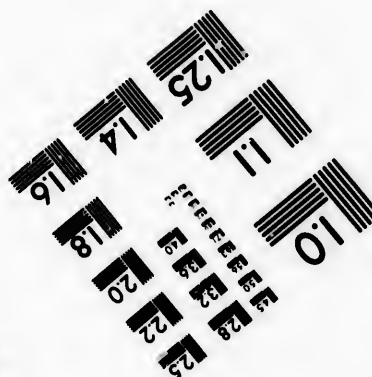
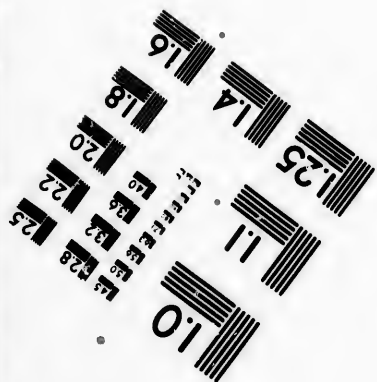
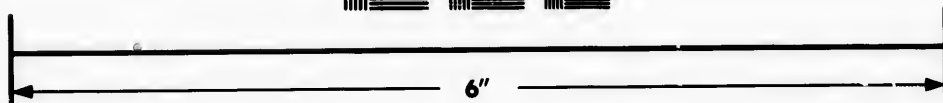
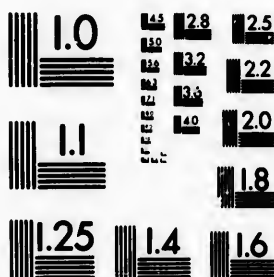


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic
Sciences
Corporation

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

**CIHM/ICMH
Microfiche
Series.**

**CIHM/ICMH
Collection de
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1982

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- ☒ Coloured covers/
Couverture de couleur
- ☐ Covers damaged/
Couverture endommagée
- ☐ Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- ☐ Cover title missing/
Le titre de couverture manque
- ☐ Coloured maps/
Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- ☐ Bound with other material/
Relié avec d'autres documents
- ☐ Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distortion le long de la marge intérieure
- ☐ Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- ☐ Additional comments:/
Commentaires supplémentaires:

- ☐ Coloured pages/
Pages de couleur
- ☐ Pages damaged/
Pages endommagées
- ☐ Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- ☒ Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- ☐ Pages detached/
Pages détachées
- ☒ Showthrough/
Transparence
- ☐ Quality of print varies/
Qualité inégale de l'impression
- ☐ Includes supplementary material/
Comprend du matériel supplémentaire
- ☐ Only edition available/
Seule édition disponible
- ☐ Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/
Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

The copy filmed here has been reproduced thanks to the generosity of:

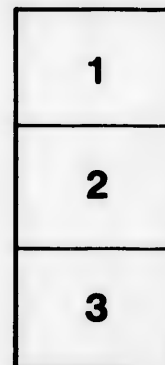
National Library of Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol → (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

Bibliothèque nationale du Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole → signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

ails
du
diffler
une
nage

rata
o

elure,
a



George M. Dawson

BRITISH COLUMBIA.

AN ESSAY.

BY

THE REV. R. C. LUNDIN BROWN, M.A.,

MINISTER OF ST. MARY'S, LILLOOET.



NEW WESTMINSTER:

PRINTED AT THE ROYAL ENGINEER PRESS.
1863.

Acc. No. 34174

BRITISH COLUMBIA.

COLONIAL SECRETARY'S OFFICE,
11TH MARCH, 1862.

Whereas it appears from a report from the Board appointed to adjudicate upon the Essays called for by this Government, by public notice dated the 29th day of October, 1861, that none of the Essays received in consequence of that notice can be adjudged to fulfil the specified requirements.

Notice is hereby given that a premium of FIFTY POUNDS STERLING will be paid by the Government of British Columbia for an Essay which shall be adjudged to set forth, in the clearest and most comprehensive manner, the capabilities, resources, and advantages of British Columbia as a Colony for settlement.

The following rules will govern the award :—

1. Competitors must send their Essays in a sealed cover, directed to the Chief Commissioner of Lands and Works, on or before the 30th day of June, 1862.

2. No name or mark is to be attached to the Essay, whereby the writer can be known by his Essay ; but a distinctive motto is to be affixed.

3. A duplicate of the chosen motto is to be sent to the Chief Commissioner of Lands and Works, marked on the *outside* of a separate *sealed* Envelope, upon the *inside* of which is to be given the name of the writer of the Essay bearing such motto.

4. The Essays will be submitted for selection to a Board composed of three independent persons, and after they have signified their decision to the Chief Commissioner of Lands and Works, the Chief Commissioner will forward to them the *sealed* Envelope bearing the motto corresponding to that of the chosen Essay. The Envelope will be opened by the Board and the name of the writer communicated to the Chief Commissioner.

5. The Envelopes of unsuccessful competitors will be returned *unopened* if desired, but *all* the Essays will remain the property of the Government.

An award of Ten Pounds will be made for the second best Essay.

By order of the Governor,

WILLIAM A. G. YOUNG.

PREFACE.

Although a meagre account of so great a subject, this Essay excuses its appearance before the world on the ground that others, whose knowledge of British Columbia is greater than the author's, probably lacked leisure to write.

The picture drawn is true at the present date, but in the ever shifting aspects of a new Colony much of the filling in will ere long be found defective, and perhaps erroneous: still it is to be hoped that the general outlines will remain correct.

The description of New Westminster (at the beginning of Chapter II.) is from the pen of the Rev. J. Sheepshanks, Rector of Holy Trinity Church in that town; as is the account of the country thence to Yale, where I have not been myself. To Colonel Moody, R.E., for the use of the MS. of his tour to the Okanagan Country, my best thanks are due; and also for valuable information and assistance to Captain Parsons, R.E., to A. C. Elliott, Esq., Magistrate of Lillooet, and to T. Elwyn, Esq., late Gold Commissioner of Cariboo.

R. C. L. B.

St. Mary's Parsonage, Lillooet,

March 19th, 1863.

TABLE OF CONTENTS.

CHAPTER I. HISTORICAL INTRODUCTION - - -	PAGE. 1
„ II. GENERAL DESCRIPTION OF THE COUNTRY -	5
„ III. PHYSICAL GEOGRAPHY AND METEOROLOGY -	23
„ IV. MINERAL RESOURCES - - -	27
„ V. AGRICULTURE - - -	35
„ VI. NATURAL PRODUCTIONS—ANIMAL AND VEGETABLE	42
„ VII. COMMERCE AND STATISTICS - - -	48
„ VIII. POLITICAL AND SOCIAL ASPECTS - - -	51
„ IX. EMIGRATION - - -	55
„ X. PROSPECTS - - -	60
APPENDIX - - -	65

[The Government reserves the right of translation.]

CHAPTER I.

INTRODUCTION.

It is the object of the following pages to give some account of British Columbia, the youngest, but not the least promising, of the Colonies of that Empire on which the sun never sets.

In the Act passed by the Imperial Parliament in August, 1858, "to provide for the Government of British Columbia," the limits of the Colony are defined as follows: "British Columbia shall, for the purpose of this Act, be held to comprise all such territories within the dominions of Her Majesty as are bounded to the south by the frontier of the United States of America, to the east by the main chain of the Rocky Mountains, to the north by Simpson's River and the Finlay Branch of the Peace River, and to the west by the Pacific Ocean, and shall include Queen Charlotte's Island, and all other islands adjacent to the said territories, except as hereinafter excepted."

These islands will not now engage our attention. The territory on the continent of North America comprehended in British Columbia, extends from the 49th parallel to the 55th, north latitude. Its length is 420 miles in a straight line, and its breadth varies from 250 to 400 miles. Its greatest length, taken from corner to corner, is 805 miles. The area of the whole colony, including Queen Charlotte's Island, is computed by Mr. Arrowsmith at somewhat more than 200,000 square miles.

To the illustrious navigator, Sir Francis Drake, is due the honour of the first discovery of these regions. Whether indeed he came further north than the 48th parallel is uncertain, but the region extending along the coast between latitudes 43° and 48° was, as is generally conceded, discovered by him, and by him taken possession of in the Queen's name, under the designation of New Albion, in the summer of 1579. Vancouver, who made his celebrated voyage to these waters in 1792, when the Island which bears his name was discovered, named the continent, between parallels 45 and 50, New Georgia. Until late years however, the country west of the Rocky Mountains has, by Hudson's Bay traders, been known

as New Caledonia, a name by which the Alexandrian district of British Columbia is still designated.

The origin of the native Indians, whose present number probably does not exceed 8000, is veiled in obscurity. They were found in possession of the country by the earliest explorers. From the berries which cluster on its bushes, the roots which grow in its soil, the salmon which frequent its seas, and ascend its rivers, the grouse which abound in its woods, and the deer, mountain sheep, and other animals which inhabit its mountains, these children of nature drew the means of subsistence. The skins of bears or deer furnished their rude clothing, nor were they unprovided with useful medicinal herbs, among others the bearberry (*uva ursi*) known in the country as kinikinik, the leaf of which is used by the natives as tobacco. Like all savage nations, whose faculties cultivation has not trained, they are an indolent race; unwilling to give themselves any trouble that they can avoid, they are roused to action only by the pangs of hunger. Yet since the white immigration, they have acquired a taste for the comforts of civilization, and a disposition to work for the means to procure them. They have accordingly proved very serviceable to the colonist in felling wood, drawing water, packing, working on steamboats, &c. In character they are cowardly, suspicious, and ungrateful, yet on the other hand they have strong tendencies to religious faith, and offer a promising field for the labours of the Christian Missionary.

Till the year 1858, British Columbia was subject to the dominion of the Hudson's Bay Company: that society was incorporated under charter of Charles II. in 1670, under the designation of "A company of Adventurers of England trading with Hudson Bay." They were to enjoy "the sole trade and commerce, together with the lands and territories upon the countries, coasts, &c., not possessed by British Subjects in the northern portion of the continent of North America." In 1821 they received a license for the exclusive trade in these regions. Under the dominion of the Hudson's Bay Company the country was nothing but a vast preserve. To the forts which they established on the face of the land, Indians, who acted as their hunters, brought the furs of the black and silver fox, the bear, the sea-otter, the fisher, the marten, the beaver, the musk rat, the lynx, &c. These furs were annually shipped to England in large quantities, to the great profit of the Company.

But British Columbia was destined to nobler uses than to be the home of fur-bearing animals. In the spring of 1858, it was known in California that gold had been discovered on

the banks of the Fraser River. The Fraser, it need scarcely be mentioned, is the great river of British Columbia. From the Rocky Mountains to the Gulf of Georgia it flows a distance of 1000 miles, remarkable not less for the grandeur of its scenery, the rapidity of its current, and the volume of its waters, than for the gold which has been found along its course. The fact that there was gold in the country had indeed been known some years before 1858. In April, 1856, Mr. Douglas, the Governor of Vancouver Island, and Chief Factor of the Hudson's Bay Company, reported to the Home Government that gold had been discovered within the British Territory on the Upper Columbia. Miners, he writes, were washing gold on Fraser River, although the number was small, they being chiefly retired servants of the Hudson's Bay Company. However, in the autumn of 1857, some persons, chiefly adventurers from the adjoining states, found their way into the country on the upper Fraser, where they mined with great success. On the approach of winter they withdrew to Victoria and San Francisco, where they spread glowing tidings of the richness of Fraser River.

The excitement caused by this news amongst the miners of California was unbounded. And not the miners only; all classes of the community seemed smitten with the gold epidemic. "None are too poor," says the *Times* correspondent, writing from San Francisco, in June, 1858, "and none too rich to go. None too young, and none too old to go, even the decrepit go. Many go with money, many go without; some to invest in real estate, some to see 'what may turn up'; some out of curiosity, some to steal, and unquestionably some to die." In short never in the history of the migrations of men has been seen a "rush" so sudden and so vast. It is calculated, that by the middle of July some 20,000 men had left California for the new Eldorado. But unfortunately by far the greater number were doomed to disappointment. They arrived too early. The river was swollen and the bars (by which term are understood the auriferous banks formed at angles of the river) were flooded by the stream. Only a few met with success. The greater part, discouraged by failure, by scarcity of food, and by the impenetrability of the forests, made haste to abandon the inhospitable Fraser. On their return to California, their disappointment found expression in a wholesale condemnation of the country, which they stigmatized as a gross imposition, coupling it with the South Sea bubble, the Mississippi scheme, and other celebrated hoaxes. Those however who remained on the Fraser reaped the reward of their fortitude and patience. The river fell, and the

miners were able to work, and with very good average success.

The Home Government now proceeded to revoke the grant, by virtue of which the Hudson's Bay Company had exclusive right to trade in these territories. The new colony, under the name of British Columbia, was thrown open to the world. An Act was passed by Parliament providing for its government, and Mr. Douglas was appointed to administer its affairs. In the dispatches of the Secretary of State for the Colonies, entire confidence was expressed in his ability and knowledge of the country. The Civil and Criminal laws of England were declared in force in British Columbia. But Mr. Douglas was empowered to govern to a great extent on his own authority. It was judged that the best form of government for a Colony in its earliest years, was one which placed the reins of power in the hands of one man. At the same time Sir Edward Bulwer Lytton gave it to be understood that this was only a temporary measure, and that it was the anxious desire of Her Majesty's Government that representative institutions, without which they were convinced peace and order cannot long prevail, should be established as soon as practicable. Provision was also made for the military requirements of the Colony by sending out a party of Royal Engineers, who arrived early in 1859. These troops, so superior in discipline and intelligence to ordinary soldiers, besides being ready to discharge military duty, were intended also to act "as pioneers in the work of civilization, in opening up the resources of the country by the construction of roads and bridges, in laying the foundations of a future city or seaport, and in carrying out the numerous engineering works which, in the earlier stages of colonization, are so essential to the progress and welfare of a community."

Thus furnished and equipped, the Colony began its career. Its progress up to the summer of 1861 was dubious and slow. Its resources were but partially known, hence its future was veiled in uncertainty. But since its mineral wealth is better ascertained, and its agricultural capabilities proved, it bids fair to advance with rapid strides.

CHAPTER II.

GENERAL DESCRIPTION OF THE COUNTRY.

No one sailing from the green island of Vancouver, can have crossed on a fine day the Gulf of Georgia, which separates it from the mainland, without admiring the beauty of that scenery. The waters sheltered by Vancouver Island are generally tranquil. The islands around present a picturesque appearance of rock and dense wood. The snow capped coast range of British Columbia lift up their bold jagged peaks. The scene is enlivened by numberless waterfowl of many species. A mile or so to the east of Plumper Pass—the narrow channel between Galiano and Mayne Islands,—the vessel passes suddenly into a stream, turbid and clay coloured, in which are seen floating masses of driftwood. This is the volume of water which the noble Fraser pours into the Gulf of Georgia. The sand banks caused by the deposit of the stream, extend some five miles to the westward of the entrance. There is no formidable bar to cross as in the case of the Columbia and so many other rivers; a narrow channel having been forced through the shoals by the struggles of the river. With an entrance sheltered from storms, and a depth of water sufficient for any vessels save of the very largest class, the Fraser seems intended to be a gate through which the wants of a great country may be supplied, and its riches distributed to all lands.

Proceeding onward we soon leave the low and marshy lands at the mouth of the river, and come to where the forest bristles along each bank. Above the brush rise the maple, the alder, and the cottonwood trees—yet higher are the cedars, and above them all tower the mighty pines, truly the giants of the forest. Viewed from a distance, however, their extreme height is not apparent. The truth is that all being so tall, and every thing in sight being on so large a scale the eye finds nothing with which to compare them. It is only when standing beneath them we measure their trunks, or compare them with a building, or pace the length of one that is fallen, that we perceive how vast they really are. The majority of the pines exceed 200 feet, and many of them are over 300 feet; the cedars, though less in height, are often of

amazing girth.

Turning a bend in the river 15 miles from the mouth, the traveller comes in sight of New Westminster. Four years ago all was forest here; in 1859 the spot was selected as the site of the capital, and there is now a town of some size and importance. (Population, including the Royal Engineers, 1000.) New Westminster contains, besides stores and residences, three churches (Church of England, Roman Catholic, and Wesleyan, in addition to which a Presbyterian place of worship is now in course of erection,) Colonial Hospital, and the Government Buildings. Here also reside all the heads of Departments excepting the Governor, Colonial Secretary, and Auditor, and here a large proportion of the revenue of the Colony is collected. A mile and a quarter above the town is "The Camp" where the Royal Engineers under the command of Colonel Moody, have their head quarters:—a most efficient body of men who have materially aided in the development of the Colony.

As a port New Westminster possesses great advantages. There is plenty of water, excellent anchorage, and abundance of room for wharves. During the flood tide a vessel is borne up with ease, and in the summer, when the freshets are strong, there is daily a fine breeze up stream which will bear her safely into port; so that with the river entrance well buoyed, and provided with a light-ship, this place might become an excellent seaport.

It is but fair to add that the value of the harbour is contested by the inhabitants of Victoria, Vancouver Island, who assert that the navigation of the Fraser is impracticable on account of the so called Bar at its mouth; this is a mistake, with ordinary care the Fraser may easily be entered by vessels drawing from 18 to 20 feet.

Indeed New Westminster only requires a few firms possessed of capital, to induce direct communication with England and San Francisco, and put an end to the present roundabout and expensive trade through Victoria.*

Among the commercial advantages of the capital may be mentioned the proximity of Burrard Inlet, where there is an excellent harbour, easy of access to vessels of any size or class.

As regards agriculture there are several farms in the neighbourhood. The soil, though not everywhere deep, is generally very fertile. Of its fertility, the luxuriant vegetation is at the same time the cause and the effect. The land has been found to bear abundantly whatever has been tried; especially vegetables and fruit; but owing to so great a portion of the dis-

* See Appendix A.

trict being densely wooded, the portion of available land in this section of the country, is at present but limited.

Leaving New Westminster the traveller into the interior of the country, ascends the Fraser in one of the river steamboats. The Camp first attracts his attention from its fine situation. Here the river is fully three quarters of a mile wide. Up stream a long reach (called the Queen's Reach) stretches rway before the eye, apparently terminating in a small island, clothed with luxuriant vegetation. The banks on either side are thickly wooded, while in the distance snow-clad mountains bound the view. Proceeding up stream the next spot worthy of mention is Fort Langley, 16 miles from New Westminster. This has been for many years a station of the Hudson's Bay Company, established both as a trading post for the Indian traffic, and also as a farm for agricultural purposes. The soil is excellent, and wheat has been grown year after year, without the use of manure.

The traveller up river will next pass the extensive and fertile prairies at Sumass and Chilukweynk (left bank). Much of this land indeed is flooded during the summer freshets, but only for a few days. These and many other similar tracts are admirably adapted for stock raising. The floods and mosquitoes are their only drawback. With the exception of these prairie lands, the banks on either side are clothed with the forest. It is indeed a strange sight for the traveller fresh from the Old World to see the exuberance of the vegetation on this humid soil. He enters the wood by the trail or path which has been cut through the dense bush, and gazes silently at the wonders of the forest. The damp soil deprived of the sun is covered with moss, ground creepers, and a rich growth of ferns of various species, and of rare luxuriance. Mingled with them are the berry bushes, the salall, the salmonberry, the raspberry, the huckleberry, loaded with their luscious and many coloured fruits. Above the bushes rise the hazel and the maple, their light green leaves relieved by the mass of darker foliage. Verdant pendants of moss hang from the lower branches of the forest trees, which stretching upwards, tower far above all things else, permitting glimpses, and but glimpses, of the blue sky overhead.

Thirty five miles above Langley, the Fraser receives the waters of Harrison River. Here is the first divergence in the route to the Cariboo mines;—one road going by way of Harrison River, Douglas, the lakes and Lillooet—the other by way of the Fraser, Hope, Yale, and Lytton. The former is the more convenient, and the more direct. From the mouth of Harrison River to Douglas is a distance of 50 miles, 7 by

the river, the remainder by Harrison Lake. This is a noble sheet of water, remarkable for its rugged beauty. At the end of the lake is the town of Douglas, the termination of the river carriage, and commencement of the waggon-road. Douglas lies in a narrow valley between two ranges of mountains, and though small, much traffic daily passes through it. The trees round the town are remarkably fine, and the white pine lumber cut by the saw-mill is much esteemed, some of it having been already exported to San Francisco. A magistrate and toll collector are resident here; and a pretty little church has lately been erected.

The first portage from Douglas to Lillooet is $29\frac{1}{2}$ miles. Roadside houses abound on it, where food and shelter may be obtained. The cost of each meal is one dollar*. At the inn 20 miles from Douglas, there is a hot mineral spring, said to be very efficacious in cases of rheumatism. Its chief constituents are sulphur and soda. The portage terminates at the Tenass Lake, across which the traveller is conveyed in a small boat; thence a portage of a mile and half conducts him to Lillooet Lake. The inconvenience of this portion of the route will shortly be obviated. The Tenass Lake is connected with Lake Lillooet, by a short and rapid river of $1\frac{1}{2}$ miles in length. It is expected that the powerful steamer just built on Lillooet Lake, will be able to stem its strong current, at least during the summer months when the water is high, and thus navigate the whole distance from the foot of Tenass Lake to the head of Lake Lillooet, a distance of $25\frac{1}{2}$ miles.

