now gone to pieces on the rocks, the prey of teredo and relic hunters.

From Vancouver the steamer takes a straight cut of 30 miles across the Strait of Georgia, passing Nanaimo and Wellington, where the coal mines of British Columbia are located. From here for the whole length of Vancouver Island the steamer hugs its shore and here too, begins that maze of islands that continues in more or less bewildering profusion as far north as you go, gradually increasing in size and character from low lying, heavily timbered to high, bold and rocky. The Strait of Georgia continue about 75 miles. The mainland shore to the right is indented with numerous inlets or arms of the sea. Howe Sound, Jarvis Inlet, Toba Inlet, Bute Inlet and so on, up which if there was time to enter wonderful beauties would be disclosed. There are Indian reservations and logging camps and settlers found all along. Up Jarvis Inlet is an extensive quarry of excellent slate. Texada, 30 miles long, low and timbered with bold rocky shore and traversed by a ridge of rugged trap mountains, is on the mainland side. It contains important iron, marble, lime and mineral deposits. To the left are Hernly and Denby, picturesque islands, over these are seen the mountain ridges of Vancouver Island; the peaks of which here are the highest of the range. Point Holmes on the left, a bold promontory is passed. From here to Comox, the coast is low and heavily timbered inland, and here lies one of the most important coal measures of Vancouver included in the Dunsmuir railway belt. Opposite, in the direction of Desolation Sound, are numerous islands—Hermando

Cortez, Maria, and so on—upon some of which are settlers and logging camps. Over in the distance, on the mainland, rise up the Cascade Mountains, range after range.

SEYMOUR NARROWS.

Now you creep closer to the Vancouver shore and presently enter the celebrated Seymour Narrows, once in which by reason of the high bluff shores you are shut out from the view on either side. The Narrows proper are about 800 yards wide and about $1\frac{1}{2}$ miles long, though Discovery Pass, to which it is the entrance, is about 23 miles long. At flood the tide runs from six to twelve knots an hour and at ebb from six to eight, the flood and ebb running equal intervals of about six hours each with about ten minutes still water. Valdes Island, lying at the entrance to Bute Inlet and forming the right shore of this channel, is a finely timbered island, with a number of logging camps on it and some well-to-do ranchers on the benches back from the shore. The Evelatan or Back Narrows, of almost equal note among navigators, on the other side of the island, is also very rapid and dangerous as well. It was at this point where it was once proposed to bring the line of the C. P. R. through the Yellow Head Pass down Bute Inlet and connecting with a line of railway to Victoria by bridging Seymour Narrows, the present proposed route of the British Pacific.

Just before entering the Narrows is a village of Evelatan Indians, once regarded as the worst of all the British Columbia tribes and said to have been cannibalistic. Passing the mouth of Campbell River you look up the fine Menzies Valley and over westward in Vancouver Island are towering snow clad peaks extending for miles. Sailing by Menzies Bay you enter the Narrows already described which after an exciting run widen out into Johnston Straits. Along here, on the Vancouver shore, are some beautiful beaches and snug coves and bays, and on the other side a group of small rocky inlands—Helmcken, Harwick, etc.—on the timbered benches of which is to be found the finest Douglas fir in the Province. The famous Bickly Bay logging camp is located on the back channel on Harwick Island.

After having sharply rounded Chatham Point the steamer gets in closer and closer to Vancouver Island and the shores become more and more precipitous. Along Johnston straits westward you steam past the mouth of Salmon River, where there are rapids and overfalls with heavy sea. The straits widen out to about three miles and now you are directly between the shores of Vancouver and the mainland, the only place where they approach each other directly. This approximation continues ten or twelve miles, both shores being thickly wooded. On the mainland side are Bienlensop Bay and Port Neville. The former is a good harbor with rocky picturesque shore. The latter is an inlet seven miles long, up which first-class building granite is found. On the Vancouver shore, which presents a bold rocky front, is the mouth of Adams River, just opposite which commences Crocroft Island, running twenty miles parallel with our course. At the south-east end of it is Port Hartney, a fine harbor.

Myriads of islands, large and small, will be seen all along the mainland side as far as Cape Caution, locally known as the Broughton archipelago. The next point of interest on your left is Beacon Cove, which in

addition to being a good harbor has an excellent milling site. A marble quarry has been located here. Back of Beacon Cove, extending to the great Nimkish Lake is an extensive valley. Nimkish River which is the outlet of the lake into Broughton Sound, Nimkish Lake and Kammutseena River, which empties into it, all afford the finest trout fishing in the Province. This district is a veritable sportman's paradise, now much frequented for big game—elk, deer, panther, etc. while the scenery is simply enchanting. From this point the centre of the island is easily accessible.

ALERT BAY.

Five miles above Beacon Cove we arrive at our first stopping place, Alert Bay on Cormorant Island, just opposite the mouth of Nimkish River. It is very prettily situated, and is a favorite calling place both up and down. Here are an Indian village with a population of 150 or so, whites included, a salmon cannery, a sawmill and two stores, an English Church mission and an industrial school under way. The run of salmon has been poor for several years and the proprietors have turned their attention to canning clams which abound in the neighborhood.

The first thing which strikes the tourists eye on rounding into Alert Bay is the Indian Burial Ground, on the south point on the right hand entering the bay. It is fantastically decorated with streamers and flags of different colors and various kinds of grave fences and epitaphs. The next thing which particularly attracts a stranger's eye is a fine totem pole, about 30 feet high, beautifully painted and carved, which guards the entrance to the present chief's house. In all probability it was purchased from the Hydales.

Cormorant Island possesses coal formations. Near it are several rocky islets upon which discoveries of silver and copper have been made. Farther up is passed Haddington Island, all one quarry of the finest freestone, and still further on is Malcolm Island, agriculturally the best piece of land on the coast. At this point in our trip we are beginning to lose the companionship of the Douglas Fir, which has been abundantly with us from the outset, finding instead forests of hemlock, spruce, cedar, cypress, birch and alder, which prevail more or less for the rest of our journey. Opposite Malcolm Island is Port McNeill, boasting a commodious harbor. The country all along here comprises coal measures and for 25 miles through to the west coast. Three miles beyond Broughton Straits we enter Queen Charlotte Sound, where the ocean swell is already noticeable, skirting the north-east coast of Vancouver Island we put in at the historic Fort Rupert, 21 miles beyond Alert Bay.

FORT RUPERT.

It consists of the old Hudson's Bay Fort, and a large Indian village, situated on a long open beach of shingle and shells, which gives it a white, snowy look. There are no wharf accommodations and consequently it is only in cases of absolute necessity that steamers call here, in which case communication has to be made with the shore by boat or canoe. On two occasions this huge village has been shelled and laid in ashes, together with all the property and canoes belonging to it by gunboats sent to demand the surrender of murderers among them. The Chief, Captain Jim, himself, was only saved by the entreaty of a trader, and ever after order was preserved.

Twenty miles beyond Fort Rupert we enter Galiano Channel and Galiano Island, and leaving behind Cape

Scott, the most northerly point of Vancouver Island, pass out into the open sea, where for the first time we receive the full sweep of the Pacific Ocean, and sniff the salt sea breeze. In the next two hours the steamer has to buffet the long rolling sea from Queen Charlotte Sound, and heading north-westerly in the direction of Cape Caution, we encounter a low-lying, rocky shore, where are dangerous sunken reefs. Cape Caution, around which an abrupt turn is made, being appropriately named. This brings us to the entrance to Rivers Inlet.

During the time since starting up the Straits of Georgia, we have not omitted to note the scenery, which though not on so magnificent a scale as that yet to come, has been nevertheless peculiarly charming. It has been one continuous subject for the artist, in which rare and elusive effects have entered—marine sketches, land and water combinations, here depressed and there bold and broken shores, backed by recurring benches densely timbered, and away over all, far off and high up have risen majestically the tops of the coast range of mountains ridging the entire length of Vancouver Island on one side, and the mighty peaks of the Cascades of the mainland on the other, giving, on the whole sweep of vision, that indefinable charm which "magnificent distance" alone can lend. Leaving out the few tide rips, which you experience with delight, you have been gliding, not propelled, over water as smooth as glass, and at times your impressions have been dream-like, now weird and solemn, and again exhilarating. Occasionally, as you have crept up into the twilight shadow and stillness of a deeply forested shore or impending bluff, you could not help a "shivery" feeling that is irresistible, yet making you afraid and think of ghosts. Sea fowl innumerable—gulls, ducks, geese and others—have kept you company, and occasionally, sometimes frequently, the attention of the party has been diverted to a spouting whale, a swarm of porpoise, and even land animals which are to be seen once in a while from the deck. To Rivers Inlet, our next objective point, we will have covered some 350 or 400 miles, and our promises so far have been more than fulfilled.

Now we have entered a distinctly new phase of our trip. We are going north with the ocean and scattered islands to the left of us and the mainland on the right. Leaving Cape Caution and passing Smith's Inlet, where two canneries are located, a few miles on we enter Fitzburgh Sound, and steam up Rivers Inlet. This was named Rivers Canal by the great Vancouver. Our friends will have recognized in the names of the Islands passed some time ago—Hermanto, Cortez, Texada, Valdes and so on—historic memories of early Spanish explorers who held the coast conjointly with the British, but as usual the christening, which remained with British ascendancy, was done by Vancouver a hundred years ago.

RIVERS INLET.

Rivers Inlet runs up about 25 miles. At the entrance and for several miles up the sides of this Inlet, which is only one to one-and-a-half miles in width, are steep and covered with dense forests of spruce and cedar. At the head of the Inlet the sides mount up abruptly for about 2,000 feet, and are almost bare of verdure through the action of landslides and avalanches. In this Inlet are three canneries, a saw mill and a station, formerly used as a salmon saltery. One peculiarity of the salmon run here is that it never, or very rarely, fails. At Nassau, on the mainland side of the channel, Messrs. Drany & Shalbolt are building a new cannery with a capacity of 8,000 cases per annum. Rivers

Inlet is a strikingly pretty place. We travel from here up Fitzburgh Sound and enter Bentinck Arm, upon which are situated the Bella Coola Indians. There is an Indian village here. John Clayton, a trader, and family reside here and keep a store. He has, as well, a large stock ranch. There is a large extent of agricultural country here, and the Bella Coola Valley affords the easiest and best route into the Chilcotin country. From here you pass into Dean's Canal, where the celebrated Bella Bella Indians reside. They have a large, beautiful village, with several stores and a resident missionary. This was the old Fort McLaughlin, of Hudson's Bay Co. days. Leaving Bella Bella, we sail into Millbank Sound, and entering Graham Reach, passing along the inside of Princess Royal Island, which has high, bluff, rocky shores, and past which we reach the mouth of the

GREAT GARDNER INLET.

The sail up this discloses the most wonderful scenery on the route. The shores are thousands of feet high and almost perpendicular, lending a grandeur and impressiveness to the scene almost indescribable, while magnificent waterfalls and glaciers are to be seen. Perhaps there is not on the whole western coast of America scenery which quite equals it in its way. The great Capt. Vancouver, who explored this channel over a hundred years ago, describes its beauties most graphically. At its head is situated Price's cannery, and the Kitlupe tribe of Indians, after which the inlet is sometimes called. Almost parallel with Gardner Canal is Douglas Channel, the extension of which is known as Kitimat Arm. At the head of this arm there is considerable good land and a pass into the interior. Kitimat Arm is similar in the massiveness and beauty of its scenery to Kitlupe Inlet, but differs in the character of detail. The shores, which are wooded with hemlock, spruce and cedar, are not so abrupt, but are bounded with lofty ranges of mountains running parallel to each other.

Two tribes of Kitimatos reside at the head of this arm, in all about 200 souls.

Going out of Gardner's Canal we enter Grenville Channel which is 90 miles long, passing along Pitt Island. Here the scenery is extremely picturesque, with adjacent bare walls of rock and high distant peaks. At Lorne Inlet, off the channel, is an Indian station and a cannery. The general effect of so many mountains rising one above the other, renders Grenville passage one of the most beautiful landscapes on the coast, and is equalled only by Klemtoo passage.

It was omitted to state that on Gribbell Island, at the mouth of Gardner Inlet, is a very fine hot spring. Through Grenville Channel, on Pitt Island, China Hat is passed. This is an Indian village, with the usual missionary and trader.

Lowe Inlet is the residence during fishing season of the Kitkahtla Indians, whose chief is the far-famed Shakes. Chief Shakes has a monopoly of the fishing here, and with a seine net in the bay, often hauls in from 2000 to 3000 salmon a day, for which he gets seven cents a piece. We have already passed Hartley Bay, where there is a sawmill and an Indian village. And now we are at the mouth of the Skeena River, and take Telegraph passage, passing the well-known Standard cannery.

THE SKEENA.

The Skeena River, the mouth of which we have entered, is the largest river on the British Columbia coast, except the Fraser, and takes its rise several hundreds of miles in New Caledonia, near Babine Lake.

It is the route into the great gold country of Omineca. The scenery up to Hazelton and beyond is not unlike that of the Fraser, and in some places quite equals it. Its rugged canyons and fierce rapids require skilful navigation. It is to the Forks of the Skeena, where one of the alternative surveys for the C. P. R. was run, and here in '66 the Western Union Telegraph Co. reached with a line which was to connect overland, by crossing Behring Straits, with a Siberian line, when the news of the Atlantic cable being laid was received and the scheme was abandoned. We, however, only explore the mouth of the wonderful river as far as Port Essington. In it are located seven canneries and three saw mills, the timber used being cedar, cypress, hemlock and spruce. Another cannery is being erected, and all of them are thoroughly equipped. They have an annual capacity each of about 12,000 cases. There is an Indian village here and a church. The view from any point here is very fine, and there is a great deal to interest tourists. The river is prolific with salmon, and is said to drain rich mineral deposits of gold and coal. The shores are heavily wooded with mountainous back-ground, and potatoes and berries of all kinds are very plentiful.

Leaving the Skeena we pass out into Chatham Straits, and rounding the Isimpshean peninsula, soon arrive at one of the most noted places on the coast, Metlakahtla, a very prettily situated Indian village about twelve miles from the Skeena.

METLAKAHTLA.

This at one time used to be a veritable beehive, under the management of Rev. Mr. Duncan, a missionary sent out in early days by the S. P. G. Society of London, England. He had a sawmill, a woolen mill, a cannery, a brick yard, a boys' home, a girls' home, an industrial school, and many other means of keeping the Indians employed. But the Home Society began to think he was getting too rich himself and sent out Bishop Ridley (the Bishop of Caledonia), to take charge and look after the Society's interests. This caused a strife between two factions which arose, some siding with Duncan and others with the Bishop, and ended in Duncan leaving with his adherents for a new settlement some 30 miles above Fort Simpson, called "New Metlakahtla." Now since his departure "Ichabod" may be written over the cannery, the brickyard and the sawmill and woolen mill. They are all shut down. The boys' and girls' homes are still running and the Industrial School is doing good work. But in fishing season the beautiful little village is almost deserted, the Indians going down to the Skeena to work in the canneries, and when that season is completed many of them leave for the hop fields in Washington. They have, if anything, been a little too well educated, one effect of it being to make them artful and conceited.

Their houses, until lately, were all built in one style, a lofty two-storey building which, if divided up, would contain about eight or ten rooms, and each one has a nice little garden patch laid out in fruit trees and vegetables, which have been much neglected of late, but nevertheless, gooseberries, raspberries, currants and strawberries thrive here wonderfully. The Church of England, built by Mr. Duncan, is a beautiful piece of work, and is the largest and most Anglican appearing in the province. The Indians are very musical, and have a brass band, and in almost every other house an organ. The church organist is an Indian. An excellent hospital has recently been established here. Metlakahtla is situated on the great Isimpshean peninsula, inhabited by the once mighty Isimpshean nation

of Indians, of which those at Metlakahtla and Fort Simpson are notable examples.

FORT SIMPSON.

A few miles farther north, the chief of the Hudson's Bay Co.'s trading posts, is a populous Indian village situated on an excellent harbor, which was once also an aspirant as a terminus of the C. P. R. by way of the Forks of the Skeena. Even now there has been an incipient boom in town lots, looking in the direction of another railway. The Hudson's Bay Co. have a large store here where anything can be procured from a needle to the latest pattern Winchester rifle. They have also wharves about a quarter of a mile long and a warehouse at the extremity. The harbor here affords excellent anchorage at any depth up to 30 fathoms, with good mud and sand bottom. The rise and fall of the tide is from 18 to 20 feet, and on this account considerable of the shore is dry at low water tide. These Metlakahtla Indians are first cousins to the Fort Simpson's, with whom they intermarry. The latter, however, are Methodists. They have a church, two school-houses, a fire hall, two stories with a tower, a two-storey drill hall, a sash and door factory, a shingle mill, worked by water power, a turning mill, worked by water power, a boys' home, a girls' home, also an excellent mission house and a hospital is in course of construction. They have also an excellent brass band which discourses sweet music of an evening from the tower of the fire hall.

Bidding good-bye to Fort Simpson, we sail past the mouth of the Naas River, where there are several canneries and imposing views, across Chatham, around Cape Fox, into Dixon's entrance and into Alaska. On the way up we sail by Tongas Islands, the home of the Tongas Indians, who are allied to the Isimpsheans. In early days the natives knew nothing of boundary lines. Tongas is where Mr. Duncan has established his celebrated mission, "New Metlakahtla." On the way up we visit Sitka and Juneau, and circle around among numerous channels and enter several noted glacier bays. This is the land of the midnight sun and a great attraction to American tourists, but for diversity of scenery, for beauty, and for interest, apart from icebergs and glaciers, it is incomparable with the great route just passed over, wholly in British Columbia waters and in Canadian territory.

THE NORTHERN INTERIOR.

An Immense Country of vast Agricultural, Pastoral and Mineral Possibilities.

AWAY to the north of Cariboo, in itself one of the richest gold countries in the world, and a pastoral district of importance, there lies an immense territory, the agricultural capabilities of which through recent survey and exploring parties have been to some extent ascertained. The Chilcotin plateau and the country north of it, including the Blackwater and Nechaco valleys, form the greater part of the region discovered by Sir Alexander McKenzie one hundred years ago, named by him New Caledonia. Geographically it answers to the interior plateau of Idaho, Nevada and Utah. In fact, it is part of that great plateau, which extends almost uninterruptedly from the Gulf of Mexico, through the United States and British Columbia, to the northern boundary

of the latter. Its general elevation here, Mr. Poudrier in his report says, may be taken as 3,000 feet above the sea level, though several valleys are much lower.

THE CHILCOTIN COUNTRY.

In 1890 the first exploratory survey was made by A. L. Poudrier, D.L.S., who in his report sums up the whole region by stating as follow:—

Taking the compact tract of good land on the Nechaco valley, Fraser and Nito Lakes, and the numerous tracts mentioned in the course of this report, there are about (3,000,000) three million acres fit for agricultural purposes. Of that, one-third, perhaps, is in prairie, or so open that it may be classed as such in practice; the rest is nearly all composed of level benches, partly covered with a small growth of poplars. The soil all over is of the richest loam with clay subsoil. In some parts, at high elevations, summer frosts may do a little damage at first, as the Indians say; but, I believe, that if the seeds were put in as early there as they should be, and if there was any clearing done, that the danger would be over. The Nechaco valley seems to be free of that danger. It is remarkable that everywhere on the black pine plateau, where the fire has passed two or three years in succession, the forest gives place to fine pasture. I have reason to think, and it is also the belief of Dr. Dawson, that, later on, the whole of that plateau, which covers millions of acres, will some day become useful for cattle raising. Even the high plateau on the local mountains, like the It-cha, Il-gachurz, Quanchus, Fawnies, offers rich summer pasture on their summits, where the fire has passed. The first thing needed to open this country, is a wagon road from Quesnelle. No doubt the country will be thoroughly settled only when there is a railroad, but I think a wagon road would open the Nechaco valley in the meantime. There is room for thousands of settlers, and with its good land, abundance of water, firewood, abundance of game and fish, a rather large population of miners and Indians at short distances, making a local market for produce for the first years, I believe no other place in the interior, in the Northwest Territories, or in British Columbia, offers better promises of success for the farmer or cattleman. There would be no extraordinary difficulties in building a railroad or wagon road into the country from Bute Inlet by the Homalko, or from Bella-Coola or Bentinck Arm, by the Bella-Coola and Salmon Rivers. A route to Lac des Francais was also found practicable by the C. P. R. engineers from Dean Channel and the Skeena, but I believe the route by Bute Inlet and the East Homalko to be the most practicable.

The timber in no part of the country is large enough or in sufficient quantities for export, but is everywhere sufficient for local wants. Douglas fir, spruce (*Engleman*), black pine, cedar, small balsam, aspen, poplars and juniper would serve all purposes which the needs of construction suggest.

The part covered by the exploration in question, and lying between the Fraser River and the Cascade Range, is watered by three principal rivers, running from west to east, and falling into the Fraser. First, the Chilcotin to the south, then the Blackwater or Westroad, and, last, the Nechaco. Besides these, several rivers take their sources on the edge of the plateau, and run their courses through the Cascade Range to the Pacific Ocean, amongst which are the two Homalkos, the Kle-na-kiene, the Bella-Coola, the Salmon River, and branches of the Skeena.

It covers an extent of country 30,000 square miles in extent. Agricultural and pastoral areas exist on Twist Lake, Tatla Lake, Chilcano River, in the Chilcotin River valley, on Alexis Creek, the Fraser River, on the Blackwater, on the Nasco River, the country drained by the Euchinico, the plateau between Chilcotin and Blackwater, the great Nechaco valley, the Chillaco River, the Stuart River, Lac des Francais and Fraser Lake, the Eudako, the country between Blackwater and Nechaco, along Telegraph and on the Fawnies and McMillans. The greater part of the country described affords excellent grazing, while there are large tracts of agricultural land, very rich, and capable of good crops. In the Chilcotin valley proper there is considerable land taken up, and a number of settlers, principally cattle ranchers.

Mr. Poudrier's report, 1890, gives these sections more in detail. For instance, he speaks of—

The grazing land, which includes all the northern bank of Tatla Lake, a narrow strip on the southern shore, and that large extent which joins to the two heads of the Homalko, and, further west, the source of the Kle-na-kiene and the Bella-Coola, where pieces of bunch grass and an extent of hay meadows are plentiful is quite considerable. * * * The grass is very luxuriant. * * * The shore near the lake is fringed with small poplars, willows and service berries. * * * Bunch grass covers the side hills. * * * Peavines and other grasses are very abundant in the open wood, and promise good grazing. * * * The Chilcano valley, for nearly the whole way to the junction with the Chilcotin proper, a distance of 28 miles by the trail, is of a very uniform appearance. The up hills, though partly wooded, offer good summer grazing, and there is a large number of ponds, some of which could be utilized to irrigate the low lands at points where it would be too costly to irrigate from the Chilanco. From the junction with the Chilanco to Cheziout lake, a distance of about twenty-five miles, the river is much like the Chilanco. The width is over half a mile; the sides, in terraces are generally covered with luxuriant grass, the bottom land is hay meadows or low land, partly covered with willows, easy to clear. * * * The course of the Puntzee, about nine miles before reaching the lake, shows much good grazing land and meadows. * * * At the mouth of Alexis Creek Messrs Hewer and Nightingale have a garden, where they grow all kinds of vegetables. Further down, on the south side of the river, there are several ranches where all sorts of farm produce are grown. * * * The upper plateau, sometimes at a height of nearly 4,000 feet, is formed of lovely prairies, on which large bands of cattle are already feeding. Messrs. Drummond and Beaumont, near Risky Creek, have a large cattle ranch; they also raise grain on a 300 acre farm. * * * At the point where the Chilco falls into the Chilcotin there are about 2,000 acres of very desirable farming land.

Of the Fraser River he says: The soil is very rich, and everything can be grown, even tomatoes. Ten to fifteen thousand acres would be fit for first class farms. Of the Blackwater: The grazing is good all the way, with an abundance of hay meadow. Nasco River: Eight thousand acres about the quantity of land fit for farming.

Between the Euchinico to the north, the Blackwater to the south, and the McMillan Mountains to the west there is a wide plateau of an average elevation of 2,800 feet. The northern part of that plateau is generally broken and timbered; but a great portion of the southern part 150 miles in area, I estimate, forms a splendid grazing ground. It is a gently rolling, park-like country, covered with bunch grass and quantities of other rich food plants. In conjunction with the flat lands along the Blackwater, it will some day make a fine ranching country. It is cut up by small creeks, ponds and meadows. The vast extent of country from the head of the Fraser River to the head of the Chilcotin River, forms a vast timbered plateau; it is in general very level.

THE NECHACO VALLEY.

This is the most important district of the Chilcotin plateau, and for agricultural purposes the best. It is intersected by a large river of the same name, which has numerous tributaries and extensions, the greater part of which is surrounded by rich, low land. There are large extents of prairies and meadows and the rest is partly open, the vegetation consisting of thickets of small asper, poplars and balsam poplars. The timber covering this vast extent of country which by some has been estimated as high as 5,000,000 acres, is ample for all purposes and consists of Douglas fir, engelman spruce, balsam spruce, birch, poplar, cottonwood and timber, all of it large size. The grasses are varied and excellent, the lakes and streams are filled with fish and all kinds of game plentiful. The climate here is less severe than in any part of the northern interior, with light snow fall, and no summer frosts. Irrigation is unnecessary and so far as is known all kinds of crops can be grown. This valley is already attracting settlers and over 100 were located this spring.

The needs of this country are woods, and above all railroads, when it is found to become the most fruitful section of British Columbia.

MINERALS.

Colors of gold are to be found in every stream. Of course, to the south in Cariboo something like \$40,000,000 of placer gold has been taken out and to the north in Omineca considerable quantities, but the Chilcotin country has not been extensively prospected. Copper ore was found in the Homalko river and Lac des Francais lignites have been discovered in a number of places, and iron in several localities.

Pure cinnabar in small quantity has been found on the two branches of the Homalko, Quartz bearing free gold and sulphurets was discovered on the west branch of the Homalko, and on the Chillaco river. On the lower Chilcotin and on the Fraser River, alum shale and "feather alum" were found in large deposits; also native arsenic.

Two veins of galena were located on the Chilcotin River. Limestone of good quality is found on the Lower Chilcotin. Limestone is also found in numerous other places. Some of the volcanic tuff near the Fawnies Mountains and the McMillans would very likely be useful as a base for hydraulic cement. A tuff on Lac des Francais, found in large quantity, is supposed by Mr. Dawson to be fit for the manufacture of porcelain.

THE BULKLEY VALLEY.

This river which gives its name to this valley rises not far from the head waters of the Endako and flows into the Skeena at Hazelton. Mr. Gauvreau, who explored this section of New Caledonia says:

The general length from the summit, between the watershed of the Endako to the Skeena, is 110 miles. The valley is wide all the way, as much as twelve miles in places. A very large portion is open prairie, with luxuriant grass, and, where it is timbered, it would be easy to clear. The soil is good, and though may be exposed to summer frost, mostly all grain except wheat could be grown, and vegetables of all sorts. No doubt that the timber once removed, the danger of frost would be greatly reduced. As grazing land it cannot be surpassed, and where the timber has been burnt, the numerous varieties of grasses growing show that the area of pasture could be largely increased.

Mr. Poudrier, who made a more detailed survey in 1892 says:

About one-fourth of the whole valley, which averages from five to ten miles in width consists of prairie and open land. If a few settlers once begin to put on cattle or improve the land, they will be re-inforced by new comers, who will be ready to assist them in making openings in the woods, especially in a country where clearing is so easy, and where it can be done completely by fire. The open country is very rich in grass of different species; as much as three tons of hay can be cut to an acre, and in some places as many as four. More than half of the country surveyed and the continuation of the valley beyond the limits of the survey is covered with a growth of small aspen poplar, balsam poplar, small birch, service berry. The hills are generally covered with coniferous species where Engelman spruce, black pine predominate. In the hollows and along the streams and lakes the bottom-wood, alders and different species of willows are very abundant, with a small quantity of cedar. The soil all through the valley is very rich. On the level land, which covers the greater part, the soil is composed of from two to five feet of alluvium, underlain with a clay subsoil. On the hills the depth of detritus is not so great, and the lower strata is either sand or gravel; but at any rate it is rich enough to form a luxuriant pasture ground."

In regard to climate Mr. Poudrier says:

The spring begins in April, and at the end of that month the snow is all gone; that is, if we can trust to the information obtained. The summer is very hot and rather dry, but the proximity of the mountain, often bring light summer frosts. According to the flora of the country, this valley should have a climate equal, if not superior, to the neighborhood of Quebec, and I know by experience that the summer season is longer. Beyond the head of the Bulkley River but in the continuation of the same valley on the Endako River, there is an Indian who has a ranch of over thirty acres under cultivation. He raises barley, oats, potatoes, turnips, carrots and other vegetables in abundance, and that with a very defective method of farming, still the elevation of his land is over 3,000 feet above the sea. I am led to believe by what I have seen of the few experiments of farming carried on by others and by myself, and by a careful examination of the flora of the country, that in well chosen ground with a southern aspect and by selecting good wheat—as red fife or, better, ladoga—that a good result could be obtained. As for barley, oats or common vegetables, there would be no difficulty in almost any part of the land now surveyed. There is plenty of timber for the use of settlers, cedar and balsam, poplar, birch, juniper, maple, wild cherry, red cedar and hemlock. Berries, like the service berry, high bush cranberries, wild cherries of three species, wild currants, gooseberries, strawberries, raspberries, are all most prolific and plentiful. Outcrops of coal occur at numerous points on the river. Different assays made give an average in carbon of about 58 to 62 per cent., leaving little ashes, of a reddish colour, and it makes a firm and fine coke. Iron nodules are abundant, holding about 40 per cent. metallic iron. In the mountains thin veins of argentiferous were found. Gold in small quantities was taken from the river and its tributaries. Platinum is also said to exist there. Alvalcaine tuff, useful as above for hydraulic cement lies in large beds in the upper part of the main river. But, concludes Mr. Poudrier: The value of the Bulkley Valley, besides its good land and grazing, lies in the fact that, when the time comes for the American people to run a railway to and through their territory of Alaska, this valley offers the best route; in fact the only route west of the Rockies, where a railway is possible in that direction. There is a road already prepared by nature from the Fraser to the Yukon River, where great engineering difficulties are unknown, where no mountains have to be crossed, and where the belt of land, though narrow, is rich and already half cleared. When this time comes, then the immense coal field above mentioned, which has no superior in the Province, will be a source of wealth.

THE OMINECA COUNTY, ETC.

There is considerable good grazing land at the mouth of the Endako river and in the valley of the same which is somewhat extensive.

Mr. Gauvreau's explorations in 1891 extended to Susquwah Valley and Babine trail, Babine Lake, the Frying Pan Pass, Echweher Portage, North Tallah Lake, Driftwood River, Middle River, Tremblay Lake, Thatcher River, Stuart Lake, Stuart Lake to McLeod's Lake, Crooked River, Giscome Portage, Fort George, Pack River, Parsnip River, Nation River, Finlay River, Manson Creek, Omineca River and New Creek.

In all this country there is large quantities of grazing land and luxuriant growth of grasses, but there is no large area suited to general agricultural purposes. "Although," Mr. Gauvreau says, "No doubt that should mining operations be carried out with vigor, extensive tracks could be utilized for hardy grains and vegetables. Cattle could well be kept with the existing pasture, and the area could be materially increased." It is next to mining prospects, gold having been found in all the country described and particularly Omineca, a grazing and stock country. The winters are severe, however, and the summers hot, with frosts.

NAAS AND SKEENA COUNTRY.

In addition to all this large extent of agricultural and pastoral land described in the foregoing, there are still extensive areas to be considered, a district large enough to make a province in itself rich and varied in resource.

Reference is made elsewhere to the land adjacent to the coast at the head of Gardner's Inlet, which has several arms, to the Kemand River and Pass and the Kitimat arm and river, to the mouth of the Naas and Skeena and the Isimpsean peninsula between. This

country, which is the opening to or verge of a very important interior plateau, has fish, salmon, halibut and oolochan principally, and timber of great value. Douglas fir, Engelman spruce, cedar, red and yellow, hemlock, poplar, cottonwood, birch, alder and maple are more or less plentiful.

There are a number of important industries, consisting principally of salmon canneries and saw mills in and around the mouth of the Skeena, which, next to the Fraser, is the most important waterway in the province. Port Essington, at the mouth, is an important trading and fishing village.

R. Cunningham & Son, the pioneer traders of the northern coast (excepting, of course, the Hudson's Bay Company). The senior of the firm has been 30 years engaged in trading, 20 years of which he was at Essington. They own two canneries, one here with a capacity of 1,500 cases, and another at Lowe Inlet, 10,000 cases. They have started, at Refuge Bay, on Portier Island, a dog-fish oil factory, with an annual capacity of from fifty thousand to seventy-five thousand gallons per annum; and a fish freezing establishment at Port Essington, with a capacity of from twenty to thirty-five tons per month. They also operate a saw mill at Essington, run by water power, having a capacity of from twelve thousand to fifteen thousand feet per day. It is principally employed in sawing box lumber for the canneries. There is, besides, a considerable local demand. This summer they intend building another mill having a capacity of twenty-five thousand feet per day. Two small steamers are owned by them in connection with their own business. This year they have undertaken another enterprise—a hotel. It will be two stories, and have twenty-five rooms, and be very complete in every respect as a tourist and commercial hotel. As a tourist resort it should be very popular, as the shooting and hunting is the best north of Nanaimo. In connection with their extensive business, which is the largest on the coast north of Victoria, they have a general branch store at Hazelton, which is a very picturesque spot on the Skeena, about 150 miles from Essington. The Hudson's Bay Co. has an important trading station here, as well as throughout the whole northern interior. The section of the coast included in the foregoing has made very rapid progress recently, a number of homesteads have been taken up, and white families are going in.

It is impossible in a brief description to do justice to this region. The main branches of the Skeena, upon which are large tracts of arable land, the Lakelse, Kit-sum-galum, the Limoetz, the Kitseguecla, the Bulkleys, the Kispyox, the Babine and the Bear rivers.

The Naas is an important stream, falling into the sea at the junction of Portland Channel and Observatory Inlet. The Cascade Cannery, owned by R. P. Rithet & Co., Victoria, is at the mouth.

A man named Gray, says Mr. Poudrier, has there (a few miles from the mouth of the river) a very good farm and some cattle; he raises almost everything one could wish for in such a climate, and his wheat and hay are first-class. He speaks highly of the quality of the soil. And further on—A large extent of good farming land could be utilized, not only along the Naas but all the way to the Skeena through that valley, and all along its continuation.

Sizing up the whole region, Mr. Poudrier says:—

There are a large number of good pieces of land, heavily timbered, along the coast, which could be utilized, but it is very hard to get the acreage with any certainty. The valley of the Skeena, with all its islands, the benches above Quatsalix, near Hazelton, the valley of the Kispyox, the upper branches, without counting the valley of the Watson-kwa, and the part included in the second part of this report, after very careful computation, would give 800,000 acres of farming land, this more or less wooded. The Naas River, its banks, its islands, the valleys of its higher branches, including the valleys of the Tsi-ax, to the Skeena, of the Shigaltin to Kitwanga, and the prolongation of the valley from the Tsi-ax would give an approximate area of 700,000 acres of farming land. Of this, three-fourths is wooded, and the rest is either clear, or covered only with light thickets. Of the higher land exposed to the summer frost, and where wheat could not be grown, and high pasture land, there are several scattered areas. Around Kit-wan-coole the higher benches on the upper Skeena and Naas; the high plateau lying between the different branches of the Naas, and between this watershed and Stickeen, can all be used as grazing land and classified as such. A million and a half (1,500,000) acres would be about the true estimate of the grazing lands.

THE MINERALS.

The whole chain of the coast range from Dean's Channel to the mouth of the Stickeen is composed of crystallines, granites, schists and gneiss, highly metamorphized. On the Naas and Skeena Rivers, vast beds of sandstone and argillites are developed. The tertiary and coal-bearing cretaceous are well developed in different places, especially on the Watsonkwa or Bulkley River.

Large quantities of gold were formerly found in Omineca, the old placers being to some extent worked yet, which is proof of the precious metal's existence there. The cost of getting into that country was too great to make anything but gold in abundance pay. During the expedition in 1891 gold colors were found in several branches of the Skeena, in the Omineca, the Lower Parsnip and a tributary of the Naas. Specimens of rich quartz, bearing free gold and gold in sulphurets, were collected on the upper branches of the Naas, Skeena and Omineca, on New Creek, Manson, Beaver and Germansen creeks, in the Omineca and Finlay Rivers and on a local range of mountains between the Skeena and Naas.

Silver bearing galena, assaying high, was discovered throughout the same country. Native silver in considerable quantities has been taken from Vital Creek and Omineca River.

Native copper and very rich veins of copper were found on Kemano River, in Punt-il-denay Pass, on the Lakelse, on the upper Naas, and many other places. Cinnabar was located in the pass from Kemano to the Interior.

Iron ore in abundance was seen at Gardner's Inlet; it is very pure magnetic iron, lying in beds of limestone. On the branch of the Extall River, a large mass of hematite was seen. Magnetite iron was also found on the Kemano, upper Skeena, Kitsequela, Zimoetz and on Bear River. Iron nodules in immense quantities are to be found on the Watsonkwa, in proximity to the coal. They are also abundant on the Kitsequela, the upper Skeena, Naas, and the Shigaltin Rivers. On a small creek below Hazelton, an immense bed of nodules was located. Iron and copper pyrites are abundantly found near Kitsilas Canon, on Babine Lake and Tatlah Lake. Magnetic sand is common in all creeks at the head of both the Naas and Skeena.

As has already been stated, lignite in drift was found all through that country, but on the Kitsequela and Bulkley Rivers particularly, coal of true bituminous character were located in large beds. Limestone is very abundant, some of the volcanic tuffs affording good material for cement. Building stones—granite, sandstone, perphiretic rock, limestone and lavas—are in abundance. While the country has been barely prospected, as yet enough has been demonstrated to prove that the whole of the northern interior and coast is highly mineralized, only requiring improved communication to make it accessible and valuable.

THE STICKEEN AND PEACE RIVERS COUNTRY.

And north and northeast there still lies a great country. The Stickeen (spelled in a variety of ways) River is 250 miles long and has numerous tributaries, and is navigable for 130 miles. A recent publication says:

It has been compared by Dr. Dawson with the province of Vologda, which supports at present a population of over one million. It can grow the same products, and in mineral wealth is probably vastly superior. At present it is hardly touched, except by fur traders and gold miners, and yet contributes no small quota (about \$150,000 annually) to the revenues of the country. Mr. Gauvreau, who made an exploratory survey of this country in 1892 in order to find a route through Canadian territory to the Yorkton country, says: There is quite a large area of tillable land, and though crops would be exposed to summer frost, I believe that hardy grains of well chosen variety, would succeed well. Oats, barley, rye, peas, and all the common vegetables could be grown in sufficient abundance to sustain a large popula-

tion. But the chief value of the region is for its minerals. In the summer of 1862, two miners, Choquet and Carpenter, discovered fine gold in the bars of the Stikine, and the year after a large number of miners came from Victoria and worked with more or less success. The paying ground was found to begin twelve miles below Genora. In 1873, two sturdy Canadians, Thibert and McCulloch, crossed the country from the McKenzie, westward, and found gold in some of the creeks falling into Dease Lake, and in the autumn they joined the miners working on the Stikine. The next year, a large number of miners rushed in to the new diggings, and a large and rich camp was established, which was successful for six or seven years. The amount of gold taken out in the district of Cassiar is about \$5,000,000. Mr. Gauvreau says: The great extent of auriferous country in Cassiar district (not including the area that has already been worked), has not been properly prospected and explored. With improved machinery, and better methods of working out claims, which to-day do not pay on account of being too expensive, there will in the near future, be opened a paying area in the district; and in quartz mining Cassiar will ere long have its turn of prosperity. According to the report of a couple of experts, a good galena mine has been discovered on the Liard River, near the boundary of the Province and the Canadian Northwest. In addition to this, Dr. Dawson says, in the annual report of the geological survey of Canada (1887-88), Quartz mining will, ere long, be inaugurated and will afford a more permanent basis of prosperity than alluvial mining, however rich.

The country through which the Liard and Peace River flows in the northeast part of the Province is of vast extent, and said to contain millions of acres of agricultural lands. Each of these rivers has a course of between 300 and 400 miles in the Province, and supposed to contain placer gold. The sources of the Yukon also lie within the Province, which is a river containing gold, and drains a valuable fur-bearing region.

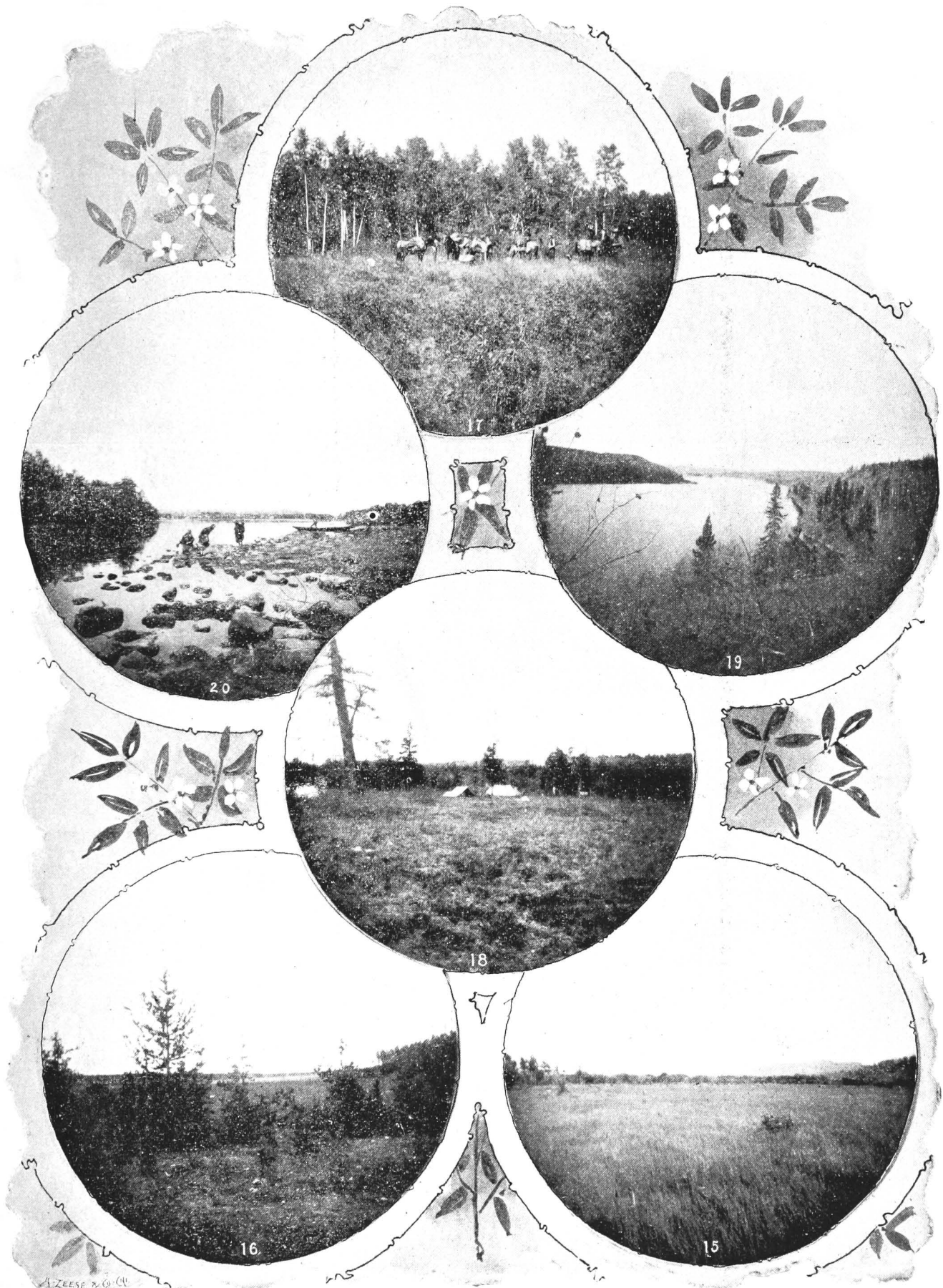
VANCOUVER ISLAND.

And the Cities of the Coast with their Industries.

THE history of Vancouver Island is to a large extent the history of British Columbia. It has furnished the mainsprings of progress, has concentrated its wealth and influence, and from a political and social point of view has constituted a centre. Several circumstances gave it a prominence that it otherwise would not have enjoyed. It was the first discovered, occupying what may be termed the ocean outpost of the Province, became the seat of Hudson's Bay Co. government, and consequently the wholesale centre of what trade existed in early years, and furthermore at an early date developed a coal industry that has grown to large and important proportions. As a means of communication with the outside world, until the C.P.R. reached Port Moody on the mainland, was by water almost exclusively, Victoria long remained the commercial *entrepot*, and after the C.P.R. was an accomplished fact it continued by its advantageous relations to trade, to occupy a leading position and progressed more rapidly than ever. Its growth for the past seven years has not been less remarkable than the progress of the many remarkable cities of the Pacific coast.

In round figures Vancouver Island is 300 miles long and has an average width of about 50 miles, possessing an area of about 10,000,000 acres. It is separated from the mainland by the Strait of Georgia and other channels. As elsewhere described, it is the most prominent in a series of Islands which represent a submerged range of mountains, which undoubtedly formed part of the mainland before that mighty cataclysm occurred which created the archipelago in question.

The history of the discovery and subsequent career of the coast, more particularly of Vancouver Island, is an oft-repeated and familiar one, not in its details, but in its outlines. A Spaniard is said to have first rounded Cape Horn, and to the old problem of a north-west passage do we owe the voyage of that daring and skilful navigator, Sir Francis Drake. How far north he came is not known, or to what extent his enmity to the Spaniards influenced his conduct, must remain a mystery. There are several rival claims to discovery of



VIEWS IN THE NORTHERN INTERIOR PLATEAU.

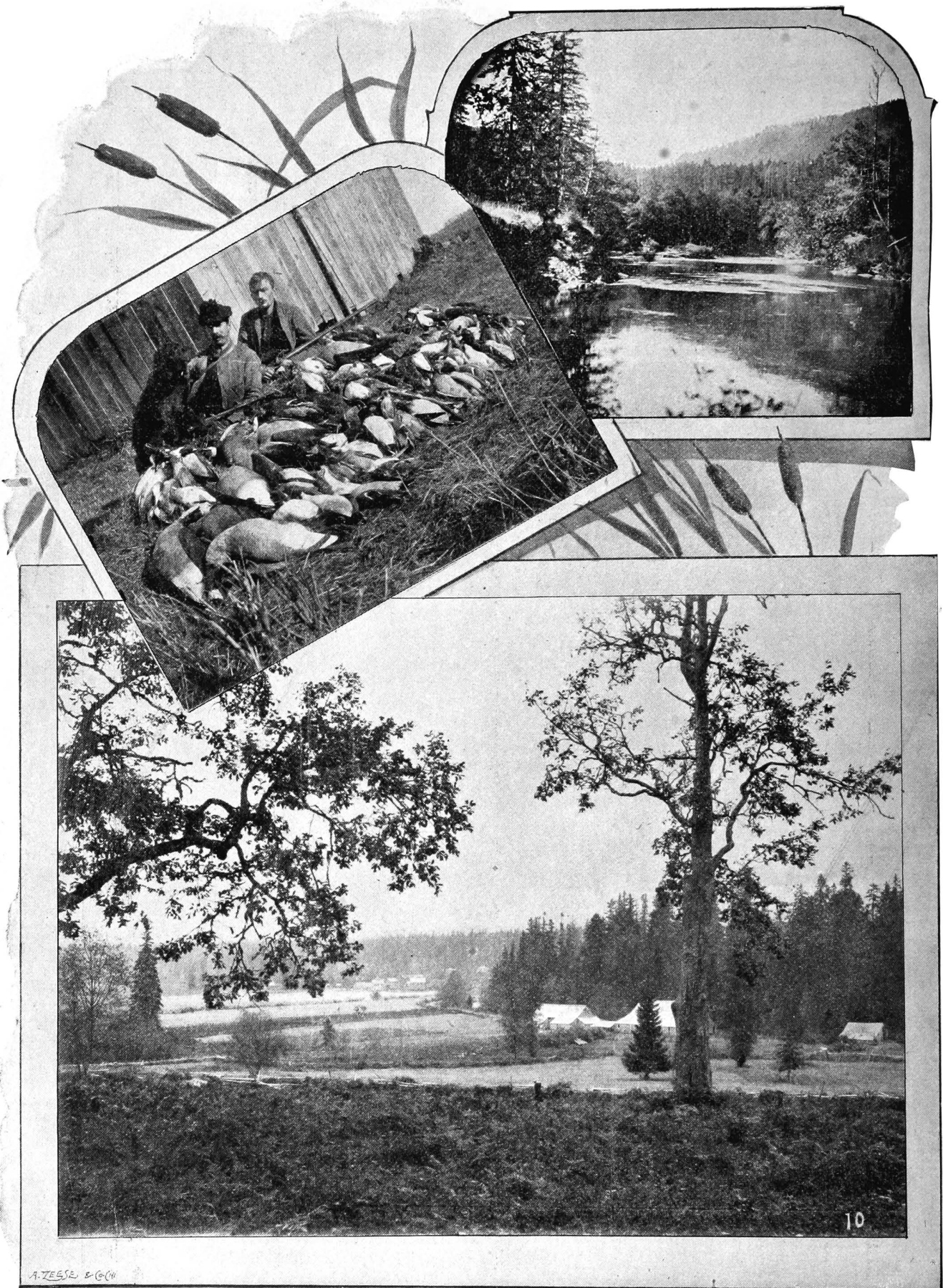
18. Camp at Blackwater.

20. Nan'tly Creek, Fort Fraser.

19. Eu-chi-ni-co Lake, Blackwater Valley.

15, 16, 17. Views in Great Nechaco Valley.

From photographs taken by Mr. FOUDRIER.



FARM SCENE, COMOX VALLEY.

DAY'S SPORT, VANCOUVER ISLAND.

SCENE, COWICHAN RIVER, V.I.

the north-west Pacific coast. Francisco de Gali is said to have reached it from China; others claim for Japanese the honor, and the ethnological characteristics of the West Coast Indians would seem to indicate that there is something in the theory that the Japanese not only discovered the country, but colonized it; while for the Spaniards and Russians, strong claims are made. It is, perhaps, not a matter of great importance, except as a historical problem, who did discover our coast. This much, however, seems to be pretty well established that the Russians first discovered Behring straits and occupied the country that used to be known on our maps as Russian America and familiarly now as Alaska, a fact from which we inherit the Behring Sea dispute, because it is upon the Russian claims to jurisdiction in these northern waters that the American position is founded.

The Spaniards, who had occupied the Mexican coast, were inspired by Russian invasion in the north to carry out the edicts of the King of Spain to take possession of the whole coast north of California and displace the Russians wherever found. In 1774 a Spanish man-of-war went as far as the north end of Queen Charlotte Island, and finding none of her enemies returned. Subsequent explorations were carried on and considerable knowledge of the whole coast was obtained. The trace of the Spaniards in our history is seen in many names which continue to this day, such as Cordova Bay, Texada Island, San Juan, Straits of Heceta, Galiano Island, etc., etc. For four or five years the Spaniards had the coast to themselves, until the celebrated Captian Cook arrived in 1778, and made important explorations. Spaniards, however, discovered the Fraser River and Burrard Inlet. Capt. Gray, an American, discovered the Columbia. About this period a large number of explorers visited the coast, including Spaniards, Americans and the English Captains, Cook, Patland, Dixon, Barclay, Vancouver, and many others. About this time, also, occurred what is known as the Nootka affair, which arose out of a Spanish claim to ascendancy and exclusive jurisdiction and which very nearly ended in bloodshed. Of all these explorers the one whose name has been most indelibly impressed on our history is that of Capt. George Vancouver. He gave his name to the island and the names of hosts of his friends to the physical features of the island and coast north and south. For a time he held the island in joint occupation with the Spaniards, but they finally withdrew, leaving the British masters of the situation. Vancouver completed his surveys in 1795, and returned to England. From 1790 on to 1812 there was a very extensive fur trade carried on by vessels of several nations, principally American and British, which was paralyzed by the war of the latter year.

In these early days two great corporations got a foothold, and occupied an immense stretch of territory for trading purposes, these were the Northwest Fur Co., and the Hudson's Bay Co. bitter rivals and keen competitors. Sir Alexander McKenzie, a Scotchman, made the first overland trip from Montreal to the coast, in 1793, coming into the province through the north-east corner of it, and named New Caledonia. In 1821 the fur companies amalgamated, and the Hudson's Bay Co. occupied, governed and traded over, having exclusive domination of, the greater half of the North American continent, the trade ramifications and the disciplinary system carried out being among the most wonderful of modern commercial corporations. In the early days the Hudson's Bay Co. exercised a sort of territorial lordship over a vast area, including Washington and Oregon. Owing to the decrease in the fur

trade, and the probability of the boundary line between British and United States possessions being settled at a point which would exclude these or a portion of them, it was decided to establish the head offices of the company some place further north on the coast than Fort Vancouver. Sir James Douglas, who was their chief factor, chose Camosun, subsequently named Albert, and finally Victoria. It was founded in 1842; and the steamer which carried the party there was the old *Beaver*, now a wreck at the mouth of Burrard Inlet, the first steamer on the Pacific Ocean. She rounded the Horn in 1835. The boundary line was fixed in 1846 at the 49th parallel of north latitude. Victoria then became the chief trading post on the north Pacific coast. For a number of years the Hudson's Bay Co. held an absolute proprietorship of Vancouver Island, on conditions of colonization. This, however, was from a colonizing point of view not a success, and in 1850 the Hudson's Bay Co. was settled with for a lump sum by the Imperial Government, and the Island of Vancouver became a crown colony, with provision for a form of government with a governor and an executive council. Richard Blanchard was the first governor, but finding his position somewhat irksome and unsatisfactory, resigned in 1851, when James Douglas was appointed in his stead. Victoria was laid out in 1852 by Mr. J. D. Pemberton, a gentleman who is still hale and hearty, and in business. The first parliamentary election for the new colony was held in 1856, and was presided over by Dr. Helmcken, who is still seen on the streets of Victoria, as bright and genial as ever, with the ever-present cigar, respected and liked by all who know him. He came to British Columbia in 1849 as physician for the Hudson's Bay Co.

The colony was practically ruled by the Hudson's Bay Co. until 1858, Sir James Douglas being its chief factor as well as governor of the colony. Then the discovery of gold and the rush of gold seekers suddenly made Victoria a city of many inhabitants, and a new era dawned. The mainland upon which the gold diggings were, was formed into a separate colony, with Sir James Douglas, who previously exercised a sort of protectorate over it, as governor. Westminster was the capital. Sir James Douglas resigned from the Hudson's Bay Co. in 1859, but continued as joint governor of the colonies until 1864, when he was knighted and retired to private life. Captain Kennedy succeeded him on the island and Frederick Seymour on the mainland. The island and the mainland were joined in 1867, and the capital moved from Westminster. Anthony Musgrave was governor of the united colonies until Confederation, in 1871, when British Columbia became part of the Dominion of Canada.

One of the principal elements of development was the coal industry. It was discovered at Nanaimo in 1849, mined in the early fifties, and the output gradually increased. In 1869, the late Hon. Robt. Dunsmuir discovered coal at Departure Bay, and with the aid of capitalists whom he interested, developed extensively what proved to be a rich coal field.

After the first gold excitement was over, Victoria and the province were depressed, until the Cariboo excitement took place, when another period of prosperity ensued for a few years. In 1860 the white population of Vancouver Island was 5,000, with a similar number on the mainland. Progress was slow but substantial until the advent of the C. P. R., which gave a wonderful stimulus to population and business, it having more than trebled during the last decade. The last Dominion

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census gave Vancouver Island in round numbers 37,000, the province 100,000, and Victoria city 17,000. A census taken by the city officials placed the population of Victoria at 23,000.

The other important industries in addition to coal mining, which assisted in the development of the coast, were the sealing, timber, and salmon canning business. The first cannery was built on the Fraser in 1876, and the industry rapidly extended.

VICTORIA OF TO-DAY.