The general direction of Lake Lillooet is N. At the head of Lake Lillooet stands the village of Pemberton. Next a waggon-road takes the traveller over a second portage 26 miles long. There is a fine tract of prairie land in the neighbourhood of Pemberton known as "the meadows," it is 7 or 8 miles long, and from half a mile to a mile wide. The land is fertile and produces grass abundantly; it is also well suited for cultivation. There are now 12 farms taken up. The road starting in a westerly direction presently approaches the river, which flows from N. E. to join Lillooet Lake. A little beyond the Half-way-House we pass the watershed of this district, which is 1482 feet above the level of the sea. From the road, the traveller will see on his right, a roaring cataract descending the mountains from their snowy summit. The stream divides on reaching the valley, part flowing S. W. and part flowing N. E.; the former running down the valley we have been ascending, through Lakes Lillooet and Harrison

* The American dollar equals 4s. 2d. of our money, but for convenience sake it is reckoned in these pages as 4s.

into the Fraser, the latter making its way through Anderson and Seton Lakes into the river just below Lillooet. The road now descends to Lake Anderson. The name is not romantic, but few scenes in nature can surpass its beauty, at once sublime and tender, especially as seen in the freshness of a spring morning as the sun crests the mountain peaks, ere his rays descend upon the calm waters of the Lake below. Its length is 16 miles, direction nearly N. and S. Lake Seton, the last in the series, is 14 miles long, general direction W. and E.; it is winding, rugged and picturesque. Probably this lake will be connected with Lake Anderson by a canal some future day: they are only a mile and a half apart. A new steamer is building on Lake Seton. Four miles further on is the town of Lillooet.* Hitherto our way from Douglas has been up a defile or pass hemmed in by stupendous mountains, but as we approach Lillooet the hills recede on either hand, and the eye rests once more on an open expanse. A valley lies before us, forming an irregular circle with a diameter of from 3 to 4 miles, bounded by lofty mountains. Through this valley or basin the Fraser winds,—the river bed being 190 feet below the plain. A series of benches rise terrace-like, regular and level, and according to the season, snow-clad, grassy, or grey. These singular benches remind us of the parallel roads of Glenroy, and suggest the idea that the whole valley was once a lake, whose waters gradually fell as some obstruction that barred their egress was removed. On one of these benches stands Lillooet, right bank of the river, latitude $50^{\circ} 41' N.$, and close upon the 122nd parallel of west longitude; its altitude is 1036 feet. The town consists of a fine broad street, at the southern extremity of which stands the church. The situation is romantic. From the flat immediately behind the town, the spectator has as fine a view of highland scenery as he could wish. To the left the golden sanded Fraser rolls his impetuous current, some distance off a mountain range (a branch of the Cascade) skirts his left bank. Westward to the right St. Mary's† Mount lifts its pine-clad peaks far into the clear blue sky. Farther south stands Mount Brew, (3000 ft.) a noble mountain: his mantle varies with the changing year, light green in the spring time, and yellow when autumn paints the deciduous trees on his flank with gold, but his lofty brow

* Stage coaches ply on all the portages from Douglas to Lillooet, the fare through being \$20, including the steamboat fares, which are \$1 each. The whole journey which now takes 2 days will, it is expected, shortly be accomplished in 24 hours.

† This name, identical with that of the church at the foot of the mountain, has received the sanction of the Governor.

remains crowned with snow during most of the year. In front beyond the town the spectator observes a series of plains, partly enclosed and blossoming into gardens, while far away the view is bounded by the mazy windings of the Fraser, as he is lost to sight among the distant hills.

Lillooet, though by no means a large town, shows signs of progress. Its average white population is 350. Much traffic passes through this town, as Lillooet divides with Yale the business of forwarding goods to the mining districts. The soil in the neighbourhood is light, but when watered proves abundantly fertile, cereals thrive, and even tomatoes, melons, &c., come to perfect maturity in the open air. Indications of mineral wealth are traced in the surrounding mountains, and coarse gold has been found both in Bridge River to the N., and in Cayoosh Creek to the S. of the town; probably important discoveries will be brought to light as soon as the Cariboo excitement abating, miners give themselves time to prospect in these parts. Lillooet is the most central town in the colony; it has the advantage of being a most agreeable place of residence. The climate is clear and regular; generally speaking the sky is without a cloud throughout most of the year. The winters are severe, the summers hot, but the winters are for the most part clear, and cloudless, while the summer heat is tempered by the mountain breeze. I must add, that it is remarkably healthy; nor in enumerating the advantages of Lillooet as a place of residence, must we forget these two, that while some of the other towns are enclosed by mountain or forest, here is ample room to walk or ride; and while many other places are in summer infested with mosquitoes, Lillooet is free from these tormenting insects.

Having thus brought the traveller to Lillooet via Douglas, I must now conduct him by the other route, through Hope and Yale to the upper country, from the point where the lines diverge, viz: at the mouth of the Harrison River. From that point there is nothing worthy of mention until Hope is reached, at a distance of 95 miles from the mouth of the river. Until lately it was a flourishing little place, but the gold-bearing country to the east, Similkameen, having now been deserted by the miners for Cariboo, and it having been found impracticable for the present to open a route direct to the upper country from Hope, via Kamloops, most of the traders have left the place, and repaired to Yale 15 miles above. No one however doubts that Hope will flourish again as soon as the Okanagan country to the east, of which it is the natural outlet to the Fraser, becomes inhabited. A short distance from Hope, a silver mine is being worked, which is

expected to prove highly remunerative. Yale (right bank) the head of the river navigation, is situated in a narrow gorge of striking grandeur. Though not very large, Yale is a thriving and busy place, and large quantities of goods and not a few passengers pass through it daily, in the summer, to the upper country. From the bars on the river near the town, a large quantity of gold has been taken, chiefly from Hill's Bar, so famous in 1858. These bars have however ceased to yield any large returns, and are consequently abandoned to Chinamen; the whites being drawn away by the attractions of the northern gold-fields. This town like most of the others in the Colony, possesses a resident magistrate and a clergyman.

Leaving Yale by the mule-road, now being converted into a waggon-road, the traveller passes through a gorge or cleft in the mountains, known as the little canon, where the Fraser forces its way through the Cascade Range. The road is hewn in many parts out of immense slides from the mountains, and one of solid granite rising abruptly from the river. When completed this road will be reckoned among the triumphs of engineering skill and human art. The precipitous mountains of the Cascade Range stand steep and stern around: below the surging Fraser hurries along

"Though much he fret and chafe and toil,
Till all his eddying currents boil."

Here the Indians may be seen catching salmon; their picturesque wooden platforms suspended above the stream, they sit with ropes tied round their waists to prevent them falling to certain destruction. They thrust into the eddies long poles with nets or running gear attached, bringing up rapidly and successfully the shining fish, their winter's food.

Eleven miles above Yale the river is crossed by means of a ferry, but a bridge is in course of construction. At a point 43 miles above the town the aspect of the country completely changes. The underbrush and cedars are left behind, there is much less moss upon the trees, and here begin the peculiar benches which mark the course of the river and its tributaries. On one of these flats, 200 feet above the stream, is Lytton (altitude 780 feet), named after Sir E. B. Lytton, the renowned founder of the Colony. This town is situated at the junction of the Thompson with the Fraser, 43 miles below Lillooet. The trail up country here turns to the right up the Thompson River, which is crossed at Cook's Ferry, 23 miles above Lytton. The waggon-road from Yale via Lytton will probably, when completed, join the road from Lillooet at a point 47 miles from the latter place, and about 75 miles from Lytton, at the town of Clinton, in the Cut Off Valley. The

traveller by the Yale and Lytton route will probably rest the first night from Lytton at the Ferry, the next at Ashcroft's, 23 miles further, the next day he will either reach Clinton, or stop at the Buonaparte, Mr. McLean's, 19 miles from the latter. From Lillooet to Cariboo is a distance of 260 miles: a waggon-road has been carried to within a short distance of Williams Lake (165 miles). As the different sections of the road are completed, stage coaches will be placed upon them. Crossing the Fraser at Lillooet by a rope ferry, (with a boat sufficiently large to take over droves of cattle, loaded waggons, &c.) the traveller passes N. along a good waggon-road (18 feet wide and with easy grades), which for the first 20 miles follows the course of the Fraser, through a grey and gloomy landscape, bounded on either hand by beetling mountains. Four miles above Lillooet the road passes a well known and dangerous slide, now converted into a safe and easy road. Here the Fraser is joined by a small auriferous river called Bridge river. Four miles further is the Fountain, where a large piece of land is under cultivation. Pavillon Stream is passed 22 miles above Lillooet, at Bridge Inn. Further up Pavillon Valley there is an extensive farm, The Grange, where with a soil derived from the "disintegration of granite, metamorphic rocks, and crystalline limestone,"* excellent crops of cereals and vegetables are produced. With such fertility one would hardly expect to find that the altitude of this valley is 2500 feet.† At Pavillon (the name is French, taken from the flags there found floating over the Indian burial grounds, by the Canadian Frenchmen, who first explored it) the River Trail diverges from the waggon-road. As the former road is 35 miles shorter than the latter, (although it is also much rougher and more hilly), it may be necessary to give some account of it. Ten miles from Pavillon will bring our traveller to Leon's, on the river side. A good walker may make it in one day from Lillooet. The next day's journey will be Big Bar, 25 miles further. Hitherto the road has lain along the course of the Fraser. The aspect of that river and its banks is grey, sombre, and desolate. But after crossing Big Bar Creek, and ascending an elevation of about 1000 feet, we reach a series of plateaux or table-lands, with good soil and beautiful grass, adorned with myriads of wild flowers, among which the geranium and wild pea are conspicuous. Here are prairies sufficient to pasture countless herds and flocks. Canoe Creek is the next stopping place, 25 miles

* Official report of journey from New Westminster to Lake La Hache, by Captain R. M. Parsons, R.E.

† *Ib.*

from Leon's. Here it was that Stewart and Fraser (the discoverers of Fraser River) abandoned their canoe to travel by land: hence the name. Fifteen miles beyond is Dog Creek. Two or three farms are taken up here and promise well. There lived here in times past an Indian Chief, who was in great favour with the Hudson's Bay Company, and who received the soubriquet of *Le Petit Chien*. From him the creek derives its name. There is a mission house at Dog Creek, which the Roman Catholic priests built and used 40 years ago. Alkali Lake is 10 miles from Dog Creek; the distance thence to Williams Lake is 34 miles (by St. Peter's Springs 10 miles). The total distance from Lillooet by this road is 129 miles.

Returning to Pavillon Valley, let us now proceed thence to Williams Lake by the waggon-road. Leaving Bridge Inn in the Pavillon Valley, the traveller begins the second day's journey from Lillooet, by crossing Pavillon Mount nearly 4000 feet above the level of the sea, covered by excellent pasturage, and well watered. Inns will be found at Clinton, 47 miles from Lillooet, pleasantly situated in the Cut Off Valley, a beautiful glen 16 miles in length. This is the point of junction of the Yale and Lillooet roads. The next day the 70 mile house may be reached: there are however stopping houses between. Land poor, soil light, plenty of wood and water. Fourth day to the 100th mile post, at Bridge Creek. Here a farming country begins, superior to anything seen since leaving Langley on the lower Fraser; the soil is good, and there is abundance of water and wood. The waggon-road here follows the old Brigade trail, so called from the large Hudson's Bay Company's trains. The Blue Tent near Lake La Hache, is 26 miles further; 22 miles beyond which is Lake Valley House, at the head of Williams Lake, and 9 miles from the village of that name. From Bridge Creek to Williams Lake is a fine country, well adapted for farming; it is said that late frosts might sometimes injure the crops, but at Lake La Hache excellent crops of barley and wheat were grown last summer, and at Williams Lake there is an extensive and productive farm. The farming land is bounded by low hills, beyond which there are other prairies and valleys. These hills are undulating and brightly green, and their grassy carpet is daisied over with countless wild flowers. The road occasionally crosses some fresh mountain stream, whose cool, clear waters invite the traveller to drink; now it wends by the bank of a lovely lake, in whose glassy depths the trees and shrubs along the margin seem to contemplate their own symmetry and face.

Here two ways to the mining country are open to the travel-

ler, according as he wishes to enter Cariboo on the eastern side at Antler Creek, or on the western side at Lightning Creek. (The term "Creek" is here used in the technical miner's sense, to denote a tributary stream.) The former route by Quesnel and Antler is the shorter, though more arduous. Leaving Williams Lake at Lake Valley House the traveller takes the trail to the right*. There are various stopping places on the road to Quesnel;—Deep Creek, the Round Tent, Beaver Lake, &c. Beyond the Round Tent we reach a beautiful sheet of water. Lovely indeed is the scenery around this lake, an open undulating country covered with copious vegetation. For agricultural purposes the soil is too humid, and would require drainage; the pasturage however is excellent. At Beaver Lake there is a pretty large extent of land capable of cultivation. Two or three farms are already taken up, and prove productive. The whole country N. and N.E. of Beaver Lake is in some respects different from any which the traveller has seen in the lower districts of the colony. Judge Begbie in a note to his map of the district, says "From Beaver Lake to beyond Keithley's is one continuous, dense, grassless, mountainous forest, about 5 or 6 days for loaded animals." The trail leads through forests and swamps, which in the middle of summer swarm with mosquitoes. Occasionally where the forest has been subjected to a conflagration, the charred trunks stand around like the ghosts of the monarchs of the wood. By a trail leading through these spectral forests, cut out of the densest forest growth, the traveller plods on his way over fallen trees and stumps, or through mud holes often knee deep. But let him take heart he is now approaching the goal of his pilgrimage,—world renowned Cariboo.

The village of Quesnel, 23 miles from Beaver Lake, is situated at the confluence of the two branches of the Quesnel River, the southern branch of which rises in the Great Quesnel Lake to the S., 8 or 9 miles from the town. That lake is nearly 100 miles in length, one branch of it extends to the E., the other N. The north branch of the river flows S.E. from Cariboo Lake. The town is situated on the low tongue of land enclosed by these two rivers ere they join: all around are high mountains thickly covered with timber. Leaving Quesnel for Keithley's Creek (25 miles) the traveller takes his way along North Quesnel river. Three miles on this side of Keithley's he gains Cariboo Lake, now rendered important by the discovery of a silver mine in the vicinity. Here begins the Cariboo country

* A short cut however may be made on the waggon-road at the Bridge, to a point beyond the Forks at Quesnel: information regarding it will be obtained at Bridge Creek.

(Cariboo—*carri-bœuf*, or reindeer frequenting those parts.) Beyond the Lake he reaches Keithley's, where a small village has sprung up; a great deal of gold was taken out of this stream in 1860, and although in 1861 a heavy flood destroyed most of the flumes, and it was accordingly in part abandoned, there is no doubt that there are still rich claims on the creek. Of the creeks in the neighbourhood of Keithley's little is now heard; the probability is they are yet far from exhausted. Such are Goose Creek, 5 miles. Cunningham's, 12 miles, and Harvey's, 14 miles distant from Keithley's. All these are to the N.E. of Keithley's, and consequently out of the way to Antler, which lies rather to the N. or N.E. The journey from Keithley's to Antler (25 miles) is somewhat tedious. The trail first ascends a mountain 5 miles in length, then descends the same, and next plunges through a swamp. Then there is the Bald Mountain, whose heights once gained command a magnificent view of mountain scenery. Immense snow mountains are seen to the N.E. which in all probability are the Rocky Mountains. An inn will be found on Snowshoe Creek, below the Bald Mountain. Pursuing our way over a mountainous and swampy country, at length after a long descent of 3000 feet, we reach the valley of Antler. Antler Creek which in 1861 yielded considerable treasure, was in 1862 to a great extent abandoned for the now far famed Williams Creek (12 miles distant), but is still believed to be rich. As the miner crossing to Williams Creek descends through the forest and brushwood, which thickly mantle the valley, upon the town of Richfield (4216 feet above the sea level) a cheering sight will meet his eye. Arriving say in June, he finds the snow all gone, life and energy, business and stir visible everywhere. The very wheels upon the stream seem inspired with the excitement which quickens every pulse, and fires every eye. Here the traveller feels he has reached indeed the heart of this immense country, the centre from which life and commerce radiate to its farthest limits. Next in importance to Williams Creek, is Lightning Creek, which is 15 miles distant from the former, across a rough and swampy country. This creek although very expensive to work, is supposed to be very rich; it is about 35 miles long. At its junction with Rip Van Winkle Creek, a town has sprung up, named Van Winkle, which bids fair to become a place of importance.

The other principal creeks are as follows: Lowhee, 3 miles from Williams Creek, Jack of Clubs, Grouse, Last Chance, Chisholm, Sovereign, Fountain, Anderson, Nelson, Stevens, California, Thistle and Sugar Creeks, Maccallum Gulch, Tababoo Gulch, &c. The route to the mines via Quesnel, as well

as the communication between the different creeks will be much improved this summer by bridle-paths, for which tenders are advertised for by Government.

Supposing one to wish to enter Cariboo by the western route, via Fraser River and Lightning Creek, he will not turn to the right at Lake Valley House on Williams Lake, but continue on to the village of that name, 9 miles further on. The village of Williams Lake, which is the residence of the magistrate of the district, is one of the prettiest places in the colony. Here nature appears, not as on the lower Fraser in her sublimer grandeur, but in her attractive beauty. The shrubs and wild flowers, no less than the fenced fields and golden corn, recall the softer landscapes of the mother country. Although its elevation is 2100 feet, Williams Lake yields exuberant crops of grain and vegetables. From Williams Lake there are 20 miles to Mud Lake, the terminus of the first portion of the waggon-road from Lillooet to Lightning Creek—now nearly completed. Mud Lake, or more properly Clear Lake, (the original name being "Lac de terre claire," a name given by the Hudson Bay Company's people, with reference to the white clay that abounds there), is a fine sheet of water, about 5 miles in length, winding like a broad river, clear, deep and calm; the slopes along its banks rather resemble a gentleman's grounds than uncultivated wastes. From Clear Lake, or rather from the mouth of Soda Creek in its vicinity, a steamer, now nearly completed, will shortly ply to the mouth of Quesnel, a distance of 50 miles; this will facilitate the journey to Cariboo and the transport of provisions. On its way the "Enterprise" will pass Alexandria, a Hudson's Bay Fort, where furs are collected from a vast surrounding district. Its position is $52^{\circ} 33' N.$ Latitude, and $122^{\circ} 26' W.$ Longitude, and 1470 feet above the sea. Here the river is "from 250 to 300 yards in width, and the velocity of its current $5\frac{1}{2}$ statute miles an hour; the extreme depth of the channel 20 feet at low water, and the rise at the freshets from 18 to 20 feet."* The land round Alexandria is for the most part poor, yet the patches cultivated by the people of the Fort, bear good crops. A few miles above Alexandria the bunch grass ceases, together with the terrace-like benches, characteristic of so great a portion of the course of the Fraser, where it usually grows. A few prairies occur of rich meadow grass and productive soil. †

The mouth of the Quesnel River, 1490 feet, will be the head of steamboat navigation; as it is likely also to become

* Lieut. Palmer's Report on Bentinck Arm Route, page 23.

† Lieut. Palmer's Report on Cariboo, page 4.

the meeting point of the Fraser River route, and whatever other route may ultimately be made available, it is evident it must become a point of importance, second only to that of the several heads of navigation, and perhaps superior to any of them taken singly. It is a fortunate circumstance that the point where these roads converge offers an admirable locality for a town; the climate is genial, the scenery picturesque, and a sufficiency of open country lies around, a good portion of which is available for agriculture. All these advantages will probably conspire to build up, on the site already laid out by Government, a city, which it is expected will spring into being, with a rapidity hitherto unknown in the growth of the Colony.

Twenty-seven miles from Quesnel mouth, we reach Cottonwood, at the mouth of Lightning Creek. The country is wooded with varieties of pine and hemlock, and there are occasional valleys of good land. At Cottonwood, we pass into the district of Cariboo, a rugged, wooded, swampy, dreary region, with scanty pasture unfit for agriculture, and possessed of no attraction save its gold. The distance from Cottonwood to Van Winkle is 25 miles, thence to Richfield 16 miles.

The entire distance from Williams Lake to Richfield by the western side (Fraser River and Cottonwood) is thus 149 miles, while the distance via Beaver Lake and the town of Quesnel, or the eastern route, is 113 miles. But notwithstanding its greater length, the western route is to be preferred, having far better trails, better feed for animals, and the great assistance of the waggon-road and the steamer on the river.

Returning to the Fraser River, I have to notice a project recently set on foot, of a new route into the northern part of the country from Bentinck Sound, on the N.W. coast, to Alexandria or Quesnel mouth, and thence to Cariboo. The new road, it is said, would materially shorten the distance to the mines, as the journey from the coast thither would not exceed 240 miles, which is nearly the same as Lillooet from Cariboo. There is, it is said, a good harbour at Bentinck Sound, at the mouth of the Bella Coola River, and a site for a town. The road, it is alleged, might be made at little cost, the country being for the most part level, although in places very marshy. This project has encountered opposition on the ground that a new route in this direction would injure the towns already established on the present line along the Fraser, and retard the settling up of the lower part of the country. Admitting, it is further argued, that the new route would facilitate the journey to the mines, and cheapen provisions there, the same road which allows men easier ingress to, furnishes at the same time a readier egress from the country, yet what is desirable is not

to furnish the greatest facilities to the miners to come to rifle its treasures, and then depart as cheaply and expeditiously as possible, the great thing is to have *the country settled*; surely it is unfair, it is contended, to sacrifice the interests of the whole country to the mining population. But to argue thus is to forget that it is the miners who are *making* the country; it is consequently of the last importance that they should be supplied with provisions as cheaply as possible. Hence if the Bentinck Arm route is found to be shorter and better than those at present in use, and will cheapen provisions at the mines, no considerations can prevent it from being carried out. Government meanwhile, being unwilling to divert its energies into new channels, and to abandon its efforts to open up the country via the Fraser River, in order to enter upon new labours on a new route, and having no money to spare for this project, is nevertheless anxious to see the country opened up in all directions, it accordingly gave a charter to the Bentinck Sound Route Company, guaranteeing that if they construct a good waggon-road from the Coast to Cariboo, they might on its completion be entitled to charge one cent and a half per lb. on all goods passing over it, and sent Lieutenant Palmer, of the Royal Engineers, to examine the proposed line of road, and lay out a site for a town at the mouth of the Bella Coola River. Mr. Palmer's Report is adverse to the route; the distance of the trail, from the Coast to Alexandria, he gives as not less than 270 miles, although in his opinion it might be shortened by 30 miles.* The harbour is bad, and the country presents great obstacles to road making. It is very swampy, and being for the most part very elevated (2000 to 4000 feet,) the snow lies on it for 7 months in the year (November to May inclusive.) There is a general absence of good soil, and the feed for animals is poor. If, however, a road be made from Bentinck Arm to the mines, it will probably cross the Fraser not at Alexandria but at Quesnel mouth, which is about equidistant from the coast with Alexandria, and 40 miles nearer Cariboo. Some such route will, doubtless, ere long be attempted. Another Coast Route, now mooted, is by way of Bute Inlet, further south than Bentinck Arm. Indeed by last reports a party of men have been conveyed to Bute Inlet from Victoria, and have already begun to construct a road. This route is said to possess the advantage of good anchorage, and a better geographical position, than Bentinck Arm. But as it has not yet been properly examined little is known about it.

* North Bentinck Arm Route. Report of a Journey of Survey from Victoria to Fort Alexander, via North Bentinck Arm, by Lieut. H. Spencer Palmer, R.E. R. E. Press, New Westminster.