As previously referred to, Victoria has always been most advantageously situated in regard to shipping interests and the trade of the coast. For many years she enjoyed the advantages of being a free port, and many to-day regret that these special privileges have passed away. This aided largely in establishing the supremacy of that port in the past.

It is more particularly from an industrial point of view that this has reference to the city, but there are peculiar attractions possessed by the city which must always lend an importance to it independent of industry and commerce. It has great natural beauty, and as a place of residence and a resort for tourists it has a future peculiarly its own. With age to impart an air of comfort and homeliness, with a climate adaptable to the growth of flowers and shrubs, with old oak trees, with picturesque surroundings and situation, and with beautiful drives, parks, etc., it strikes the visitor as a place where the fullest measure of enjoyment is possible. It has a profusion of flowers of all kinds in summer—roses, honeysuckles, ivies and all the rest of the old-fashioned flowers and plants; it has Beacon Hill park, one of the most beautiful spots on earth; it has drives to Oak Bay, where a fine new summer hotel, the Mount Baker, has just been opened; to the Gorge to Esquimalt, to Mt. Tolmie, which has a splendid view, to Cedar Hill, to Goldstream and many other places; it has its Chinese quarters, with the Joss house and Chinese theatre; it has Esquimalt, with its dry dock and harbor and men-of-war; it has the Gorge, Victoria's picnicing grounds and boating resort; the Provincial museum, where is a most interesting collection, illustrative of all parts of British Columbia; it has the cemetery, Government House, Dunsmuir castle, the agricultural grounds, and suburban fishing and shooting grounds—all places of exceeding interest largely visited by all who take in the city.

The inner and outer wharves furnish accommodation for considerable volume of shipping, the former for smaller craft and the latter for ocean-going vessels. Victoria handles the principal part of the salmon and sealing trade, and has a number of large wholesale and commission houses. Among these are R. P. Rithet & Co., merchants, shippers and insurance agents; Hudson's Bay Co., general supply and liquor merchants; Turner, Beeton & Co., liquor merchants, commission and insurance; Robt. Ward & Co., commission merchants, importers and insurance agents; Lenz & Leiser, dry goods; Simon Leiser, groceries; E. B. Marvin & Co., hardware; J. H. Todd & Son, grocers; E. G. Prior & Co., iron and agricultural implements; Thos. Earle, groceries; Nicholls & Renouf, iron and hardware; Cowan & Wilson, dry goods; McQuade & Son, ship chandlers; J. Piercy & Co., dry goods; Boucherat & Co., liquor merchants; Strouss & Co., dry goods; Sehl & Co. and Weiler Bros., furniture; J. & A. Clearihue, fruits, etc.; Langley & Son, drugs; Boscowitz & Sons, furs, etc. All of these and others do a large and prosperous business, which extends all over the Province.

R. P. Rithet & Co. (Ltd.), is probably the largest and wealthiest firm in the Province, with agencies in San Francisco and Liverpool. Their business includes wholesale merchandise, fire and marine insurance, canned salmon, in which they represent a number of canneries, and shipping agency. They represent as well the Giant Powder Co., Cadboro' Bay; the Pacific Coast Steamship Co.; the Columbia Flour Mill Co., of Enderby; and the Moodyville Saw Mill Co.

Industrially Victoria has made great progress. The Albion Iron Works is probably the largest and oldest of the industrial concerns in the city, and the largest of the kind north of San Francisco. Large marine contracts and a general foundry and machinist business is carried on. The Victoria Iron Works Co. (Ltd.), has recently been established, and is running night and day. This company has control of Williams' celebrated patents, particular among which is Williams' gas producing engines.

The Victoria Rice and Flour Mills, operated by Hall, Ross & Co., is an extensive manufacturing enterprise, which is a branch of the Mount Royal Milling and Manufacturing Co., of Montreal. A variety of rice and rice manufactures is made with a market from Victoria to Winnipeg. Something like 3,000 tons of rice are imported in the fast sailing ship "Thermopylae," owned by the firm. A considerable business is also done in grass mats, split rattan and Chinese cord. The manufacture of wheat flour was undertaken two years ago in conjunction. Wheat from Manitoba, Okanagan, Nicola, Fraser and Willamette valleys is milled for general family use. The mill has a capacity of 250 bbls. a day. Trial shipments have been made to the Orient.

The National Mills, owned by Messrs. Brackman & Ker, is another large concern, producing oatmeal, rolled oats, split peas, pearl barley, Graham flour, chopped feed, etc. This business was formerly carried on in Saanich and was moved here two years ago. The firm imports feed oats and barley, from Manitoba principally, but the oats manufactured for oatmeal and rolled oats are all obtained from the Province, the home article being peculiarly adapted for producing superior brands. The imported oats have not been found of a suitable quality and are not used.

Chemical works have been established and are in full blast, supplying the wants of the province in basic acids and other chemical products. The Canada Paint Works have established a branch paint factory, which will soon be in operation, and it is understood a company has undertaken a project to utilize bone refuse in making charbon ash, fertilizers, etc., etc.

Sehl & Co. and Weiler Bros. have large and old established furniture factories. There are several sash, door, planing and lumber mills and ship yards.

Two years ago, Messrs. O'Kell & Morris started a fruit canning industry which has had a most successful career and last year was turned into a joint stock concern and paid after the first year a dividend of 20 per cent. They are manufacturing jams, jellies, canned fruits, etc., and are extending their market to England and the Territories.

The Victoria Vinegar Works, under the management of J. H. Falconer, has been established for some time and turns out a fine line of vinegars, syrups, sauces, ciders, flavors, extracts, and catsups, which are sold extensively in the Province.

Stemler & Earle manufacture coffee, spices, cocoa, cream tartar, mustard and baking powder. This industry was established in 1875 and has made solid progress ever since.

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Ames, Holden & Co., manufacture boots and shoes; Phillips & Bros. and C. Morley, soda water; Kurtz & Co., cigars; M. R. Smith & Co., biscuits; W. J. Pendray, soap; H. A. Lilley, candy; The Hamilton Powder Co., giant and blasting powder, etc.

There are three breweries, the Victoria Brewing Co., the Phoenix Brewing Co., and Fairall's; a granite and marble works; two lithographing establishments; the Williams Book-binding Co.; a match factory; a rubber stamp factory and the British Columbia Pottery and Terra Cotta Works.

The last named as a comparatively new industry deserves some special attention. The works are situated at Constance Cove, on the road to Esquimalt. They manufacture fire brick, pressed brick, terra cotta ware, drain pipe and ordinary red brick. The plant consists of six kilns, 25 feet in diameter, eight feet high and carrying three lengths of pipe; and all the latest and most improved presses, machinery, etc. The fire clay is obtained from the coal mines at Nanaimo, and in fire bricks and sewer pipe they manufacture an article equal to anything ever imported into the Province and practically supply the entire demand, the works being fully occupied.

The banking interests are represented in the Banks of British North America, British Columbia and Montreal chartered; and Garesche, Green & Co., and the British Columbia Land and Investment Co., private. Bradstreet's and R. G. Dunn & Co. have district agencies here.

The leading real estate, financial agents and mining brokers are:—

H. Croft.	E. M. Johnson.
Lowenberg, Harris & Co.	Dalby & Claxton.
J. E. Crane & Co.	A. W. More & Co.
J. D. Pemberton & Son.	Morrow, Holland & Co.

Henry Croft, Asso. M. Inst., C. E., etc., transacts a very large amount of business as real estate agent, mining broker, financial and insurance agent, and is largely interested in the Province as well. He is a member of the Provincial Legislature and prominently identified in a number of ways with public affairs.

J. E. Crane & Co. carry on an extensive real estate, commission, insurance and manufacturers' and mercantile agency business.

There is a large number of hotels, in Victoria, the principal of which are:—

Driard.	The Wilson.
Dallas.	Oriental.
Victoria.	New England.
Mt. Baker Hotel, Oak Bay.	Brunswick.
Balmoral.	Occidental.

The Driard made a continental reputation years ago and the new building erected a year ago is one of the largest and most finely appointed on the Pacific coast. It is eight stories high, contains 225 rooms, with accommodation for 300 guests. Throughout the Driard is lighted by electric light and gas and heated by steam, with elevator to each floor and hot and cold water in each room. The main dining-hall seats 350 persons, with private dining parlors and cafe attached. The appointments and furnishings are all first-class.

Victoria has gas, water-works, electric light and tramway, transfer, messenger and telegraphic service; communication by steamer with Vancouver, Westminster and Fraser river points, Seattle, Tacoma, San Francisco, China and Japan and all northern coast points as far as Alaska; and by E. & N. Ry. with Nanaimo and intermediate points. Journalistically it is represented by two of the finest daily papers west of Winnipeg the *Colonist* and *Times*.

The Board of Trade has a large membership and is a very active and influential body. A splendid new building has recently been erected and was formally opened on the 4th of May this year, the occasion being celebrated by a banquet at the Driard.

The city boasts of three clubs—the Union, Victoria and Anglo-American; fine agricultural exhibition buildings, market place, church edifices, town hall, court house and numerous handsome business blocks. Public appropriations have been made for new Parliament buildings, postoffice and custom house, fortifications at Esquimalt, quarantine station at William Head, drill shed, barracks, and several other important public improvements. Victoria in many respects has a bright future before it.

The Canadian Pacific Navigation Co., Limited, was incorporated in the spring of 1883, and commenced business with the steamers "Princess Louise," "Enterprise," "Otter," "R. P. Rithet," "William Irving," and "Reliance." Shortly afterward the steamers "Western Slope" and "Gertrude" were purchased, and in July of the same year, the fast and commodious steamer "Yosemite" was added to the fleet, which has since been increased by the purchase or building of the following steamers and steamships. viz.: "Wilson G. Hunt," "Maude," "Premier," "Sardonyx," "Islander" and "Danube," thus placing the company in a position to transact any business in connection with water transportation that the public may demand, and offering superior inducements for the public patronage, by the number of steamers being a guarantee to fulfil any undertaking in the water transportation of British Columbia.

Daily trips are made between Victoria and Vancouver, connecting with Bellingham Bay and British Columbia R. R. for Puget Sound ports, tri-weekly trips between Victoria and New Westminster, there connecting each trip, during river navigation, with river steamers of the same company, for Hope, Popcum, Sumas, Chilliwack, Langley and way landings on Fraser river; semi-monthly trips to Fort Simpson, Metlahkatla, Skeena River, Bella Bella, Alert Bay and intermediate ports on the Northern coast, which, when inducements are offered, are extended to ports on the West coast and those of Queen Charlotte Islands, carrying Her Majesty's mails over these various routes. Regular trips are made to Alberni and ports on Barclay Sound. Trips are also made to Bute Inlet and other points, as occasion requires. During the tourist season trips are extended to Alaska. The Islander and the Danube are fine steamers, the former being equal in equipment to anything on the Pacific coast. The company is under the management of Capt. John Irving,

THE OUTER WHARF.

One of the largest individual enterprises in the Province to be undertaken purely on faith in the future was the outer wharf of Victoria city. The gentleman, whose enterprise it was, is no other than R. P. Rithet, the name of whom is now one of the best known in British Columbia, being associated with large businesses and extensive undertakings and almost synonymous with success. When it is stated that \$250,000 was expended in this work and that it was begun ten years ago, before the C. P. R. was completed, and long before Pacific steamship lines to Australia and China and Japan were thought of, and when our merchant marine was very small compared with what it is now, the foresight and business courage of the promoter can be best understood. Mr. Rithet undertook it and carried it

through single-handed, and is to-day sole proprietor of one of the most valuable properties in the city, a work that cannot be duplicated except at enormous expense. Briefly, it was begun in 1883 and completed March 1st, 1891. To carry out the scheme in completeness a great deal of dredging was necessary to ensure a depth of water, at low tide, sufficient for all purposes. For this two dredges were built, one costing \$25,000 and the other \$10,000. With a 90-ft. boom, one of these dredges could carry material a distance of 160 feet. For this purpose also, 5½ acres of waste, rocky land was reclaimed. At the present time there is 28 feet of water at low tide alongside the wharf, sufficient to float the largest ship in the ocean. The new and main wharf is 210 feet wide and extends 1,400 feet into deep water; the old dock is 120 feet wide and extends 1,100 feet into deep water. They are parallel to each other. To give an idea to the solidity and expensive character of the work in question, it may be stated that the dump wall, south and west, took no less than 130,000 tons of stone to form it. The main front, the face of the dock, is of solid masonry, large blocks of sandstone, set in cement, being built under water to a depth of from 24 to 38 feet, and nearly all placed in position by divers. This front contains about 8,000 cubic yards of masonry. Some of the blocks ran from two to eight tons each in weight. A rock excavation of 52,000 cubic yards was necessary to make the dump wall. The new dock is capable of accommodating five or six large sailing ships at once and both the old and new docks can take in eleven large sea-going vessels, while there is accommodation at the head of the docks for smaller craft. The Pacific steamships now call at the outer wharf, having every accommodation and convenience, while further appropriations have been made for dredging the harbor, the opening of which is well sheltered, affording absolute safety to shipping and rendering it possible to load a vessel in the heaviest gale. Mr. T. F. Sinclair was the contractor who so successfully carried this extensive enterprise to completion. As a matter affecting the commercial importance of Victoria, the importance of an undertaking like the outer wharf can scarcely be estimated, the more wonderful as promoted by the efforts of a single man, who illustrated not only great business foresight, but remarkable faith in the future of the city's commerce. When Mr. Rithet undertook the work, many regarded it as a too ambitious, and not a few as a crazy project, but to-day not a man in the Province but admits his head was level.

POINT COMFORT HOTEL.

Midway between Victoria and Vancouver is Plumper's Pass, a channel dividing Mayne and Galian Islands. It is in the steamer's course and is distinguished by great natural beauty. It has been a favorite stopping place for some years and it is not surprising that it should have been selected as a site for a tourist and summer hotel. The enterprise was promoted by Mr. W. H. Mawdsley, a prominent rancher there, and now a splendid hotel with all modern conveniences and beautiful grounds, is being erected and will be opened shortly. It will be a popular resort. Good fishing and shooting are available.

OAK BAY HOTEL.

Three miles from Victoria at Oak Bay, which is reached by tramway and also by a beautiful drive skirting the sea, a new, large summer hotel has been opened under the management of Mr. J. A. Virtue, late manager of the Hotel Vancouver. The hotel is beautifully situated, and under the management referred to is certain to be successful.

BARCLAY SOUND.

Barclay Sound is a large open roadstead at the mouth of Alberni Canal, dotted with small islands, through which there are two channels, the middle and eastern, the latter being in direct line with the Alberni Canal. Its shores are heavily timbered with fir and cedar, mixed with alder. From Cape Beale to Barclay at the head of the Sound is a fine agricultural valley extending several miles back. It has a clay subsoil covered with vegetable mould. The northwestern side is precipitous, with the exception of one large flat at Toquart. At the head of the sound on Uchucklesit harbor is the town site of Barclay. The harbor is 3 miles long by 1½ miles wide, is perfectly land-locked and sheltered with from 6 to 100 fathoms of water. Here is what is known as "snug basin," naturally and peculiarly adapted for a first-class dry dock. At the head of the harbor and separated from it only 150 yds., is a fresh water lake 10 miles long. There is a fine run of salmon here with an A 1 site for a cannery. The promoters of Barclay town site claim that if a transcontinental railway finds a terminus on the west coast it will be at Barclay and not at Alberni, as in the Alberni Canal there are strong winds and strong tides, but that either one will some day be selected, affording as it does an immediate opening to the ocean and the most direct to the Orient.

Alberni Canal is 25 miles long, ranging from 300 yds. to 1½ miles in width, with steep, rugged shores, which at the mouth are very precipitous. At the head of this is the celebrated Alberni Valley, an extensive tract of rich agricultural land, surrounded by mountains, the sides of which are heavily timbered. Something like 30,000 acres of land in this valley have been taken up by settlers and much more still remains unsettled. Alberni is rich in resources and not less in minerals. Reference has been made to its gold placers, but a recent valuable discovery of quicksilver was made on Cinnibar Creek, the property having been sold to a Victoria syndicate, who are developing it. There is no question as to this being a very rich claim and this opinion has been confirmed by experts. Alberni has another industry, the only one of the kind in the Province, viz., a paper mill. The site was purchased from Mr. Mallett, and consists of 160 acres. The machinery is all in place and operations are expected to be begun at an early date. The C. P. N. Co's. steamboat "Maude" makes regular trips to Alberni and points on the west coast, and carries the mail there.

NANAIMO.

The black diamond city, as Nanaimo is called, grew out of the coal mining industry, fully described elsewhere. It has a population between 6,000 and 7,000, is delightfully situated and overlooking a beautiful deepwater, well-sheltered harbor. The trade of Nanaimo depends largely upon the coal mines in the district, previously enumerated under that heading. For that reason the shipping of Nanaimo port is the largest in the Province, vessels from San Francisco being constantly employed as colliers.

Next in importance to the coal mining is the extensive lumbering business carried on by Mr. A. Haslam, Mayor of the city, President of the Board of Trade and recently elected by acclamation to represent Vancouver electoral district in the House of Commons. His has been one of the most prosperous enterprises in the Province. It includes a saw mill, sash and door factory, planing mills, etc., etc., which for some years has supplied almost the entire local demand. He employs a

large number of hands. Recently he has undertaken the erection of another mill designed for the foreign trade for which he will compete as soon as the markets improve sufficiently. Included in Mr. Haslam's extensive timber limits is some of the finest cedar in the Province, a wood that will be ultimately the most valuable. Mr. Haslam is justly regarded as Nanaimo's most enterprising citizen and the honors conferred on him are evidences of the esteem in which he is held.

Nanaimo is most advantageously situated in regard to the trade and shipping of the future. It possesses gas, electric light, waterworks and telephone system, with prospects of a tramway to Wellington in the near future. It is connected by two lines of steamships with Vancouver, by one with Westminster and by another with Victoria. It is also connected with Victoria by rail, and with Cranberry, Cedar, Oyster, Harewood and Northfield by wagon road.

The local industries apart from those mentioned are the Hamilton Powder Co's Works, the British Columbia Tannery, two foundries and machine shops, a cigar factory, two breweries, a carriage shop, soda water and several others.

The city is beautifully located and for attractiveness is second only to the capital itself. Climatologically it is if anything more favorably situated, and for fruits, flowers and vegetables no part of the Province can excel Nanaimo and the district immediately surrounding it.

One of the features of the laboring population is that they are as a rule the owners of their own real estate and dwelling houses, it being difficult perhaps to find a coal mining region where similar conditions prevail, or where the miners are so contented and prosperous. It is a model mining town and to the wise policy of the New Vancouver Coal Co., this is largely due. Perhaps in the whole continent of America there are not to be found more interesting sociological conditions than here. Just on the outskirts of the city a few years ago the Coal Company laid out a tract of land in five acre plots, built roads through it, etc. These were sold to the miners at \$200 an acre, the payments extending over ten years without interest. The result has been that this wasteland, which will soon all be within the city limits, is the home of hundreds of people, with cosy cottages, well cultivated gardens and everything indicating comfort and prosperity—a worthy example for the Province at large. The same air of neatness and general well-to-do-ness characterises the city at large, the streets being in good order and the residences well kept.

There are several good hotels, notably the Wilson and Windsor, an active Board of Trade, a daily evening paper the *Free Press*, fine churches, good schools, fraternal organizations, a theatre and all the usual concomitants of a modern town. Merchants here do a steady lucrative trade, owing to the large amount of wages distributed in cash each month. Opposite the city is the island of Newcastle, upon which is a fine quarry of sandstone, and Protection Island upon which a shaft of the New Vancouver Coal Co. is in operation.

Tributary to Nanaimo are the mines at Chase River, Nanaimo River, Northfield, Southfield, Harewood, Wellington, East Wellington and South Wellington, and the settlements of Cranberry, Cedar, Oyster and Inoos Bay the population of which in the aggregate is considerable.

Nanaimo is 75 miles from Victoria by the E. & N. Ry. and 35 miles from Vancouver with which it has daily mail service by steamship Cutch. Nanaimo has an ever present and rapidly growing industry to depend upon and its steady, substantial growth is assured.

Among the largest merchants in the city are A. R. Johnson & Co., grocers, etc., and Spencer & Perkins, dry goods, millinery, etc. The leading real estate and financial agents are W. K. Leighton, Marcus Wolfe, (Secretary of the Board of Trade), A. L. Planta & Co. and C. Dempster & Co. W. K. Leighton represents as well the British Columbia Land & Investment Agency, the Western Investment & Savings Co., the Dominion Building & Loan Association and six leading insurance companies. Mr. John Hilbert, ex-mayor and a leading citizen, carries on a large furniture business.

TEXADA ISLAND.

This, the largest island in the Gulf of Georgia, is one of the most remarkable on the coast from a geological point of view, containing as it does, nearly all the mineral formations of the Province besides a number of valuable structural materials. It is situated about 35 miles from Vancouver and about 18 miles from Nanaimo. There are immense deposits of iron ore of the purest and best qualities—quarries of it in fact. In 1888, gold, silver and copper were found in several parts of the island, running from \$6 to \$2,000 per ton. The silver shows good prospects and some six different veins of copper exist, varying from 20 to 40 per cent. of copper and assaying gold and silver. Lead, zinc and molybdenum have also been found. Perhaps the most remarkable of all the deposits are those of marble of which fourteen different varieties have been found and which when dressed have been greatly admired. So far as can be judged these deposits are very extensive. For decorative purposes there is ample to supply a very large market. The best limestone in the Province is quarried here and two kilns are in operation with an unlimited supply. Terracotta clays of excellent quality also exist. All these deposits have additional value from the fact that they are located as a rule near deep water shipping points affording cheap shipping facilities. The geological formations of the island is one of the most interesting to students. They contain granites, porphyries, syenites, limestones, amygdaloids, slate shales and sandstones. The latter are rich in fossils, while quartz, quartzites and quartzose figure prominently throughout and the intrusions of the lower rocks add constantly to the interest of the student. This wonderful combination of mineral resources is bound ere long to bring Texada Island to the fore. Several mining companies have been organized through the efforts of Mr. Raper, of Nanaimo.

VANCOUVER CITY.

The youngest of the quartette of coast cities is also designated the Terminal city, its origin and destiny being largely bound up in the fact that it is the terminus on the Pacific coast of the Canadian Pacific Railway, and the ocean terminus of the Pacific and Australian steamship lines. Shortly it will be the Canadian terminus of the Northern Pacific and Great Northern Pacific railways. Vancouver is seven years old, is situated on Burrard Inlet on the mainland. Its population two years ago, according to the census, was 14,000, and may fairly be put down now at 17,000. The distinguishing features of Vancouver are its rapid growth, its many handsome and substantial business blocks, and its admirable and picturesque situation. It has an excellent system of waterworks, gas, electric light, electric tramway and telephone Co. The workshops of the Canadian Pacific Railway for the Pacific division are located here, and with the head offices employ about 600 men. Among the larger industries are the British Columbia Iron Works, the British Columbia Sugar Re-

finery, the Hastings Saw Mills, the Royal City Planing Mills, Cassady & Co's., Teamy & Kyle's, the Vancouver Co's., Vancouver Manufacturing and Trading Co's., Buse's, Mosse & Bogg's, H. H. Spicer's and several other smaller mills, which include lumber and woodworking of all kinds; the San Juan lime kiln, Portland cement works, jute and cooperage works, cigar factory, tannery, four breweries, candy factory, three foundries in addition to the British Columbia Iron Works, a fruit canning factory, soap works, etc. Moodyville Saw Mill on the other side of the inlet may fairly be included. That and the Hastings Mills are the two largest exporting mills in the province. The lumber industry of the province is largely concentrated on Burrard Inlet, the mills in operation there having a capacity per diem of about 750,000 feet. Vancouver is a rival to Victoria in regard to the wholesale trade, and during the past three years has developed a very extensive business with the whole province. The firm of Messrs. Oppenheimer Bros., wholesale grocers, were the pioneers in this line, and do a business of very large proportions. There are in the wholesale commission line, Messrs. B. Major & Eldrich, McMillan & Hamilton, F. R. Stewart, Baker & Leeson, Welsh Bros., Ashfield & Co., Martin & Robertson, all making a heavy turnover. The other wholesale firms are Thos. Duncan & Co., McLennan & McFeely, and the Cunningham Co. hardware; F. W. Hart, Setil & Co., and Shelton & Co., furniture; Skinner & Co., crockery, glassware, etc.; Carscaden, Peck & Co., Wm. Skene, G. S. McConnel, dry goods, hats, caps, etc.; R. V. Winch and A. Fader, fish. There are a number of good hotels, the Hotel Vancouver being known the whole world over almost. The leading hotels are: Hotel Vancouver, Manor House, Leland, Delmonico, Oriental and Waverly. The Opera House, built by the Canadian Pacific Railway, is the finest on the Coast. The city is unusually well off for schools and churches, has two clubs, and is in every way cosmopolitan. Stanley Paak, eight miles around, is one of its chief attractions.

Burrard Inlet, perfectly land-locked, is one of the finest and largest in the world, and the city slopes to it gradually, affording unexcelled drainage facilities. The rise and progress of Vancouver reads like a fairy tale. It has now settled down to prosaic ways of the world and substantial growth, with high expectations on every hand for its future.

The Hudson's Bay Co. has an extensive business in general wholesale and retail lines. Messrs. Bell, Irving & Paterson, and Messrs. Evans, Coleman & Evans, are among the leading shipping and commission agents in the province, with dock facilities of their own. The banks of British Columbia, British North America and Montreal have flourishing branches, with fine buildings of their own. The other financial concerns are the British Columbia Land & Investment Co., the Yorkshire Guarantee & Savings Co., the Vancouver Securities Co., the Vancouver Trust, Loan & Survey Co., the Western Investment & Savings Co., the Dominion Building & Loan Association, the Canada Permanent Loan Co. and others.

Messrs. De Wolf & Munro are the only firm on the coast who make a specialty as mining brokers, both being practical men, well acquainted with the country, and Mr De Wolf being a graduate of the School of Mines, London, England.

WESTMINSTER.

The Royal City is the familiar name for the fresh water terminus of the Canadian Pacific Railway. It was founded in 1858 by Col. Moody, and was the first

capital of the colony of British Columbia. It is situated on an eminence sloping to and overlooking the Fraser River, and has, like all the other cities referred to, a most picturesque foreground. Being the only city on the Fraser River, it is the natural centre of the rich agricultural district known as the Fraser River Valley. The last census gave it a population of 7,000, which now may be regarded as 9,000, it having experienced the same rapid development as the rest of the province during the past few years. Westminster is the centre of the great salmon canning industry of the Fraser River, upon which there are about 25 canneries. Statistics of this industry have been given elsewhere.

The other industries are the Ross McLaren saw mill, the largest in the province; the Bonnette saw mills, the Royalty planing mills, the woollen mills, oatmeal and feed mills, a match factory, the Reid & Currie iron works, and several mining concerns. It has water works, electric light, electric tramway, and telephone. The number of fine new business blocks is a remarkable feature of the city. There are also a number of large public institutions—the provincial penitentiary, lunatic asylum, court house, two hospitals, central prison, schools, Y.M.C.A. hall, and public library and reading rooms. The city is well supplied with churches, and is the diocesan headquarters for both the Episcopal and Roman Catholic Churches. It also is the headquarters for the Dominion Government officials of the mainland. There is an effective board of trade, splendid agricultural exhibition grounds and buildings, and a social club. It is connected with the Canadian Pacific Railway by a branch line, is the present terminus of the Great Northern Railway, and is joined with its twin sister, Vancouver, by an electric tramway, twelve miles long, which makes the time in thirty minutes.

NEW WESTMINSTER DISTRICT.

BY far the largest and most important farming area in the Province at present under cultivation is the New Westminster District. There are between 500,000 and 750,000 acres of agricultural lands in the valley of the Fraser, a good deal of it of the richest possible character. This valley was evidently an immense salt water inlet which has been filled up by detritus from the Fraser River, which broke through the coast range of mountains and found an outlet in the inlet referred to. It is nearly all rich alluvial deposit, showing plainly its origin.

Westminster District really is composed of about 250,000 square miles, extending all the way from Yale to the northern boundary, taking in the whole coast, the adjacent lands and a large portion of the interior, but Westminster county proper, and what is generally understood as such, is the valley on the coast through which the Fraser River finds an outlet. It is made up of the municipalities of Delta, Richmond, South Vancouver, Coquitlam, Burnaby, Langley, Surrey, Matsqui, Maple Ridge, Chilliwack and Dewdney, and the well known districts of Pitt Meadows, Mission, Hatzic, Agassiz and Harrison Lake.

A very considerable area of prairie land is included in the Delta, Lulu, Sea and Westham islands, Pitt Meadows, Langley, Surrey, Sumas, Matsqui and Chilliwack, all of it very rich, and that portion of it which has been reclaimed being wonderfully productive and varied in its products. A great deal of it is being reclaimed by dyking and drainage, and soon all of it will be reclaimed. These portions of the Province are specially adapted for grain growing, hay, dairying, roots

and vegetables. Most remarkable yields are recorded. Fruit, too, does well, especially plums, pears, cherries and small fruits, but the part of the district which seems particularly adapted for most fruits is that north of the Fraser on the high dry benches and in Chilliwack. The Experimental Farm at Agassiz has demonstrated the great capabilities of the district in almost every respect, but especially in fruit and floriculture. In that section peaches, grapes and tomatoes have the best prospects.

There is considerable land suitable for hops, which are now being cultivated to some extent. The yield and character of the crop is very much similar to that in Washington and Oregon on the other side of the line.

The district is very heavily timbered in places with very valuable timber, Douglas fir, cedar and spruce, and some alder, maple and cotton wood.

Considerable is done in dairying and stock raising in the prairie sections, and attention is being paid to poultry and bees. Grain of all kinds yields heavily, but oats pay best, as the wheat is rather soft for milling alone, and barley cannot always be safely harvested from rain. Root crops and vegetables are everywhere enormous, and small fruit of all kinds reach their highest perfection. Apples do well in most places, where land is high or well drained.

Improved land is, as a rule, pretty high in price, and where unimproved costs from \$10 to 50 per acre for clearing. For general mixed farming no part of the Province has better adaptabilities. The white population of New Westminster district is about 8,000. The main line of the C. P. R. runs through it on the north side of the Fraser River. A railway is being built from Vancouver *via* Westminster on the north side of the Fraser to Sumas to connect with the Great Northern Railway, 47 miles. A branch of the C. P. R. runs from Mission city to Sumas, B.C., ten miles; and a railway is being constructed from Chilliwack to Sumas, so that facilities of travel will be excellent. Two lines of steamers run up the Fraser from Westminster, and an electric tramway connects Westminster and Vancouver, on which there is an hourly service each way, taking 45 minutes to make the trip.

Extensive dyking enterprises are under way at Pitt meadows, Sumas, the Delta and Richmond by which large areas of very rich lands will be reclaimed.

There are three fruit canneries in operation, one in Vancouver, one at Chilliwack and one at Ladner's Landing. The field as yet, however, is a limited one which will develop with the fruit growing industry.

There are several important industries, the headquarters of which are here: The Westminster Slate Quarry at Jerves Inlet; the Westminster Tile and Pottery Co., on Fraser River, and the Terra Cotta Co. of Port Moody. Woods & Gamble, wholesale and financial agents, are secretaries of the Slate Quarry Co., and carry on a large business in their own line.

AGRICULTURAL RESOURCES.

The Districts on Vancouver Island and Adjacent Coast.

B RITISH COLUMBIA has not been known as an agricultural country principally on account of the general impression as to its being a "sea of mountains," but its farming capabilities have been demonstrated beyond question, and the areas, which

are suitable to cultivation are very much more considerable than is generally conceded. The part of the country of which this treats, on the Island and coast, is more particularly adapted to small farming—on a mixed scale—fruit growing, horticulture, hop raising, poultry, stock raising on a limited scale, oats, etc., etc., as there are no large areas upon which farming on an extensive scale could be carried on. In the northern interior there are very extensive areas suitable to grazing, grain growing and general farming. There are difficulties in the way of farming as it is conducted in the east, but the advantages of soil and climate, and the advantageous relation of the market to farm products give many compensating offsets. Of course, there are a great many disadvantages and inconveniences peculiar to a new country, but where rapid development occurs and means of communication is increasing these will shortly be overcome. In the older farming sections many comforts exist, and there is perhaps no part of the American continent where the farmers are in better condition. Fruit growing is regarded as the most hopeful aspect of agriculture in this province, and Vancouver Island and adjacent coast with its mild, equable climate and warm sea breezes have special adaptabilities for the industries. The principal districts in the field reviewed herein are described in what follows. The particulars are compiled from the most authentic sources:—

ESQUIMALT, METCHOSIN AND HIGHLANDS.

These districts, which adjoin Victoria city, contain about 110 farmers. The rainfall here is small, and as a consequence grain growing and sheep raising do well. Root crops, fruit and vegetables are all good as a rule. Poultry do well. About 20 per cent. of the land is cultivated. A large portion of these districts is dry, gravelly plateaux, with a thin soil, suitable for growing alfalfa. There are some very picturesque spots to be found and the driving, on account of the good roads, is a most enjoyable exercise. Dairying is not carried on to any extent.

THE SAKE DISTRICT

has about 70 farmers, who raise considerable quantities of hay, grain, roots, vegetables and fruit. Some attention is paid to stock raising. About 20 per cent. of the land is under cultivation. The representative of the district, Mr. G. W. Anderson, says: "All root crops, temperate climate fruits, early peaches, grapes, tomatoes, and apricots do well."

VICTORIA DISTRICT.

Immediately adjoining the city of Victoria, and including the Lake district for parliamentary purposes, is one of the oldest settled parts of British Columbia, and pastorally considered one of the most picturesque and best cultivated. It contains some beautiful farms. There are about 150 ranchers in it. A good deal of fine grain is grown, large root crops, and a very large quantity of fruit, which is invariably a sure crop. There are a number of small nurseries in the district and numerous orchards and vegetable gardens. Dairying is a considerable industry, but the milk is nearly all sold in the city and not used for making butter. Sheep raising is carried on to some extent. About fifty per cent. of the land is under cultivation.

SAANICH.

This district—north and south—is to Vancouver Island what New Westminster district is to the mainland of British Columbia—the garden. It contains about

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150 farmers. J. R. Anderson, in his report to the Department of Agriculture, says: "The remarkable fertility of the soil and the equable climate, renders the successful cultivation of all grain, root crops, hops and fruits, both hardy and half hard, an easy matter in most seasons. It is particularly well adapted to the cultivation of hops, which here attain great perfection and have a reputation in the English as well as in the eastern markets. The industry is being prosecuted with vigor and promises to form one of the leading features of the agricultural products of Saanich. A fair number of sheep are raised. A good deal of butter is made and a large quantity of grain, hay, hops, roots and fruit was marketed. Probably 25 to 35 per cent. of the land is cultivated." Being close to Victoria a good market is afforded for all products.

SHAWNIGAN

includes Cabbie Hill and McPherson's. It is rendered accessible by the E. & N. railway running through it, but as yet only a small area under cultivation. There are between 75 and 80 ranchers, principally new settlers, in the district. Hay and root crops are principally cultivated. Fruit does well and its culture is being entered upon generally. Butter and poultry are marketed to some extent. Much of the land is wooded and swampy and requires clearing and draining for cultivation.

COWICHAN.

This is one of the most important districts in the Island, and includes Sahtlam, Cerfield, Treameieban, Comiakien, Cowichan, Maple Bay, Duncan's, Somenos, etc. There are in the neighborhood 200 settlers. The report of the Department of Agriculture says: "This new and important district has such a variety of soil and climate that it is possible to raise all the ordinary crops and fruits." Some grain is grown, principally oats, also a large quantity of hay of the very best quality. Root crops and vegetables yield largely. Orchards are being set out in all parts, the fruits, including apples, pears, plums, peaches, cherries and all small fruits. Dairying is carried on extensively, and a good many sheep are raised, also poultry. About 11 per cent. of the land is cultivated.

CHEMAINUS,

including Kuper and Thetis Islands, have about 40 settlers. Root crops and fruit are principally cultivated. In Chemainus a good many pigs are raised, and on the islands, sheep. A large proportion of the land is heavily wooded, and only about seven per cent. is cultivated. All kinds of crops—hay, grain, fruit, roots and vegetables—seem to do well. In the low-lying land, a good deal of which requires dyking, the returns are very large.

NANAIMO DISTRICT.

This includes the Nanoose, Galniola, DeCourcy and Mudge Islands, in all of which are some 225 or 250 settlers, sheep and poultry raising receive a good deal of attention. There is no extensive tracts suitable to grain, though grain invariably does well. Hay, oats, roots and vegetables produce very largely. Perhaps no part of the province is better adapted to fruit-growing. For pears, cherries, plums and all small fruit, it cannot be beaten.

SOAKE,

There are about 70 farmers in this settlement. There is very limited open land and therefore farming on a

large scale is out of the question. Fruit-growing, root crops, poultry-raising, dairying and sheep farming are carried on, on a small scale. About ten per cent. of the land is cultivated. As an indication of horticultural capabilities, tomatoes and corn are grown with good results.

ALBERNI.

One of the most promising districts of the Island of Vancouver is Alberni, on the west coast. There is a very considerable extent of farming lands, most of it, however, heavily timbered. The soil is of excellent character, and the number of settlers annually increasing. Its geographical situation is unexcelled and there are many predictions in high quarters that Alberni canal which leads up from the ocean to the agricultural district will yet be the principal route via Pacific coast to the Orient. In fact, it is stated that the late Robt. Dunsmuir, who built and owned the E. & N. railway, intended to build a short line across the Island through this valley. There are some 75 to 80 farmers in this district, mostly bachelors, however, who have not yet fully demonstrated its agricultural and other capabilities; owing to its isolation and lack of means of communication. Apples, pears, plums, cherries, wheat, oats, barley, roots and vegetables, and all kinds of grasses are grown with success. One of the drawbacks to the settlement is the number of young men, who own ranches, but who are practically non-producers and depend on public works for a living instead of clearing and cultivating their lands.

COMOX.

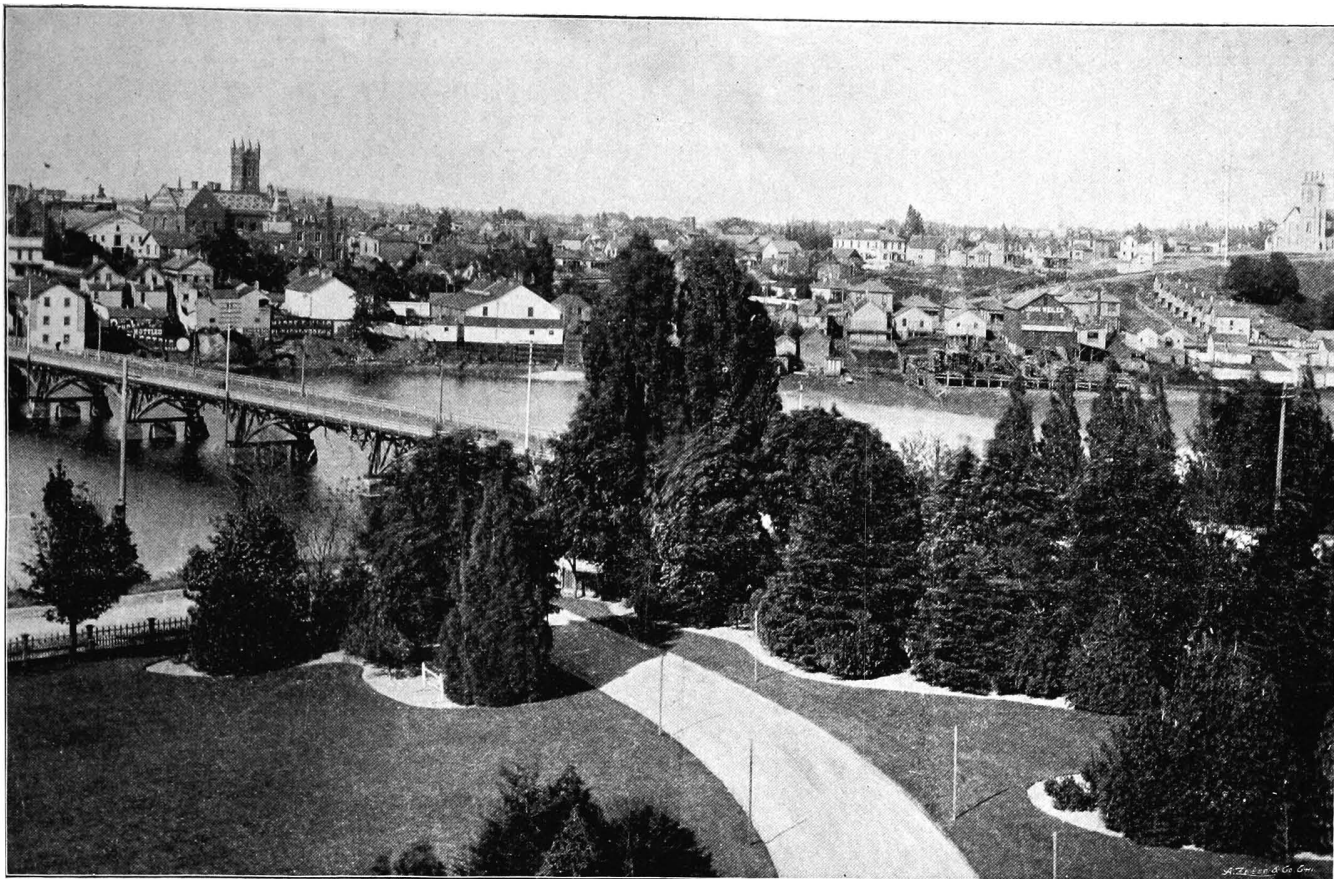
In this district, including Denman, Hornby, Valdez and Lasqueti Islands, there are about 260 settlers. Oats, root crops and hay are the principal crops, but general farming, with the exception of fruit, does well. This failure is attributed to mild winters and late frosts. It is a good dairying district, and sheep and swine are raised in considerable numbers. Fruit succeeds better on the adjacent islands; but onions, all wool crops, grasses and cereals do particularly well. Progress here has been very rapid, and development is now going on at a most satisfactory rate. Its railway possibilities and coal measures have been bringing it into prominence of late.

SQUAMISH, HOWE SOUND AND BOWEN ISLAND.

These form an important settlement near the mouth of Burrard Inlet, in which there are about 40 settlers. The valleys of Squamish and Howe Sound are heavily timbered but comprise a considerable percentage of good land. So far the area under cultivation is not large, but fruit, roots and vegetables do well. The fruit includes cherries, plums, pears and apples and small fruit and vegetables, tomatoes, citron, squash and cucumbers. Grain and grasses are also grown.

THE BELLA COALA VALLEY.

Reference has been made elsewhere to Bella Coala Valley. The Bella Coala River rises in several lakes on the plateau west of Chilcotin, and flows west into North Bentinck arm, navigable with canoes for about 40 miles. The valley is from one to three miles wide. Mr. Clayton has a fine ranch there, and his experience with root crops, fruit trees and cattle shows the farming capabilities to be good. There are about 18,280 acres of agricultural land. The soil is light sandy loam and very productive, adapted to fruit, vegetables and grass. The timber, of which there is considerable, consists of cottonwood, spruce, cedar, alder and Doug-



VICTORIA, FROM GOVERNMENT BUILDINGS, JAMES BAY.

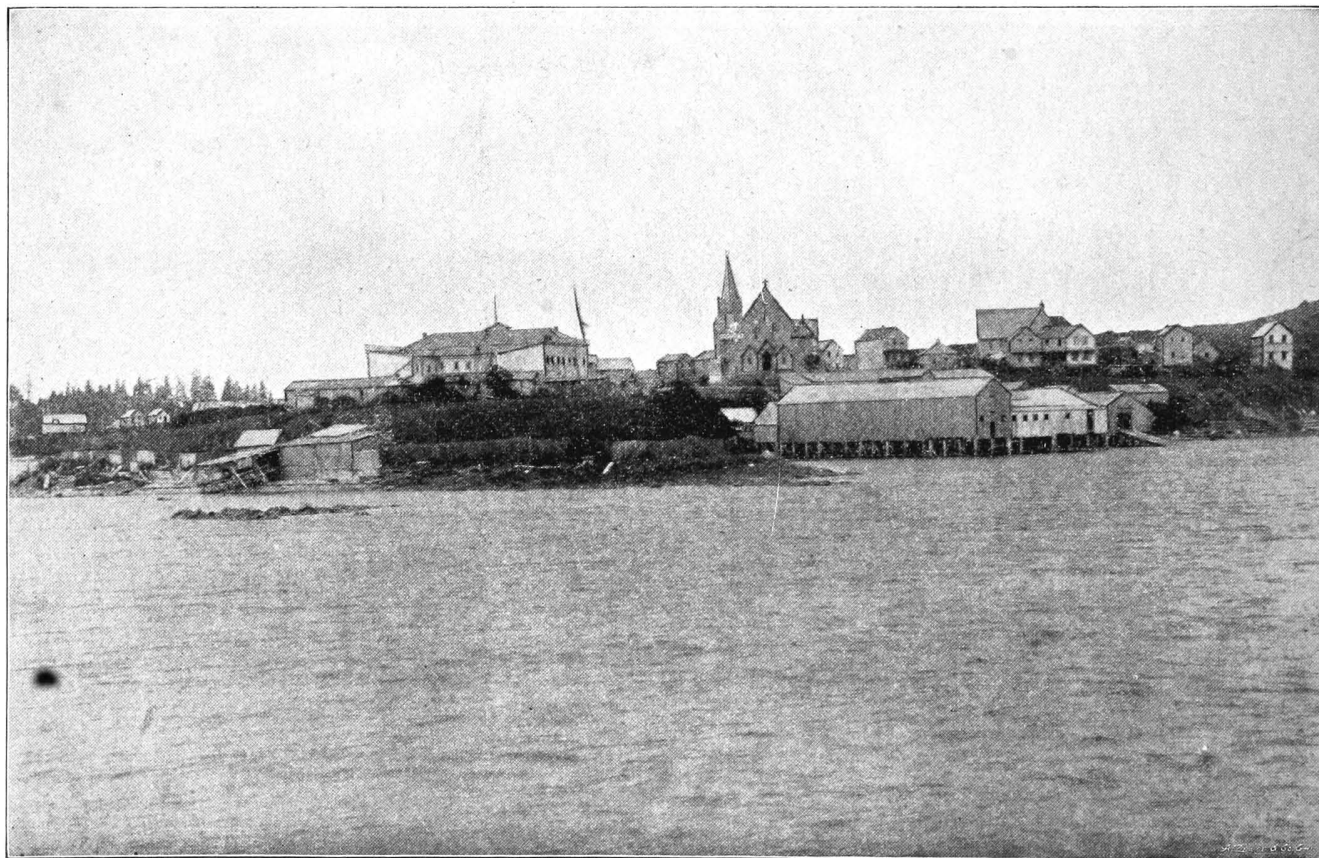


VICTORIA, FROM GOVERNMENT BUILDINGS, JAMES BAY.

The Commercial—British Columbia Supplement.



MOUNTAIN VIEW, BELLA COOLA.



METLAKAHTLA, ISIMPSHEAN PENINSULA.

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las fir, with a dense growth of salmonberry, gooseberry, elderberry, hardback, willow and crabapple. The climate is less humid than on the immediate coast, but not dry enough to require irrigation. Waters teem with salmon. Bear, black, brown and grizzly; marten, beaver, mountain goat, ducks, geese and grouse are plentiful. Several settlers have taken up land here.

THE ISLANDS.

A group of islands, including Salt Spring, Galiano, Mayne, Saturne, Pender, etc., is known as "The Islands," and forms a parliamentary constituency. They include, irrespective of Salt Spring, about 75 ranchers, and are, generally speaking, of similar character. Fruit, butter-making, cattle and sheep raising, are the principal industries. A good deal of the islands is devoted to sheep runs, but when the soil is suitable anything pertaining to the temperate zones may be raised successfully.

SALT SPRING ISLAND.

This is one of the most important of the islands adjoining the province proper. There are over one hundred settlers, though not much of the land, comparatively speaking, is under cultivation—about six per cent., the island being hilly and wooded. A large portion of it is devoted to sheep runs. The climate is particularly well adapted to fruit and grain growing, the rainfall being limited and the climate very mild. It is adapted to peach, apricot, nectarine, melon and grape growing. The settlers are principally engaged in fruit growing, sheep and cattle raising and dairying.

NORTH END OF VANCOUVER ISLAND.

A large area of good land has been discovered on the north end of Vancouver Island, and recently surveyed. About 150,000 acres are described as pastoral and 13,000 agricultural, which, by improvement, would be made of considerable value. The climate is spoken of as more equable and humid than the southern portion of the island, and agriculturally is suited for grazing, vegetables and small fruits. Though the timber is sufficient for local purposes, it is no place of great commercial importance. The value of the fisheries surrounding this portion have already been dealt with. The game consists of blue and willow grouse, small deer, elk, black bear, wild geese, and all kinds of water fowl. From Cape Commerell around the north end of the island to the mouth of Quatsino Sound is an exposed beach, the black sands of which contain flour gold, and though not prospected extensively, has yielded in places good pay. The great adaptability of the country, however, is for pastoral purposes, the value of which could be greatly enhanced by the expenditure of about \$5 per acre in clearing and drainage.

QUEEN CHARLOTTE ISLANDS.

THIS group of islands lies northwest of Vancouver Island, nearly between 52° and 54° north latitude, and geologically is closely related to the latter and greater island. Who first discovered these islands, whether the Japanese, the Russians, the Spanish or English navigators, is a historical speculation of little moment here. They were rounded and named in 1786 by Commanders Portland and Dixon, and they have remained as such until this day. Graham and Moresby Islands constitute the principal portions of the group, and of the two Graham is the chief. For pur-

poses of settlement its land, coal and fisheries are important elements. A low range of mountains run along the west coast, which is abrupt and rugged, but its greater area is comparatively level. On Massett Inlet, Wago Sound and all along Skidegate channel are large quantities of spruce (*A. Menziesii*) timber, the best of its kind on the continent, and grows much larger in size. For box lumber it is preferred to any other timber on the coast.

Red cedar here attains a size without parallel on the Pacific slope, and on that account the Indians of Queen Charlotte Islands enjoy a monopoly of the canoe building of the coast, and supply nearly all the canoes used by the Indians of the mainland and Alaska. Some of these are of enormous size and graceful in contour. The model of the first clipper built ships was taken from these canoes. The cedar differs from that of the southern part of the Province, inasmuch as it is sound to the heart, whereas the other is usually hollow. It is very plentiful.

The hemlock (*A. Canadensis*) is also abundant, and is much superior to the Douglas fir in some respects.

Another timber found in large quantities is the cypress or yellow cedar. It is a beautiful wood and should enter largely into the manufacture of furniture. For bridge timbers or for any purpose where strength and durability are required it is very useful. It is almost indestructible and foundations made of this after fifty years were found upon examination to be perfectly sound. Its durability, exposed to any weather or climate, is not less than four times that of any other timber.

There is a large extent of grazing land on the island, and there is probably 300,000 or 400,000 acres that could be drained, extending all along the east coast to the mountains. The facilities for drainage, too, are excellent and some day this work will be undertaken on a large scale with good results.

There is every reason to believe that the whole of Graham Island is a bed of coal. It is part of the same formation that extends up the Sound, and along the east coast of Vancouver, and evidently belongs to the same geographical period. Some extensive prospecting has been done during the past season, and the seams in which work was done prove the quantity to be immense and the quality equal to, if not superior, to any in British Columbia. Seams of from 16 to 18 feet of high bituminous coal were very thoroughly prospected, and in the Yakoun Valley, about midway between Skidegate and Massett Inlet, a discovery was recently made and the character of the coal is shown by the following analysis made by the geological department at Ottawa:—

Hygroscopic water.....	2.65
Volatile combustible matter.....	30.59
Fixed carbon.....	61.33
Ash.....	5.43
	100.00

These coal seams could be reached by a railway of eight miles to an excellent harbor on Rennell's Sound and shipment therefrom could be made about the same rates of freight to San Francisco as from Nanaimo or Comox.

Anthracite coal of excellent quality was discovered in the Southern part of the Island years ago, but the measures are somewhat broken and the possibilities of its working have not yet been demonstrated.

Moresby Island is more mineralized in its composition than Graham. It is supposed to contain copper and Iron. Springs of naphtha were found on an adjoining island. Over \$60,000 in gold was taken out of

a pocket on Moresby Island in the early fifties, and it is supposed that a much greater quantity was allowed to be washed into the sea. Argentiferous galena has also been found on this Island, but no prospecting has been done. Very fair samples of rock were shown. Native copper exists on the west coast and is used by the Indians.

A deposit of black clay slate, out of which the Haida Indians, who have their home on Queen Charlotte Islands, make their stone figures, and carve many artistic and ingenious designs, is located near Skidegate, and apart from its usefulness to the Indians, may yet be available as an article of commerce.

The waters about Queen Charlotte Islands abound with fish of especially fine quality. The Japan currents strike the Coast here, bringing with them nutritious fish food, and as a consequence the fish of the northern waters are larger, fatter and in every way superior to those further south. The principal economic species occupying these waters are dealt with elsewhere.

The climate of Queen Charlotte Islands is much better than that of the mainland in the same latitude, the moisture being greatly less, and in the spring vegetation is about three weeks in advance. There are no summer frosts. Oats and barley and all vegetables do well. Apples have been tried at Skidegate. Cherries and all small fruits are successfully grown. Summer extends from April to November.

FORT SIMPSON.

This place, upon which the eyes of railway men and speculators have been for some time resting, is situated at the head of Dixon's entrance, and has, in the opinion of naval men, one of the finest harbors in the world. It is directly connected with the ocean, is five miles long and three miles wide. When the Hudson's Bay Co. established itself on the Northern Coast, a brig was sent out to explore in order to locate a depot of easy access. Capt. Simpson, commander, of the vessel, after surveying the whole coast thoroughly, and notwithstanding that a depot had already been established at the Naas Estuary, recommended Fort Simpson as headquarters. This was in 1831, and the business was done direct with Fort Vancouver and London. It is still headquarters for the northern trade. Fort Simpson has a good deal in its favor as a candidate for the terminus of a second transcontinental railway. In Sandford Fleming's report of 1879, this route is strongly recommended, and it is stated that a locomotive between Fort Simpson and Edmonton would be equal in drawing power to three between Port Moody and Calgary.

At Fort Simpson cherries and small fruits are grown and peas, oats, flax and grasses. Three tons of timothy hay have been grown to the acre.

At Fort Hazelton, on the Skeena, oats and barley and vegetables are grown successfully. Tomatoes ripen in the open air.

The island adjacent to Fort Simpson are timbered along the shores, principally with cedar and spruce. The Tsimpsan Peninsula, upon which Fort Simpson and Metlakatla are situated, is an extensive moor, covered with moss, owing to the humid climate, capable of drainage, and wherever reclamation has been attempted the land has proved fertile.

The Skeena is navigable to Hazelton, and the Hudson's Bay Co's steamer Caledonia made the first successful trip in 1891. With a little more attention by the Dominion Government to this river navigation would be greatly improved.

Southeasterly is a vast expanse of agricultural and pastoral land, possessing a healthful and excellent climate suitable for the cultivation of the hardy cereals, vegetables and fruits and for stock raising.

THE TIMBER INDUSTRY.

ONE of the principal sources of wealth on the Coast is its great timber resources. It is difficult to estimate the number of feet available now, but before the best timber is exhausted the second rate will have grown into a supply equal to the present, if not destroyed in clearing the country. Not only the extent of the timber, but its size and quality give value to the timber limits of the Coast, to which it is principally confined. Immense quantities, however, have been destroyed by fire. In fact, the whole of the interior has been denuded of its best timber, and a good deal on or near the Coast has thus been destroyed. No estimate of this loss can be made, but it might not be amiss to put it down at a sum equal to the value of the supply now on hand.

The bulk of the best timber limits is found on Vancouver Island, New Westminster district, up the inlets of the Coast as far as Knight's Inlet, and on the islands midway between, notably Thurlow, Crocow, Valdez and Harwick, upon which is situated the famous Bickly Bay logging camp.