Before leaving this part of the country, there is a word to be said of the districts to the north of Cariboo, and settlements already existing there. Various Hudson Bay Company's Forts are dotted about the northern regions. Fort George is 136 miles above Alexandria, where the land under cultivation produces wheat. A hundred miles beyond there is another Fort at Stuart's Lake, from which flows Stuart's River, a tributary of the Fraser. Beyond Fort George, the Fraser makes a great bend to the eastward. It rises near Mount Brown, in the Rocky Mountains, in 53° North Latitude, $118^{\circ} 40'$ West Longitude: not far distant is the source of the Columbia, flowing south, the Peace River, flowing north, and the Stickeen River, whose main course is west, all gold-bearing rivers. At the outset of its course, the Fraser flows N.W., then W. to Fort George, about 290 miles from its source, whence it flows S. and S.W. as far as Hope. Within the remarkable curve just indicated—let a straight line be drawn across the map from the source of the Fraser to Alexandria, and a just idea will be obtained of the locality—within that singular bend lies the golden region of Cariboo.

Peace River, where great discoveries were made in 1862, flows N., through the Rocky Mountains. At present the only way of getting there is by the Hudson's Bay route, viz: from Fort George, 120 miles up the Stuart River, to Fort James, thence by land to the head waters of Peace River (90 miles), and down that stream 130 miles to the mines.

It may be well to give now a brief account of that southern portion of British Columbia, known as the Similkameen and Okanagan country. The entrance into this interesting and valuable district is by Hope. From this the road will lie, for about 25 miles, in a S.E. direction, up the valley of the Nicoloom and down the valley of the Sumallow, a tributary of the Skaget. On the Nicoloom the land is thickly timbered; on the Sumallow it is of a superior quality. Thus far there is an excellent waggon-road, constructed by the Royal Engineers, in the summer of 1861. Hence a mule-road, 35 miles in length, leads to Princeton, at the junction of the Sulameen and Similkameen Rivers. This is carried over very rough and elevated ground, the altitude at one point being close upon 4,000 feet.

The Cascade range, running in general in a N.W. and S.E. direction, is here so cut up by interlacing valleys, that it can scarcely be termed a "range"; the country lying between the Fraser and Princeton, is better described as a vast sea of mountains. Through some one of these valleys, as yet undiscovered, a road will at some future date be made by Nicola Lake and

Kamloops to the north: and looking southward, there can be little doubt that at no distant period there will be an important line of communication with Washington Territory through the valley of the Skaget.

About 15 miles from Princeton the highest ridge is crossed. Here the country becomes more open; covered with bunch-grass, and with firs at intervals; there are but few deciduous trees, and the soil is very light. There is however plenty of feed for cattle, and though not good for agriculture, much of the land is suitable for pasture; and Princeton may one day become the centre of a pastoral and mining country: good prospects of gold have been made in the neighbourhood, and indications have been found of silver and copper. From Princeton, the valley of the Similkameen lies in a S.E. direction, until the frontier is crossed, a distance of about 55 miles. The landscape is grassy, and there are patches of rich land wherever water has passed. Two miles below Princeton a trail, somewhat over 40 miles in length, branches off to the great Okanagan Lake. The country round the Lake is well adapted for farming: open and grassy with rolling hills, and sufficient wood for agricultural purposes. On the west side of the Lake runs the Hudson's Bay trail, the line by which the upper country is supplied with cattle from Washington Territory. The trail runs along between the lake and a low mountain range, from which detached spurs press upon the lake, and rise above the water in precipitous bluffs. There is excellent feed for cattle all along this route, especially on small spits of land which jut out into the lake. These have been formed by an alluvial deposit brought down from the mountains by the numerous streams, and consisting of rich soil, are covered with luxuriant grass. They are favourite spots with the drovers, who camp between their herds and the trail, and thus prevent the risk of the animals straying. The lake itself is about 70 miles long, and about 1 to $1\frac{1}{2}$ miles wide, and lies almost directly N. and S. About the centre, on the eastern side, is the Roman Catholic Mission, in the midst of an extensive farming district. There are here about 10,000 acres of clear land, having an excellent soil, adapted for raising stock, or growing corn, or any other kind of produce. The climate in summer is warm, the thermometer ranging as high as 98° in the shade. There is a little Alkali in the neighbourhood; it may be seen in small quantities in the Mission Garden, but the vegetables do not seem injured by it. * Some gold is found over all this

* "Alkali" is a saline efflorescence which is found in patches in many parts of the country. It contains sulphate of soda, common salt, and carbonate of soda.

region,—on the trail from Osoöyos Lake, and on the streams that fall on either side into the Okanagan Lake. Last year there were paying diggings on Mission Creek, but the miners have been enticed away by the more glittering prospects of Cariboo. There are a few small farms taken up in the neighbourhood of the Mission. Arrived at the northern extremity of the lake, the traveller comes upon a piece of ground which has perhaps the finest soil that he has yet seen in the Colony. This is called *Tête d'Epinette*, and is claimed by the Nicola Indians, and has accordingly been reserved for their use. Still following the Hudson's Bay Company's trail, which here takes a westerly and slightly N. direction, we arrive at a fine tract of country, called the Grand Prairie, with excellent soil, and clothed with luxuriant bunch-grass; its extreme length 16 miles, breadth from $1\frac{1}{2}$ to $2\frac{1}{4}$ miles, bounded on either side by hills, between which flows the Salmon River. Admirably adapted for a grazing station, the altitude of the district (1250 feet) acts as a drawback in causing nocturnal frosts as early as the month of September. The ride from the Grand Prairie to the Thompson River is one of exceeding beauty. A glittering stream flows merrily down the valley, and by the margin the alder and the willow dip their branches in the clear water. On either side green meadows stretch along, studded here and there with clumps of trees that give a grateful shade through the hot summer day, and every mile or two a small lake reflects the rocks and trees, and passing clouds on its glassy surface. Here the farmer will find good soil, fit at once for cultivation, and what renders it of greater value is the fact that the recent discoveries of gold on the Thompson and North Rivers seem to promise that this part of the country will prove extremely rich, and thus attract an abundant population for the consumption of all the agriculturist can produce. From the extremity of Okanagan Lake to the Thompson River is about 45 miles, and hence to the junction of the North River and the Thompson about 16. This latter portion of the journey offers nothing specially worthy of remark. The low grounds still present many spots well suited for farming.

At the confluence of the North River and the Thompson stands Fort Kamloops, the Hudson's Bay Company's Post for the district; and having arrived at this point, we will pause to notice the economic importance of the country through which we have been passing. Its value consists in this, that it is the highway through which the mines of the north are supplied with cattle. The droves are purchased in Oregon, and are driven by the Dalles, Columbia River, Okanagan River, Osoöyos Lake, western shore of Okanagan Lake, Thompson

River, Buonaparte River, and thence to the Cariboo country. The profit obtained by persons employed in this business is very large, as may be seen at once from the fact that beasts purchased in Oregon at \$10 per head are sold three or four months afterwards in the north at \$50 per head, and cost literally *nothing* for food by the way. At the same time it may be mentioned that they by no means deteriorate during the journey, but arrive at their destination in as good condition as they started. The only expense is the wages and keep of the drivers, and this is but small, the owners themselves being able to drive a large herd without difficulty. But this country will be used not only as one convenient for the transit of stock, but also for cattle *raising*. Land taken up here will be at once supplied with stock by the droves passing through, and at a very moderate price. Here cattle thrive wonderfully: and (a fact of some importance) they may safely be left out during the winter. If besides we take into account the many thousands of acres, capable of raising good crops of wheat for the supply of the mines, the importance of this beautiful district must at once be discerned.

The Fort is situated a few miles from the head of Kamloops Lake, a fine sheet of water 25 miles in length. There is a trail on both sides of the lake: that on the north bank rough and hilly, while on the southern bank, the country consisting of rolling prairie land, the trail is good. On the west side, half way down the lake, are indications of a copper mine, at a very romantic spot; thence the trail turns to the right, leading to the upper country, which is used occasionally by the Hudson's Bay Company. On the southern side of the lake there are some fertile valleys, where some claims are taken up: the rest is pasture land. A ferry will be found at the west extremity of this noble lake, where the waters of the Thompson leave it to resume their course to Lytton and the Fraser, some 75 miles distant. The trail to Lytton passes the mouth of the Nicola River, which flows into the Thompson from the Nicola Lake, where there is, it is said, a fine agricultural country.

Taking the trail on the right bank of the river, we descend the basin of the Thompson, along a series of table-lands. The soil is somewhat light, but the herbage is good. The trail next crosses over into the fertile valley of the Buonaparte, whence we may either proceed northwards to the upper country, or west towards Lillooet.

CHAPTER III.

PHYSICAL GEOGRAPHY AND METEOROLOGY.

The Rocky Mountains which may be termed the spine of North America, run from N.W. to S.E., forming the eastern boundary of British Columbia. They are part of the mighty chain which as the Andes transects South America, which crossing over into Asia, at Behring's Straits, may be followed as far as Arabia, and again traced in Africa; while a branch appears in Europe as the great Ural range. The range which is composed mainly of igneous rocks, is found to contain auriferous strata at various points of its world encircling course.

From a spur of the Rocky Mountains, rise the Fraser River, flowing first towards the North, and the Columbia flowing South, their sources being only a few yards apart. It is probable that the mountains of which Cariboo forms a part, run nearly parallel to the Rocky Mountains, at a distance of 100 to 150 miles, but of these little is known.

The great Cascade Range runs almost parallel to the Rocky Mountains, at a distance of from 250 to 300 miles. It has ramifications in all directions, and from various points sends down rugged mountain spurs which meeting the sea form deep inlets*. The Cascade Mountains are composed chiefly of igneous and metamorphic rocks with dykes of trap. In some places crystalline limestone appears in contact with other rocks. There are mountains of this crystalline limestone 2000 feet in height, as in that magnificent gorge called the Marble Canon 30 miles N.E. of Lillooet. No trace of fossils occurs in these rocks, which evidently belong to the igneous series. Huge granite boulders are found along the Fraser, but granite is not so abundant as limestone. Between Similkameen and Lake Okanagan, one sees scattered every here and there small rounded masses of vesicular lava; having the appearance of vitrified sponges.

The district of the lower Fraser from Harrison River to the mouth, and from Burrard Inlet S. was, probably once an estuary. The geological feature of this section of country is loose friable sandstone and alluvium; this sandstone oc-

* See Dr. Forbes's Essay on Vancouver Island, page 7.

curs in alternate layers with lignite; at Burrard Inlet it is found to contain fossils of leaves and branches of trees. Sandstone is found also cropping out on the Brunette near New Westminster, such as would be excellent for building purposes.

To the north of Burrard Inlet, the coast is, says Dr. Forbes, "a rugged mass of plutonic trappean and quartzose rocks, with associated semi-crystalline limestone" much the same, in fact, as the Cascade Range.

The coast is deeply indented with numerous inlets and arms of the sea, many of which afford excellent anchorage. "The Colony of British Columbia," says Dr. Forbes, "has a noble barrier for the protection of its shores. An outlying ridge, another parallel chain of mountains cut off however by the sea from the continent, with which in its physical geography it is connected, forms an archipelago of islands, the chief of which is the sister Colony of Vancouver." He further adds with reference to the country round the mouth of the Fraser, that but for the protection given by Vancouver Island against the storms and currents on these coasts, "the loose friable materials of that district must have been long since swept away, and what will eventually be a rich agricultural country lost to the industry of man."

As already observed the districts on the E. and on the W. of the Cascade Range are vastly different. The great "divide" between these two districts is passed on the several routes near the Half-way-House on the way to Lillooet, and at Boston Bar on the Yale route. The country to the W. of this is thickly wooded, the soil is moist and loamy, vegetation is luxuriant. Beyond the Cascade Range on the other hand the timber is, generally speaking poor, the soil is lighter, but the herbage is excellent. Nor is the difference in climate less remarkable west of the Cascade Mountains, the climate tempered by the ocean is more equable and mild, the winters are less rigorous than on the eastern side, the summer sun less powerful. In the northern parts again we find the features of the landscape changed. The country from Williams Lake to Cariboo seems to resume the aspect of the lower Fraser. Trees abound and grass is more rare. Much rain falls.

It is not easy to give satisfactory information on the very important subject of climate. The recent origin of the colony, and the want of proper instruments for observation at different points over the country, render our knowledge exceedingly limited. Indeed there is only one district concerning which we possess any definite information whatever, viz: the southern corner east of the Cascade Range; for this we

have the observations taken at the observatory at New Westminster by the Royal Engineers; (see appendix B.) It were greatly to be desired that Government would cause observations to be taken at all the principal towns.

Generally speaking it is a notorious fact that to the west of the Rocky Mountains, the climate is much more moderate than on the eastern side.

No Arctic currents wash these coasts similar to those which render the winters of the countries of the Atlantic so intense.

The following data given by Dr. Forbes, apply to the whole of the North Pacific coast:

"The winter of 1846 was remarkably severe, the cold setting in on the 5th of January, and continuing with severity until the middle of March, during which time the Columbia River was frozen, the thermometer ranging 5° below Zero.

1847. Very mild throughout.

1848. The cold weather began on the 17th December, the Columbia River froze over, but the ice broke up before New Year's day, the River remaining open.

1849. The cold weather set in on the 27th of November, when the moon was at full, clear days and sharp frosty nights continued till the 10th of December, when the Columbia was covered with floating ice, and snow began to fall heavily, this continued till the 18th (7 inches of snow on the ground), when it became mild, with S.E. winds and rain, and open weather continued to the end of the month."

The climate to the west of the Cascade Range is genial and moderate, though rather humid; the summer beautiful with some rainy days; the autumn bright and fine; the winter frosty and rainy by turns; and the spring very wet.

The winter of 1859 was very mild, the frost came November 10th, then went away; snow in December 1860, January, February, March were mild and damp, April and May fine days, but a good deal of rain fell, June, July, August, and September were very fine, October rainy, November and December fine winter weather.

In 1861 as the appended abstract will show the maximum temperature at New Westminster was 84° ; and the minimum 20° .

January was wet and frosty.

February very wet: rain fell on 18 days out of the 29.

March and April also wet.

May fine days, but a good deal of rain.

June, July, August, September, very fine, with a little rain.

October, fine, snow appeared upon the mountains in November, and until shortly before Christmas, the weather was

good. A little before Christmas there was hard frost increasing in intensity till January 9th 1862, when the River froze over opposite New Westminster, remaining so till the early part of March. The minimum temperature was $16\frac{1}{2}^{\circ}$ below Zero. Such a winter has not been known in the country for 13 years.

The difference in the physical aspects of the countries on either side the Cascades, extends as already remarked to the climates. As a sample the last four winters at Lillooet may be described.

In 1859 winter began on the 7th November, and continued till the middle of March.

In 1860 winter commenced on the 7th December, and lasted till the end of February. There were three or four days of severe cold with wind from the N., and the thermometer fell to Zero. There was a long spell of bright clear frosty weather with an occasional thaw; little snow fell.

In 1861, the severest winter known for 20 years began on the 27th of November, and may be said to have lasted till the end of March, although the River did not break up till April 15th. The thermometer attained a minimum of 25° below Zero. There were 10 weeks of continued frost, when the thermometer frequently got below Zero in the evenings and mornings. But the weather was always clear and sunny. The snow was at one time 12 inches deep, but at other places in this section of country there were last winter 2 feet of snow, a depth however very unusual. Notwithstanding this, most of the stock left to winter out and find their own food as best they might, survived.

The winter of 1862-3 was extremely mild, with the exception of two or three days in November, and ten days of severe cold in February.

January and February are usually cold months, March and April variable—the plains begin to be clothed with verdure. May to October, and sometimes November, fine, clear warm weather: in the last two months the evenings are frosty. December is cold and wintry. In summer on the other hand the mercury sometimes shows 100° in the shade.

In this section of country little rain falls, More rain fell in 1862 than in 1861, more again in 1861 than in 1860.

In the Okanagan district there is a great supply of rain; at Williams Lake a sufficient quantity. At the latter place the winters are more severe than at Lillooet, the thermometer sometimes ranging as low as 40° below Zero; yet the weather is clear, and without wind: and in the experience of those accustomed to cold climates, any cold is bearable and even

enjoyable, so long as the sun comes out during the day and the winds are still.

At Alexandria and Quesnel mouth, snow appears in the end of November, and lies to a depth of 18 inches for three or four months; January is the coldest, August the hottest, June the rainiest, August, September and October the driest months in the year.

The climate of Cariboo is severe, there the winters are long lasting from November till the end of April; yet the weather is usually clear and calm, snow falls principally in January or February, sometimes to a depth of from 7 to 10 feet, so that snow shoes are used for winter travelling.

But with the exception of Cariboo, the climate of British Columbia is universally regarded as one of the finest in the world. Nor can the fact of its extreme healthiness be too much insisted on. Cases of sickness are rare, and many who suffered at home from feeble health, have here inhaled new life from the bracing mountain breeze.

CHAPTER IV.

MINERAL RESOURCES.

Of the resources of the country, the most important are the mineral, and among these first comes the noblest of metals—gold.

British Columbia is pre-eminently a gold country. To its gold it owes its existence as a Colony. Only that mighty magnet which attracts man with so potent a spell, because it represents to him all that earth can bestow—could have drawn a population into regions so inhospitable and so remote. But for these gold discoveries it is more than probable that the unclaimed acres of other more attractive lands would have been occupied by the settler, ere enterprise and endurance forced a path through these forests, or laid bare the treasures of these mountains.

The "colour" of gold has been found in parts of the country the most dissimilar in appearance and the most remote from each other. By the "colour" being found is meant,

that when all the earth has been "washed" or removed by water out of the pan or basin used for the purpose, some specks of the heavy metal are found to remain behind. The "colour" then has been found on the bars and banks of the Fraser River and its tributaries, and in the benches which run parallel to the Fraser. The country is almost surrounded by auriferous mountains: gold being found on the Stickeen and Peace Rivers to the N.; in the mountains which transect the eastern as well as in streams flowing through the western portions of the country.

The gold found on Fraser River and its benches is remarkably fine, and cannot be obtained without the use of quicksilver; when thus procured it is subjected to the action of heat to remove the quicksilver, some of the latter however still remains in it, and this kind of gold from its admixture with the quicksilver, is called *amalgam dust*.

Along the whole course from Hope to beyond Alexandria, there are certain remarkable gold-containing benches. These benches are well described in a letter in the *Times* from its "own correspondent" in British Columbia. He says; "The Fraser and many of its tributaries are skirted or bordered by terraces, all of which yield gold. These terraces, or benches as the miners call them, run at intervals along both sides of the rivers for miles in length; and they recede where the mountains retire, for distances back into the valleys varying from a few acres to a few miles in breadth. They are objects of curiosity and speculation, and add much to the beauty of the rude scenes in which they occur from the regularity and evenness of their structure. They generally occur on both sides of the river, and in some places are multiplied into several successive level plateaux, rising one above the other as they recede from the bank."

The claims on the river have been mostly abandoned by white men, the attractions of Cariboo proving more inviting: these claims are now worked by Chinamen whose wages average \$2 to \$5 a day.

The further one goes up the Fraser and its tributaries, the coarser the gold becomes. The first pioneers of the country expected to find it so. Where, they asked themselves, as they examined the fine gold of the lower Fraser, does this dust come from? It must be formed by the disintegration of coarser gold—where then is the coarser gold, and the quartz veins whence coarse gold comes? So those enterprising men went up the river and its tributaries in quest of coarse gold. This was discovered in 1859, first on the Quesnel River, and late in 1860 followed the discovery of Cariboo.

Cariboo is unquestionably the richest part of the country yet explored. In that region the gold is found both in the beds of the creeks, and in their banks. The bed-rock from which it is taken is very irregular, being "struck" sometimes near the surface, sometimes at a depth of from 12 to 50 feet. The bed rock itself consists of slate, which is generally of a bluish colour, though sometimes of a yellowish white. For the primary or igneous rocks which form the marked geological feature of the whole country are, in Cariboo, of a schistose or slaty character. The gold is found in the bluish clay which is on and in the slaty bottom, sometimes as far as a foot deep; streaks of yellowish clay are also found, which are sometimes very rich. The gold appears to have been held in the ridges of the slate, (which lie generally at an angle of 45° ,) as in a natural rift. No quicksilver is used, so that the tiny particles are allowed to escape. But these "tailings" will all be washed over again with quicksilver at some future period.

The gold of Cariboo is frequently found mixed with quartz. Sometimes the quartz is in the centre of the specimen protected by the gold; sometimes the specimen shews only the slightest admixture of quartz, or again it is almost all quartz with a bright spot of gold offering a fine contrast with the white stone. It is interesting to note the history of this combination. In order to understand it, we must go back to the fountain-head, viz: the rocks from which this gold, with its quartz has come. Here is an igneous metamorphic slate-rock, one of those giants primeval, who bear the world on their shoulders; it is in a state of intense heat, it cools: and, in cooling, cracks: through its cracks or fissures water passes containing silica. It deposits its silica in the rent of the fire-rock, probably on both sides of the rent; and so the sides of the rent or fissure are coated with quartz. Up from beneath rushes a stream of molten gold; the fluid metal mixes and combines with the quartz and remains in union with it, when it cools and hardens. In process of time the rock which holds this gold and quartz is worn away.

The gold-pieces have been scattered and subjected to various influences. Where they have been driven to a distance or subjected to the action of water, sand, &c. they become rounded like many of the Cariboo specimens (e.g. Williams Creek:) sometimes the pieces are more jagged and angular, as if they had not been driven far, but left where they fell, the quartz which encased them having decayed and fallen away from about them. Such is the Lowhee gold.

In the early part of the season of 1861, the most important

creek in Cariboo was Antler. This creek yielded at one time at the lowest \$10,000 a day. The writer was present when on one claim \$1000 were taken out of the sluice-boxes, as the result of a day's work. Later in the season Williams Creek came into notice, and ere long wholly eclipsed Antler. One claim, Steele's, gave on one day 387 oz. and even reached a maximum yield of 409 oz.: the total obtained on that claim on an area of 80 feet by 25, was a sum of £21,000. The experience of 1862 has confirmed the opinion of the great wealth of Williams Creek, and shown it to be one of the richest creeks in the world. In 1861 gold was found on that creek only in 6 claims, but now the valley is taken up for 6 miles, both in the creek and in the hill side. In 1861 the only mining was in surface diggings. The mining of 1862 assumed a new character, and shaft sinking, drifting, and tunnelling are now vigorously prosecuted; a system of mining be it observed which unlike the former can be carried on throughout the entire year.

In the summer of 1862, the highest amount taken out by any Company in 24 hours was \$9050 (£1810): this was in Cunningham's claim. The same claim averaged nearly \$2000 a day during the whole season. There were 4 full shares, having 600 feet frontage, the claims being discovery claims, and consequently larger than others. On several days 52 lbs. were taken out. The Bishop of Columbia witnessed 600 oz. taken out in one day on a claim. Adams's claim yielded to each of its 3 partners \$40,000 (£8000) clear of expenses. In Barker's claim 8 partners realized £1400 each. It is believed that on this creek last year 155 claims paid expenses, which would average \$2000 each, making a total of \$310,000, and about an equal amount was cleared. The entire yield of the creek for the season may accordingly be estimated at \$620,000. The gold of this creek gives in fineness .830.

Yet the results of the season of 1862, brilliant as they were, were in the main disappointing, for only a few, a very few, gained any large harvest of gold: a dozen claims, it is said, paid beyond expectation; half a dozen paid enormously. The season, it must be remembered, was very severe and very late. It was not till late in August that shafts were sunk; previously provisions were so dear and scarce that nothing could be done. After the summer season, mining operations were carried on, in a few claims, during the winter. A new part of the creek 'below the canon,' hitherto unprospected, was found to pay as richly as the famous claims above the canon, and \$300,000 were taken out of three claims, between October and January 1863: in attestation of which 150 lbs.

of gold were brought to Lillooet on the 21st of February. Later in the spring of 1863, Dillon's claim gave the extraordinary yield of 102 lbs. in one day, or about £4,000 sterling. There is thus every ground for the anticipation (a general one,) that the present year will far surpass the last, and yield ten times the amount. Many claims are now in working order, shafts sunk, everything ready, and the season promises to be an early one.

A word on the other creeks.

Lowhee Creek has paid very well: a great many claims are taken up, and much is expected from this creek. The quality of the gold on this creek is .920.

Lightning Creek (the colour is found all over it) has not however yielded much this year. It is difficult to work, the soil being loose and gravelly. The bed-rock is found from 8 to 30 feet below the surface. The prospects for next year are excellent. One claim (Campbell's), which it cost \$25,000 to open, paid over \$100,000 in three months.

Antler Creek is said to have disappointed many last year, as only some half dozen claims paid, yet in the opinion of miners, this creek is by no means exhausted, and it is confidently expected that a good deal will be done on it in the ensuing year.

Generally speaking, the maximum fineness of British Columbian gold is 940, or \$19.43.15 per ounce; the minimum \$17.15.76. In the colony, however, Cariboo gold can be bought for \$16 or \$16.50; a lucrative trade could thus be done in exporting gold dust.

Nuggets of pure gold have been found weighing 5 oz., and, with an admixture of quartz weighing 16 oz. (Lowhee.)

The diggings hitherto described are more or less of a transient character. True, on Williams Creek the mining is generally expected to last for ten years at least. But more permanent diggings are essential to the establishment of the Colony on a lasting basis; and such diggings have at last been discovered in the quartz leads, of which intelligence was received late in the autumn of 1862. One of these, which is situated within 10 miles of Keithley's Creek, is reported very rich. The vein, which is 18 inches thick, is said to contain \$10 worth of gold to the pound of quartz. In the vein there is also some galena, and a large per centage of silver. These mines will probably be worked this spring, and thus will be introduced a more elaborate and more desirable system of mining than the present. In California where most of the surface diggings are exhausted, quartz mines are still extensively worked. Everything seems to indicate that the Cari-

boo Mountains are a continuation of the California Range, and will prove equally rich and equally lasting.

Cariboo imperfectly as it is known—for last year but little prospecting was done,—is thus seen to be one of the richest gold-fields in the world. Notwithstanding, it cannot be denied, that it labours and has laboured under great disadvantages. Chief among these is the dearness of provisions. Flour, beans, and bacon, the main articles of food at the mines, have seldom been sold for less than \$1 per lb., generally more: in January 1863, flour was 90 cents (3s.9d.) per lb. at Richfield.* (Only beef has been cheap at 1s. to 2s. per lb.) No doubt mines must be rich when men can afford to pay so highly for the necessaries of life. But although this dearness of provisions is no hardship for the rich claim-owner, it falls heavily upon the miner on his first arrival in that rugged country, seeing that he has yet to find and open a claim, and is perchance provided with only a scanty purse. Worse than all, there was a time last summer when owing to a "great rush" of people to the mines, there was an absolute dearth of bread. It is probable that provisions will continue high during part of the present season.

The causes of this state of things, have chiefly been the great distance of Cariboo, the want of roads which rendered it necessary for everything to be packed on mules into the mining district. These causes are however being removed, as waggon-roads are in course of construction into the very heart of the mines. Another cause of the dearness of provisions is assuredly to be found in the fact that all the carrying trade has hitherto been in the hands of a few men, of narrow means and many of still narrower spirit. There is no reason in the nature of things why flour should not be sold at Williams Creek at 1s.6d. to 2s. per lb. But this will scarcely be the case, until the trade of the country is in better hands. If however a great forwarding company were organised to convey goods through from Victoria via New Westminster and Lillooet, or by any other way which is found practicable, the present unfortunate state of things would come to an end, and provisions in the mines brought within the reach of all. It is indeed scarcely likely that any such great and beneficial scheme will be attempted, until a new set of enterprising English capitalists come into the country. Hitherto there has been but little capital: what little is in Victoria appears to be frittered away in trifling land investments, rather than expended in opening up the vast resources of these mines.

* See Appendix N.

Other disadvantages which Cariboo labours under are, the shortness of the mining season and the inclemency of the weather. The shortness of the season in which prospecting can be undertaken, or surface diggings worked, (from June to October) is indeed a disadvantage to the individual miner that will probably prove ultimately beneficial to miners in general, and the country at large. Surface or placer diggings which could be worked all the year would be soon exhausted; this happened in those parts of the Californian mines where the climate was temperate. In Cariboo on the other hand the surface diggings will hold out for many years; and not merely give as in California splendid fortunes to the few but a competency to thousands. Meanwhile time will be given for the country to be settled. But the operations of drifting and tunnelling now entered upon are such as can be carried on through the whole year; and will be no doubt, so soon as a supply of provisions sufficient for the maintenance of a large number of men can be carted into the mines in summer, or taken in on sledges during winter.

The climate of Cariboo is irregular and ungenial in the extreme. The summer season is more accurately defined as the rainy season, and not infrequently does a storm of snow and sleet mar the sunshine of an August day. In the matter of climate, Van Winkle is however superior to Richfield. Usually September and October are fine throughout the whole of Cariboo. Yet even where the weather is least propitious, British Columbia proves as salubrious as in those districts where she is blest with sunnier skies; sustained by the buoyant mountain air, the miner goes unscathed through countless hardships, brings a keen appetite to his beans and bacon, and rarely indeed suffers from rheumatism, although often compelled to lie down in wet clothes from Sunday to Saturday. Again, with all its drawbacks, Cariboo enjoys the advantage of having abundance of wood for mining purposes, and numerous streams of water. The miners of Australia were often hindered from want of water, and in 1862 many came to British Columbia from New Zealand, because there they could not mine from want of wood. It thus seems that every gold field must have some disadvantages; but amongst those of Cariboo, want of these necessities cannot be reckoned.

It were vain to attempt any computation as to the extent and duration of the mines of Cariboo. As already remarked, its mountains appear to belong to an auriferous range, extending both to the north and south of Cariboo. That the latter form part of a great gold region, is clear from

the fact that several auriferous rivers take their rise in that section of country. About 150 miles from Cariboo rise the Fraser and the Columbia, both gold-bearing streams. Not very far distant are the head waters of Peace River, flowing N.W. through the Rocky mountains. On this river gold was found last summer, some 200 miles from its source. The gold is described as fine in quality, like that of Fraser River. The explorers found good diggings,—4 men taking out in 8 days \$3,300,—but their provisions being exhausted they had to leave. It is confidently expected that a number of miners will be at work there next season.

The Stickeen River also, on whose banks fine gold was discovered last summer, and to which so great a "rush" of people repaired that it was deemed necessary to create there a new British Colony—the territory lying beyond the northern boundary line of British Columbia;—takes its rise in the same mountains. Everything in short seems to indicate the existence of wealthy mines in and beyond the district of Cariboo, to the north.

The North River flows into the Thompson at Kamloops, perhaps 200 miles from Cariboo, S.E., as the crow flies. This river takes its rise in the neighbourhood of the Cariboo mountains. It has been but slightly explored, but is believed to be auriferous, and would doubtless repay the labour of prospecting. It is navigable for nearly 60 miles N. of Fort Kamloops, where it joins Kamloops Lake; and it is not impossible that one of the great roads to Cariboo may be viâ Fort Kamloops and the North River. The Tranquille River flows into Lake Kamloops out of the North, some 5 miles west of the Fort. A considerable quantity of gold has been taken out of this little river. The writer found a crowd of Chinamen working there in June, 1861; their wages averaged \$7-15 a day. Looking S.E. towards Okanagan, we find the streams everywhere auriferous. And beyond from Okanagan, at Similkameen, S.W. of the lake, and to Rock Creek on the frontier to the S.E. we find traces of gold. Eight streams which flow into the lake, and the two small lakes adjoining, give the "colour." Indeed in 1869 this country was the rage among miners, and though now abandoned for Cariboo, its wealth is very far from exhausted. In July, 1860, as many as 200 white men were at work in these localities, and many claims paid from \$25 to \$100 (£5 to £20) a day.

Nor is the gold-field confined to the eastern section of the country; from Peace River to the Border, even to the west of the Fraser, gold has been found; the quantity hitherto obtained on Bridge River, Lillooet, Last Chance (streams enter-

ing the Fraser on its right bank) has been small, but its gold has been partially coarse, one piece found on Bridge River weighing an ounce and a half.

Of the other Mineral Resources of British Columbia little is known. The country is believed to be very rich in many minerals. Indications have been found of Silver, Copper, Tin, Platinum, Plumbago, Galena (Lead), Iron, Limestone, Coal, &c. To the silver mine at Hope allusion has already been made. Indications of rich silver leads have been found in various parts of Cariboo. Pieces of copper ore have been found at several places. Galena has been obtained at Williams Lake and elsewhere. Plumbago near the Northern Coast, &c. Indications of iron and limestone are visible at many places. Outcroppings of lignite or tertiary coal are found at Alexandria, the Similkameen, and Burrard Inlet. At the last named place a small shaft has been sunk for trial, but the mines have never been worked. When the country becomes thoroughly explored and prospected, the number and value of its minerals will be found to exceed all anticipations.

CHAPTER V.

AGRICULTURAL AND PASTORAL RESOURCES.

Can British Columbia support an agricultural population? Up to a recent date, the general notion in Europe was, that the country from one end to the other was little better than a "howling wilderness, wherein half-famished beasts of prey waged eternal war with a sparse population of half-starved savages, where the cold was more than Arctic, the dearth more than Saharan", and that to quote the words of the Chancellor of the Exchequer in the House of Commons four years ago, "these territories were bound by frost and banked by fog, and woe betide any unfortunate individual who might be so far diverted from the path of prudence, as to endeavour to settle in those parts."

And a stranger on his first arrival is apt to imagine that there is truth in this description. As he looks upon the seemingly impenetrable forests, which cover the banks of the lower

Fraser, as he sees far in the distance the snow-topped peaks, and is told that yonder mountains traverse the country in all directions, he is not unlikely to question the existence of any agricultural land in the Colony.

But the country round about the lower Fraser, is not by any means the locality where farming can at present be most successfully undertaken. Yet even here there are many broad acres of excellent land. Behind the belts of forest there are open spaces where grass grows luxuriantly: as already remarked, some of these lands require draining; they invite the investment of the capitalist with a sure prospect of a rich return, whether laid down in hay or cereals. There are thousands of acres of good prairie land on the lower Fraser well adapted for stock-raising, which is the chief thing to be done in farming in this district. A farm below New Westminster comprises 1,500 acres; there cattle fatten rapidly, and whatever is sown grows well. Close by, is an island with many thousands of acres of clear land: the whole comprising 25,000 acres. There is also prairie land at Mud Bay, 10 miles S. of New Westminster; at Pitt River 6 miles to the N., at Fort Langley 15 miles up stream, &c.

But to reach the best agricultural lands we must penetrate further into the interior. They will be found scattered up and down throughout the vast area beyond the Cascade Range. Most of the country is occupied by arid mountain chains, rolling hills, or high grassy table-lands. Between the mountains we find fertile and well watered valleys. The Okanagan and adjoining districts possess an extent of land capable of supporting an agricultural population of 10,000 souls (allowing 160 acres for 9 persons.) Above this lies the country around Shushwap Lake, which is described as containing an extensive area of arable land. The district around Kamloops Lake and the North River, is described as extending "80 miles from S. to N., and 100 miles from E. to W.—a pastoral country of high table-land, with abundant pasture, free from forests, and only interspersed with timber." Adjacent lies the land around Nicola Lake, the head-quarters of the Indian tribes: a district little known, but said to possess great agricultural capabilities. The basin of the Thompson River has good pasturage, and its tributary the Buonaparte excellent arable land. The country through which the waggon-road passes to Williams Lake, must ultimately become a valuable agricultural district. The soil is excellent, requiring little clearing, and will prove most fertile. With no more timber than is needed for farming purposes, it has also a good supply of water and plenty of the best of feed for stock. The

same remarks apply to Williams Lake, Clear Lake, Mouth of Quesnel, and Mouth of Cottonwood. Nor is this the limit of the agricultural district: for at Fort George 100 miles further up the Fraser, excellent wheat is raised; and further north still at the Hudsons' Bay Forts, barley and vegetables are grown.

The soil is of three kinds: first—black, rich, and loamy, consisting of decayed vegetable matter, and alluvial deposits. This is the character of the soil by the banks of streams or lakes, and in the bottoms of valleys, and wherever land has been formed of deposits brought down by the streams from the mountains. This soil is rare.

The second kind of soil (which characterizes the basin of the Fraser) is lighter and more sandy. Being formed by the disintegration and decomposition of rocks (a process that may be seen any rainy day,) it contains a great deal of lime (the mountains being frequently limestone) and to this fact together with the strong sun, is probably to be ascribed its fertility, notwithstanding its lightness. It is found to a depth varying from one to three feet, and beneath it, is a sub-soil of gravel, sometimes of clay, which by the way makes excellent brick.

The third description of soil is neither so good as the first nor so light as the second—it rather resembles ordinary land in the mother country: such is for instance the soil around Williams Lake, on the Brigade Trail &c.

Compared with the area of the country so far as it is yet explored, the quantity of good land is small. It is indeed chiefly to be found in valleys of greater or less breadth bounded by hills. Still, these valleys are so numerous that the quantity of land available for agricultural purposes mounts up to not a few acres. The table-lands may also be arable, if not too high. It is a question still to be solved, to what extent late frosts may there interfere with cultivation. Most of the valleys however, are safe from this risk. Again it has been thought that the presence of alkali would obstruct the growth of cereals; a fear likely to prove utterly chimerical.

In many places the supply of rain is inadequate, and irrigation has to be resorted to: for which purpose streams abound everywhere. This want it must be admitted a drawback, but by no means a fatal one, seeing that many of the most fertile countries in the world are watered by artificial means.

Wherever the soil has been cultivated, it has been found highly productive, and I shall now give a few illustrations of its capabilities. My samples are taken from farms and gardens in different parts of the country, chiefly those of Messrs.

Brady and Hory at Lillooet, and Mr Herring at New Westminster. At one farm oats produced 50 bushels to the acre with 4 tons of straw, the straw being from 3 to 5 feet high. At another oats and barley grew to the amount of 60 to 70 bushels to the acre. Wheat has not yet been extensively tried, but fields of it at Fort Langley, on the Buonaparte, and elsewhere have borne good crops, which promises well for its cultivation. It is said that wherever the service-berry is found, wheat can be grown. Spring wheat would indeed require irrigation; not so, wheat sown in the autumn; receiving all the necessary moisture from the rains of autumn and spring, it would come quickly to maturity and yield an early harvest in July. For some years the virgin soil would produce it without manure. Maize or Indian corn yields from 60 to 70 bushels to the acre.

The vegetables of British Columbia are unsurpassed by any in the world. Its potatoes (thriving best on the continent of their birth) excel those of the "Old Country". On one farm the yield to an acre was 7 tons, on another as high as 15. The average size of many was a pound, but there were not a few weighing 2½ lbs. each, and one or two even attained a weight of 3 lbs. Turnips both Swedish and white produced 25 tons to the acre. On Brady's farm some grew to the enormous size of 20 lbs. Rarely I believe are they seen so large in England. The average size on the New Westminster farm was 7 lbs. Onions produced from 4 to 6 tons to the acre. Many weighed 1½ lbs., a few 2 lbs., one (grown at the Fountain, 2 lbs. 1 oz. Cabbages weighed frequently 12 to 14 lbs.; at one garden a cabbage was produced weighing 25 lbs., this prince of cabbages worthy to grace the table of the Titans, was disposed of to an Indian for 6 bits (3s.) Last autumn the writer saw a beetroot 11 lbs. in weight, 2 feet in length and 20 inches in girth, and at another farm a carrot weighing 4 lbs., with 17½ inches girth. But—not to trespass too much on the patience of the reader—suffice it to say, that every kind of vegetable which has been fairly tried has grown abundantly.

With regard to fruits, it is worthy of note that melons grow in the open air without manure, attaining great size and fine flavour: tomatoes also come to full maturity when sown not too late. The orchard at Fort Langley is a great success, and it cannot be doubted that this is a good country for apples: orchards are in course of being planted in various localities, which may one day vie with those of California and Oregon. That the soil is adapted for pears and cherries, the growth of the wild cherry and wild pear sufficiently testify:

and probably the grape itself would ripen on the sunny Rhine-like terraces of the Fraser.

It is not less important to state that the farmer or gardener may reckon upon a ready market for his produce. Although the prices of farm and garden produce must fall below the present excessively high rates as settlers increase, it will be long before grain and vegetables cease to command a high price. In the interior the great price of freightage acts as a high protective duty. Hitherto all the flour used in the colony has been imported, its present prices being at New Westminster £3 per barrel; at Lillooet £4 per barrel, in Cariboo £40 per barrel more or less. Barley will always be in great demand, where so many horses and mules are employed; its price in June 1862 was 12s. per cwt. at New Westminster; £3 per cwt. at Lillooet—further up the waggon-road £5 per cwt. The price of hay ranges from £6 per ton, to £20 or even £25 per ton: according to the locality.

Prices of vegetables vary exceedingly according to the supply, the season of the year, &c.; the following are the average prices throughout the past year.

Prices of Vegetables at New Westminster, Lillooet, and Cariboo, in 1862.

NEW WESTMINSTER.	LILLOOET.	CARIBOO.
Potatoes 6s. to 16s. per cwt.*	8s. to 20s. per cwt.	£10 per cwt.
Beans 60s. "	80s. "	£12 to £16 "
Turnips 8s. "	16s. "	£8 "
Onions 40s. to 80s. "	3£ to 4£ "	£20 "
Carrots, &c. 10s. "	20s. "	
Cabbages 1d. to 1½d. per lb.	16s. "	
Peas 1s. 6d. "	2s. per lb.	
Corn (Indian) 3s. per doz.	4s. per doz.	

For stock-raising this country is unrivalled. The grass is of great excellence. There are various kinds, but the best is also the most abundant, extending over vast tracts between the Cascade range and the Rocky Mountains. It is termed "bunch-grass," as it grows in tufts or bunches. In proof of its highly nutritious character it is only necessary to mention the fact that the common horses of the country fed on it alone perform journeys such as a grain-fed English hack could not, without difficulty, overtake. On one of these hardy animals 40 miles a day may be ridden without difficulty: the expressman's daily distance is 50 miles. Pack animals too in the upper country, although they have to carry three and

* The reader will bear in mind that throughout this Essay the cwt. represents One hundred pounds, being the American computation.

even four hundred pounds over trails sometimes hilly, stony, or marshy, are fed exclusively on this bunch-grass. Cattle thrive wonderfully on it. A well known cattle-dealer, who has brought in several droves from Oregon, has stated in the *British Columbian* (Nov. 28th, 1861) that after two years' experience of the country, he could say that his stock had thriven better here than even in Oregon and California. Cattle thrive better and increase more rapidly in British Columbia than they do in England. I shall give a single instance shewing the value of this kind of property: two years ago a man bought a cow, for which he paid \$140: that summer he made \$350 by the sale of her milk and butter: now she has three calves, each of them worth \$100.

In summer the cattle need little care, and no feeding—even in winter they have till last year been left to forage for themselves. Yearling calves and foals, not 6 months' old, have weathered the wintry blasts. But to make no provision whatever against severe weather is at once imprudent and inhuman. Much is not required to be done: a log-built shed for shelter, and six weeks' feed, would save all risks. And the settler can easily obtain hay, grass being everywhere abundant.

For sheep the country is found to be admirably suited. It is only a year since the experiment has been made, and it has been attended with complete success. The Southdowns thrive best: these may be purchased at Victoria, or cheaper in Oregon. On the grass of the midland country they fatten and increase amazingly. By a simple calculation it might be shown that 100 ewes and 2 rams would, in the course of 5 years, supposing the produce to be one half lambs, and the wethers to be sold, increase to the number of 10,00. This calculation supposes the ewes to lamb twice a year, and to have twins one time in three, which is under the average. Sheep cost, in Victoria, £2, and rams £20 (Southdowns.) The animals would cost little, summer or winter, and the wethers being sold for mutton, the proceeds would cover the wages of a shepherd. As mutton cost 1s. to 1s. 3d. per lb. (and the sheep average 50 lbs.), it is easy to see that even allowing a wide margin for casualties, a small fortune could thus be realized in the course of a few years. The fleeces might either be turned to account in the country itself, or exported: the price of wool at San Francisco is 40 cents per lb.

The number of sheep imported in 1862 was 6,946; of cattle 5,640; of horses and mules 6,427.