The chief timber is made up of Douglas Fir (*A. Douglasii*), cedar (*Thuja gigantea*), hemlock (*Tsuga mertensiana*) spruce, (*Picea sitchensis*). These at present constitute (if we except the hemlock), the timber of commerce, but there are found also, speaking of Vancouver Island and the mainland coast as far north as Fort Rupert, maple, alder, white pine, some yew and crabapple and a little oak on the southern end of Vancouver Island, all of which enter more or less into the manufacture of house finishings and furniture. Maple and alder are both valuable woods and white pine, but are not found in any large quantities.

The largest body of valuable timber is found on Vancouver Island in the southern part, principally located and running up the valleys of Cowichan, Chemainus, Nanaimo, Englishman's, Little Malicum, Big Malicum, Comox, Oyster, Campbell, Salmon, Adams and Nimkish rivers and French Creek and Black Creek and other streams and tributaries of the foregoing. On the west coast the principal timber is in the Alberni Valley, where some large timber limits have been located. The rest of the timber is very much broken up. A good deal of cedar and spruce is interspersed in all this, but it is mainly fir. The spruce is found largely in swampy places and in the delta districts and attains as large a circumference as 44 feet, but is not so tall as Douglas fir. It is one of the most useful of timbers, but in this province is largely used for salmon boxes. The red cedar is found usually about three miles or so from the Coast, and attains enormous proportions in some instances from 50 to 75 feet in circumference at the root. Economically, it is one of the most useful of woods for inside finishings, shingles, posts and what not, its utility being greatly enlarged by its wonderful durability. It is the greatest friend of the settler, who can turn it to a great variety of uses. Douglas fir is, of course our forest king, being majestic in proportions, clear of imperfections and useful for all construction purposes, where strength and durability are required. It attains a height sometimes of 300 feet and a circumference of 50 feet, but the best aver-

ages are 150 feet clear of limbs and 5 to 6 feet in diameter. It makes beautiful spars and for car sills, dredge booms, heavy plank, dock beams, etc., etc., it is the finest timber in the world. The limit of Douglas fir on the Coast is at or near Fort Rupert, where its place is taken by Cypress or yellow cedar, a timber destined to be quite as useful in its way. It grows to a large size, makes a beautiful finishing wood, is very strong and exceedingly durable. It is found everywhere north on the Island and mainland. Large tracts of it are said to exist in the interior of Vancouver Island. Hemlock, too, is an exceedingly useful timber but answering very much the same purpose as Douglas fir, will not come into use until the latter begins to be exhausted or lumber is in greater demand. It grows from 1½ to 5 feet in diameter and is from 150 to 200 feet in height. There are thousands of acres of it all up the Coast. It is additionally valuable for the bark. White pine, which is commercially about twice as valuable as Douglas fir, is limited.

On the mainland the timber is more broken, but extensive tracts exist in the Fraser River, on Burrard Inlet, Howe Sound, and the principal inlets, and many of the islands as far north as River's Inlet, the limit of the logging camps for the Coast saw mills.

One remarkable feature of the Coast timber is the great density of the forest and the number and size—the average size—of the trees. As high as 500,000 feet of timber has been taken off a single acre, while something between 25,000 and 50,000 feet would be an average estimate.

North of the Douglas fir limit there are hemlock, cypress, spruce, birch, maple and alder. In describing Queen Charlotte Islands, the northern coast and interior reference has been made to their timbers. These, while perhaps not affording any great quantity for export, are ample for all local demands for all time to come.

STATISTICS OF COAST TIMBER.

NAME.	LOCATION.	DAILY CAPACITY.	AVERAGE TIMBER.
Brunette Sawmill Company	Westminster.	65,000	22,331
Moodyville Land and Sawmill Company	Moodyville.	105,000	84,481
B. C. Mills, Timber and Trading Company	1 Vancouver.	150,000	
	1 " "	30,000	88,433
	1 Westminster.	110,000	
Leamy and Kyle	Vancouver	50,000	8,131
W. P. Sayward	Victoria.	40,000	6,041
Hughitt and McIntyre	Cowichan Dist.	90,000	7,089
J. Martin and Sons	West'r. Dist.	25,000	2,280
A. Haslam	Nanaimo.	70,000	12,840
Taylor Mill Company	Victoria	15,000	
Leigh and Sons	"	25,000	
D. F. Adams	"	10,000	
Knight Bros	Papcum.	25,000	
McLaren-Ross Lumber Co.	Westminster.	200,000	51,190
Muir Bros	Sooke.	12,000	
Port Moody Saw Mill Co.	Port Moody.	15,000	5,037
Indian Mission	Alert Bay.	5,000	194
A. C. H. King	Frederick Arm.	10,000	
Cunningham & Co.	Port Essington.	8,000	
J. A. Carthew & Co.	Skeena.	10,000	
G. Willis Croft	Georgetown.	20,000	
Indian Mission	Kincolith.	3,000	
Victoria Sawmill Co.	Rivers Inlet.	5,000	
Vancouver Sawmill Co.	Vancouver.	125,000	36,946
Victoria Lumber and Manufacturing Co.	Chemainus.	120,000	18,537
North Pacific Lumber Co.	Burrard Inlet.	125,000	14,950
H. H. Spicer	Vancouver.	30,000	2,277
Geo. Cassidy & Co.	"	20,000	
Ernest Buse	Hastings.	10,000	
West Bay Saw Mill Co.	Gambier Island.	25,000	
Michigan Lumber Co.	Vancouver.	75,000	20,219
Laidlaw and Co.	Delta.		4,397
Delta Saw Mill Co.	Ladner's Landing.		
Mechanics Mill Co.	Westminster.		
Shawnigan Lumber Co.	Shawnigan Lake.		
J. White	Sydney.		35,919

There are 51 saw mills in all parts of the Province with a daily capacity of about 3,000,000 feet. Of these 35 are situated on the coast, having a daily capacity of 1,750,000 feet. It is estimated that there are 100,000,000,000 feet of timber in sight. About 65,000,000 feet were cut last year. The mills running at their full capacity would take about 150 years to exhaust the present supply, so that there need to be no anxiety about the immediate future.

Last year there were exported by vessel 41,680,053 feet, valued at \$480,061 in ships. In the past the principal market has been South America, but Australia, China, New York and Great Britain have taken considerable quantities. For several years all foreign markets have been greatly depressed, and particularly the South American. During the last few years, however, a considerable trade has grown up with Eastern Canada in shingles, in finishing woods and in heavy timbers for construction, and this trade is very likely to increase to very large proportions. The building of the Nicaraguan canal and the free admission of our lumber into the United States would give a great impetus to the industry in British Columbia.

THE FISH OF THE COAST.

EVERYBODY has read of, if not eaten, British Columbia salmon. Few people comparatively know much of the other fish of the coast, which some day will figure commercially in the same relation to salmon as the latter does now to the former. In an article on the Crofter scheme, published elsewhere, a good deal of information is given in reference to the food fishes of the coast, and, therefore, not so much will be necessary here.

The salmonidæ represented in British Columbia are the salmon, oolachan, trout, char, grayling, smelt, surf smelt, charr, and white-fish. There are five varieties of the salmon: Sumnel (or spring salmon), the sockeye, the coho, the daf salmon, and the hump back. Mr. Ashdown Green, Victoria, an authority on this subject, says:—

All these are found in British Columbia, though all do not frequent the same streams; for instance, there are no sockeyes on the eastern shore of Vancouver Island except in the Nimkish River, and the small streams to the north of it. There are no humpbacks in the Cowichan, while they abound in the Chemainus River. The tyhee salmon only frequents the large streams; the coho and dog salmon, every little brook. The time of arrival of the same species varies in different rivers. Broadly speaking, the tyhee salmon is taken in the late autumn and spring, the sockeye, in the summer and the coho, dog salmon and humpback in the autumn.

There is not so much known as might be in regard to the salmon and their habits, but it seems that the run starts from the north, and in their respective varieties appear a little later as they come south. They run in all the rivers and inlets from Alaska southward to the Fraser in British Columbia, including the west coast of Vancouver Island. In addition to salmon canning, which is the staple fish industry, there is being established at Cloyoquot, on the west coast of Vancouver Island, a salmon saltery, by Mr. Mangensen, of Victoria. The choice table salmon are the steelhead and the tyhee, or spring salmon. The latter are of two kinds, white and pink, the latter being the favorite both for table and canning, but the stock fish for the canneries is the sockeye. Cohoes are only utilized when the run in the sockeyes is short. The dog salmon and hump back are not eaten, except by Indians. Particulars of the salmon pack are given elsewhere. A trade has started up during the past year or two in shipping frozen salmon east. There is a freezer at Port Hany, and another at Port Essington. By this process white salmon as well as red are utilized, and may be kept for any length of time, and shipped, retaining all the original flavor and freshness when thawed out. A number of carloads of fresh salmon on ice have been shipped to New York, although the trade is still in an experimental stage, but it promises to become an important item of commerce.

The halibut, or giant sole, is one of the most important of the Pacific coast fishes. It winters off Banks

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Island principally, in enormous numbers, and goes south as the season advances all along the Hecate Straits and the west coast of Vancouver Island. The halibut, next to salmon, is the greatest factor of Pacific coast fisheries, and is the most prized for table use. As a shipping fish it is ahead of all others, being fine in texture, and makes a delicious steak.

The "Skil" is a new fish to commerce, referred to elsewhere. It is found in 150 to 200 fathoms of water, off Millbank Sound and around the head of and along the West Coast of Vancouver Island. It is the most deliciously flavored of all the fishes, but too delicate a texture for export fresh.

The oolachan, known also as the candle-fish, is a little fish of extremely delicate flavor and texture. It begins to run in the Naas about the 20th of March, and later in Knight's Inlet, Kingcunbe Inlet, Kitimat Arm and the Fraser. In the north it is almost too rich and oily to be eaten by the Whites, and is largely used by Indians for making grease. It is also used by them in the place of candles. As they proceed further south they become better pan-fish and when they reach the Fraser they make excellent pan-fish, but are no use for grease-making purposes. These fish run in enormous quantities for a limited season and are greatly prized.

There are several varieties of the true cod, which are constantly seen in the fish markets. They must be abundant somewhere, as the young cod come into the inlets and bays in great numbers, but the large cod is only caught in deep water and not in sufficient quantities to lead to the belief that their home has been, as located, on the eastern coast. The Arltus Cod (*Ophidion elongatus*) is very common and an excellent food fish, and is in season the year round.

The sturgeon in British Columbia grows to an enormous size, 1,000 and 1,200 pound fish being recorded. It is taken principally in the Fraser. Commercially it should be of importance, not only for food in the ordinary, but for caviare and isinglass.

Herring and smelt are very plentiful. The former run in enormous numbers, though somewhat irregularly. Their most noted locality is Matsino Sound. Sardines are also present at times in great quantities and have been taken in bucketsful out of Victoria harbor. They are large and of fine quality.

Flounders are plentiful, and a small flat fish resembling flounders, called by fish dealers soles, are delicious table fish, very white and flaky..

Other fish, commonly found on the fish stalls, are toumy cods, sea bass, sea trout, mountain trout and whiting, all of which are splendid table fish. Occasionally capelin and graylings are offered and a few other species.

Whitefish and trout are found in the interior lakes, and what are known as land-locked salmon.

Shell fish are represented in oysters, clams, cockerels, razor clams, mussels, crabs, and abelones. A small native oyster is found more or less abundantly in a lagoon back of Blunden harbor opposite Fort Rupert, at Oyster Bay near Naniamo, above the gorge at Victoria in the mud flats, at Sooke, and Chemainus. These oysters are small and have a slightly coppery taste, but by many are more highly prized than the eastern oyster. Doubtless a great deal could be done toward improvement by cultivation, though little or nothing has been done in this direction.

There are no lobsters on the coast, but the conditions are favorable, it is understood, for their cultivation, and the Dominion Government intend taking steps to plant eastern lobsters on this coast next year.

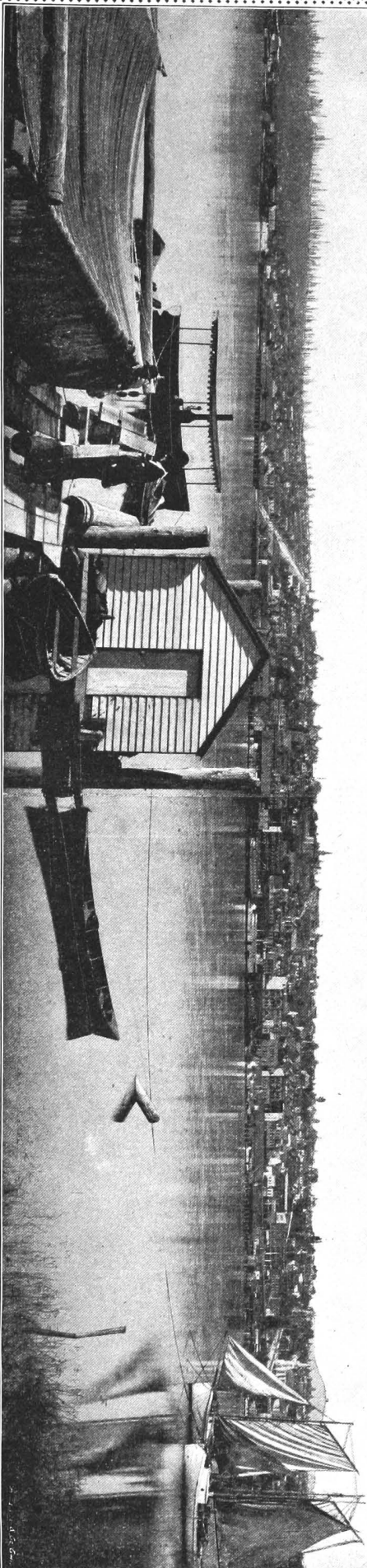
A fish of great economic value, though not a food fish, is the dog fish. It is in great abundance on the west coast of Vancouver Island, on the coast of Queen Charlotte Islands, and, in fact, in all northern waters. It preys on all fish, and follows more particularly the run of oolachan and herring. It is very large and the oil from its liver, of which it takes nine or ten to make a gallon, is one of the finest lubricants known. As the results of tests in the east it is declared to be of rare quality. The oil from the body of the fish, though not equal to that of the liver, is also of excellent quality, and with greater experience in its manufacture and the adaptation of some of the processes employed in making cheap lubricants, it would find an extensive market. The dog fish is caught principally by the Indians, who fish with long trawls in 10 or 20 fathoms of water. There are small dog fish oil factories in the province, the principal being at Skidgate, Queen Charlotte Island, owned by Robt. Tennouth. There is another at Clew, Q. C. I., and a third is situated on Portico Island, which is owned and operated by R. Cunningham & Son. Port Essington dog fish are so plentiful that Indians often make \$10 to \$12 a day fishing for them.

Herring, oolachan, rat fish, sharks, and whales are all very plentiful, and economically considered for oil extraction, etc., are valuable.

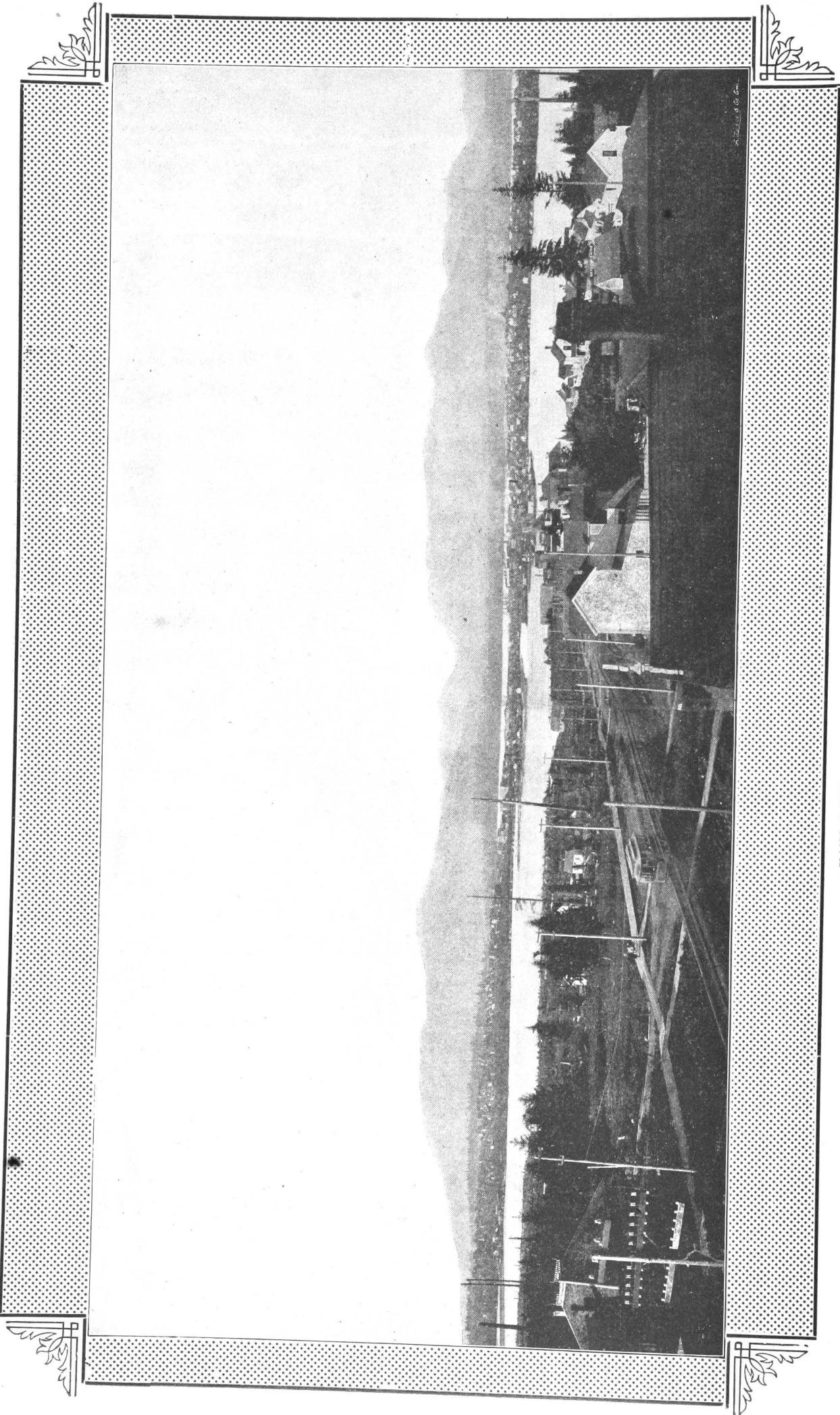
The fur seal is another valuable possession of the Coast. They come from the south early in January and are followed up by sealers and gradually work north into Behring Sea. Just around the inside of the north end of Vancouver Island is a favorite place for them, where the female seals, in young, pup in the kelp. They are often found in the inlets of the Coast, which they enter to catch the oolachan. As a fish destroyer, the fur seal is the greatest enemy British Columbia has, and if it were not for the important returns they yield in the way of skins it would be a blessing if they were completely destroyed. They breed in great numbers, and all the anxiety expressed by the United States government in reference to their extinction by "pelagic sealing" is fudge.

BRITISH COLUMBIA SALMON PACK, SEASON 1891.

FRASER RIVER—		CASES.	SKEENA RIVER—		CASES.
Ewen & Co	25,045		Inverness Canning Co	10,717	
Bon Accord Fishery Co	9,498		Anglo British Col. Packing Co.: ..		
(Sea			North Pacific		
Island)	10,000		B. A. P. Co.	25,149	
Anglo British Columbia Packing Co., comprising:			Standard Packing Co.	10,978	
B. C. P. Co			Skeena Packing Co.	11,793	
Phoenix			Balmoral Canning Co.	9,914	
B. A. P. Co			B. C. Cannery Co. (L'd)	9,584	
Canoe Pass			Total	78,135	
Wadhams			NAAS RIVER—		
Garry Point			A. J. McLellan	5,473	
Dumfries			Cascade Packing Co.	2,770	
Britannia			B. C. Canning Co. (L't)	2,081	
Annandale			Total	10,323	
British Columbia Canning Co ..	56,025		Grand total	314,893	
Wellington Packing Co.	7,126		TOTALS FOR DIFFERENT LOCALITIES.		
Delta Canning Co.	9,200				
Laidlaw & Co	9,180		Fraser River	1890.	1891.
Laidlaw & Co	12,116		Alert Bay	241,889	178,954
Harlock Packing Co.	5,684		River's Inlet	7,280	650
Beaver Canning Co.	12,985		Gardiner's Inlet	32,961	34,924
Richmond Canning Co.	12,095		Lowe Inlet	3,719	3,876
Lulu Island Canning Co	10,030		Skeena River	6,087	8,031
Total	178,954		Naas River	90,995	78,135
ALBERT BAY—			Bute Inlet	23,906	10,323
Albert Bay Canning Co.	650		Total	2,627	
Total	650		Total number of cases, 409, 464		314,893
RIVER'S INLET—			SHIPMENTS FOR 1891.		
British Col. Canning Co. (L'd) ..	14,001		United Kingdom	220,761	
"	9,914		Canada (Eastern Provinces) ..	263,950	
Wanuck Packing Co.	11,009		Australia	3,534	
Total	34,924		China	100	
GARDINER'S INLET—			India	100	
Price & Co. (L'd)	3,876		Singapore	50	
Total	3,877		United States	350	
LOWE INLET—			Local sales and stock on hand ..	8,948	
Cunningham & Son	8,031		Total	314,893	
Total	8,031				



NEW WESTMINSTER—FROM ACROSS THE FRASER RIVER.



VANCOUVER—FROM BEYOND FALSE CREEK.

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The pack for 1892 was by general agreement reduced nearly 50 per cent., it being as well a very short year and therefore not a standard year so far as the pack is concerned.

CATCH OF SEALING SCHOONERS.

Sealing Fleet of 1892.—49 vessels—tonnage, 3,342 tons, 16 canoes, 384 boats, 696 whites, 356 Indians.

CATCH.—Lower Coast, 4,127 skins; Upper Coast, 17,443 skins; Behring Sea, 28,847 skins: Indian canoes 1,540 skins; Catch off Kurile Islands, 399 skins; Total, 52,365.

Sealing Fleet of 1892:—Victoria, 64 vessels, tonnage 4,465 tons, 244 canoes, 275 boats, 957 whites, 488 Indians.

Sealing Fleet of 1892—Vancouver, 6 vessels, tonnage 274 tons, crews 111 men.

TRADE RETURNS—IMPORTS.

The total imports of British Columbia for the year ending June 30, 1892:—

PORT OF	DUTIABLE.	FREE GOODS.	LEAF TOBACCO.	TOTAL REVENUE 1892.	TOTAL REVENUE 1891.
Victoria.....	\$ 2,925,401	\$832,681	\$20,596	\$1,033,691 13	\$987,672 17
New Westminster..	507,662	161,340	---	15,616 43	98,639 45
Vancouver	931,569	782,695	---	330,18 65	61,9 6 31
Nanaimo	254,256	26,389	---	75,545 16	331,955 02
Total.....	\$4,671,898	\$1,803,105	\$20,596	\$1,596,971 37	\$1,481,222 95

EXPORTS.

PORT OF	TOTAL, 1892.	TOTAL, 1891.
Victoria.....	\$3,037,428	\$2,779,873
New Westminster..	368,471	401,520
Vancouver	541,600	2,506,859
Nanaimo	2,628,490	669,406
Total	\$6,574,980	\$6,557,158

MAMMALS—MAINLAND AND ISLANDS.

IN the deer family the moose ranks first. Its principal habitat is in the Peace River country, the point nearest to the coast which it reaches being at Giscour Portage, Fort George. All through the Cassiar country it is plentiful, and north on the slope of the Arctic as far as the mouth of the Yukon and McKenzie Rivers. It has a very wide distribution.

At one time the American elk, or wapiti, was found all over the mainland, but has been exterminated, it being now confined to the Island of Vancouver, where alone in British Columbia it is found, and where it is likely to be safe for a long time to come. It is specially plentiful in the centre of the island, keeping away as far as possible from settlement. It is hunted more or less every year by sportsmen, but there is never a large number killed.

The woodland caribou is found in the interior, along the Selkirks, to the head waters of the Skeena and Naas rivers and ranges as far as Cassiar. It is quite plentiful, but not hunted much, except by those who can afford time and money.

The mule deer, so called on account of its large ears, is the largest of the small deer, and extends from Similkameen across the interior to Chilcotin. It is found east of the Cascades only, and is very plentiful. It is extensively shot, and rapidly thinning out as a consequence. Its habitat is in the open country, on mountain and plain.

The black-tailed deer is plentiful on Vancouver Island and all the islands of the coast as far as Alaska. It is, in fact, common on the coast and ranges all along it, but is not found east of the Cascades.

White-tailed deer are found only in the southern part of the Province in the valleys along the borders of streams. They are not plentiful, and are rapidly becoming extinct.

There are no mountain goat on Vancouver Island, their principal habitat being along the coast range, where they are abundant, but they are found all over the mainland wherever there are mountains. With the exception that they live in very inaccessible mountain peaks, they are not considered great game, being very stupid and easily shot when their haunts are reached.

The *summum bonum* of sport, however, in British Columbia is the hunt for big horn or mountain sheep, which are found throughout but not west of the Cascades. Their habitat is in the Similkameen valley, in the Chilcotin country, and as far north as the boundary of the Province. The big horn sheep are much hunted, the ram's heads especially being regarded as great prizes. One incentive to their hunting is the difficulty of the sport afforded. Unlike the mountain goat, they are very difficult to bag, which is accomplished by stalking and still hunting.

The black bear is found everywhere on the islands and mainland.

The grizzly is found only on the mainland and chiefly on the coast; also in Cariboo, along the North Thompson, in Kootenay, in the Horse Fly county and as far north as Alaska. He is wary and very hard to get a shot at, and the most dangerous of all animals when wounded. They reach as high as 1000 lbs. in weight.

The American panther is found all over British Columbia, but is not common anywhere except on Vancouver Island, where he does a lot of damage. The largest shot was 8 ft., 2 in. in length, but despite his size and great strength the panther is one of the most cowardly of animals and is referred to by the Indians as "cultus."

A really dangerous animal is the Canada Lynx. He is found only on the mainland, on the coast, in Chilcotin, in the Peace River county, in Cariboo and is very abundant in Cassiar.

The wild cat is found only west of the Cascades, but not on the Island. Like the panther he too is very "cultus."

The wolverine, a member of the bear family, is a habitat of the mainland and island, abundant on the north and running south to the Similkameen. There are few on the coast.

The grey wolf, a lonely resident of the forest, is found all over the province, but more plentiful on the east coast of Vancouver Island. The Coyote, or prairie wolf, is east of the Cascades in the dry open country.

The fox—red, black, silver and cross—is east of the Cascades, and in the north.

The marten habitats in Vancouver Island, but is more abundant in the interior and northward.

Mink, abundant on the coast, but found everywhere.

Similarly the beaver is found all over, but is more abundant on Vancouver Island and northward on the mainland.

The land otter has a big range, being found all over, but is not common anywhere.

The fisher is not common, but like the otter is over the mainland.

The smaller animals are the hare, rabbit, weasels, skunks, and the ground hog.

GAME BIRDS.

The coast is rich in game-birds and water-fowl, as well as the whole of the interior. A check list published by Mr. John Fannier, curator of the museum, contains the principal of these, and from its pages the most common are enumerated.

Grebes — western, red-necked, horned, American eared. Loons—great northern diver, Pacific; tufted puffin, marbled murrelet, pigeon guillemot, California murre. Gulls — glaucous-winged, western, Pallas's, American herring, California, ring-billed, Bonaparte's; short-tailed albatross; fork-tailed petrel; Laysan petrel; cormorants — white-crested and violet-green.

Ducks are largely represented. The most common are the American merganser, red-breasted merganser and hooded merganser, the mallard, green-winged teal, American widgeon, pintail, American scamp duck, American golden-eye, butter-ball, long-tailed duck, harlequin, white-winged scoter, surf scoter. The geese are the lesser snow, American white-fronted, Canada goose, Hutchin's, cackling, black brant. Whistling swans are not uncommon. The American bittern and great blue heron are abundant, also the sand-hill crane. Carolina rail and American coote are common. The northern phalarope, Wilson's snipe, the red-breasted snipe, Robin snipe, the least sandpiper, red-backed sandpiper, western sandpiper, yellow-legs, wandering tattler, and buff-breasted sandpiper are abundantly resident. The most common plovers are black-bellied and American golden.

Most common varieties of grouse are the mountain partridge, California partridge, sooty grouse, the fool hen, Canadian ruffed grouse, willow ptarmigan, and white-tailed ptarmigan.

Pigeons are not common. There are sixteen varieties of hawks, which are abundant everywhere. The golden and bald eagles are everywhere abundant. There are about a dozen varieties of owls. The smaller birds are fairly well represented, such as cuckoos, woodpeckers, humming birds, perching birds, larks, jays, magpies, blackbirds, finches, sparrows, swallows, warblers, tits, etc. But, speaking generally, they are less frequent than in the east. There is a noticeable absence of songsters and birds of bright plumage.

English and Japanese pheasants have been introduced, and the former are plentiful in the southern end of Vancouver Island, especially about Victoria.

MINERALS OF THE COAST.

THE geological nature of the northern interior has been pretty fully described elsewhere. The submerged mountains lying alongside the mainland and which is a continuation of the coast range is represented by a series of islands, the largest of which is Vancouver Island. They reproduce in the main the physical features of the adjacent coast. A recent official guide book says: "The island (Vancouver) may be described geologically as a group of upturned gneissic rocks, embracing certain tertiary areas and worn down by glacial action, so that in one place extensive gravel moraines, in another beds of boulder clay, sandstones alternate with the barren cliffs of trap. Upon such unpromising surface, generations of trees have flourished, and by their decay gradually deposited a mould of increasing thickness sufficient to provide suitable ground for other forms of vegetation, until the country has become covered with a dense growth of timber, varying according to the situation and adaptability to the wants of each particular kind." The coniferous trees grew on the gravelly ridges and granitic deposits, while the deciduous plants and trees grew on the beds of boulder clay, and thus one form of vegetation succeeded another, maples growing on burnt pine lands. "Indeed, in time," says the writer

just quoted, "much the same sequence of soft and hard timber might be expected on the coast as is known to have occurred on that of the Atlantic, where firs, oaks and beeches have followed in successive order." Inferentially, therefore, we might conclude if no other evidence was afforded, that the Pacific belonged to a later geological period than the Atlantic. To man belongs the task of diversifying the forestry of this province and cultivating the hard woods, which nature in her own slow way would have accomplished in time.

In regard to the geological structure of the coast we have simply to look around us to apprehend in a limited way the mighty disturbances and upheavals which produce its rugged exterior. To it we owe the intrusions of precious metals and materials of economic value which observations regarding the surface have disclosed. For this reason, for the reason that there is a "sea of mountains," the whole of British Columbia may be characterized as a mineralized area; and not less the part of it now under consideration. To describe briefly the minerals of the Coast is the object of this chapter. Those of the northern interior have been included in the general review devoted to that and will not be referred to here.

In no part of the coast can it be described as highly auriferous. Gold in places has been discovered at Sooke and in Alberni district, but not in considerable quantities. Colors can be obtained in many of the streams all the way up the coast, but nowhere in paying quantities. The black sands at the north end of Vancouver Island have yielded fine gold in small quantities, and it is said with proper appliances could be made to pay well, but little has been done to demonstrate their values yet. A very rich pocket of gold was mined years ago on Moresby Island, on the Queen Charlotte group, but was quickly exhausted and no further discoveries have ever been made. A good deal of prospecting was done in Texada Island several years ago, and very rich surface indications were discovered, the gold being found in stringers. Development work has not been sufficient to prove the value of the deposits. It is said that in and in the vicinity of Victoria city quartz veins exist in considerable body, but if so, the assay value has not been sufficient to induce any development to take place. Altogether, not much more has been ascertained than that gold exists.

So far as known silver does not exist in any large or paying quantities. A ledge of argentiferous galena was discovered on Moresby Island, but was lost and never since found again. Some Nanaimo prospectors last year claimed to have discovered ledges on the mainland coast equal to the Slocan finds, but nothing more has been heard of it. Five years ago ledges were prospected on Bowen Island and favorable assays obtained, but that too has lapsed into oblivion. Mineralized rock of some description was found in considerable quantities on the north side of Burrard Inlet, but evidently of not sufficiently high grade to work.

Copper is one of the metals most frequently met with all up and down the coast, both as copper pyrites and as pure native copper. It is found in a great many streams and rivers, and the Indians made a variety of uses of the one native article, but no large body of it has been found in one place. The indications are, however, that very extensive deposits of copper ore will be located somewhere on the coast. Grey copper ore is found on Texada Island.

IRON.

What the islands and coast lack in precious metals they make up in the economic minerals. Principal of

these are iron. Hematite deposits exist at Port Kells (in Westminster District), at Sooke and elsewhere, but magnetite predominates.

On Texada Island there is a very large deposit of magnetic iron ore on Gilley Bay, the property of the Irondale smelting works, Washington. At Blubber Bay, at the north end of the island, where an excellent harbor exists, a splendid iron property is owned by Messrs. DeWolf & Munro, Vancouver. The ore contains 60 per cent of iron, the vein being from 9 to 18 feet in width. A bed of limestone lies alongside of it, the conditions being most favorable for smelting works being erected there, particularly in relation to facilities for acquiring material for fluxes. There is limestone without limit, charcoal is easily obtainable, and a splendid coking coal is mined at Comox.

Redonda Island, 40 miles north of Texada Island, contains the largest deposit of iron on the coast. It is located on the north end of the island on Price's Channel. The anchorage is good, and the water is smooth the year round, above which the ore is 600 feet. The property is owned by Messrs. De Wolf and Munro. There are two veins developed, about 200 feet apart. No. 1 vein is 29 ft. 6 in. of solid ore, and No. 2 40 ft. The analysis of the coal made by the Dominion Government chemist was as follows:—

Metallic iron	65. 37
Sulphur.....	.015
Phosphorus.....	nil
Titanic	nil
Insoluble matter	8. 06

Of course, development work is in its incipient stage as yet, and it is impossible to give any estimate of its extent, but the presumption is that there are millions of tons of it. On the opposite side of the channel on the mainland is a similar deposit, owned by the same parties. No development work has been done. Marble occurs alongside, white and gray, the vein of which is 50 feet wide.

There are iron ore deposits and frequent indications of iron elsewhere along the coast, but these are the principal deposits. Messrs. De Wolf & Munro have large contracts to supply ore to smelters on the other side of the line, and with apparently an inexhaustible supply of iron ore, with every facility for fluxing, and with unexcelled communication by water, there seems to be no reason why a large smelting industry could not be established and iron produced as cheaply as in any other part of the world.

SLATES.

Another natural product of great importance is slate. It is abundantly plentiful on the coast and of superior quality. There are slate deposits at Howe Sound, the head of Jarvis Inlet, and elsewhere more northerly in the granite formation where it is found as intrusions.

The chief deposit and the only one where actual work in quarrying has been undertaken is situated on tide water on Jarvis Inlet, about 100 miles north of Vancouver. Here there is an immense body of slate, and sufficient for the needs of the trade for many years to come. It is owned by the Westminster Slate Co., whose head office is at Westminster, and who have an extensive tract of land in connection with it. The slate is of excellent quality, equal to the best Scotch or Welsh article, and highly commended by practical men. Two years ago an exhibit of this slate was made at Toronto Fair, and building supplies' dealers were willing to place large orders for it, provided a rate of

freight could be secured so as to allow it to compete in the market there. The official report on the exhibit spoke in the highest terms of its quality and possibilities. But while a rate could be secured to sell it profitably in Toronto, the company have recently received three large orders for it in the Northwest, and expect to open up a large market there. Although the quarry has been operated only for a comparatively short time some of the principal buildings in cities of the Province have been roofed with this slate, and considerable has been shipped to Seattle, Tacoma, Portland and cities in California, where it has been received with great favor. The only other slate quarry on the Pacific coast is in California, which produces an inferior article under most unfavorable conditions for shipping and in a limited way. The company is now looking to Australia, Hong Kong and Shanghai, where they expect a large demand.

The quarry has all modern machinery, and has a capacity of 1,000 squares per month. The plant consists of tramways, 90 h.p. boiler, steam hoists, two steam drills, three slate dressing machines, a derrick and all the necessary buildings. It is situated right on the water's edge, with every facility for shipping. About \$50,000 has been spent so far in developing it. Between 35 and 40 men are employed in connection with it, who produce about 500 squares per month. The supply is practically unlimited, and at the present rate of progress promises soon to become one of British Columbia's chief industries.

BUILDING MATERIALS.

There is an unlimited supply of building stone on the coast, both on the islands and mainland.

The principal deposits of gray granite are on Nelson and Hardy Islands, and on the North Arm of Burrard Inlet, where quarries are in operation. There is said to be pure red granite on Valdez Island. However, the field for granite is a large one and there are room for extensive quarries as soon as sufficient demand exists.

Some excellent sandstones exist also, white and blueish grays. Quarries are located on Newcastle Island, Koksilah, Coble Hill, English Bay, and on Haddington Island. Owing to the extensive supply of stone, granite and sandstones enter largely into the construction of all large buildings.

Limestone exists in large bodies in Texada Island, the Peninsula of Sceancicle, on Redonda Island and elsewhere.

Clays for brick-making are found everywhere north and south. Large deposits of fire brick clay have been discovered in the coal mines near Nanaimo, and the same is being manufactured at the Terra Cotta Works, Victoria.

COAL MINES OF BRITISH COLUMBIA.

THE coal measures of the B. C. coast of British Columbia seem to be part of a formation that extends from California to Alaska, outcropping at points all up the Pacific Coast, on the south and eastern coast of Vancouver Island, numerous islands in the gulf, and Queen Charlotte Island. Geologically all these indications are no doubt related. The principal deposits, however, and most valuable so far as known or developed are in the southeast and eastern portions of Vancouver Island. The coal measures grow better apparently as we go north from California, no impor-

tant or really good coal being reached until we get into British territory. This is proved by analyses, by the commercial values of the various articles, one-third of the supply in San Francisco being received from the Vancouver Island mines.

Coal was first discovered at Fort Rupert in the early thirties and mined by the Hudson's Bay Co. until about 1850, when a change of the base of operations was made to Nanaimo, where good coal in a large body had been discovered by Hudson's Bay Co., through the agency of Indians. Subsequently the mines were sold to the Vancouver Coal Co., London, Eng., which was subsequently reorganized as the New Vancouver Coal Co., and is now under the successful management of Mr. S. M. Robins.

The other principal coal property is that owned and controlled by the Messrs. Dunsmuir, of Victoria, whose father, the late Hon. Robt. Dunsmuir, amassed the largest fortune in the province by his successful operation of mines at Wellington and elsewhere. He was a coal expert in the employ of the Vancouver Coal Co. many years ago, discovered coal at Departure Bay, and though a poor man then, interested sufficient capital to develop it and by industry and enterprise amassed wealth and acquired political influence. He built out of his own means the Esquimalt and Nanaimo railway, for which he received 3,000,000 acres of land in the southern portion of the island, known as the E. & N. railway belt. He died rated at between ten and fifteen millions of dollars, and at the time of his decease was president of the council of British Columbia. The two principal coal districts are the Nanaimo and Comox districts, the first embracing an area of two hundred and the second three hundred thousand square miles, the workable coal being imputed at 16,000,000 tons to the square mile. The coal measures are of cretaceous formation; the coal highly bituminous; and the seams from six to ten feet in thickness. But the above by no means represent the possibilities of the coast in the development of the coal mining industry. Not speaking of the coal measure extending up the east coast of Vancouver Island, in which there are said to be several valuable properties, coal has been located on a number of the adjoining islands, such as Tumbo and Mayne and many others, on Queen Charlotte Island and in many parts of the northern interior. With reference to the latter two, considerably has already been said.

Without going into any description of the mines themselves, all coal mines being more or less alike, some more may be said of the established collieries.

THE NEW VANCOUVER COAL CO.

at Nanaimo, has the largest producing and best equipped mines on the Island. Apart from that it has been a most important factor in building up a prosperous community. A large proportion of the citizens of Nanaimo are miners, or those who directly or indirectly exist through this industry. Much of the prosperity is due to a wise and liberal policy on the part of the management of the coal mines. Most of the men own and live in their own houses on their own lots and are thus rendered happy and contented and to a certain extent independent. It may be regarded as a model mining town, which has few parallels in that important respect. The same wise policy has entered into all relations with the miners themselves and as a consequence strikes have been averted and mutual good will established.

The Nanaimo colliery includes No. 1 pit, Esplanade, Nanaimo; Southfield No. 2, Southfield No. 3, Southfield No. 5, No. 1 Northfield shaft. Southfield No. 2 is

worked by slope, in a seam 6 to 10 feet; Southfield No. 3, by shaft, seam 5 to 10 feet. Southfield No. 5, shaft, seam 5 to 10 feet; No. 1 Esplanade, shaft, seam 6 to 12 feet; No. 1 Northfield, shaft, seam 4 feet 6 inches.

The following description of the plant is gleaned from the government report:—

"Railway to Southfield, 6 miles, with sidings: railway to No. 1 shaft, 1 mile with sidings; railway from Northfield mine to wharf at Departure Bay, 4½ miles; rails are of steel, 56 pounds per yard, of standard gauge, viz., 4 feet 8½ inches; 8 hauling and pumping engines; 15 steam pumps; 5 locomotives; 220 coal cars (6 tons), besides lumber and ballast cars; fitting shops for machinery repairs, with turning lathes, boring, drilling, planing, screw cutting machines, hydraulic press, steam hammer, etc., etc.; diamond boring machine, for exploratory work (bores to 4,000 feet); 150-horse power electric plant, engines, boilers, dynamo; 2 30-horse power (8 ton) locomotives; 1 15-horse power (4 ton) locomotives; hauling and lighting equipment; wharves, 2,000 feet frontage, at which ships of the largest tonnage can load at all stages of the tide.

The Nanaimo mine is a most valuable property with resources of coal practically inexhaustible. The shaft is 650 feet deep to No. 1 level which, with its windings, is two miles under Nanaimo harbor. The face of the level is under Protection Island, and last year connection was made with a shaft there at the depth of 670 feet, enabling you to go down on Protection Island and travel two miles under water and come up to daylight again in Nanaimo. The mine is fitted up with a complete electric plant for hauling the coal underneath and lighting the mine, and this most recent improvement has proved a success. A large wharf has been built near the south point of Protection Island, 400 feet long, and the largest ships are able to tie up there.

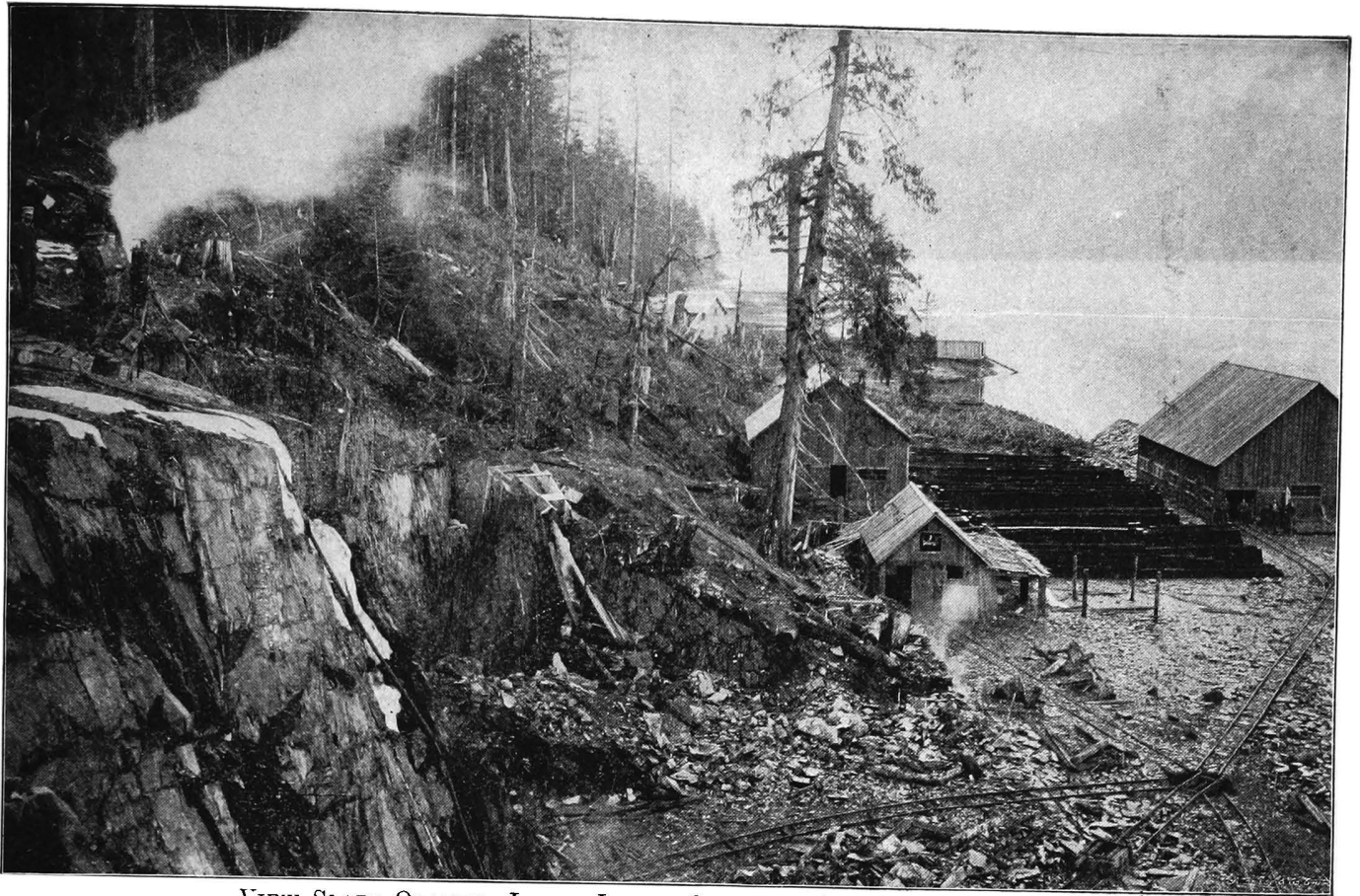
The Southfield mine, Nos. 1 and 2, has produced a large quantity of coal. The coal is hard and good and plenty of it, but owing to depressed state of the market has not been worked much recently. The coal in No. 5 pit is good quality, but the seam is irregular in width. The mine is well equipped with all necessary appliances, and promises to be a large producer. The Northfield mine is five miles from Nanaimo. The coal has a thickness of from two to four feet, and the government inspector in his report says:—"Being hard and of good quality commands the highest price in Victoria and in the California market, and in any other place where it has been introduced."

In addition to the coal got at this mine there has been a large quantity of fire clays extracted and forwarded by rail to the British Columbia pottery and Terra Cotta Co., whose works are near Victoria, and who manufacture articles equal to any of that class that are to be got from England.

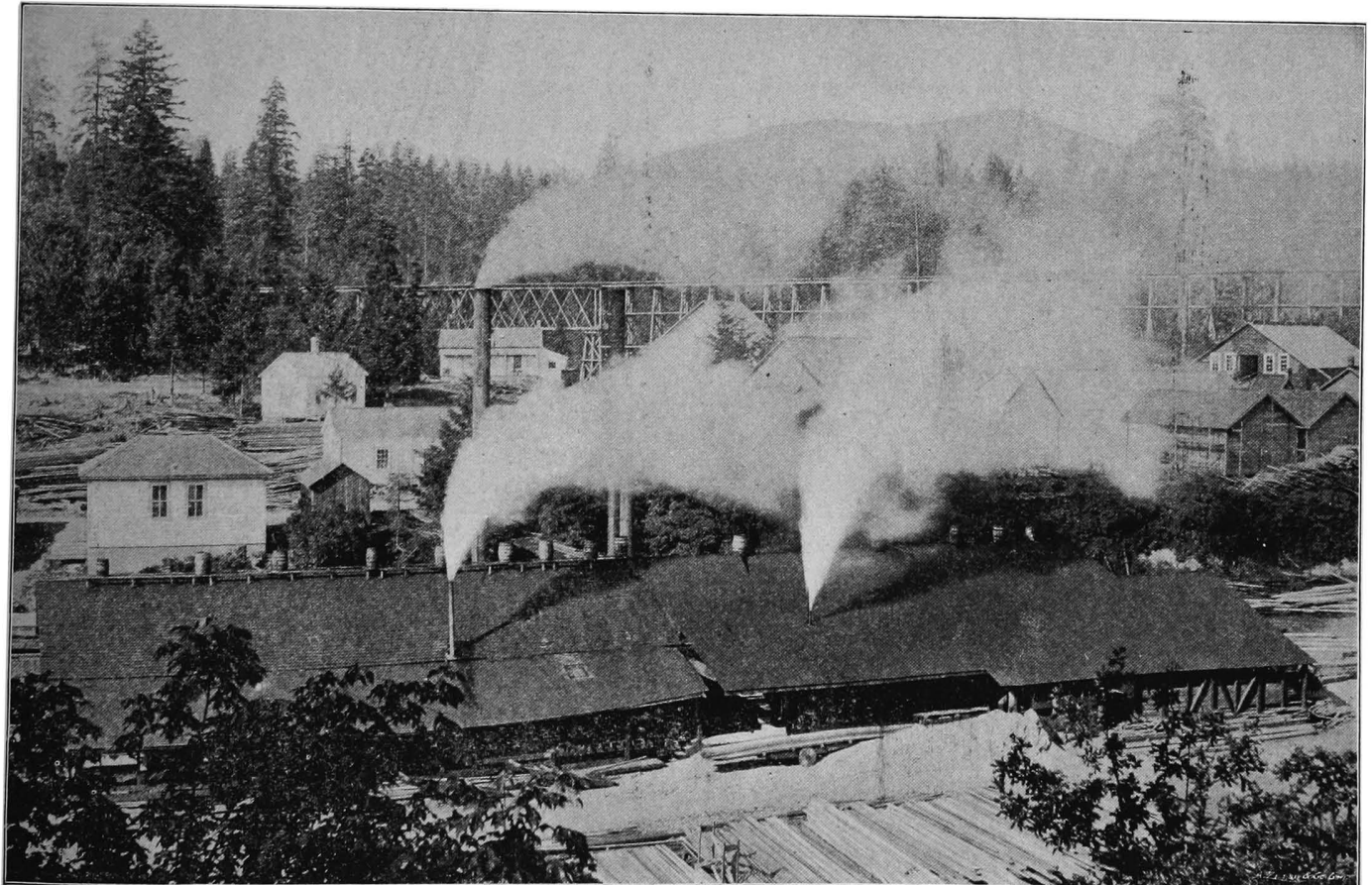
The New Vancouver Coal Co. has done and is doing a good deal of exploratory work, and its management being very popular as well as judicious, its continued success is the wish of all classes. One of the characteristic features of the company's policy is the betterment of the community surrounding the sphere of its operations, and more particularly the condition of its employees. Mr. S. M. Robins, the superintendent, personally has done much towards assisting the progress of the city of Nanaimo and all connected with the industry.

THE WELLINGTON MINES.

The Wellington Collieries are owned by the Messrs. Dunsmuirs, and comprise Nos. 1, 4, 5 and 6 pits. There

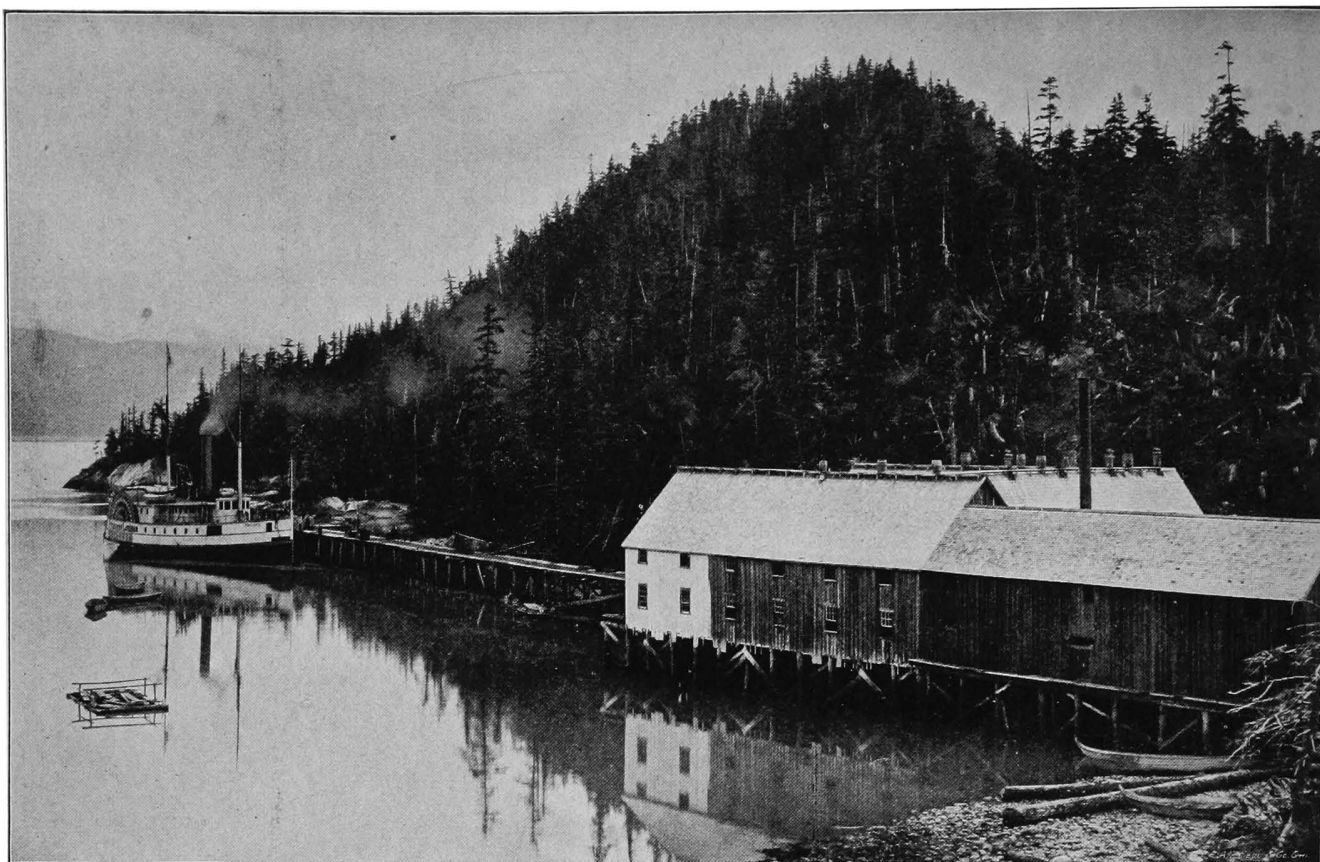


VIEW SLATE QUARRY, JARVIS INLET—OWNED BY WESTMINSTER SLATE CO.