The small cactus, which some have erroneously supposed

would prove an insuperable obstacle to the raising of sheep, is most serviceable in the fattening of pigs. In fact these animals require no other food in the summer time than the roots, grasses, and fruits which abound in the woods and plains. They would of course require to be kept up and fed during the winter. Pigs are a very profitable investment, bacon being one of the great staples in the mines.

Average prices of farm yard produce in 1862: Beef 1s. per lb., Mutton 1s., Butter (fresh) 4s., Milk 4s. per gallon, Cheese 3s. per lb., Bacon 1s. 5d. per lb. (in the mines 4s.), Hens 4s. to 16s. each, Eggs, 4d. to 1s. each.

These figures may seem high, but even the articles which in a new country are counted luxuries, such as milk, fresh butter, eggs, people are always glad to purchase, and the supply by no means equals the demand. At the Grange, near Lillooet, 30 lbs. of butter were sold weekly at 6s. per lb., and a farmer at New Westminster weekly disposes of 30 lbs. for 4s. per lb.

The conclusion as regards the agricultural and pastoral capabilities of British Columbia then is: (1) as an *agricultural* country, it never can be great, or ever vie for instance with California or New Zealand. British Columbia is chiefly not an agricultural but a mineral and a mountainous country. On the other hand it is perfectly able to maintain an agricultural population, and grow grain for the support of a large mining community. There are many thousands of acres scattered up and down even in that portion (not exceeding one third) of her territories which has been explored. These acres enjoy great advantages of soil and climate. So far at least as the first settlers are concerned, their comparative scarceness is itself in favour of the colonist: for the fewer they are the more profitable they will be. (2) As a *pastoral* country, on the other hand, British Columbia has great capabilities.

Other more established Colonies, like Canada or Australia, may present to the settler broader lands for cultivation, and fewer hardships in the first years of his settlement, but none offer so sure a market, or such high returns for all produce, whether of the garden, the field, or the farm yard.

CHAPTER VI.

NATURAL PRODUCTIONS—ANIMAL AND VEGETABLE.

No coasts or rivers are more abundantly supplied with fish than those of British Columbia. These are so numerous and so varied that to become thoroughly acquainted with their habits would almost involve the study of a lifetime.

Taking them in their order, the first fish that visit our shores are the herrings that come in shoals into the harbours in the month of March. The herring caught in Burrard Inlet is small but good. There are larger and finer fish, equal indeed to those of our own seas, in the Gulf of Georgia, were there only skilful fishermen to catch them.

Next, in the month of April, come the famous *hoolicans*. They enter the river in millions, and their presence is at once made known by the sea-gulls which wheel above the shoals, and dart about among them for their prey—startling the usually still Fraser with their shrill cries. The immense numbers of this fish are shewn by the mode in which the Indians catch them: they make an instrument about four feet long of a piece of wood armed with a row of sharp nails on either side like a two-edged iron comb. This they pass through the water as they do their paddles, and in general at each sweep two or three fish are impaled upon the nails. The hoolican is somewhat larger than the sprat, and is a very delicate and delicious fish; so full of oil that it is said those caught in the north will burn like a candle. There can be little doubt that they would make excellent Sardines: they could be preserved in their own oil.

The salmon begin to enter the river in March, and species after species continue to arrive until October, the successors mixing for a time with the last of their forerunners. There is a greater degree of certainty in periodical arrivals of each kind in this stream than at the coast and islands. The most valuable kind, the silver or spring salmon is sure to make his appearance.

It is impossible to say how many species there are. During the summer of 1861 five or six different kinds passed up the Fraser to a greater or lesser distance from the mouth. A considerable portion of them (chiefly those of the silver and

hook-bill species) make their way up the river to a distance of a thousand miles—even forcing themselves up the streams on the sides of the Rocky Mountains. With such rapidity do they travel that they have been known to reach Lillooet within ten days of their arrival at the mouth of the river. Many perish on their toilsome journey: faint and weary they will not pause nor turn back, but press onward and upward, battling still with the mighty current until at length exhausted with the contest they are driven ashore to die. Their grand object is to propagate their species, and an instinct impels them to deposit their spawn in the very headwaters of the stream; whereby they fulfil the design of Providence, supplying food on their way to thousands of human beings in the interior.

The spring or silver salmon begins to arrive in the river in March or early in April: it is most plentiful in June, and by the early part of July has mostly passed up the river. It is a remarkably fine fish, weighing 4 to 25 lbs.: it has been known to reach as high as 72 lbs. The fish sent to the exhibition of 1862 weighed 40 lbs. Of those that arrive first, the greater portion are red; the next are red and white (the flesh of the back above the sidelines red, belly white), the last are principally white. This fish is easily cured and stands well at market.

The second kind arrives in June, continuing till August; a small handsome fish, back green, belly white, flesh red, average size 5 to 6 lb., easily cured, and brings the highest price at market. The third coming in August, weighs on an average 7 lbs.: also an excellent fish. Next the hoan or hump-back salmon, which comes every other year, arriving in August and remaining until winter; size 6 lbs., seldom 14 lbs. The male has a hump or arched back and hooked upper jaw; the back is covered with skin, the belly with small scales. The hoan is not much esteemed when pickled, but dried and smoked it does well.

The fifth is the hookbill, a hideous animal, which arrives in September, remaining until winter, when many of them return to the sea (size 12 to 15 lbs., they even attain to 45 lbs.) the flesh is white; the female is without the extraordinary hooked snout and teeth which characterise the male (not edible.)

The smelt arrives in the lower Fraser early in spring, and after spawning, returns to the sea.

An excellent trout is caught in the lower Fraser, weighing 7 and 8 lbs.; a smaller one of 3 or 5 lbs. abounds in its tributaries. Twenty mountain trout were recently caught in a stream near Hope, whose aggregate weight was 146 lbs: two

of them weighed 11lbs. a piece. Trout of various species are found in most of the lakes, rivers, and streams of the country. Nor is the Royal fish wanting in these waters.

The sturgeon abounds in the rivers and lakes throughout the year: he has been found as far up as Fraser's Lake, and near the Rocky Mountains. In winter he retires to the bottom in deep water, and sometimes goes out to sea to return in spring. They attain a size ranging from 100 to 500lbs. and upwards. The female is the larger—as she lies in the deep water she is rarely caught: hence the comparative rarity of caviare, which is made from her roe. A female sturgeon contains great quantities. From one killed in the Fraser recently a bushel was taken. The flesh also of the sturgeon is by some considered good when properly cooked.

It is believed that there are extensive cod-banks in the Gulf of Georgia. In the northern seas whales and seals abound. Indeed the extent and variety of the fisheries of British Columbia are immense.

Oysters abound in Burrard Inlet, good but small—they only require a little care—transplantation, feeding, to equal those for which Britain has so long been famous.

It is evident that in these fisheries British Columbia possesses a source of immense wealth. Her countless salmon (to speak of them alone) must form one day a very important article of export. Unfortunately no one has as yet taken up this branch of trade. Here, as elsewhere, it is capital that fails.

The process of curing is a work of care and time. But there must come ere long to these shores men of practical knowledge and capital sufficient to give this business a start, and there is no fear that a market will be wanting. In California there is a good market, for her own rivers do not supply all the salmon she needs: so too eventually no doubt the Colony will be able to export its fish to the Sandwich Islands, Australia, and New Zealand, perhaps even to England.

The fur-bearing animals have already been incidentally mentioned. The country is rich in these. To shew how large a trade the Hudson's Bay Company still carries on it need only be mentioned that £50,000 worth of furs were taken out of the country last year. With their organization no individual or company could successfully compete, although many silver-grey foxes are obtained from Indians, who receive for them from £2 to £3 a piece—the value in England of a good skin being from £20 to £30.

In this country there is an ample field for the adventurous sportsman. There is an abundance of bears: grizzly, black, and brown, the last being by far the most common. To be found

however these animals must be sought; they are usually as anxious to shun the peaceful colonist as he them. Only she-bears with their cubs are known to attack spontaneously the passing traveller. There are also large quantities of deer and mountain sheep: the latter dwell in the almost inaccessible strongholds of the mountains. The deer are stalked by the Indians in the winter, and many are slain. In the winter of 1861, when the stock of beef was exhausted in the upper country towns, the Indians supplied its place with venison. But that food, so highly prized at the tables of the great, was soon found to pall upon the appetite, and another illustration was given of the truth that man's most common blessings are after all the best.

The panthers, wolves, &c., usually keep far from the haunts of men. There is a wild dog, called a Coyote, with curled-up tail, sharp nose, and pointed ears; a cowardly cur, which is however available for sledging, as a couple of them will draw 250 lbs. a distance of 20 miles in 2 hours.

The lakes and marshes in some localities teem with water-fowl: duck of various kinds, snipe, teal, widgeon, geese, swans; the woods have pheasants, grouse, partridges, and prairie-chickens. In some places these are numerous, and often furnish a meal to the wayfaring miner, who shoots the unsuspecting creature with his revolver, or knocks him over with a stone.

The following are a few of the other principal birds: eagle, sparrow-hawk, mosquito-hawk, owl, wood-pecker, humming-bird, king-fisher, swallow, robin, raven, crow, pigeon, plover, crane, magpie, thrush, jay, blue-bird, &c.

A peculiar kind of hare or rabbit is found on the Bonaparte and elsewhere. Squirrels abound of various kinds. The rats and mice display often an ingenuity which does not characterise those vermin at home. One species of rat has a great bushy tail like a squirrel.

Snakes are rarely met with: a peculiarity of the country is the utter absence of worms.

In the insect kingdom we have varieties of splendid butterflies, dragon-flies and beetles, which would be dearly prized by the naturalist. Of interest to all (but by no means a pleasant interest) are the varieties of venomous insects, mosquitoes, sand-flies, black-flies, and horse-flies. These have been and still are a real plague in many parts of the country. Fortunately smoke is driving them from the towns, but not till the lands are cleared and ploughed, will these troublesome insects wholly disappear.

In the vegetable kingdom two things specially demand notice, the trees and the berries. The timber of British Colum-

bia like that of Vancouver Island is unsurpassed by any in the world. Chief among the trees, and monarch of the woods, rises the *Douglas Pine*, a tree peculiar to the Pacific coast, round, massive, straight like a majestic column, it towers far above the surrounding forest. This tree sometimes attains the enormous height of 300 feet, with 10 feet of diameter at the base.

Sections of a Douglas Pine 309 feet in height, cut at New Westminster, have been sent to the Exhibition of 1862, which will make known more eloquently than words can do, the forest wealth of British Columbia.

Already a trade in this wood is springing up between Vancouver Island and the Sandwich Islands, the South American coast and Australia. Dr. Forbes in his Essay on Vancouver Island states that "the French, Sardinian, and Dutch Governments have been supplied with masts and spars, by a company which has established Sawmills &c. at the head of the Alberni Canal in Barclay Sound, V. I. In the English Merchant Service, they have been largely used, and have given great satisfaction, being usually considered the finest mast ever imported." He adds "the extraordinary size, straightness and uniform thickness of the trees, their strength and flexibility, the regularity and beauty of their grain, their durability, freedom from knots and sap-wood, place them almost beyond competition in point of quality, and especially fit them for the masting of large vessels." (See Appendix E.)

The White Pine is another valuable wood, clear, smooth and easily worked, it is well adapted for finishing purposes. The White Pine of New Westminster is not of so fine a quality, but that which grows at Douglas is superior to any on the Pacific coast. Thus in these two woods, the Douglas Pine and the White Pine, the Colony possesses two invaluable sources of supply, the hard wood adapted for masts of vessels, for rafters of houses and other heavy work, the softer wood unrivalled for all work of a finer description, such as the internal furnishings of a house, &c.

Among the other pines may be mentioned the Balsam, Hemlock, Black spruce, Scotch fir; all valuable trees.

The Cedar attains even greater dimensions than the Pine. The author measured one at Douglas in 1860, which was 33 feet in girth some 4 feet from the base. This wood is very useful for domestic purposes: easily chopped, it makes a bright and warm fire. From this tree it is that shingles (the slates of wood built houses) are made.

Of the deciduous trees the following are some of the principal: Maple, Hazel, Cottonwood, Alder, Dogwood, Cherry, Indian Pear tree, and Crab-apple.

Wild fruits grow in great profusion. The variety and number of its berries constitute a marked feature of the country. These form a staple of the food of the natives, who dry them for winter use. They are vastly superior to the wild fruits of Europe, often attaining a size and a flavour such as only cultivation can impart in England.

The service berry is twice as large as a ripe black currant; it grows in profusion, everywhere beyond the Cascade Range.

The other principal berries are the sallal, the huckle-berry or blue-berry, the wortle-berry, the salmon-berry, the raspberry, strawberry, oregon grape, gooseberry and currant: delicious fruits, which make excellent preserves. The best berry for preserves is however the cran-berry, which grows in swampy places. Picked in the proper season (towards the end of September) cran-berries will keep well for more than a year, by being simply put into a water-tight cask, filled with water. There are great quantities near the mouth of the Fraser: and this fruit already forms an article of export. 250 casks (each containing 30 gallons) having been exported in 1861, from New Westminster to San Francisco.

The country is rich in roots, which form another chief article of Indian consumption. Some of them possess important medicinal properties.

Both hemp and flax grow in this country wild, a fact which promises well for their cultivation.

Many shrubs and beautiful flowers grow wild, which are much prized in England, such as the honeysuckle, arbutus, myrtle, seringa, hawthorn, rhododendron, wild rose, a species of lily of the valley, calceolaria, &c.

Often the wanderer through the unpeopled waste is cheered by the sight of a geranium, or it may chance a daisy or some well known flower looking up to him from its grassy bed with a kind of mysterious sympathy, and recalling to him the verdant plains and flowery gardens of his own dear land.

CHAPTER VII.

COMMERCE—STATISTICS.

A Colony possessed of such resources cannot fail to become a commercial country of importance. At present gold is her sole export of importance, besides the furs of the Hudson Bay Company. But when her mineral resources are developed, she will export largely various ores, gold, silver, copper, lead, possibly too iron and coal. Her agricultural resources will with difficulty maintain herself, but her pasture-lands may supply hides and fleeces for export. For her natural productions there is a demand all over the Pacific. For preserved fish a market may be found in Chili, Peru, &c., for dried or salted fish in China and Japan; probably also in New Zealand and Australia. Oils, isinglass, caviare, &c., may also form articles of export. The splendid timber of this Colony and Vancouver Island, also promises for both Colonies a commercial future. Spars may be exported to England and France, timber to South America, China and Persia, countries where wood is scarce. Potash or pearl-glass, turpentine, &c., may also become articles of export. Ice may be shipped to India, Australia, and the islands of the Pacific.

It may be long before British Columbia will accomplish much in manufactures, excepting for the partial supply of her own necessities. But as she will probably be found to have better coal-fields, and more numerous harbours than are now known, there is no reason why with a large population she may not ultimately become important also as a manufacturing country. Meanwhile her active little neighbour, Vancouver Island will probably far outstrip her in this respect.* For the goods she manufactures her mighty sister will furnish her with varieties of raw material, and then become a purchaser of the articles she manufactures.

As regards imports, these are steadily increasing; those of 1862 shewing an increase of 98 per cent on those of 1861. The latest published list will be found in the Appendix F.

* For a valuable sketch of the manufacturing prospects of Vancouver Island, the reader is referred to Dr. Rattray's interesting treatise on Vancouver Island and British Columbia, (Smith, Elder, & Co., 1862,) chapter VI.

The large bulk of the imports consists of articles of consumption, which will probably ere long be raised in the Colony itself, e. g. flour, bacon, beans, &c.

It will be noticed that the value of goods imported via Vancouver Island for the last year is £402,650, whereas those imported from the United States direct amounts only to £157,568.

The transfer of goods by Victoria causes a great additional expense and loss of time which might be avoided if these goods came direct. There is however nothing to prevent British Columbian merchants receiving their goods from San Francisco, New York, and England. The idea that Fraser River cannot be entered except by the smallest class of vessels is now happily exploded. The statement of Captain Richards, R.N., containing the nautical opinion upon the subject is of the highest importance, (vide Appendix A.) Many vessels have with ordinary care successfully passed and repassed the so-called bar at the mouth of the Fraser. A prejudice, it is said, exists, or has existed, in England against this river in consequence of which shippers wishing to insure direct to New Westminster may be required to pay an additional premium. But Captain Richards's statement shews such a prejudice to be unfounded, and that with vessels of 1500 to 2000 tons, drawing from 18 to 20 feet, the risk would not be increased by their coming direct to New Westminster.

The great obstacle to direct importation is not the navigation, but the want of capital among the merchants of British Columbia.

There are not in the Colony merchants able to charter ships in regular succession. When opportunity offers they combine and charter an isolated ship from San Francisco; for instance in May 1862, a ship brought a large cargo of flour and barley from San Francisco to New Westminster direct: the freightage was \$2½ per ton, while the freightage from Victoria alone would have been \$3 per ton. Doubtless as the Colony advances, and capitalists resort to it, and the increasing demand requires increased supplies, merchants will settle there, and have their goods consigned to New Westminster and brought thither by a regular line of ships.

A table of the duties collected at New Westminster, will be found in the Appendix.* Every article imported is taxed, with the exception of fresh meat, fresh vegetables, fresh fruit, coin, baggage of passengers, Government Stores, salt, and books; a further duty of ½ cent per lb., is levied on all goods leaving Douglas, Hope and Yale. The Tonnage Dues amount to 12s. per ton on all goods leaving New Westminster.

* Appendix G.

The Harbour Dues on entering and on clearing are 3d. per ton register for sailing vessels; for steam-ships 2d. per ton register.*

A personal tax of 4s. is levied on all persons entering the Colony, for the relief of the sick.

The Revenue of the Colony up to last year will also be found in the Appendix.†

The Revenue of 1862 falls not far short of £120,000. This is a large revenue for so small a population, but in truth the taxes are little felt, being lost sight of in the high prices paid for goods in the upper country. It is a healthy sign that the magisterial districts are self supporting, the receipts at the different towns (from sale of land, of miners' licenses, recording claims, &c.,) fully covering the expenditure. Thus the entire revenue, with the exception of the salaries of Officials at New Westminster, can be expended on improving and developing the country. The great means of improvement is manifestly the construction of roads; and accordingly to this object the largest proportion of the revenue is devoted. And not without result. By the end of the present year the colony will probably possess two good waggon-roads into the heart of the mines. Whatever grumblers may say, this is no mean achievement for the Government of so young a Colony. Five or six hundred miles of road through the roughest country under heaven—why there are parts of civilised Europe (such as Spain) without waggon-roads to this day. Yet the revenue is by no means adequate to the wants of the Colony. Public works of essential utility are in abeyance, for want of means. There is no Gold Escort from the mines. At least two-thirds of the country is unknown, because unexplored. With the exception of the main routes little of it is surveyed. No bridge yet spans the Fraser either at Lillooet or Yale. The Douglas Lillooet road is in poor repair. The Cariboo district requires to be intersected with roads. The mail service is defective and irregular both on the ocean, and within the Colony itself. For these and many other public requirements essential to progress money is needed. In a word we need a loan from England. It is said that the Governor has applied for a loan of £80,000. Heartily is it to be desired that no obstacle or delay may occur in obtaining it: for such a sum judiciously expended would prove an incalculable boon.

It is thought by many that the revenue might be advantageously increased without detriment to the interests of the community at large, by substituting for some portion of the import duty, an export duty on gold. If a duty of, say 2s. an

* Appendix II.

† Appendix I.

ounce, were imposed, a handsome addition would be made to the revenue, even allowing for the expenses of collecting it. Nor would the tax be in any way unjust to the miners, who might well be called upon to contribute to the development of the country, a fraction of the wealth it gives them. Further it is argued, such a tax would touch only the successful men who could well bear it.

Others however are of opinion that such a duty could not be collected without difficulty and expense, and that for the present things had better be permitted to remain *in statu quo*.

CHAPTER VIII.

POLITICAL AND SOCIAL ASPECTS.

The affairs of the Colony are administered by a Governor, who, with the Colonial Secretary, usually resides in Victoria. In New Westminster the other Heads of Departments reside, viz: the Chief Commissioner of Lands and Works, the Judge, the Treasurer, the Attorney General, the Collector of Customs, the Chief Inspector of Police, the Postmaster General, the Registrar General. The Treasurer is also Master of the Mint, his staff consisting of a Chief Assayer and Chief Melter, with their Assistants.

The country is divided into districts, each of which is under the care of a Resident Stipendiary Magistrate; these districts are as follow: New Westminster, Douglas, Yale, Lytton, Hope, Similkameen, Lillooet, and Cariboo. The Magistrates also discharge the duties of Assistant Gold Commissioners, County Court Judges, Assistant Commissioners of Lands and Works—in a word they are General Agents of the Government. New Westminster is the only incorporated town. Its Town Council is composed of nine members elected annually. The improvements which this body have effected in the short period of their administration would seem to indicate that the same privilege might with advantage be conferred upon the other towns.

The manner in which the Government is carried on, and the laws administered, gives general satisfaction. So long as

the Colony progresses, and its new necessities are met by new enactments, the colonists (with the exception of an uninfluential clique at New Westminster) are satisfied; they have not the wish, as in the present circumstances they would not have the time, to legislate for themselves. Yet, although British Columbia has flourished under her present Governor, it is evident that her interests can never receive that exclusive attention which is essential to her rapid developement, so long as His Excellency has also charge of the neighbouring Colony of Vancouver Island, and resides there.

The white population of the whole Colony in the summer of 1862 probably did not exceed 7,000: in the winter it fell to 3,000.

In the autumn most of the miners left to winter in Victoria or San Francisco. Such will continue to be their practice until winter-labour at the mines and elsewhere becomes more abundant.

The Chinamen number about 2,500. A peaceable and industrious class, they have hitherto as consumers proved a benefit, and fortunately their numbers are not increasing.

The colonial population is very varied, comprising men from all the nations of the earth, and from many grades of society. Until recently the Americans have had the ascendancy in point of numbers: but the immigration of 1862, from England and the Colonies, has turned the scale: and now the British Subjects decidedly preponderate. As in all new communities, the character of the population is somewhat rough. A sprinkling of the refuse of society may be found amongst them; but the majority are respectable and well conducted. The amount of crime committed in the Colony is wonderfully small. A list of the commitments at the House of Correction at New Westminster is given in the Appendix.* It will be seen that the total number of commitments at this, the principal prison of the Colony, during a period of 19 months, only amounted to 164, and of these 81 were discharged, while of the 83 left, a number were only cases of drunkenness. Another table will shew the character of the crimes committed in the course of a year, the punishments awarded, and the nationalities of the several criminals: from all which we can draw but one conclusion, viz: that our calendar of crime is singularly light. That so large a number of men, many of whom have previously dwelt in lands where scenes of license and bloodshed were daily witnessed, and where the law was often set at defiance because the criminal could buy himself off from Justice, should conduct themselves so peace-

* Appendix K.

ably is a matter of wonder and of thankfulness. This happy state of things is to be ascribed, under God, to the purity and impartiality with which Justice is administered, and to the wholesome sense entertained by all of the majesty and inflexibility of the English Law.

But the existence of certain grave social evils is not to be denied: such is the degrading concubinage with native women, a vice which is happily on the decrease. Gambling, that curse of mining communities, has been hitherto largely practised at the mines.

It is earnestly to be desired that the Magistrates of Cariboo will soon be in a position to put a stop to the practice of that debasing vice. There is no doubt that the thing can be done, for the large body of the miners themselves are opposed to it, and will readily assist the efforts of the Magistrates. These social evils will, let us hope, be crushed in their infancy; nor can one fail to mark already various signs of improvement in general society, among which not the least is the arrival of more families in the Colony. Discovered from the softening influence of women, men generally become more or less rough. Often Religion itself does not seem permitted to effect the needed reformation without this instrumentality. To many men the Son of Mary still reveals Himself through woman, and through her puts forth His healing and civilizing grace. The recent increase of families is therefore a matter for congratulation. At New Westminster there is a small and choice society; at the other towns there are the germs of society in the presence of a few families; and even beyond the towns we find occasionally a family "squatted" in the wilderness, where ladies (with young children too) are braving the toils and hardships of the "bush"—toils and hardships which seen from a distance appear high as mountains, yet when approached in a strong and courageous spirit become more easy and endurable.

The religious wants of the community are not neglected. The Church of England, with a Bishopric founded in 1859, by the illustrious munificence of an English lady, has taken root in the land. The Bishop resides in Victoria, Vancouver Island, which for the present forms part of his Diocese, but already during his brief episcopate, he has travelled throughout most of his vast Diocese and penetrated into the heart of the mines. The Archdeacon resides at New Westminster. Churches have been erected at New Westminster, Hope, Douglas, and Lillooet, while the ministrations of the Church are carried by a series of itinerary services throughout the mining district of Cariboo. The Church of Rome has

POLITICAL AND SOCIAL ASPECTS.

Churches at New Westminster and Okanagan. Its Ministers however devote themselves chiefly to the Missionary work amongst the Aborigines. For half a century the Roman Catholics have been amongst the Indians: their sphere of labour is now confined to the lower Fraser, and the Okanagan district. The Wesleyans have Churches at New Westminster and Yale, and the Presbyterians have now regular services at New Westminster. In all the settled towns of the country Sunday is admirably kept.

Families meditating emigration to British Columbia will not unnaturally inquire what provision there is for the education of their children. Now it must be confessed that the subject of education has not as yet received much attention. This is owing to the very limited number of children in the Colony. New Westminster is the only exception: there, at the R.E. Camp, contiguous to the town, is a good Military School, attended by a large number of children, and efficiently conducted. In the towns in the interior the necessity for schools does not yet exist. There can however be no doubt that so soon as twenty children are settled in a town provision will be made for their education. As for boys and girls beyond the years of childhood, they must for the present be left at Victoria, where there are excellent schools: let the reader refer to the Collegiate School ably conducted by the Rev. C. J. Woods.

For a long time the want of suitable accommodation for the sick was sorely felt. Now however, thanks to the energetic movement made by New Westminster, seconded by the liberality of the colonists, a large and handsome Hospital, situated on a commanding site, has arisen in the capital, where the sick and infirm of any nation, colour, or creed are admitted, and attended with care and skill.

Thus, one by one, the institutions of the Mother Country transplanted here take root, being destined one day to cover the land. Her Religion, her Laws, her Charitable Institutions, we have already. Her Education will follow soon, soon too the Home life of the old country will characterize the new. Nor, may we be sure, shall the political life be wanting, or Representative Institutions be withheld, whenever, by an unanimous expression of its wish to possess them, the community gives evidence of its capacity to use them.

CHAPTER IX.

EMIGRATION.

It is not the object of this Essay either to induce or check emigration to the Colony whose advantages and hardships alike he is endeavouring to portray. If any persons unfit to encounter the difficulties of a new country, are so far led astray by hopes of wealth, as to emigrate to these shores, they will have only themselves to thank for their folly. The classes of emigrants that the Colony needs are capitalists and labourers; yet even the latter should not come without means to maintain themselves for a time, in case of not immediately procuring work.

For want of men of capital the Colony is hindered in its development: to such it presents strong attractions. It is a common saying that money makes money: the remark especially applies to new countries, most of all to the newest. In British Columbia at its present stage, a man possessed of some capital may within a period of say 5 years realize a competency; while the larger capitalist may multiply his means a hundred fold.

To enumerate within the limits of a publication like this, all the varied fields of enterprise here opening up, would be impossible. A few however may be hinted at: a man with means may for instance go to Cariboo and purchase a share in a mining claim. Miners often dispose of claims which promise well for a comparatively small sum in cash. There have been cases where a claim has yielded the day after its purchase gold enough to reimburse the outlay. Such cases are exceptional. Not every one lights on a pocket of gold; one claim costing little or nothing yields a fortune: another for which a large sum is paid, yields little or nothing. Mining, like life, is a lottery, (as in our ignorance we say,) whereof the blanks are many, and the prizes few. All that I can say is, at Cariboo the "chances" are good.

Again the man of capital may hire men to prospect in new and unexplored parts of the country, and share the profits of their discoveries. Capital can open mines of silver, copper, &c. Or take trade. At present there are many traders, few merchants.

Goods on their way to Cariboo, pass through many hands, and at each transfer the price swells, until it attains large pro-

portions. Merchants possessed of capital sufficient to establish their own line of communication between the port of entry and Cariboo, would, while reducing the present high rate of provisions, and thus conferring a boon on the whole population, soon realize a large fortune.

An easy but inglorious way to wealth open to one possessed of some means, is by lending money. At some places 5 per cent a month is the ordinary rate of interest. But there are ways of investing which do not savour so strongly of usury. Take for instance the timber trade. Lumber may be squared for transportation. A good trade in squared lumber will ere long spring up with Australia, and also with China. There are many in the Colony who understand the squaring business, especially New Brunswickers and Canadians. Again, much may be done as regards the fish which abound—Herring, Salmon, Cod, for which a ready market would be found in the Colony itself, at San Francisco, the Sandwich Islands, &c. Should such projects lie beyond the capacities of the immigrant, he may turn to other things, for instance he may erect a saw-mill or a flour mill. The price of lumber at present is, at New Westminster £3 8s. (dressed £7) at Lillooet £10 and at Williams Creek £25 per 1000 feet.

A reference to the chapter on agriculture, will show how profitable are farming and stock raising. For the latter the pasture-lands are free to all, and for farming liberal allowance of land is made; 160 acres almost given away (so small is the price) to each *bona fide* settler, being a British subject, or an alien who has taken the oath of allegiance. For particulars the reader is referred to the Pre-emption Act given in the Appendix.*

A free grant of land is made to retired Officers of the Army and Navy. Particulars respecting this peculiar (but substantial) reward of valour will be found in the Appendix.†

Besides the men of capital, the class of men for British Columbia are the men of muscle. For miners, labourers, artisans, there is an opening; yet even they require in most cases some means to begin upon.

What openings there are for the miner, the account already given of the mines will amply show. Cariboo has already made a few affluent, many well off. Now be it remembered, any man can be a miner, who is gifted with pluck, strength, and a good constitution. True the novice does not know where to look for the gold; he must therefore ally himself with an experienced miner: a good partner is half the battle.

There are many discouragements in mining life, and a man's

* Appendix L.

† Appendix M.

fortitude and patience are often sorely tried, especially at Cariboo,—what with bad weather, poor food, and sometimes swarms of mosquitoes buzzing about him as he works. But he who means to succeed must set all those things at defiance; keep a good heart, and not be cast down by hardships or disappointments. I would also recommend him if he hopes to be successful, to have nothing to do with the bad liquors, which are frequently sold there, the ruin 'alas of many. To take the trouble of going to Cariboo, to undergo all the hardships of mining life, and then to spoil everything by drink would be indeed a pity.

No miner in search of a claim need be in Cariboo before June: a man may indeed find work earlier by hiring himself out, as yet the demand for hired labour is limited: as claims are opened there will be a larger demand for labour. The proprietor of a claim must be on the ground by the first of June, otherwise his claim is "jumpable" i. e. may be jumped on, and taken possession of by others; such is now the law, but as soon as provisions are abundant at the mines, claims will no longer be laid over during winter: the owner or his representative will then have to remain on his claim all the year round.

It is possible that the miner, even if he should not arrive too early, may not succeed at once in finding a claim. Perhaps his means become exhausted, what then is he to do? First he will naturally try to hire himself out in the mines. Nor if he is a man of sense will he be too proud to work for another man. He who is not willing to take any honest employment that offers bread and wages, is quite unfit for the work of this Colony. Such an one had better remain at home or emigrate elsewhere.

If unsuccessful at the diggings, the miner is not left without a resource; he can work on the public roads, or engage in farm labour, or ply his own trade in any of the towns. There was indeed a time last year, when men wanted work and could not obtain it. But it is very unlikely that such a combination of misfortunes as the country then suffered from will occur again.

There are a few berths open for carpenters, axemen, blacksmiths and labourers. The present wages are,—carpenters 12s. a day at New Westminster, 20s. a day in the central towns, in Cariboo 60s., blacksmiths 20s. to 40s. a day in the season, axemen 10s. to 16s. a day at Lillooet, 40s. to 60s. in Cariboo. The wages of ordinary labourers vary, ranging from 12s. a day to 16s.: at the mines 40s. Where there is work, men will have high wages. The wages received on the pub-

lie roads last summer were £6 a month and board: for farm labour at present £10 and board, in the central districts. Wages are smaller at New Westminster, and living cheaper.

The latest prices of provisions at New Westminster, Lillooet and Cariboo, will be found in the Appendix.*

At present living costs at New Westminster 3s., at Lillooet 4s., in Cariboo 20s. a day; or if one boards at an hotel, at New Westminster £2 a week, at Lillooet £2, in Cariboo £6: or for single meals at an hotel one pays at New Westminster 4s., at Williams Lake 6s., at Williams Creek 10s., but in Cariboo the cost of living will it is expected be less before long.

The demand for labour is comparatively small because there is not as yet sufficient capital to employ a very large number of labourers. When it is brought, the field of labour will be seen to be unbounded. The number of situations is increasing every month. But it were best that no great 'rush' of emigrants took place. Let the country be peopled little by little. A new colony is like a child. Feed the infant-state with crowds of emigrants, and it will reject the indigestible mass, but let the wholesome food be administered by degrees, and so become absorbed into the social system, then the state will thrive and grow.

Capitalists then are wanted, and in limited numbers, labourers. To other classes the country in its present stage offers no inducements. There are as yet no large towns with numerous situations for clerks, bookkeepers &c., going a begging, consequently such a class of young men are out of their element here, and will not readily find employment in their own business. Hard bodily work is the chief labour to be done, which few can undertake, who have not been brought up to it: to this there are however exceptions.

To a certain class of tourists British Columbia offers a field. True the distance, the expense and length of the voyage, are such as to place it beyond the reach of most: but the nobleman or gentleman, who can command sufficient means and leisure, might well exchange for a time the beaten tracks of European travel, for a tour of exploration and adventure, where the world assumes a new and to some minds not unattractive phase. To the observant traveller nothing could be more instructive, than to witness the beginnings of a noble Colony. In the magnificent scenery of British Columbia the lover of nature would see much that would remind him of Switzerland and the Rhine. The naturalist and botanist would find hundreds of specimens not known in Europe. The geologist would witness a panorama to which the old

* Appendix N.

world presents no parallel. The sportsman would find abundance of adventure, and game of all kinds. While for general tourists the novelty of roughing it in the bush, would possess singular charms.

Having thus far spoken of the inducements which the Colony offers to emigrants, the next thing is to show how a man may reach it.

There are three principal routes to British Columbia from England: one by the West India steam packets and Panama; another by New York and Panama, and a third by sailing vessels round Cape Horn. The first two routes are the shortest and most expensive. The fares by the West India steamers and Panama are as follows, (provisions included): Southampton to Victoria, first class £75 10s., second class £59, third class £45 5s.

The Company give through tickets to Victoria, which also cover the Railway fare across the Isthmus. The steamers leave Southampton on the 2nd and 17th of each month; the steamer leaving on the 17th is to be preferred, as there is less risk of being delayed at Panama. By this route the voyage takes about six weeks: three weeks to the Isthmus, and about three weeks more for the voyage up the N. American coast. The safest time to cross the Isthmus is winter or spring.

The journey by New York may be performed somewhat more economically. There are I believe screw steamers from Liverpool to New York, with fares as low as £12 for the voyage. The following will then be the fares by this route.

	Cabin. Steerage.	
Liverpool to New York,	£26	£12
New York to San Francisco,	50	30
San Francisco to Victoria,	10	5
	<hr/>	
Total ...	£86	£47

Every miner should have £20 in his pocket on arriving at Victoria, which is over 500 miles from Cariboo.

The great objection to these routes is the risk of being detained for some days at Panama and San Francisco, through the overcrowding and inconvenience of the American steamers from the Isthmus. This evil would be obviated, and the expense lessened, were an English Company to put a line of steamers on the Pacific side to run from Panama to Victoria direct. Indeed such a project is talked of, and may soon be carried out. It is calculated that by placing a line of screw steamers on the lines from England to the Isthmus of Panama, and from Panama to Victoria, the fare might be brought as low as £20.

With regard to the route round Cape Horn the fares are £50 for the cabin, and by some ships as low as £20 for the steerage. The voyage takes five months, but a steamer or even a good clipper ship can make it in about 100 days.

There is an overland route from Canada across the Rocky Mountains. The last expedition which entered the country by this route reached Cariboo late last autumn. The party which consisted of 150 men accomplished the journey from Lake Superior to Cariboo in five months. They do not encourage others to follow their example. The hardships encountered, the risks of Indian attack, the toils of the road from Edmonton to the Rocky Mountains, (where the men had to cut their own trail through very marshy ground) the dangers of the descent of the Fraser, and the length of time expended, all conspire to make this route objectionable. Until a waggon-road or railway unite the two great divisions of the North American Continent, the sea must continue to be the highway to British Columbia.

CHAPTER X.

PROSPECTS.

If the resources of British Columbia are such as they have been described in these pages, we may safely predict for her a brilliant future. When capital begins to flow into the country, and labour grows cheaper and more abundant, districts now unknown will be explored. Mineral wealth, of which only the out-croppings so to speak are apparent, and commercial resources, which are still latent, will be revealed and developed. The lands which are adapted for agriculture will be occupied, and new valleys and plains fit for settlement discovered. Although as an agricultural country alone, British Columbia will not become great, she has, nevertheless, as we have seen, arable and pasture lands sufficient to maintain a large mining and commercial population. That population will come, unsteadily perhaps at first: by ebbs and flows the tide will advance. If the population should increase but slowly, this will be all the more advantageous. That it will increase, the fact of the wealth of the country renders certain. Drawn by the resistless power of gold, men will penetrate into the desert; and while the miner compels

the earth to unfold her secrets, the farmer will constrain lands, seemingly barren, to yield abundant harvests. Cities will spring up wherever mines of gold or silver, of copper, lead, iron, or coal are opened, as well as at the ports of entry and along the lines of route. Then the lonely places shall be lively with the sounds of labour, and shores now silent echo back the seaman's call. Busy commerce will descend into harbours now unvisited, and thence dispatch her fleets across the seas to Europe and to Asia. British Columbia will send her spars and timber to South America, China, and Japan; her fish, her silver, lead, and copper ores to English ports; and her gold to all the world; and receive in return the produce of the States, the manufactures of England, and the luxuries of India and China. Religion and civilization, following in the train of commerce, will extend to these new lands the sceptre of their ancient rule,—and British law and liberty find a new home in the west.

But in an attempt to view the future of British Columbia, the eye is forced to range beyond her limits, and see her linked with her sister colonies—Vancouver Island, already as one with herself, and Canada so distant. Connection with Canada is essential to her full developement. In a political point of view, it is of the utmost importance that Her Majesty's dominions in North America should be united by road, telegraph, and railway. Commercially, this is important, for it is now understood that the connection of the two shores of the North American continent would open a new highway for the commerce of England with Asia and Australia: even now the want is felt. Free and regular postal communication is essential to the existence of commerce and the advance of civilization. At present British Columbia is denied this boon. English mails reach the colony, via New York and Panama, in American ships, or overland from New York to San Francisco. Not to speak of the delays and risks to which the mails are subjected on these lines, it is unseemly that a great naval Power should be indebted to foreigners for the transmission of its mails to its own Colonies. Were communication opened between Canada and British Columbia, the mail service to the latter Colony and Vancouver Island would be regular, expeditious, and safe. Nor would these Colonies alone be benefited: such a line once established, the postal service of England with Australia and Asia could not fail to be carried through British Columbia.

It is computed* that by a railway across the North American continent, there would be a gain on the present route to

British Columbia of 22 days from England.

TABLE OF DISTANCES.

" Panama to Canton	about 10,000 miles,	
British Columbia to Canton ..	6,900	"
Panama to Sydney.....	8,200	"
British Columbia to Sydney ..	7,200	" "

"By transmitting the Australian mails from England to the Pacific across British North America, a saving of 5 days would be effected, as compared with the route by Panama, between England and the Pacific, and of 1000 miles, or say 5 days more, in the passage across that ocean—ten days saved in all."

The following remark is extracted from *l'Echo du Pacifique*, a French newspaper, published in San Francisco, "In case of war with the United States, the only possible postal line for Enland would be through her own territory, across the Rocky Mountains,"—a consideration which ought to be conclusive, but the writer adds, "*mais le trésor anglais est peu libéral pour sa Colonie*," ("the English Government is not too generous in its treatment of its Colony.")

The difficulties of constructing a railway across the North American continent in British territory have been greatly exaggerated. Taking a rapid survey of the route, we find there is steam communication to the head of Lake Superior; thence to the Red River Settlement, a road could be made without much difficulty. From the Red River to Edmonton, the way lies up the valley of the great Saskatchewan River, navigable for 700 miles. This is described as a splendid and extensive valley, capable of supporting a large agricultural population. At Edmonton the difficulties begin. Thence to Jasper House, in the Rocky Mountains, the country is swampy and bad. There is a coalfield here, and the seams appear on the surface, at some places on fire. Here the party from which this information is obtained (the party of Canadians who entered British Columbia by this route last autumn, already alluded to) built their nightly camp fires of coal. The gorge through which this road enters British Columbia is the New Caledonia or Jasper Pass. It is described as a natural roadway through the mountains, which rise on either side like a wall to a height of many thousand feet. From Jasper House to Tête Jaune Cache, at the head of the Fraser, the country around is rugged and mountainous: yet there is a valley through which a road or railway could be carried. From Tête Jaune Cache the road would probably take a direct course for Cariboo, by one of three valleys as yet unexplored, which appear to connect the latter with the head waters of the Fraser. It is of course

impossible to define the distance, but the probability is that it does not much exceed 150 miles. From Richfield the line would be taken to the mouth of Quesnel River, where it would join the great highways from the lower Fraser, and (should such be ultimately constructed) from Bentinck Arm or any other sea port on the North West Coast.

PROXIMATE TABLE OF DISTANCES.

	STATUTE MILES.
Lake Superior to Red River Settlement	380
Red River to Edmonton, by valley of Saskatchewan..	800
Edmonton to Jasper House, Rocky Mountains	400
Jasper House to Tête Jannée Cache	144
Thence to Richfield	150
<hr/>	
Total distance from Canada to Cariboo	1,874
Richfield to Quesnel mouth	60
Mouth of Quesnel to Bentinck Arm, <i>circa</i>	250
(Mouth of Quesnel to Douglas, Yale, or Hope, <i>circa</i>)	300

Total distance between Heads of Navigation 2,184

Such is the line which in all probability the waggon-road and railway will follow. It is preferable to those dwelt upon by previous writers. Its preference over the route by St. Paul's, Minnesota, consists in this that *its whole course lies through British territory*. Indeed the possibility of war with the States is a sufficient objection to any line which passes at any point within their border. Jasper Pass possesses advantages both over the Kananaski Pass recommended by Captain Palliser,* and the Kootanie Pass preferred by Captain Blackiston.† Its advantages are: (1) The road from Edmonton to the Rocky Mountains is more free from Indian molestation, than the others by the more southerly passes. (2) It opens up the settlements of St. Albert's and St. Ann's. (3) The Jasper Pass is pronounced easily convertible into a waggon-road or railway. (4) This route leads directly to the great gold fields of Cariboo.

When, in addition to these important advantages, it is remembered that the distance from Lake Superior to the Coast, by Jasper Pass, is apparently less than by the Kootanie, or other passes, to New Westminster, it will be seen that the fact of the former passing through Cariboo must decide the question in its favour.

That communication across the continent is desirable, the very fact of the *existence* of British Columbia is enough to prove: that it is practicable the accounts of reliable travellers sufficiently shew. To many however the idea appears vision-

* Papers relating to the Exploration by Captain Palliser, June, 1859.

† Quarterly Review, vol. cix., Article on Canada and the North West.