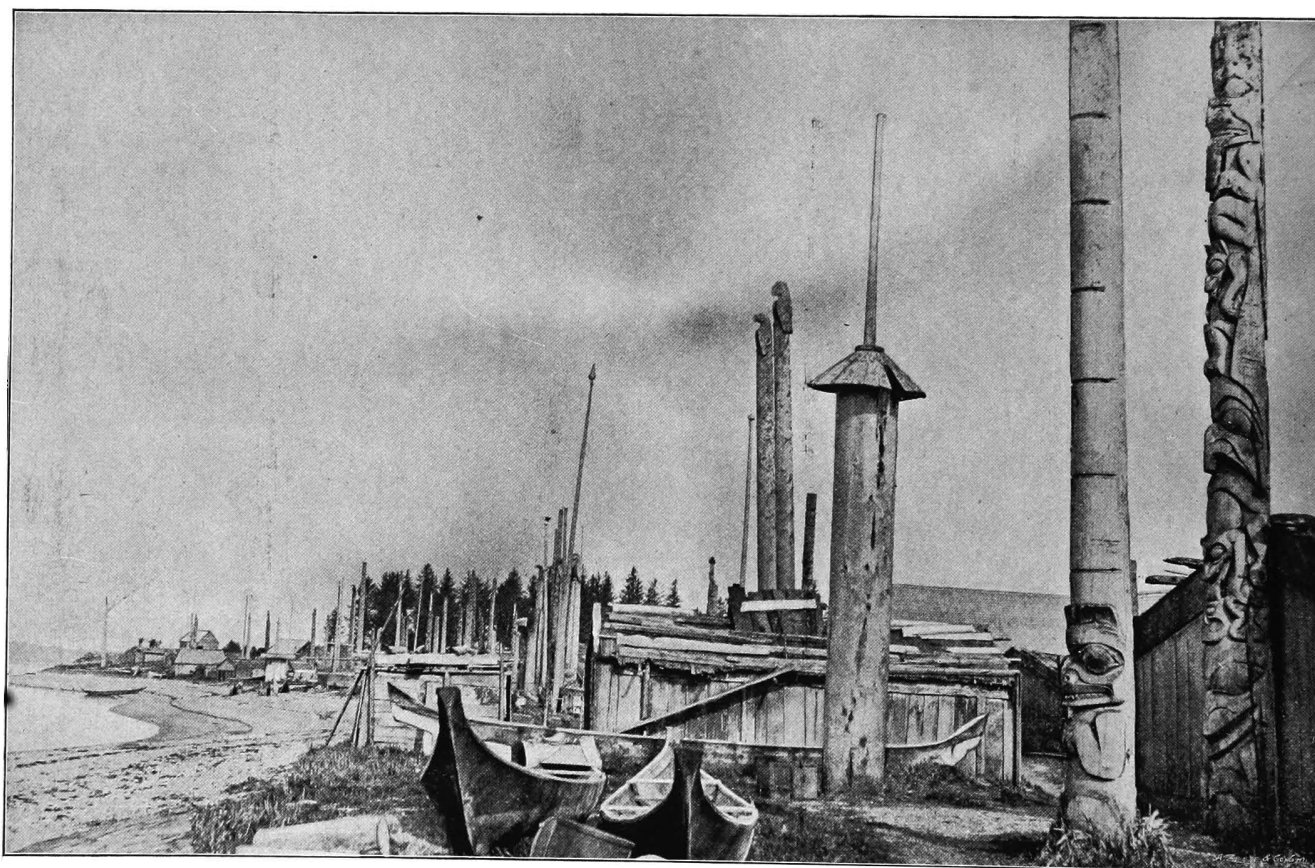


A. HASLAM'S SAW MILL AND FACTORY, NEAR NANAIMO—TAKEN FROM MILLSTONE,

The Commercial—British Columbia Supplement,



SALMON CANNERY, NORTHERN COAST.



INDIAN VILLAGE, MASSETT, Q. C. I.

Photograph by MAYNARD, Victoria.

THE COMMERCIAL—BRITISH COLUMBIA SUPPLEMENT.

are four shafts, with slopes, airway and levels and 3 air shafts. There are five miles of railways, with sidings and branches, six locomotives, 250 coal cars, 13 stationary engines, 9 steam pumps, 4 wharves for loading vessels and bunkers. No. 1 pit is near Departure Bay. The upper seam, which is worked, is about three feet and of good quality. The shaft is down 300 feet. Close on the top and between the coal and the hard rock there is a bed of fire-clay, five feet six inches thick; then below the coal they have four feet of soft black dirt, and next comes a solid bed of fire-clay, twenty-eight feet thick, making altogether thirty-three feet of most valuable fire-clay, an article that has been much sought after in this country. The Messrs. Dunsmuir & Sons, although not manufacturing it themselves, have sent a quantity of this fire-clay to the British Columbia Pottery and Terra Cotta Company, some of which have been made into brick for use in Her Majesty's war-ships on this coast, which brick has given great satisfaction, and compares favorably with any that is imported from England.

No. 3 pit has not been worked for two years, but has plenty of coal. No. 4, 1,000 yards east, though now shut down on account of being flooded to extinguish fire, has mined coal extensively. No. 5 pit is the only mine of the Wellington colliery connected with the E. & N. It is also connected by rail with the shipping point at Departure Bay. This also is a very extensive mine and is working on a large face of coal. No. 6 pit is quite close to No. 4 and connected with No. 5. The coal is hard and of the usual good quality of the Wellington seam, varying from 4 to 8 feet in thickness. No. 2 slope has not been worked for several years. Alexandria mine belongs to Messrs. Dunsmuir & Sons, and is about one mile south of the Southfield mine of the New Vancouver Coal Co. It has not been working for some time, but operations were expected to be resumed this year. All these mines are well equipped with the latest labor-saving machines, and are most economically worked. Owing to the depression of the coal market for several years, they have not been operated as actively as in former years. Strikes have also interfered with their working.

EAST WELLINGTON COAL CO.

There are two shafts at East Wellington Nos. 1 and 2. There are 2 seams; lower or main seam, 2½ to 7½ feet thick; upper or small seam, 2 feet thick; 2 shafts. There are 4½ miles standard narrow gauge; 2 locomotives; 31 (4½ ton) coal cars; 2 hoisting engines, 2 donkey engines; 1 fan engine; 7 steam pumps; 1 steam pile-driver; 1 steam saw mill, capacity 12,000 feet per day. Mr. W. S. Chandler is superintendent. These mines have been working steadily. The coal is considerably broken and is difficult to mine, but is of good quality and commands a high price.

MUM COLLIERY, COMOX.

This is owned by the Union Colliery Co., of which Mr. James Dunsmuir is president. It consists of No. 1 slope, with airway and levels. There are 12 miles of railway, 4 feet 8½ inches gauge; 4 locomotives; 100 coal cars, 25 tons; 1 diamond drill; 3 stationary engines; 3 steam pumps; 1 steam saw mill; 2 wharves; 1 pile driver. The coal mined here is a good coking article and the demand for the coke is active. It is the intention of the Company to build a number of coke ovens. Although two of the mines have recently started to work not much has been done recently owing to causes previously stated as affecting other mines. The mines are located near the extensive farming settlement of Comox.

A shaft is being sunk on Jumbo Island, with good prospects of success, a fair seam being discovered by boring. It is now down 350 feet.

Taking all these together and the undeveloped fields which are largely distributed all over the Coast, there are prospects of an illimitable supply of coal on the British Columbia coast for all time to come, which with its proximity with immense quantities of coal must eventually give this province the position in manufacturing now occupied by Great Britain.

COLLIERY RETURNS, 1892.

	Output in Tons.	Tons Exported.	Hands Employed.	Value Plant.
Nanaimo	433,386	807,623	1,867	350,000
Wellington	290,370	218,400	815	150,000
East Wellington.....	33,650	28,000	152	80,000
Union Colliery.....	63,928	66,556	560	100,000

The returns for 1891 were rather more favorable than the above, the coal industry being very much depressed during 1892, owing to the glut of foreign coal in San Francisco, the principal market for the B. C. output.

STATISTICS OF THE COAL MINING INDUSTRY.

The following table shows the output of each year from 1874 to 1892, inclusive:—

Year.	No. of Tons.
1874.....	81,000
1875.....	110,000
1876.....	139,000
1877.....	154,000
1878.....	171,000
1879.....	241,000
1880.....	268,000
1881.....	228,000
1882.....	282,000
1883.....	213,000
1884.....	394,070
1885.....	365,000
1886.....	326,636
1887.....	413,360
1888.....	489,300
1889.....	579,830
1890.....	678,140
1891.....	1,029,097
1892.....	836,335

THE COAST INDIANS OF BRITISH COLUMBIA.

THE Coast Indians of British Columbia include all those from Point Robert at the international boundary to Alaska, including those on Vancouver Island and Queen Charlotte Islands and on the Naas and Lower Skeena. They may be classed according to the affinity of their language as follows:—

1. The West Coast Indians, inhabiting the west coast of Vancouver Island, and including the Sookes and Beechy Bay Indians on the south and southeast of Vancouver Island.

2. The Flatheads, from Sooke to Comox on the Island and from Pt. Roberts on the mainland up to Squamish, at the head of Howe Sound and up the Fraser River four miles above Fort Langley.

3. The Fort Ruperts, embracing all those from Cape Mudge, north on the east coast of Vancouver Island, on intervening islands and on the mainland as far north as Bella Bella on McLaughlin Sound, which include Jervis, Bute, Knight, Kingcombe, Smith and Rivers Inlets and Blunden Harbor.

4. The Bella Bellas, including Bella Bellas, Kokoitz, Kemsquits, and China Hats in Tolmie Channel

5. Bella Coolas at the head of Bentinck Arm.

6. Kitlupes at the head of Gardner's Inlet; Kitamats at the head of Douglas Channel; Kitkahtas at Hartley Bay, McKay's Reach; Kitkahtlas at Lowe Inlet and on the islands at the mouth of the Skeena; and the Kittishaus on the Skeena River.

7. The Mellakahtlas, Tsimpseans and Naas River Indians.

8. The Hydahs of Queen Charlotte Islands.

The West Coast Indians are supposed to have been some time or other connected with the Japanese either by descent or intermarriage, owing to the striking resemblance to the latter people. They were at one time a brave and warlike nation, often fighting among themselves, and with the Flattery Indians on the American side. Perhaps the most noted were the Cloyoquots. Of later years, however, they have become greatly civilized in this respect. They include the Beechy Bays, Sookes, Patchinas, Kitmats, Clayoquots, Nootkas, Euclulicts, Euchucklesssets, Koyuquots, Gheebats and the Quatsinos.

The Flat Heads were so called from their habit in early days of compressing the foreheads of their children, they considering a flat full moon face a mark of beauty. The West Coast Indians on the contrary, compress their skulls, so as to give it an elongated appearance, somewhat resembling a sugar loaf; but these practices have been discontinued of late years. The West Coast Indians, too, largely indulge in ornaments, such as earrings, nose rings and lip bones, termed canoe lips, worn by women inserted in the lower lip. The flat heads, on the other hand, only wear earrings, fingerings and bracelets. These tribes are: Esquimalt, Songhish, Saanich, Cowichan, Quoenichan, Some-nas, Chemainus, Penelhocotts, Nanaimo, Squamish, Bur-rord Inlet, False Creek, New Westminster, Langley, Port Hammond, Coquitlam, Musquden and Point Roberts and extending on the American side as far as Port Angeles. The Neah Bays and Flatterys belong to the same family as the West Coast Indians. These are the characteristic Siwash of the coast. They are as a rule of small stature, averaging 5 ft., 5 ft 2 in. in height, with large, heavy, well developed bodies, but very diminutive lower limbs, in body giants, in limb pigmies. This is the evolutionary effect of their constant life in canoes, without which they hardly travel any distance, while their exertion in paddling has developed their body and arms. They are of somewhat servile nature, working harder and more easily inclined to be civilized than any other of the British Columbia Indians. Some of them, however, were fierce and wicked enough in their days, especially the Cowichans, Quamichans, Chemainus and Peullhacats. Most of them have embraced christianity and are principally Catholics. The Songhees and Esquimalts are Methodists, also the Nanaimos. The Comox Indians are Church of England. As a rule they make very little use of their reserve set apart for agricultural purposes, preferring to make their living by hunting, fishing, as mill hands, stevedores, steamboat hands, etc. The Squamish Indians are fishermen and hunters, and the Sechelts are mostly hand-loggers. They make, as a rule, a fairly good wage and have more to spend than the average white working-man.

The Fort Rupert tribe commences at a line drawn south of Cape Mudge on Valdez Island across to the mainland and includes the following villages: Cape Mudge, Alert Bay, Fort Rupert, Mamallidlaculla, Nuoity, Matillpe, Cape Scott, Blundubarboo, Jervis Inlet, Bute Inlet, Knight's Inlet, Kingcombe Inlet, Smith's Inlet and River's Inlet. They are generally regarded, and perhaps justly so, the worst Indians in British Columbia. Missionary efforts have been of little avail. Whisky among the men and prostitution among the women are their prevailing vices, while indolence, theft, treachery and sometimes more serious

crimes have characterized them as a nation. Their villages were shelled on several occasions to bring them to an appreciation of their duties to society. One of their annual diversions is the potlatch, at which the ancient custom of a lavish distribution of wealth and the eating of live dogs by medicine men are conspicuous features. These potlatches are described as terrible orgies.

Strongly in contrast with the Fort Ruperts are the Bella Bellas, their first cousins, who reside in and around McLaughlin Sound. They include the Bella Bellas proper, the Kokoitz, Chinaman Hats and the Kemsquits. Many years ago they were the most fierce and troublesome tribe of the Coast, but are now among the most civilized. They are superior in every way to the Fort Ruperts, morally as well as otherwise. They appear to be devout Christians and trustworthy in business. They run a co-operative store among themselves and two shops in connection with it. They are retentive of memory and quick at acquiring knowledge. They are splendid workers, do a little carving of curios, make mats for sale, hunt and fish and do anything else with a penny in it. Their pretty village is one of the neatest and most picturesque on the Coast. They pronounce it "Bal Ballas." The women do a good business in picking and drying wild berries, which abound there in great profusion, particularly the soapberry, the blackberry and raspberry. The first-named is dried in cakes and when used is mixed with water and sugar and worked in a basin, when it turns to a foam resembling soap suds, and when sipped is quite palatable.

The Kemsquits, at the head of Dean's Canal, are a connecting link between the Bella Bellas and Bella Coolas. The latter, though related to the former, are very little like them in any respect, more especially in morals. They are characterized by the lack of cleanliness, diligence, artistic skill, and moral perception possessed by the others. Their redeeming feature is that they devote themselves to agriculture to a greater extent than any of the Coast tribes and raise and sell a good many potatoes. They have considerable good land in their reserve. The women, though not particularly virtuous, are good workers in the salmon canneries and hop fields. The Bella Coolas have a strong regard for the almighty dollar, but apart from their cupidity, are neither bright nor cunning.

We next come to the Kits and the Sims, "Kit" and "Sim" or "Tsim," mean people." Thus "Tsim-Shau" and "Kittishan" or "Kit-shan" mean "people of the river Shan," which white people have corrupted into Skeena. "Kit-salas," an up river tribe, means "people of the rough waters," their abode being at the canon, about 150 miles above Port Essington. The Kitimats, at the head of Douglas channel, are the first of this nation, being a connecting link between the Bella and the great Tsimpsean people of Metlakahtla, Fort Simpson and Naas. The same may be said of the Kitlupes, at the head of Gardner Channel. They both speak the Tsimpsean language. Their chiefs, as well as that of the Kitkahtlas, the famous "Shakes," all large, powerful men, are half brothers. Paul, the Kitlupe chief, weighs over 250 lbs. He is a noted hunter, and bags a number of grizzlies each year. These tribes are highly civilized, well informed and anxious to improve. They are the exception among the Indians in regard to natural increase, being all married, with large families. The Kits are all famous hunters, good fishermen and excellent workmen. The Kit-kahtas are a mere handful (less than

90), and live in a small village at Hartley Bay, in McKay Reach. A white man, Job Bowyer, has a saw-mill there. Indians employ their time cutting logs for the mill. The Kittishans live above Fort Essington on the Skeena. The Kit-kaht-las of Lowe Inlet and the islands about the mouth of the Skeena, are fine, intelligent fellows, perhaps a little too highly civilized. They know too much of the way of the white men, and as laborers have given a good deal of trouble to the employers at the canneries and in the hop fields. They are grasping and avaricious, and although the best educated of all British Columbia Indians, and perhaps the most cunning and clever, their religious devotion is largely a matter of show, or rather they make a hypocritical display of it. The Kitkahtas are Methodists; the Kitkahtlas Church of England. At Port Essington they are of both denominations—at Metlakahla, Church of England, and at Fort Simpson Methodists. Metlakahla has been a noted place, and both the village there and at Fort Simpson give evidence of civilization far in advance of any other tribes in British Columbia. In fact, their education to some extent has spoiled them, in giving them a very exalted opinion of their own importance. Both these villages are described elsewhere in the description of the coast trip. Fort Simpson Indians have a reserve of 40,000 acres of very fine agricultural land, of which they make very little use, and which could be turned to good account in raising potatoes and stock. The same may be said of the Metlakhatlas, who have 35,000 acres of similar land reserved. Small fruit, too, could be grown in great abundance. Their principal livelihood, however, consists in working in canneries and in the hop fields. Neither do they cure their own halibut, for which they trade oolachan grease with the Hydah Indians of Queen Charlotte Islands. This oolachan grease could be made of considerable profit if properly refined, both as a medicine (equal to cod liver oil), and as useful in arts. But as used by the Indians is anything but pleasant. The fish are caught in the two weeks' run in immense numbers and dumped on the beach, and left until they become putrid, when the oil is squeezed out. The smell produced by this process is one of the abominations of earth. The spruce gum, which abounds in great quantities, and of great value medicinally for lung troubles and venereal diseases, should form a considerable article of commerce.

The Nishkas, or inhabitants of the Naas, resemble the Tsimpsians both in feature and language, but are not so far advanced in civilization nor so quick. They live mostly by hunting and fishing and the sale of fish grease. They as well as the Tsimpsians have a few totem-poles, but whether original or borrowed from the Hydahs it is impossible to say. Of late they have taken to erecting marble monuments. Although christianised, morally they are far from exemplary, using their religion largely as a cloak. They are given to cheating, lying and drinking whiskey, but recently, however have shown a marked improvement in many respects.

We now come to the most remarkable of all the Indians on the North American continent, the Hydahs, of Queen Charlotte Indians, they are haughty, dignified, proud, of fine physique and of medium height and morally superior. As a nation they are quite distinct from all the other Indians just described, and whatever their origin, Japanese, Egyptian, Phœnician or what not, it is evident, too, quite distinct. The Hydahs were once a powerful and populous nation, but are now reduced

to three villages, Massett, Skidegate and Clew. They formerly numbered sixteen or seventeen large villages, now, with the exception named, all deserted and in ruins, marked by empty lodges and those remarkable totem poles for which the Hydahs have become famous. These totem poles are of all sizes and heights from a foot to 60 feet high, ornamented by carvings and paintings, which are genealogical and symbolical, but in no sense of a religious character. It is a common mistake to regard their carved figures as idols. They are most skilful carvers in wood and stone and engravers in metals, which they work into various beautiful designs. Their artificers are skilled and perfect workmen, not rude and primitive, and are wonderful imitators. The great number of Indian curios collected from the Northwest Pacific Coast are principally of Hydah manufacture, though now becoming rather scarce and dear. The Queen Charlotte Hydahs are allied to the American Hydahs of Alaska, who were all once part of the same great nation. They employ their time in making those monstrous cedar canoes, which they sell at from \$150 to \$175 each to mainland Indians, and which are from 50 to 75 feet long, 8 to 10 feet wide, and carrying from 4 to 8 tons with ease. Properly built and rigged they will weather almost any sea. There is a great deal of antiquarian, archeological, and historic interest connected with the Hydah Indians, which it would take a great deal of space to enlarge. Their traditions of the nation and many other things are especially interesting, and bear a strong resemblance to the cosmic theories of South American Indians, and not unlike in many respects to the sacred narrative itself. There are glimmerings at least of the Mosaic hypothesis.

The Indians referred to, together with those further up the Skeena and in the Omineca country, and on the Stickeen River, in the upper Cassiar country, number between 11,000 and 12,000. Some twenty tribes live in the Chilcotin and Cariboo country, numbering about 2,000. There are industrial or other schools at Alberni, Alert Bay, Bella Belle, Chilliwack, Kwaw Kewith, Hartley Bay, Hazelton, Kincalith, Killope, Keeper Island, Massett, Metlakahla, Nanaimo, Port Essington, Port Simpson, Victoria, Mission City, Yale, and Williams Lake, having a total attendance of about 650 pupils. The Indian Department returns place the total Indian population of British Columbia at 35,000. About 12,000 of these are supposed to be in the Yukon country and on the Arctic slope generally.

THE CROFTER SCHEME OF BRITISH COLUMBIA.

NO project affecting so wide interests is less known or more imperfectly understood than what is referred to in British Columbia as the Crofter Scheme. This does not relate to the general Crofter Scheme of colonization which has been before the Imperial Parliament some years, and which has for its special object the relief of the congested Crofter districts of Scotland, one or two colonies, under which have been planted in the Canadian Northwest. Although affiliated, the enterprise, so far as British Columbia is concerned, is commercial as well as colonizing in its scope, and as such is quite distinct. At the outset, the idea of locating Crofters in British Columbia originated in the parent movement referred to, and had for its promoter a gentleman whose zeal in the cause earned for him the sobriquet of "Crofter Begg." Subsequently, however,

the enterprise took a more definite and practical form in the hands of men who saw how the interests of the Crofters could be brought into effect in developing the deep sea fisheries of the west coast of this Province, and at the same time accomplish the other end in view. The Crofters, as their name indicates, are essentially a pastoral class, but situated as some of them were on the bleak and inhospitable shore of their native land, they became a fishing population as well. As a class they became noted as daring skilful navigators in fishing smacks and small boats, and acquired not only a wonderful knowledge of local conditions, and the habits of the fish inhabiting their waters, but great skill in fishing.

The west coast of British Columbia presented conditions akin to those of the west coast of Scotland, its waters being rich in the economic and food fishes, and requiring just such a class of fishermen for the development of deep sea fishing, the suggestion was a natural one that the men who lived in the latter place, and were to the manor born, would more easily and successfully adapt themselves to this industry in British Columbia than would any other class of fishermen who could be selected. Here was a new and undeveloped field of wealth; waters teeming with halibut, cod, "skil," herring, salmon, oolachan, dog-fish, etc., only waiting for skilled hands and willing hearts for its development, and a commercial organization as an adjunct to direct the work and find a market for the fish. The time was ripe for colonizing a number of persons whose discontent at home was not only well known, but a matter which had called for action on the part of the Imperial Government. When the Crofter Scheme was first mooted in British Columbia it found but little favor. In the first place on general principles a colonizing scheme was likely to be a failure, and had almost invariably proved to be so in the past. In the second place, to dump down a lot of Crofters with their families, on a bleak, uninhabited coast, even with a few hundred dollars of good British money in their pockets to start with, would be regarded as an act of positive cruelty and disregard for human rights. At first sight, that was a plausible presentation of the case, and although the newspapers occasionally made reference to it, little was thought about it.

However, a gentleman with wonderful clear head and practical genius, Major Clarke, of Winnipeg, had incubated a scheme, which not only anticipated all possible objections but provided apparently for all possible contingencies. The general scheme may not have been all his, but the details were. Himself a Scotchman, with the most ardent patriotism, he was not likely to mislead his countrymen. With Major Clark were associated several other gentlemen with shrewd, practical, Scotch brains, who, likewise, would neither encourage nor engage in a wild-cat enterprise, nor permit of a deception in carrying out a colonization scheme affecting, more particularly, the interests of Scotchmen. The public did not know what was in contemplation, and therefore the public was not to blame if it rushed to conclusions unfavorable to the project. With characteristic reticence the promoters did not wish to disclose all they had in view until they were quite ready, but they steadily developed their scheme, first at home and then in British Columbia, until a perfectly formed plan, sanctioned by both Imperial and Provincial Parliaments, and state aided, was evolved. Men of the very highest standing in Great Britain gave it their influence and support. As may be seen by the prospectus, and as is provided for by

Acts of Parliament, the interests of the colonists are looked after, inasmuch as they are to be migrated to British Columbia, given lands to settle upon, housed, provided with fishing boats and appliances, and every other necessity of living that human foresight could suggest. In other words, when the colonists arrive they will find their land cleared and their houses ready, the beds made and the dinner cooking. More than that, it is contemplated to have their fishing boats moored at the wharf ready for the fishermen to go out the following morning, as at home, and fish, and upon returning again at night to find a buyer for their day's catch—conditions made for them such as they, after years of hardship, might have evolved for themselves. Such, in the rough, is what is to be done for the Crofters in British Columbia.

On the whole, the project is one of the most colossal, far-reaching, unique and important that has been undertaken in the material interests of Canada since that of building a Canadian transcontinental railway was consummated. The mechanism of the scheme, from industrial, commercial and colonization point of view, as I endeavor to show, is wonderfully complete and practical. It means making the Pacific Coast equal in wealth and population to the Atlantic seaboard. But first, I must review the steps taken in the formation and development of the great plan, and in doing so I shall speak by the book as to the facts.

I have said that while the Crofter scheme, as applied to British Columbia, was part of the general colonization idea, it was still quite distinct in its objects and *modus operandi* compared, for instance, with what was accomplished in the Northwest. By an Order-in-Council in 1888 the British Columbia Government appointed a commissioner to submit a proposal to the Imperial Government, offering in consideration of a loan of £150,000 being granted for that purpose, to transfer 1,250 families of Crofter fishermen from the Scottish coasts and settle them on the West Coast of British Columbia. A select committee of the House of Commons was appointed to enquire into the various schemes proposed, and in March, 1891, it reported as follows on the British Columbia scheme:—

"The project presents the rare recommendation that it demands from the public purse or from local funds no assistance beyond the Imperial loan, the repayment of which is guaranteed by a solvent and promising Province, which seems to possess ample resources for the settlement of a large population, in the respects of climate and seaboard it is well suited for the reception of a class accustomed to both sea and land pursuits. In many particulars the requisite machinery is incomplete, but your committee see no reason to doubt that the enterprise of the Colonial Government would soon supply what is deficient, aware, as they would be, that the success of their undertaking would depend upon their very first shipment of emigrants being well selected and well provided for in every way. Your committee think that in no way could the object recognised as necessary be obtained with less outlay or risk to the national exchequer, and they can conceive of many considerations in which the colonization of British Columbia by a maritime population would appear to be desirable in the interests of the British Empire. They do not think that by any one scheme the adequate relief of the congested districts can be attained, and they recommend the government of British Columbia to the early and favorable consideration of Her Majesty's Government and Parliament."

In response to the above report the Imperial Government offered to lend £150,000 to the British Columbia Government, in three instalments of £50,000 each, repayable within thirty years, at 3 per cent. per annum. The Local Government, however, prepared to submit the matter to the Legislature before accepting the offer, which necessitated the delay of a year before action could be taken.

Up to this point the Crofter Scheme was still *in nubibus*. No definite plan had been evolved for placing the Crofters, and the details had all to be filled in, but just here it took a practical shape by the introduction of a commercial factor. A syndicate was formed in London, Eng., to co-operate with the Government, called the Vancouver Island Development Syndicate. This had in view the marketing of the fish caught by

the Crofters, and the general development of industries growing out of their settlement. This syndicate appointed two commissioners, Major Clarke, before referred to, and Col. Engledue, to visit British Columbia, negotiate with the Local Government, and report on the commercial prospects. Upon the report of these gentlemen, the basis of a full-fledged scheme was arranged. At the next following session of the British Columbia Legislature two acts were passed dealing with the offer of the Imperial Treasury and the proposals of the syndicate, the nominal share capital of which was £1,000,000, powers being given to the Governor-in-Council of the Province to formulate the details of the agreements, which were to be ratified with Her Majesty's Government and the syndicate respectively. Lord Salisbury's Government, just before the recent dissolution, passed an Act giving effect to the offer provisionally made. The next purpose of the syndicate, in whose hands the success or failure of the enterprise lay, was to form a commercial company to co-operate with the Government in carrying out all the arrangements for which the scheme provided. At the time of writing, that was the state of progress to which the project had reached, and the promoters were simply waiting for a more favorable turn of the British money market to launch it.