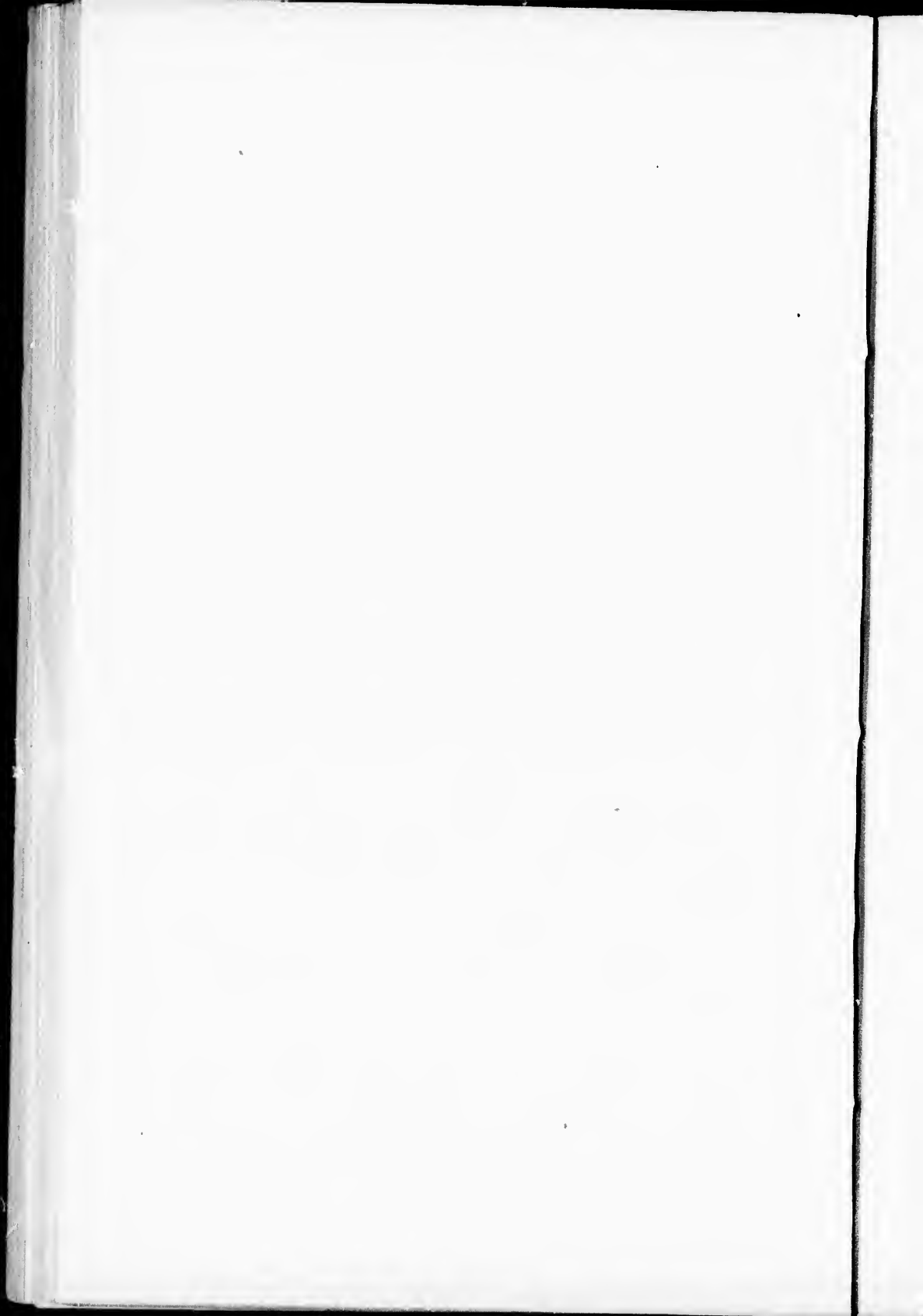
ary and remote. Yet, remote as it may seem, it must be brought near, taken hold of, carried out, and that soon if at all. The United States have long been endeavouring to achieve a trans-continental railway through their own territory. Hindered, first by party interests, and more lately by pecuniary difficulties, this cherished scheme will nevertheless ultimately be executed by that enterprising people. But the national honour as well as interest require that England should take the lead across the continent, and English capital renders this to her a comparatively easy task. Millions of money and many precious lives have been expended on the North West Passage. The way by sea to the Pacific is now found to be barred by ice, but here is a safer and cheaper way by land, which invites immediate attention from statesmen and capitalists.

When, in 1858, British Columbia was made an English Colony, the following sentiment was expressed in the speech from the throne: "I hope," said Her Majesty "that this new Colony in the Pacific may be but one step in the career of steady progress by which my dominions in North America may be ultimately peopled in an unbroken chain, from the Atlantic to the Pacific, by a loyal and industrious population." To the fulfilment of this sublime hope, a railway across the continent would infallibly lead. When by its construction England shall have solved one of the greatest problems of the age, and made another stride in that career, which as the great civiliser of the world she seems called to pursue, then British Columbia will assume the importance which her geographical position and her resources conspire to bestow. As one of the great highways of the world, she will be the scene of a busy traffic between Europe and Asia. Passengers, mails and at least the lighter goods will pass through her territory between England and Australia, China, perhaps India. In conjunction with Vancouver Island, she will become a centre-point where the commerce of the Pacific and the Atlantic will meet, and receive the produce of the one for transmission to Europe; the goods of the other for dispersion over the Pacific.*

In the march of christianity and civilization which still moves towards the western Sun, British Columbia and Vancouver Island are in the van. The torch of truth they shall raise, shall yet flash along the shores of the Pacific, till the degraded millions of China, and the benighted idolaters of the Isles, beholding, shall arise from their darkness and superstition, and rejoice in the light of God.

* See Appendix P. Compare Rattray, Vancouver Island and British Columbia, p. 128.

APPENDIX.



APPENDIX.

i.

APPENDIX A.

DESCRIPTION OF THE MOUTH OF FRASER RIVER BY CAPTAIN RICHARDS, R. N.

Fraser River, in point of magnitude and present commercial importance, is second only to the Columbia on the North West Coast of America. In its entire freedom from risk of life and shipwreck, it possesses infinite advantages over any other river on the coast, and the cause of this immunity from the dangers and inconveniences to which all great rivers emptying themselves on an exposed coast are subject, is sufficiently obvious. A sheltered strait scarcely 15 miles across, receives its waters; and the neighbouring Island of Vancouver serves as a natural breakwater, preventing the possibility of any sea arising which would prove dangerous to vessels even of the smallest class. To the same cause may be attributed in a great measure the fixed and unvarying character of the shoals through which this magnificent stream pursues its undeviating course into the Gulf of Georgia; and there can be little doubt that it is destined, at no distant period, to fulfil to the utmost, as it is already partially fulfilling, the purposes for which nature ordained it, to be the outlet for the products of a great Country, whose riches in mineral and agricultural wealth are daily being more fully discovered and developed.

Vessels of from 18 to 20 feet draught may enter the Fraser and proceed as high as Langley, or a few miles above it, with ease, provided they have, or are assisted, by steam power. The only difficulty is at the entrance, and this is easily overcome by providing pilots, and the means of maintaining the buoys in their positions. The great quantity of deposit brought down by the freshets of summer has created an extensive series of banks, which extend 5 miles outside the entrance proper of the river. The main stream has forced an almost straight, though somewhat narrow, channel through these banks, and at its junction with the current of the Gulf of Georgia, which runs at right angles to it, has caused the wall-edged bank before alluded to, extending to Roberts Point on the South, and Gray Point on the North.

APPENDIX B.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT THE ROYAL ENGINEERS CAMP, NEW WESTMINSTER, DURING THE YEAR 1861, BY ORDER OF COL. R. C. MOODY, R. E., COMMANDING THE TROOPS.

Latitude 49° 12' 47" North. Longitude 122° 53' 19" West.
INCHES.

The highest reading of the Barometer,
corrected for temperature, was 30.565 9.30 A.M., 4th Feb.
The mean height do. do., at 9.30 A.M. 29.943
do. do. do. 2.30 P.M. 29.889
The lowest do. do. 29.272 9.30 A.M. 3rd Dec.

DEGREES.

Maximum temperature of Air, in shade, at 9.30 A.M.	74.3 9th July.
Do. do. do. do. 3.30 P.M.	84.0 "
Mean temp. of Air, in shade... 9.30 A.M.	48.8
Do. do. do. do. 3.30 P.M.	52.2
Minimum temp. of Air, in shade 9.30 A.M.	20.0 21st January.
Do. do. do. do. 3.30 P.M.	24.0 23rd December.
Minimum temperature on the Grass	10.0 21st January.
Greatest amount of Humidity	1.000
Mean do. do. 9.30 A.M.764
Do. do. do. 3.30 P.M.854
Least do. do.422 3.30. P.M. 9th July.

The cistern of the Barometer is about 54 feet above the level of the sea. All the observations were made at 9.30 A.M. and 3.30 P.M. daily throughout the year.

There were several frosty nights in April, one on the 20th May, and they recommenced on the 20th October.

Thunder and Lightning occurred on the 27th May, and 5th, 21st, 22nd, and 29th August.

During the months of June, July, August, and September the amount of Ozone was inconsiderable. On the 10th July the test paper gave no indication of its presence. The mean daily amount for the year would be indicated by 5 on the scale.

Table shewing the depth of rain, the number of days on which it fell, the mean humidity and mean temperature of Air at 9.30 A.M., 3.30 P.M., and the lowest temperature on the grass in each month.

THERMOMETER.

	INCHES.	DATE.	HUMIDITY.	9.30 A.M.	3.30 P.M.	MIN. ON GRASS.
January.....	7.190	15	.904	33.2	35.4	10.0
February.....	5.485	18	.879	38.2	42.3	22.0
March.....	3.270	12	.788	42.6	47.5	25.0
April.....	5.265	16	.743	48.1	51.4	29.0
May.....	4.575	12	.713	53.6	57.7	31.0
June.....	4.770	15	.733	59.1	64.6	37.0
July.....	0.390	3	.673	64.3	68.9	40.0
August.....	3.189	8	.743	64.0	68.0	38.5
September ..	1.075	6	.797	59.9	64.4	35.0
October.....	6.145	16	.915	48.8	50.9	25.0
November... 11.629	23	.941	39.1	40.6	22.0	
December	7.520	20	.910	54.2	55.2	11.0

Total... 60.485 164

Rain fell on 12 days when the wind was S., 5 when S.W., 9 when W., 2 when N.W., 14 when N.E., 64 when E., 26 when S.E., and 32 when calm.

The greatest fall of rain in 24 hours measured 2.150 inches, on the 4th of November.

The average fall for every day of the year, was 0.166 inches.

The average fall for each wet day was 0.369 inches.

A comparison of this abstract with that for the year 1860, shews that 0.065 inches more Rain fell in 1861 than in 1860.

Rain fell on 13 more days,.....in 1861 than in 1860.

The mean height of Barometer .070 less..... " "

The mean amount of Humidity was .008 greater " "

The mean temperature of the Air in shade was 5.1 greater " "

The absolute limiting nights of Frost, were nearly at the same date in both years.

In the six winter months, January to March, and October to December, 41.230 inches of rain fell in 1861, and 40.586 inches in 1860.

In the remaining months 19.255 inches fell in 1861, and 13.834 in 1860. Of the entire quantity of rain 26 inches fell in January, November, and December, in each year.

The prevailing direction of the wind during rain in both years, was E. and S.E.

June was the driest month, and August the warmest in 1860.

July was both driest and warmest in 1861.

The Fraser River attained its highest level at New Westminster, for the year 1861, on the 8th of June, and its lowest, being a difference of 9 feet 6 inches, on the 17th March; between 19th May and 10th August, Ships did not swing to the flood tide. These periods and difference of level correspond very closely with the observations for 1859 and 1860.

There was floating ice in the Fraser River opposite New Westminster 7th January 1861, it increased until 22nd January, and disappeared on the 2nd February. The Navigation to the mouth of the River was not impeded.

There was no ice in the Fraser, at New Westminster, in 1860.

The Observations were taken by 2nd Corporal P. J. LEECH, and Lance Corporal J. CONROY, R. E.

R. M. PARSONS, Captain R. E.

ABSTRACT OF METEOROLOGICAL OBSERVATIONS TAKEN AT THE
ROYAL ENGINEER CAMP, DURING THE YEAR 1862.

INCHES.

The highest reading of the Barometer,	
corrected for temperature, was.....	30.517 9th February.
The mean height do., do., at 9.30 A.M.	29.983
Do. do. do. do., at 3.30 P.M.	29.963
The lowest do. do.	29.071 22nd January.

DEGREES.

Max. temp. in sun's rays (black bulb)....	104.0 29th August.
Do. do. of Air, in shade	83.5 do.
Do. do. do. do.	9.30 A.M. 73.9 23rd July.
Do. do. do. do.	3.30 P.M. 86.0 28th August.
Mean temp. of Air, in shade	9.30 A.M. 46.8
Do. do. do. do.	3.30 P.M. 51.2
Minimum temp. of Air, in shade	9.30 A.M. 2.0 below zero, 15 Jan.
Do. do. do. do.	3.30 P.M. 6.0 15th January.
Minimum temp. on the Grass 15.0 below zero, 16 Jan.
Greatest amount of Humidity 1.000
Mean do. do.	9.30 A.M. .842
Do. do. do.	3.30 P.M. .772
Least do. do.320

There were slight frosts nearly every night in the month of April, and once in May (16th); they did not recommence until the 9th of October. The severe frosts of January and February have been unknown for many years.

Thunder and Lightning occurred on the 24th May, 24th July, and 22nd, 29th, and 30th August.

Table shewing the depth of rain, the number of days on which it fell, the mean humidity (9.30 A.M. and 3.30 P.M.), mean temperature of the air in shade, and the lowest temperature on the grass in each month.

	INCHES.	DAYS.	HUMIDITY.	THERMOMETER.		
				9.30 A.M.	3.30 P.M.	MIN. ON GRASS.
January.....	3.460	9	.855	19.0	23.0	-15.0
February.....	5.727	8	.815	80.8	34.2	2.0
March.....	5.830	17	.862	38.0	41.7	23.0
April.....	2.345	14	.767	45.5	51.3	20.0
May.....	3.415	13	.718	57.1	62.1	31.5
June.....	2.760	10	.712	62.7	67.1	40.9
July.....	2.709	12	.713	63.2	67.7	44.0
August.....	2.030	8	.787	63.0	69.8	43.0
September ..	1.625	9	.751	58.4	62.7	33.5
October.....	4.605	10	.860	49.3	52.0	23.0
November.....	4.050	8	.938	37.9	41.7	22.0
December.....	7.990	17	.948	36.7	39.7	18.5
Total...	47.466	135				

Rain fell on 8 days when the wind was South, 4—S.W., 3—W., 5—N.W., 8—N.E., 43—E., 26—S.E., and 38 when calm.

The greatest fall of rain in 24 hours measured 2.260 inches, and was on the 20th March. The average fall for every day of the year was 0.130 inches, and for each wet day it was 0.352.

The amount of Ozone this year was very small, its mean daily number would be represented by 3 on the scale, and it seldom exceeded 6. During the greater part of October, November, and December there was little indication of its presence. In November and the early part of December there were heavy fogs, during which there was no Ozone.

COMPARISON OF MEAN RESULTS FOR THREE YEARS.

Years.	Rain.		Mean Temperature		Min. on Grass.	Humidity.		Mean height of Barometer.	
	inches	days	9.30 A.M.	3.30 P.M.		9.30 A.M.	3.30 P.M.	9.30 A.M.	3.30 P.M.
1860	54.429	151	49.9	54.0	15.5	.847	.766	29.942	29.619
1861	60.485	164	48.8	52.2	10.0	.764	.854	29.913	29.889
1862	47.466	135	46.8	51.2	-15.0	.842	.772	29.953	29.963
Means	54.124	150	48.5	52.5		.815	.797	29.956	29.924

Rain was more equally distributed throughout all the months this year than in 1860 or 1861.

In the winter months, January to March and October to December, 31.682 inches of rain fell in 1862, 41.230 in 1861, and 40.586 in 1860. In the remaining months 15.715 inches fell in 1862, 19.255 in 1861, and 13.834 in 1860.

The prevailing direction of the wind during rain in each year was E. and S.E. The absolute limiting nights of frost in the three years were nearly the same.

THE FRASER RIVER AT NEW WESTMINSTER.

Year.	Highest level.	Lowest level.	Difference of level.	Remarks.
1860	12th June	4th Mar.	10.5 feet	22 May to 12 Aug, ships did not swing to
1861	8th June	17th Mar.	9.5 feet	19 May to 10 Aug, do. do. [the flood tide.
1862	14th June	16th April	10.5 feet	1 May to 2 Sept, do. do.

Ice appeared on the 1st of January, 1862, and the river at New Westminster was unnavigable on the 4th; it was completely frozen over on the 9th, and the ice attained a thickness of 13 inches in the channel opposite the R. E. Camp. on the 12th of February. Sleighs were running from Langley to several miles below New Westmins-

APPENDIX.

V.

ter, and persons walked from Hope to the latter place, a distance of 80 miles, on the ice, at the end of January. Lake Harrison and the other Lakes were frozen. Navigation from New Westminster was open to the mouth of the river on the 11th of March, and from Yale on the 12th of April. Again on the 5th of December, there was ice in the river at New Westminster for one day. In January, 1861, there was ice at New Westminster, but the navigation to the mouth of the river was not impeded. In 1860 there was no ice.

The observations were taken by 2nd Corporal P. J. Leech and Lance Corporal J. Conroy, R.E.

R. M. PARSONS, Captain, R.E.

METEOROLOGICAL OBSERVATIONS TAKEN AT LILLOOET, 1862,
BY DR. H. FEATHERSTONEHAUGH.

- January.**—Average Temperature for 22 days 14° above zero.
Do. do. 9 " 9° below zero.
Coldest day, 29th - - 22° do.
Hottest " - - 26° above zero.
Ten cold windy days; wind from N.W. and N.E.
Amount of snow fell during the month, 28 inches; 18th 10 in. fell, 22nd 11 in. fell.
- February.**—Average Temperature for 18 days 25° above zero.
Do. do. 10 " 4° below zero.
Coldest day, 1st - - 6° do.
Hottest " 11th - - 45° above zero.
11th, heavy rain and thaw; 4 days heavy rain and thaw, three cold windy days.
Amount of snow fell during the month, 14 inches.
- March.**—Average Temperature for 31 days 37°
Coldest day, 10th - - 20° (sharp frost.)
Hottest " 31st - - 50°
Three cold windy days; two rainy days, 14th and 23rd.
Amount of snow fell, 10 inches.
- April.**—Average Temperature for the month 54°
Coldest day, 4th - - 31°
Hottest " 30th - - 84°
Seven cold windy days; 14th, gale of wind from S.E.
Amount of snow fell, 10 inches.
- May.**—Average Temperature for the month 78°
Coldest day, 6th - - 64°
Hottest " 11th - - 100°
Two windy days, 7th and 11th; 4 rainy days; 5th, eight hours heavy rain.
- June.**—Average Temperature for the month 81°
Coldest day - - 60°
Hottest day - - 104°
Three windy days; rain fell on 4 days.
- July.**—Average Temperature for 12 days 97°
Coldest day, 2nd - - 80°
Hottest " 5th - - 106°
- August.**—Absent.
- September.**—Average Temperature for the month 81°
Coldest day, 30th - - 60°
Hottest " 2nd - - 98°
Rain fell on 6 days; 25th, rain and snow; 5 windy days; 30th, cold S.E. wind.

October.—Average Temperature for the month 71°
 Coldest day - - - 50°
 Hottest „ - - - 81°
 Rain fell on six days ; six windy days.
 November.—Average temperature for the month 48°
 Coldest day - - - 30°
 Hottest „ - - - 56°
 Rain fell on two days, 1st and 3rd.
 December.—Average Temperature for the month 38°
 Coldest day, 6th - - - 25°
 Hottest „ 25th - - - 50°
 Rain fell on four days ; 9th, eight hours rain ; five inches
 snow fell during the month.

1861.

November.—Average Temperature for 23 days 36°
 Coldest day, 28th - - - 20° below zero.
 Five coldest days average Temper. 13° below zero.
 Rain fell on 23rd for 24 hours, Thermometer 40°. 40 in-
 ches snow fell during the month.
 December.—Average Temperature for the month 26°
 Coldest day, 29th - - - 14° below zero.
 Hottest „ 13th - - - 42°
 Rain fell with sun and thaw, Thermometer 42°. Thirty
 two inches of snow fell during the month.

H. FEATHERSTONEHAUGH, Surgeon.

Lillooet, 31st Dec., 1862.

APPENDIX C.

RULES AND REGULATIONS FOR THE WORKING OF GOLD MINES IN BRITISH COLUMBIA.

Issued in conformity with the Gold Fields' Act, 1859.

WHEREAS, it is provided by the Gold Fields' Act, 1859, that the Governor for the time being, of British Columbia, may, by writing under his hand and the Public Seal of the Colony, make Rules and Regulations, in the nature of By-laws, for all matters relating to Mining. Now therefore, I, JAMES DOUGLAS, Governor, &c., do hereby make the following Rules and Regulations, accordingly :—

I, In the construction of the following Rules and Regulations, unless there be some contrariety, or repugnancy thereto in the context, the words "Governor" "Gold Commissioner," "mine," "to mine," shall have the same meanings as in the Gold Fields' Act, 1859. The expression "Bar diggings" shall mean every mine over which a river extends when in its most flooded state. "Dry Diggings" shall mean any mine over which a river never extends. "Ravines" shall include water courses, whether usually containing water or usually dry. "Ditch" shall include a flume or race, or other artificial means for conducting water by its own weight into or upon a mine. "Ditch head" shall mean the point in a natural water course or lake, where water is first taken into a ditch. And words in the singular number shall include the plural, and the masculine gender shall include the feminine.

II. All claims are to be, as nearly as may be, in rectangular forms, and marked by four pegs at the least, each peg to be four inches square at the least, and one foot above the surface, and firmly fixed in the ground. No boundary peg shall be concealed, or moved, or injured, without the previous permission of the Gold Commissioner.

III. The size of a claim, when not otherwise established by a by-law, shall be, for bar diggings, a strip of land twenty-five feet wide at the mark to which the river rises when flooded, and thence extending down into the river indefinitely. For dry diggings, a space twenty-five feet by thirty feet. For ravine diggings, a space of twenty-five feet along the bank of the ravine and extend up to the top of each bank. In quartz claims the size, when not otherwise established by by-law, shall be one hundred feet in length, measured along the vein or seam, with power to the miner to follow the vein or seam, and its spurs, dips and angles, any where on or below the surface included between the two extremities of such length of one hundred feet, but not to advance upon or beneath the surface of the earth more than one hundred feet in a lateral direction from the main vein or seam, along which the claim is to be measured. All measurements of area are to be made on the surface of the earth, neglecting inequalities. Every claim is to have a distinguishing number marked on its boundary pegs.