There are three Acts dealing with the Crofter Scheme, two passed by the British Columbia Legislature, and one by the Imperial Parliament. The first is an Act to authorize an agreement with Her Majesty's Government as aforesaid. It provides for the settlement of 1,250 families of "Colonists" from the United Kingdom on the coast of British Columbia, subject to the abandonment at any time, if the measure of success attending the scheme has not been adequate, and the borrowing of £150,000 from the Imperial Treasury, in three installments, of £50,000 each, at 3 per cent. interest. Repayment commences at the end of five years from the date of the first advance, and extends over twenty-five years, in equal annual installments. The second Act is entitled "An Act to encourage the Deep Sea Fisheries of British Columbia," and deals with the commercial aspect of the enterprise. It authorizes a company having a capital stock of not less than £1,000,000, which is to provide all the facilities for carrying on the work, and for a grant to the said company for 500,000 acres on the West Coast of British Columbia, to be selected from a reserve of 1,300,000 acres for that purpose, subject, of course, to its carrying out all the requirements of the Act in question, said company to deposit \$100,000 as security for their bona fides, until it has expended \$100,000 in permanent improvements, buildings, machinery, plant, etc., when the same is to be refunded by the Government; but such improvements, buildings, etc., are to remain as security to the Government for obligations entered into on behalf of the company. The lands in question are to be exempt from taxes for ten years, and the personal property of the company for two years. The Imperial Act simply authorizes the advance of £150,000 from the Imperial Treasury to the Government of British Columbia, on certain conditions, the only difference existing in the terms of the Act of the respective governments is that the Imperial Act refers specifically to selections from Crofter parishes, while in the Provincial Acts the term "Colonists from the United Kingdom" is used, which does not limit the selection of Scottish Crofters at all. That is, if suitable fisherman cannot be found among the Crofters it permits of selections being made from any other part of

Great Britain and Ireland. This was regarded as a wise precaution on the part of the Provincial Government, but herein lies a possible bone of contention, but, if so, ought not to be a serious matter to arrange between the two governments. It may be added here that the details of the agreement, whereby the interests of the various parties interested are to be safeguarded, are settled by the Governor-in-Council with the concurrence of the syndicate. This agreement, though made, is not yet public. One feature of the scheme which does not appear in the acts relating to it, is that the colonists repay to the Provincial Government the advances made to them in easy instalments covering a term of years, so that the Province, while recouping the Imperial Treasury, is recouped in return by the colonists. Having thus briefly outlined the statutory conditions, I wish to dwell particularly on the commercial aspects of the scheme; but before doing so an interesting, though mournful subject, with permission may be introduced. So far as the Provincial Government was associated with the carrying out of the project, the latter had as prime mover and a warm advocate the late Hon. John Robson, Premier of British Columbia. The deceased gentleman was one of the most distinguished of the pioneers of the Province and its most illustrious statesmen. It is to be related here that he died in London, Eng., while in the consummation of this great enterprise, having had conferred on him an honor never before accorded to a Premier of a Province in Canada, being summoned by the Imperial authorities to arrange with them the details of a final settlement. It was while steeped in this public business that he was suddenly carried away, and if nothing more should ever come of it, this episode will render the Crofter colonization scheme a memorable one.

A glance at the map reveals the fact that the land reserves from which the selections of the 500,000 acres are to be made, are located along the west and around the north and northwest coasts of Vancouver Island, on Queen Charlotte Islands, and at the mouth of Gardner Inlet on the mainland of British Columbia. The principal object of the company will be the development of the deep sea fisheries; but other industries will naturally enter into the project, owing to the nature and resources of the coast and the lands reserved. The company announces the scope of its operations to include fresh fish, fish curing, extraction of oils, manufacture of fish products, seal and sea otter fishing, sawing and conversion of timber, clearing and opening up of lands for town sites and agricultural purposes, prospecting for coal and other minerals, and trading within the settlements.

First let me say that it is the intention of the company when formed to bring out only a few families at first and reinforce them as the success of the operations would seem to justify, so that neither the company nor the Province will have a burden on their hands if failure should ensue. In other words, the risk is minimized to the lowest possible degree. If fifty families succeed then fifty more will be sent for, and so on until the whole 1,250 families have been landed. As explained previously, the colonist on landing finds his land cleared and prepared, his house built and furnished, and everything ready to put his hands to. The settlers will be located in villages, so as not to be isolated, and free schools, churches, etc., will be provided; conditions, only much improved, will be as nearly as possible like those at home. Truly, from a sociological point of view, a well devised plan of colonization.

Now, then, as to the commercial and industrial modus

operandi, not less a marvel of internal mechanism. Primarily, the business of the commercial company of British Columbia is to catch and sell fish. In the first place, the company buys from the fishermen at a fair market value. He does not have to hawk or peddle, or consign them. The local market is limited, and therefore the big market will be in the United States and Canada. The best fishing grounds are 600 miles north of Vancouver, the point of shipment. The principle of handling will be refrigeration throughout; cold storage at the fishing stations; cold storage on a line of fast steamers to Vancouver; cold storage on the fast express trains eastward; and cold storage at the principal points of distribution, east and south. This system of refrigeration can be utilized for general trade purposes, and thus be made remunerative independently of the fish business. The above refers to fresh fish, of which there are a number of varieties, the principal of these being the halibut, or giant sole, much prized in the eastern market. It exists in great numbers, is the best shipping fish known, averages from 100 to 200 pounds in weight, is firm in flesh, and makes a delicious steak. The salmon, of which there are six varieties, is illimitable in quantity and runs in all the inlets, rivers and streams of the coast. The best table salmon are the steelhead and tyhee or spring salmon. There are several varieties of cod and herring, sole, flounders, shad, bass, "skil," oolachan, sturgeon, haddock, smelts, anchovies, capelin, skates, crabs, clams, oysters, etc., in great abundance. Special reference may be made to one or two others of these. The "skil," sometimes called "black cod," is a new fish to commerce, but one of the most delicate and finely flavored known. It resembles a mackerel somewhat, is found in 150 and 200 fathoms of water and is very plentiful. It is of too delicate a fibre, perhaps, to ship long distances, but cured properly will eventually be one of the most highly prized of fishes. Then the oolachan (spelled in a variety of ways), sometimes called the candlefish, runs in enormous numbers at certain seasons, and is a delicious table fish, also very delicate in texture, but cured would make a very marketable "bloater." The oil, too, of which the Indians extract great quantities, and use as we use butter, if refined should become an important article of commerce. The native oyster is small, but preferred by connoisseurs to the Eastern, and no doubt by cultivation is capable of much improvement in size. Clams are found everywhere along the coast, and at Alert Bay an industry in canning them has grown up, and the manufactured article is exceedingly good, and should be everywhere saleable. These above enumerated are, of course, independent of the salmon canning industry, which has been developed on a large scale, and is not capable of much further extension for the present.

The possibilities in the way of curing fish in various ways—salmon, halibut, cod, herring, "skil," sardines, oolachan, and so on—are very great, and a large demand exists for such products, but which, as yet, it has been impossible to supply from this end.

Another important item is the extraction of oils. The dogfish, found following the runs of smaller fish, upon which it preys, yields from its liver and body an oil, which, for lubricating purposes—more especially the liver oil—has no superior in the market. Two factories on the north coast are engaged in its production and find a ready demand. The liver of the ratfish, a marine monstrosity, found with the dogfish, also yields an oil of great economic value. Sharks, whales, herring, and the little oolachan

are likewise valuable for their oil producing qualities.

There are various other fish products known to commerce, which it is proposed to manufacture, notably fish guano or fertilisers, in which an extensive trade has grown up.

All these things the Commercial company being organized, propose to undertake, and much more. They will saw their own lumber out of the timber on their own lands, erect their own houses, make their own shingles, barrels and boxes, build their own boats and ships, and construct their own wharves; clear their own lands; prospect for and develop their own mineral properties; operate their own stores; trade with the settlements of the coast; hunt for seal and sea otter; and generally do all and sundry all these things which their hands find to do well and profitably for themselves and the colonists.

In such a complex industrial and commercial fabric as the one just outlined, besides being practical and founded on well known conditions of utility, it will provide for the colonists a diversity of occupation and employment, constituting an adaptation to a variety of pursuits and create labor at all seasons of the year.

An essential consideration in a scheme of the magnitude proposed will be the character of the colonists themselves, and as objections have been raised to the crofters as a class, from whom they will be largely, if not altogether drawn, some reference to them is necessary. Morally it is a significant fact of local repute, that on the Isle of Skye there was not, in a population of 30,000 people, a single serious crime recorded in a period of 400 years. It is urged that they are lazy and unsuitable as emigrants to a new country. These objections, however, are either the result of ignorance, or are inspired by special motives. In answer, I cannot do better than quote from "the Report of Her Majesty's Commissioners of Inquiry into the condition of the Crofters and Cottars in the Highlands and Islands of Scotland."

Sec. 224: While it is true that the physical conditions of life in the remote parts of the districts in question, and the possibility of utilizing the means of modern progress, are far behind those of more favored parts of the country, it is pleasing to know that the general character of the inhabitants is not so by any means. It may be said, on the contrary, that in no part of our Majesty's dominions are there to be found among the humble ranks of society, more intelligence, better manners, purer morals than in the remotest parts of the Highlands and Islands from the Mull of Kintyre to the Skaw of Mist in Shetland.

"340: It would be difficult to replace them by another race of equal ability and worth.

"Sec. 341: It is not only in regard to fishing that the Crofting and Cottar population have a peculiar value. They constitute a natural basis for the naval defence of the country, a sort of defence which cannot be extemporised, and the value of which, in possible emergencies, can hardly be overrated. The sea-faring people of the Highlands and Islands contribute at this moment 4,431 men to the Royal Naval Reserve, a number equivalent to the crews of seven armoured war steamers of the first class, and which, with commensurate inducements, could be greatly increased. It may be added that most of the men incorporated in corps of militia and volunteers would be able to serve ashore and afloat with equal efficiency.

"Sec. 313: The Crofting and Cottar population of the Highlands and Islands, small though it may be, is a nursery of good workers and good citizens for the whole Empire. In this respect the stock is exceptionally valuable. By sound physical constitution, native intelligence and good moral training, it is particularly fitted to recruit the people of our industrial centres, who, without such help from wholesome sources in rural districts, would degenerate under the influences of bad lodging, unhealthy occupation and enervating habits. It cannot be indifferent to the whole nation, constituted as the nation now is, to possess within its borders a people, hardy, skillful, intelligent and prolific as an ever-flowing fountain of renovating life."

I can hardly give a higher or better authority than the foregoing, and we might incidentally mention that the daughters of these hardy fishermen would become excellent domestic helps in a country whose chief dependence for that purpose is now so largely drawn from the almond-eyed Mongolian.

Hitherto I have dealt with the project mainly as a speculation having a very wide field for successful development. I now desire to regard it as a necessity, not less national than and second only in importance to the building of the C. P. R.

All the available evidence goes to show that the west coast of British Columbia has wonderful piscatorial as well

as other material resources. Owing to peculiar conditions it is well nigh impossible for private or non-state-aided enterprise to succeed in developing the fisheries, which, basing an estimate on the wealth of the Atlantic Coast waters, should maintain a population wholly employed in fishing of about 75,000 persons. The fisheries being situated far north, and the principal market being thousands of miles away, it requires a resident fishing population, a huge system of cold storage, and a line of fast steamers to make a success of it. To ensure success provision must be made for sending a regular and continuous supply of fish, assorted and in prime condition, to the markets of the east. Upon this everything hinges as a purely commercial venture. These enormous facilities, if I may be permitted the expression, involving such a minutiae of expensive detail and generally such a large outlay of money, requires "enormous" capital, more, in fact, than private enterprise can afford or is even likely to invest in the undertaking.

But there is still another factor, which has almost been entirely overlooked, and one which, in these days of combination of interests, must be fully taken into account. I speak of the Eastern fish combine which controls the markets of the United States. You cannot sell Western fish to the dealers in New York, Boston or Chicago, because they are under the thumb of the wholesalers in the combine, to whom they must look for their regular supply and who virtually own them. A great many attempts on a small scale have been made in British Columbia to develop the deep sea fisheries, but they have invariably failed for the reasons named, partly for the lack of the long train of facilities previously indicated, and largely because the promoters cannot stand against the combine and sell fish in the market which it controls. In a fluctuating market, such as a fish market essentially is, the risk is too great for small capitalists or any probable combination of small men. Without agents on the spot, cold storage and all that, if the fish is not sold at once it spoils on your hands. You cannot sell to the retailers or jobbers unless you can guarantee an invariable supply, for the reason that the dealer must go back to the wholesaler of the combine again if you fail, and he naturally objects to be made a convenience of. The latter immediately tells him that if he intends buying from the "trade" only when he cannot buy elsewhere than he cannot buy at all, and if there happens to be a balance unpaid on credit account he is gently reminded that an immediate settlement is desirable. It is scarcely necessary to explain this principle of business. It is too well understood and fully accounts for the repeated failures experienced in finding a market on the other side for our fresh fish. The only remedy is to oppose the combine with an equally powerful combination. With £1,000,000 subscribed capital and all the modern machinery for carrying out the enterprise, every commercial link being complete from the Atlantic to the fishing grounds on the Pacific Coast, the Crofter Company could force and control the markets of the North American Continent, within the limits of which there are about 75,000,000 or 80,000,000, and an enormous daily consumption of fish foods. They have in contemplation, as has already been stated, the adoption of the most complete and improved system of refrigeration and storage, and it is understood recent scientific experiments have demonstrated that, beyond doubt, fish can be kept for an indefinite period and exposed on the counters of fishmongers for ten days after being thawed out, retaining their original

flavor and firmness. This, in itself, presupposes great possibilities for trade in our fish.

Without the commercial adjunct the Crofter scheme, as applied to British Columbia, would be impracticable and visionary. The two must stand or fall together. Considered as a philanthropic, a commercial, and industrial, a social, or a colonization enterprise it must commend itself to all men and especially to Canadians, to the building up of whose interests it would contribute not only in a material way but in the higher national sense. It is one of the greatest and best devised projects of the present day.

In conclusion, I cannot do better than quote from a pamphlet recently issued, which says:—

"Considering the room for expansion, it is anticipated that the families under this scheme will only furnish the outside guard for thousands more for whom this province can find place and employment. They will be transferred from one portion of the Empire to settle under the same old flag. Not emigration to a foreign land to be lost to the Mother Country but migrating to an unoccupied and fertile field, where, while working out their independence and securing a brighter future for their offspring, they will be helping in a marked degree in the colonization and development of one of the richest and most attractive portions of Her Majesty's Empire."

THE RAILWAY PROBLEM.

WE have described generally and somewhat in detail the resources of the greater part of British Columbia, and what would in itself form a province larger, with one exception, than any in the Dominion. There is everything but population and development to create a commonwealth of vast importance. There are gold, and coal, and iron, and nickel; there are fish and timber, and large areas of farming and pastoral lands; there are clays and slates and building stones; there are fur-bearing animals, big game and feathered game; there are picturesqueness combined with a climate that is nowhere rigorous in extremes; there is an ultimate market in the east from the foot of the Rocky Mountains and across the Atlantic; south of the boundary line, over the Pacific in the Orient and on the continent under the Southern Cross. All the wealth of all Incas is not greater than what the land and waters of this country afford. Enough has been brought to sight to demonstrate the richness of the untouched remainder.

The keys to unlock the treasures are the modern civilizing agents, the railways, the steamboats and the telegraph. A good deal has been done to open up British Columbia by these means. One or two main arteries have been created, with a few veins, but their ramifications while extensive have left the best and largest part wholly out of reach. Old Cariboo, with its wealth of gold and its 60,000,000 acres of territory still slumbers, after but a brief awakening. The whole northern interior plateau hundreds of miles in extent, and containing millions upon millions of grazing and farming lands, is almost a solitary wilderness; while six hundred miles of coast to the north, with sufficient fishery wealth to sustain a population of between 60,000 and 100,000, all of this must remain practically as they are until capitalists appreciate the importance of what is the last, greatest and grandest area of the North American continent still undeveloped.

The C. P. R. penetrated B. C. to the coast. It passes through the wildest and most barren section of the province; but notwithstanding the unfavorable local circumstances, it has been a phenomenal success and the Pacific Division has paid from the start. It has now inaugurated a policy of branch lines, that promises much. On the coast a branch line has been built from Mission City to the boundary to connect with the Great Northern system. A short line of railway will be con-

structed from Chilliwack, on the south side of the Fraser, to connect with the above branch, and it is proposed to extend it to Ladner's Landing to connect again with a short line from Vancouver City. The Burrard Inlet and Fraser Valley Railways, a part of the Northern Pacific Railway system, is now being constructed to run from Vancouver City via Westminster to connect with the Northern Pacific branch to Suma's City on the boundary line. The New Westminster Southern, another branch of the Great Northern, terminates at Westminster and is expected shortly to be extended to Vancouver. As will be seen, the Fraser Valley is to be well supplied with railways.

Coming over to the Island of Vancouver, railway development has been somewhat slow. The Esquimalt & Nanaimo Railway was built by the late Hon. Robt. Dunsmuir, for which he received as a subsidy 3,000,000 acres of land, known as the E. & N. belt. This extends from Victoria to Wellington *via* Esquimalt and Nanaimo, a distance of 80 miles. It was built entirely out of the private means of the owner, being one of the few railways in America that has been constructed without floating bonds. It is still owned by the Dunsmuir family. A passenger train each way a day is run. The freight consists of coal, wood, farm produce, etc., principally local. It is understood to have been the intention of Hon. Robt. Dunsmuir had he lived to have continued the road to the north end of Vancouver Island, and also to have built a branch through the centre of the island from the Comox coal fields to Alberni harbor, where a short and easy route to the ocean is afforded. No doubt that before many years both of these projects will have been carried out.

A more recent undertaking is that of the Victoria and Sydney railway, a short road running from Victoria City to Sydney Harbor, which runs through some of the best farming districts on Vancouver Island, and materially shortens the distance from Victoria to the mainland. Sydney, the terminus, has made rapid progress during the year. Mr. John White, representing an eastern syndicate, has erected a fine saw mill there, with which are connected extensive timber limits. It is understood, when completed, that arrangements will be made with steamship lines to connect at Sydney with the railway there.

Saanichton is another town site situated on the Victoria and Sydney railway, in the centre of the agricultural district of Saanich.

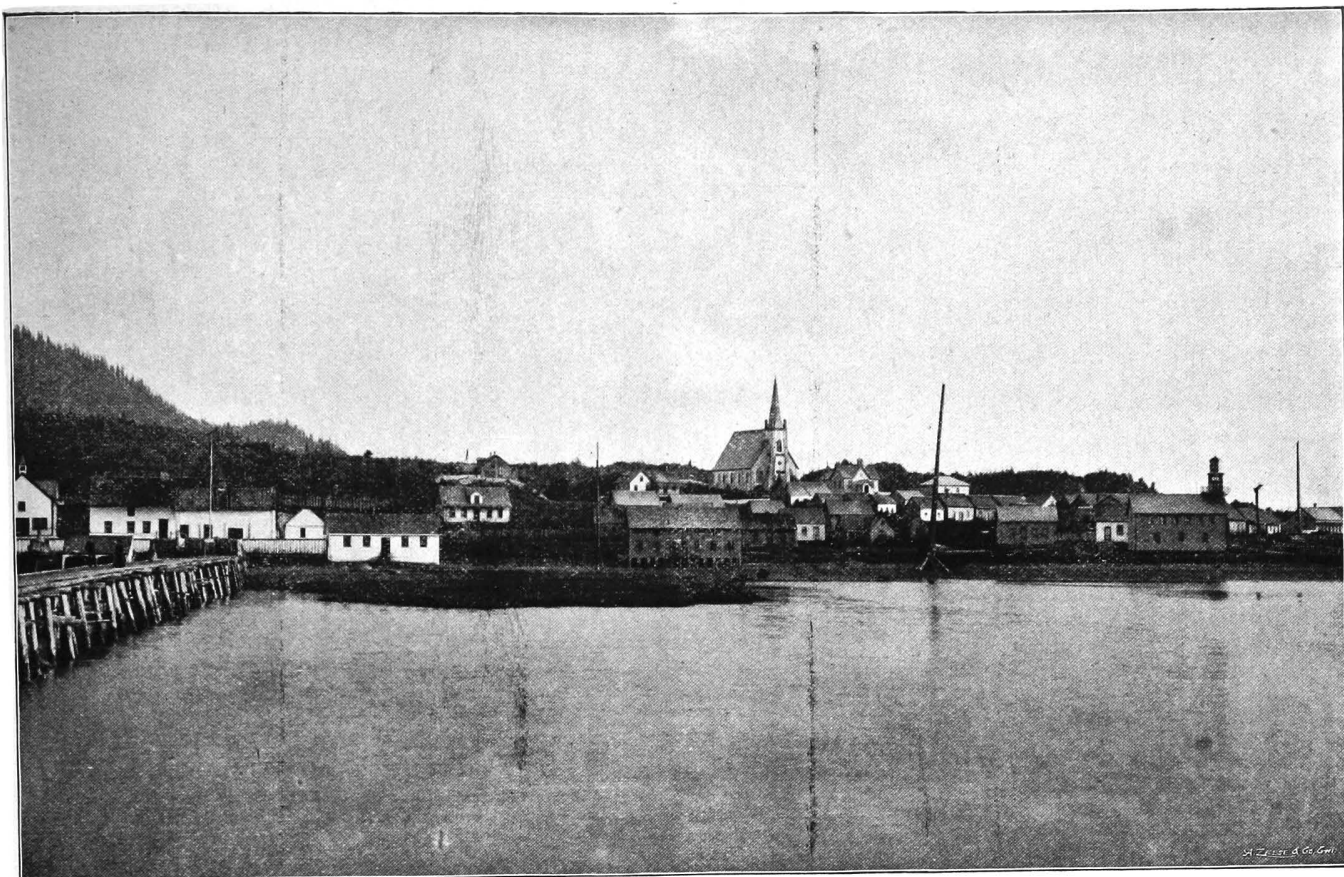
Another railway scheme for which a charter was obtained and a bonus passed guaranteeing bonds, but which has not yet matured, is the Victoria, Saanich, and Westminster railway. This is a proposition to connect Victoria and Westminster by rail, by means of a ferry across the straits.

The most ambitious project, however, is the British Pacific railway, hitherto known as the Canada Western. Several years ago a charter was granted for the construction of a railway from Victoria, running along the eastern coast of Vancouver Island to a point on Seymour Narrows, over which it was proposed to build a bridge to Valdez Island, striking the mainland at the mouth of Bute Inlet. The route is along Bute Inlet and into and through the interior to Yellowhead Pass, as formerly proposed for the C. P. R. before it was changed as at present. An Act was passed the same year granting a substantial land subsidy in aid of the enterprise. Last year an Act was passed extending the charter one year, and during the present year another Act was passed granting a still further extension, and changing the name to the British Pacific Railway Com-

pany. This latter extension was granted on the grounds that a substantial beginning had already been made in the way of surveys, and the deposit of \$150,000 with the Provincial Government. This was done through the agency of Chicago financial men, who represented some of the leading citizens of Victoria. About two months ago Mr. F. Bakeman, of Chicago, was able to announce that he had completed a construction company in London, England, of whom Lord Thurlow is head, with subscribed capital sufficient to initiate the undertaking—viz., \$5,000,000. "This company," Mr. Bakeman explained, "is to undertake to finance for the road, and to raise all the money which the enterprise will need, not only for the purpose of construction, but for the carrying out of the large projects in connection with the road, which the company has in contemplation."

It is possible that to induce capitalists to subscribe fully the money required to build and equip the road in its entirety, further aid will be required in the way of guaranteeing the interest on some portion of the bonds, as the country through which the road passes will be largely undeveloped, and will not earn dividends for the first few years. Whether or not the further aid will or should be granted is a matter in the hands of the people of British Columbia to decide. The road, if built, will open up and develop an area of country great in extent and importance, and as a colonization road, if no more, will yield great benefits to the province, the direct influences of which will be felt in Carriboo, in the great interior plateau northward, and on the coast everywhere. As a railway proposition this much must be said, if no more, it will be the last long line of railway on the American continent that will carry with it a land subsidy, which in this instance amounts to between 12,000,000 and 20,000,000 acres. It will have tributary to it all that vast extent of country and its varied resources the description of which it is the object of this little volume.

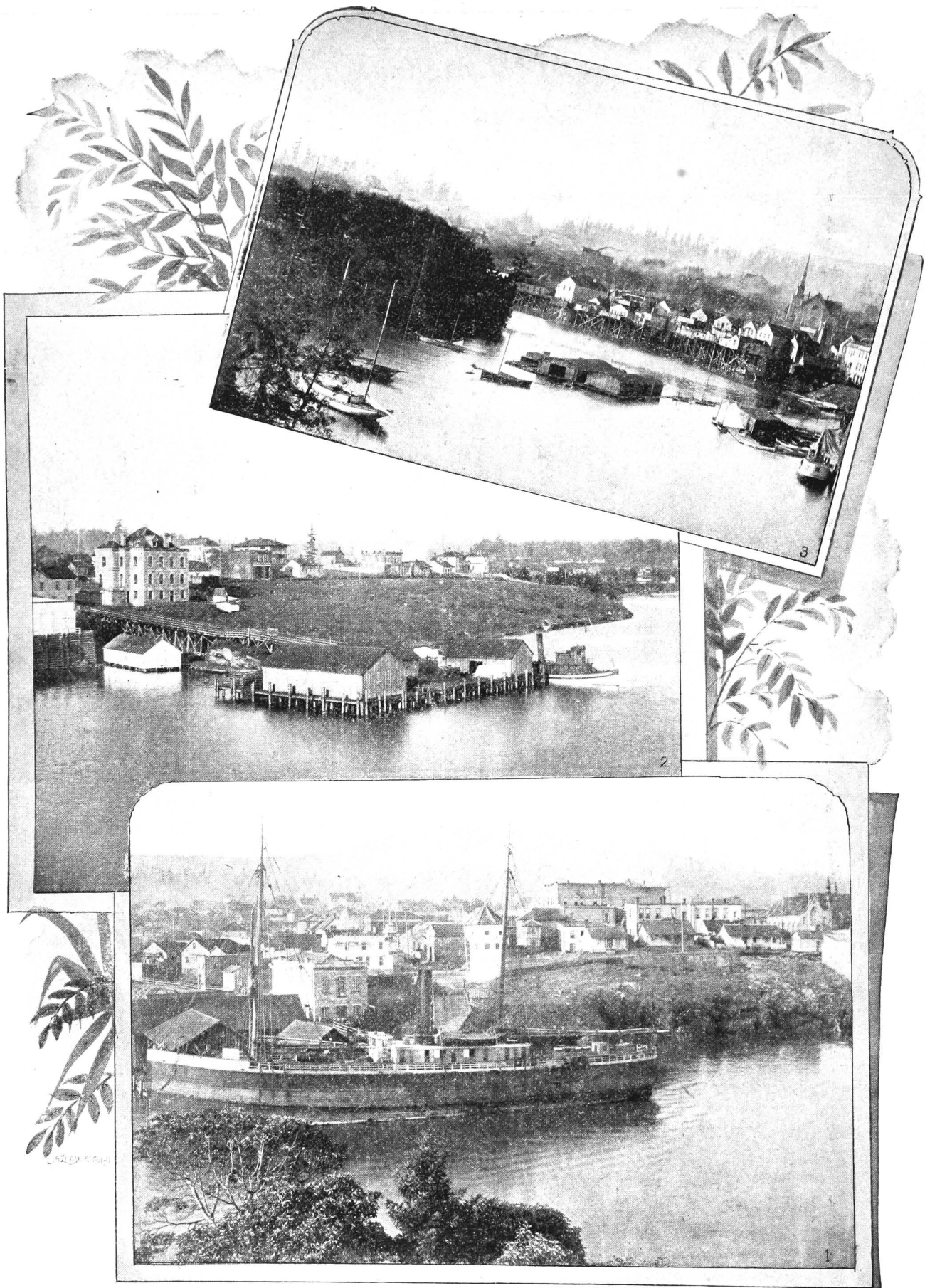
Some day, sooner or later, the Canadian Pacific Railway will build a branch of railway from Ashcroft to Cariboo to tap this country, not probably, however, before a rival company takes the project up. Some day, too, a railway will follow up the interior plateau to Alaska. A charter was obtained at last session of Parliament for a cable from Victoria and Vancouver along the west coast of British Columbia to Queen Charlotte Islands. There are a number of passes on the coast, through which railways can be run to tap the interior. A vast commercial project is already under way to develop the deep sea fisheries and other coast resources; the Canadian Pacific Navigation Co. of Victoria, the Union Steamship Co. of Vancouver, the Pacific Coast Steamship Co. of San Francisco and various private individuals or firms have vessels ploughing British waters in every direction as far north as Alaska, settlers are going in at various points and logging camps and fishing stations are being established. With all these progressive elements at work it will not be so very long before Vancouver Island, the Coast and Northern Interior will contain a large and thriving population compared with which the present population of the province will be insignificant, industries on a large and remunerative scale will be found everywhere and many of the waste places will blossom like a rose. And while this shall have been achieved, Yale, Lillooet, and the two Kootenays will have gone on in consonance and the Province of British Columbia like the stone once rejected of the builders will have become the chief in the structure of confederation.



FORT SIMPSON.



KITLOPE, GARDNER'S INLET.



NANAIMO—VIEWS FROM THE HARBOR—CONTINUOUS, 3, 1, 2.