IV. If any Free Miners, or party of Free Miners, shall discover a new mine, and such discovery shall be established to the satisfaction of the Gold Commissioner, the first discoverer, or party of discoverers, if not more than two in number, shall be entitled to a claim double the established size of claims in the nearest mine of the same description, (i. e. dry, bar, or quartz diggings.) If such party consist of three men, they shall collectively be entitled to five claims of the established size, on such nearest mine; and if of four or more men, such party shall be entitled to a claim and a half per man. A new stratum of auriferous earth or rock, situate in a locality where the claims are abandoned, shall for this purpose be deemed a new mine, although the same locality shall previously have been worked at a different level. And dry diggings discovered in the neighbourhood of bar diggings shall be deemed a new mine, and vice versa.

V. The registration of claims shall be in such manner and form as the Gold Commissioner shall in any locality direct, and shall include, besides the matters mentioned in the Gold Fields' Act of 1859, all such other matters as the Gold Commissioner shall think fit to include.

VI. No transfer of any claim or of any interest therein, shall be enforceable, unless the same, or some memorandum thereof shall be in writing, signed by the party sought to be charged, or by his lawfully authorized agent, and registered with the Gold Commissioner.

VII. Any person desiring any exclusive ditch or water privilege, shall make application to the Gold Commissioner having jurisdiction for the place where the same shall be situated, stating for the guidance of the Commissioner in estimating the character of the application, the name of every applicant, the proposed ditch head, and quantity of water, the proposed locality of distribution, and if

such water shall be for sale, the price at which it is proposed to sell the same, the general nature of the work to be done, and the time within which such work shall be complete; and the Gold Commissioner shall enter a note of all such matters as of record.

VIII. Unless otherwise specially arranged, the rent to be paid for any water privilege shall be in each month, one average day's receipts, from the sale thereof, to be estimated by the Gold Commissioner with the assistance if he shall so think fit, of a jury.

IX. If any person shall refuse or neglect to take within the time mentioned in his application, or within such further time (if any) as the Gold Commissioner may, in his discretion think fit to grant for the completion of the ditch, the whole of the water applied for, he shall, at the end of the time mentioned in his application, be deemed entitled only to the quantity actually taken by him, and the Gold Commissioner shall make such entry in the register as shall be proper to mark such alteration in the quantity, and may grant the surplus to any other person, according to the rules herein laid down for the granting of water privileges.

X. Every owner of a ditch or water privilege shall be bound to take all reasonable means for utilizing the water granted to and taken by him. And if any such owner shall willfully take and waste any unreasonable quantity of water, he shall be charged with the full rent as if he had sold the same at a full price. And it shall be lawful for the Gold Commissioner, if such offence be persisted in, to declare all rights to the water forfeited.

XI. It shall be lawful for the owner of any ditch, or water privilege, to sell and distribute the water conveyed by him to such persons, and on such terms as they may deem advisable, within the limits mentioned in their application. Provided always that the owner of any ditch or water privilege shall be bound to supply water to all applicants, being Free Miners, in a fair proportion, and shall not demand more from one person than from another, except when the difficulty of supply is enhanced. Provided further, that no person, not being a Free Miner, shall be entitled to demand to be supplied with water at all.

XII. A claim or any mine shall, until otherwise ordered by some valid by-law, be deemed to be abandoned, and open to the occupation of any Free Miner, when the same shall have remained unworked by some registered holder thereof for the space of seventy-two hours, unless in case of sickness, or unless before the expiry of such seventy-two hours, a further extension of time be granted by the Gold Commissioner, who may grant further time for enabling parties to go prospecting, or for such other reasonable cause as he may think proper. Sundays, and such holidays as the Gold Commissioner may think fit to proclaim, are to be omitted in reckoning the time of non-working.

XIII. Whenever it shall be intended, in forming or upholding any ditch, to enter upon or to occupy any part of a registered claim, or to dig or loosen any earth or rock within [4] feet of any ditch not belonging solely to the registered owner of such claim, three

days notice in writing, of such intention, shall be given, before entering or approaching within four feet of such other property.

XIV. If the owner of the property about to be so entered upon or approached, shall consider three days notice insufficient for taking proper measures of precaution, or if any dispute shall arise between the parties as to the proper precautionary measures to be taken, or in any other respect, the whole matter shall be immediately referred to the Gold Commissioner acting in the district, who shall order such interval of time to be observed before entry, or make such other order as he may deem proper.

XV. In quartz claims and reefs each successive claimant shall leave three feet unworked to form a boundary wall between his claim and the last previous claimant, and shall stake off his claim accordingly, not commencing at the boundary peg of the last previous claim, but three feet further on; and if any person shall stake out his claim, disregarding this rule, the Gold Commissioner shall have power to come and remove the first boundary peg of such wrong-doer three feet further on, notwithstanding that other claims may then be properly staked out beyond him; so that such wrong-doer shall then have but ninety-seven feet. And if such wrong-doer shall have commenced work immediately at the boundary peg of the last previous claim, the Gold Commissioner may remove his boundary six feet farther on than the open work of such wrong-doer: and all such open work, and also the next three feet of such space of six feet shall belong to and form part of the last previous claim, and the residue of such space of six feet shall be left as a boundary wall.

XVI. Every such boundary wall shall be deemed the joint property of the owners of the two claims between which it stands, and may not be worked or injured, save by the consent of both such owners.

XVII. In staking out plots of land for Free Miners and Traders, for gardening and residential purposes, under the powers of the said Gold Fields' Act, 1859, contained, the Gold Commissioner is to keep in view the general interests of all the miners in that locality, the general principle being that every garden benefits indirectly the whole locality, and also the earlier application is to be preferred; but where the eligible spots of land are few, or of scanty dimensions, and especially where they are themselves auriferous, it may be injudicious that the whole or the greater part should fall into the hands of one or two persons; and therefore, in such cases, the Gold Commissioner may, in the exercise of his discretion, allot small plots only to each applicant.

XVIII. Any person desiring to acquire any water privilege, shall be bound to respect the rights of parties using the same water, at a point below the place where the person desiring such new privilege intends to use it.

XIX. Any person desiring to bridge across any stream or claim or other place, for any purpose, or to mine under or through any ditch or flume, or to carry water through or over any land already

occupied by any other person, may be enabled to do so in proper cases, with the sanction of the Gold Commissioner. In all such cases the right of the party first in possession whether of the mine or of the water privilege is to prevail, so as to entitle him to full compensation and indemnity. But wherever due compensation by indemnity can be given, and is required, the Gold Commissioner may sanction the execution of such new work on such terms as he shall think reasonable.

AS TO LEASES IN LARGER PROPORTIONS THAN CLAIMS.

XX. Applications for leases are to be sent in triplicate to the Gold Commissioner having jurisdiction for the locality where the land desired to be taken is situated. Every such application shall contain the name and additions of the applicant at full length, and the names and addresses of two persons residing in the Colony of British Columbia, or Vancouver Island, to whom the applicant is personally known. Also, a description accompanied by a map of the land proposed to be taken.

XXI. Leases will not be granted in general for a longer term than ten years, or for a larger space than ten acres of alluvial soil (dry diggings,) or half a mile in length of unworked quartz reef, or a mile and a half in length of quartz, that shall have been attempted and abandoned by individual claim workers, with liberty to follow the spurs, dips, and angles on and within the surface for two hundred feet on each side of the main lead or seam, or, in bar diggings, half a mile in length (if unworked,) along the high water mark, or a mile and a half in length along high water mark, where the same shall have been attempted and abandoned by individual claim workers.

XXII. Leases as above, will not in general be granted of any land, alluvium or quartz, which shall be considered to be immediately available for being worked by Free Miners, as holders of individual claims. Nor will such a lease in any case be granted, where individual Free Miners are in previous actual occupation of any part of the premises unless by their consent.

XXIII. Every such lease shall contain all reasonable provisions for securing to the public rights of way and water, save in so far as shall be necessary for the miner-like working of the premises thereby demised, and also for preventing damage to the persons or property of other parties than the lessee. And the premises thereby demised shall be granted for mining purposes only, and it shall not be competent for the lessee to assign or sub-let the same, or any part or parts thereof without the previous license in writing of the Gold Commissioner. And every such lease shall contain a covenant by the lessee to mine the said premises in a miner-like way, and also, if it shall be thought fit, to perform the works therein defined within a time therein limited. And also a clause by virtue whereof the said lease and the demise therein contained may be avoided in case the lessee shall refuse or neglect to observe and perform all or any of the covenants therein contained.

XXIV. Every applicant for a lease, shall at the time of sending in his application, mark out the ground comprised in the applica-

tion, by square posts firmly fixed in the boundaries of the land, and four feet above the surface, with a notice thereon that such land has been applied for, stating when and by whom, and shall also fix upon a similar post at each of the nearest places on which miners are at work, a copy of such notice.

XXV. Objections to the granting of any such lease shall be made in writing, addressed to His Excellency the Governor, under cover to the Gold Commissioner, who shall forward all such objections, together with his report thereon.

XXVI. Every application for a lease shall be accompanied by a deposit of Twenty-five pounds sterling, which shall be refunded in case the application shall be refused by the Government, and if the application shall be entertained, then such sum of Twenty-five pounds shall be retained for the use of Her Majesty, her heirs, and successors, whether the application be afterwards abandoned or not.

Issued under the Public Seal of the Colony of British Columbia, at Victoria, Vancouver Island, this seventh day of September, in the year of our Lord one thousand eight hundred and fifty-nine, and in the twenty-third year of Her Majesty's Reign, by me,

JAMES DOUGLAS. [L. S.]

By Command of His Excellency,
WILLIAM A. G. YOUNG,
Acting Colonial Secretary.

RULES AND REGULATIONS FOR THE WORKING OF GOLD MINES.

Issued in conformity with the Gold Fields' Act, 1859.

WHEREAS it is provided by the Gold Fields' Act, 1859, that the Governor for the time being, of British Columbia, may, by writing under his hand and the Public Seal of the Colony, make Rules and Regulations, in the nature of By-laws, for all matters relating to mining;

And whereas, in conformity with the said Act, certain rules and regulations have already been issued, bearing date 7th of September, 1859;

And whereas, since the issuing of such rules, extensive mines have been discovered on the high level benches, lying on either side of Fraser River, Thompson River, and other rivers, which benches are generally terminated by abrupt and steep descents or cliffs, the general direction of which is parallel with the general direction of the Rivers;

And whereas, such mines cannot be conveniently worked in small rectangular subdivisions, but the convenient working thereof requires a large size of claim, and may, in some cases, require that each claim should reach from the cliff in front of each bench to the cliff in the rear, or when there is no cliff in the rear, then to the general slope of the mountains in the rear;

And whereas, it is also expedient to make further provision with respect to the regulation of claims, and to adopt one general rule for determining the measure of the quantity of water in any ditch or channel,

Now, therefore, I, JAMES DOUGLAS, Governor, &c., do hereby make the following Rules and Regulations accordingly:

I. The mines in the said level benches shall be known as "bench diggings," and shall, for the purpose of ascertaining the size of claims therein, be excepted out of the class of "dry diggings," as defined in the Rules and Regulations of the 7th of September last.

II. The ordinary claims on any bench diggings, shall be registered by the Gold Commissioner according to such one of the two following methods of measurement, as he shall deem most advantageous on each mine, viz: One hundred feet square, or else a strip of land 25 feet wide at the edge of the cliff next the river, and bounded by two straight lines, carried as nearly as possible in each case, perpendicular to the general direction of such cliff, across the level bench, up to and not beyond the foot of the descent in the rear, and in such last mentioned case, the space included between such two boundary lines when produced over the face of the cliff in front, as far as the foot of such cliff, and no further; and all mines in the space so included shall also form a part of such claim.

III. The Gold Commissioner shall have authority in cases where the benches are narrow, to mark the claims in such manner as he shall think fit, so as to include an adequate claim. And shall also have power to decide on the cliffs which, in his opinion, form the natural boundaries of benches.

IV. The Gold Commissioner may, in any mine of any denomination where the pay dirt is thin or claims in small demand, or where, from any circumstances, he shall deem it reasonable, allow any Free Miner to register two claims in his own name, and allow such period as he may think proper for non-working either one of such claims. But no person shall be entitled to hold at one time more than two claims of the legal size. A discoverer's claim shall for this purpose be reckoned as one ordinary claim.

V. All claims shall be subject to the public rights of way and water, in such manner, direction and extent, as the Gold Commissioner shall, from time to time direct. No mine shall be worked within 10 feet of any road, unless by the previous sanction of the Gold Commissioner.

VI. In order to ascertain the quantity of water in any ditch or sluice, the following rules shall be observed, viz:

The water taken into a ditch, shall be measured at the ditch head. No water shall be taken into a ditch, except in a trough whose top and floor shall be horizontal planes, and sides parallel vertical planes; such trough to be continued for six times its breadth in a horizontal direction from the point at which the water enters the trough. The top of the trough to be not more than 7 inches, and

the bottom of the trough not more than 17 inches below the surface of the water in the reservoir, all measurements being taken inside the trough, and in the low water or dry season. The area of a vertical transverse section of the trough, shall be considered as the measure of the quantity of water taken by the ditch.

The same mode of measurement shall be applied to ascertain the quantity of water running in a trough, or out of any ditch.



Issued under the Public Seal of the Colony of British Columbia, at Victoria, Vancouver Island, this 6th day of January, in the year of Our Lord One Thousand Eight Hundred and Sixty, and in the Twenty-third Year of Her Majesty's Reign, by me,

JAMES DOUGLAS.

By His Excellency's Command,
WILLIAM A. G. YOUNG.

RULES AND REGULATIONS,

[ISSUED IN CONFORMITY WITH THE GOLD FIELDS' ACT, 1859.]

WHEREAS, under the "Gold Fields' Act, 1859," the Governor for the time being of British Columbia is empowered by writing under his hand and the Public Seal of the Colony, to make rules and regulations, in the nature of By-laws, for all matters relating to mining;

And whereas, in conformity with that Act, certain Rules and Regulations have been issued, bearing date the 7th September, 1859, the 6th Jan., 1860, and the 29th Sept., 1862, respectively;

And whereas it is expedient to make further provisions for the working of gold mines;

SEC. I.—Repeals rule 3, of 7th Sept., 1859.

The Rule No. 3 of those dated 7th Sept., 1859, declaring the size of mining claims, is hereby repealed, so far as it is inconsistent herewith.

SEC. II.—Size of claims. —Bar diggings.

From and after the date hereof, the size of a claim shall be, for bar diggings, a strip of land 100 feet wide at the mark to which the river rises when flooded along such high water mark, and thence extending down direct to the river, to the lowest water level.

Dry Diggings.

For dry diggings, 100 feet square.

General Diggings.

For diggings not herein otherwise specially described 100 feet square.

Quartz Claims.

In quartz claims the size shall be 150 feet in length, measured along the lode or vein, with power for the miner to follow the lode

or vein and its spurs, dips and angles, anywhere on or below the surface, included between the two extremities of such length of 150 feet, but not to advance upon or beneath the surface of the earth, more than 100 feet in a lateral direction, from the main lode or vein, along which the claim is to be measured. All measurements are to be made on the surface of the earth, neglecting inequalities.

Number—Staking.

Every claim is to have a distinguishing number marked on its boundary pegs. Every individual claim, whether part of a company claim or not, shall be staked out with 4 corner pegs of at least 4 inches diameter, the same as defined in rule 2 of the rules and regulations of 7th September, 1859.

Tunnel Claims.

In tunnelling or sinking, each miner shall be allowed a frontage of 100 feet, irrespective of depth. The Gold Commissioner shall have the power to regulate what number of the miners, holding such claims shall be employed prospecting, until gold in paying quantities shall have been discovered, after which the full number of authorized miners must be employed on the claim. The side boundaries of each claim shall be distinctly marked off by 2 parallel lines or rows of pegs, fixed in the ground at intervals of 5 feet or thereabouts, the said boundaries or parallel lines shall be carried in a direction as straight and square as possible to the summit level. No party shall sink or drive ahead between the said parallel lines, saving with the consent of the party first in possession, until gold shall have been found as under mentioned.

Extent of Claim.

The extent of claim to each miner shall be 100 feet square, and he shall be allowed to mark off the claim ahead of the spot, where gold in paying quantities shall have been obtained, beyond the limits of the claim so marked out.

Rights of Prospecting

Beyond these limits any other party may prospect by shaft and tunnel from the bottom thereof, and until a lead is struck in paying quantities, shall have the exclusive right of prospecting within two such parallel lines as aforesaid, and shall then mark out his claim as above mentioned.

Tunnel Under Hills.

In tunnelling under hills, on the frontage of which angles occur, or which may be of an oblong or elliptical form—no party shall be allowed to tunnel from any of the said angles, nor from either end of such hills, so as to interfere with parties tunnelling from the main frontage of such hills. In case of two or more parties tunnelling from opposite sides of the same hill, and their side boundary lines meet or intersect, or their claims meet, the party that first marks off their claim shall be entitled to priority of claim thereon. In case of tunnelling under hills, or fronts of hills, such as occur at the junction of creeks in which there may be two leads, all parties shall, if required, take their claims on the lead nearest the side of the hill at which their tunnel commences.

Forfeiture of Claim Involves Tunnel, &c.

The right to the tunnel and the ten feet of ground on either side of it, in addition to the above claim, shall be considered as appurtenant to the claim to which it is annexed, and be abandoned or forfeited by the abandonment or forfeiture of the claim itself to which it appertains.

Deposit of Leavings.

The Gold Commissioner may, where deemed desirable, mark out a space in the vicinity for deposit of leavings and deads from any tunnel.

SEC. III.—Definition of Miners' Rights in a Claim.

Whereas it is expedient better to define the rights of registered free miners in their claims, it is hereby declared, enacted and proclaimed;

That clause 7 of the Gold Fields' Act, 1859, is hereby repealed.

Every free miner shall, save as against Her Majesty, have during the continuance of his certificate, the exclusive right to take the gold and auriferous soil upon or within the claim for the time being duly held registered and *bona fide* not colourably worked by him and the exclusive right of entry on the claim for the purpose of working or carrying away such gold, or auriferous soil, or any part thereof. And also as far as may be necessary for the convenient and minerlike working and security of his flumes and property of every description, and for a residence—but he shall have no surface rights therein for any other purpose, save as next hereinafter mentioned, unless specially granted.

SEC. IV.—One record covers necessary water and claim.

In addition to the above rights, every registered free miner shall be entitled to the use of so much of the water flowing naturally through or past his claim as shall in the opinion of the Gold Commissioner be necessary for the due working thereof.

SEC. V.—Inclusive water privileges; preliminary notice.

Where application is intended to be made for the exclusive grant of any surplus water to be taken from any creek or other locality, every such applicant shall, in addition to the existing requirements, affix a written notice of all the particulars of his application upon some conspicuous part of the premises to be affected by the proposed grant, for not less than five days before recording the same.

Power to Gold Commissioner to modify the Grant.

The Gold Commissioner, upon protest being entered or for reasonable cause, shall have power to refuse or modify such application or grant, either partially or entirely, as to him shall seem just and reasonable.

Saving of future miners' rights to water.

Every exclusive grant of a ditch or water privilege in occupied or unoccupied creeks shall be subject to the rights of such registered free miners as shall then be working or shall thereafter work in the locality from which it is proposed to take such water.

SEC. VI.—Gold penalties recoverable by Distress.

Whereas it is expedient to confer additional power for enforcing

penalties recoverable for infraction of the Gold Laws under Section 40 of the Gold Fields' Act ;

It is hereby declared, enacted and proclaimed that such penalties may, if deemed proper, be ordered to be recovered by sale and distress, to be levied forthwith or at any convenient interval after conviction and nonpayment within so many hours, or such longer time as shall be allowed by distress and sale of any claim or ditch or any personal property whatsoever of the person on whom such penalty may have been imposed.

Sec. VII.—Certified copy of any Gold record to be evidence.

Every copy of or extract from any record or register under or by virtue of this Act or the Gold Fields' Act, 1859, or any other Act which shall be made in relation to Gold mines or Gold fields, or any of the Rules and Regulations made in pursuance thereof, respectively required to be kept by any Gold Commissioner, and certified to be a true copy or extract under the hand of the Gold Commissioner, or other person entrusted to take and keep such record or register, shall in the absence of the original register be receivable in any judicial proceeding as evidence of the matters and things therein appearing.

Sec. VIII.—Fees on recording claims.

So much of section 6 of the Gold Fields' Act, 1859, as imposes a fee of 4s. on the Registration or Re-registration of Claims shall be and is hereby repealed.

In lieu thereof it is hereby declared, enacted, and proclaimed, there shall be paid to the Gold Commissioner for the use of Her Majesty, her heirs, and successors, the following fees: That is to say:

Upon every Registration or Re-registration on record }
of any Claim,..... } 10s. 3d.

And no person not being a free miner, shall be entitled to record a claim or any interest therein.

Gold Commissioner may enlarge Ditches.

The Gold Commissioner shall have power whenever he may deem it advisable, to order the enlargement or alteration of any ditch or ditches, and to fix what (if any) compensation shall be paid to the parties to be benefitted by such alteration or enlargement.

Settlement of Districts—As to Boundaries, &c.

In case of dispute as to boundary, or measurements, the Gold Commissioner shall have power to employ a surveyor to fix and mark the same, and cause the reasonable expense thereof to be paid by or between such of the parties interested in the question at issue as he shall deem fair and just.

Served under the Public Seal of the said Colony, at Victoria, Vancouver Island, this 24th day of February, A.D. 1863, and in the twenty-sixth year of Her Majesty's Reign, by me,

JAMES DOUGLAS.

By His Excellency's Command,

WILLIAM A. G. YOUNG.

Colonial Secretary.

APPENDIX D.

I. BRITISH COLUMBIAN GOLD DUST SHIPPED FROM VICTORIA
TO SAN FRANCISCO.

YEAR.	MACDONALD & CO.	WELLS, FARGO, & CO.	TOTAL.
1858	\$137,765	
1859	\$259,815	951,489	
1860	349,292	1,303,329	
1861	602,724	1,339,895	
Total.....	\$1,211,841	\$3,932,478	\$5,144,319
or about £1,028,164			

II. RETURNS OF THE ASSAY OFFICE AT NEW WESTMINSTER,
FOR 1861-2.

Amount of Gold Dust Assayed 71,172 ounces.
Approximate value \$1,223,854.

APPENDIX E.

The following statement on the Flexibility and Resistance, and Density of Masts from Vancouver Island, compared with masts from Riga, is taken from Dr. Forbes' *Essay on Vancouver Island*.

"The timber of British Columbia possesses similar qualities.

The principal quality of these woods is a flexibility and a tenacity of fibre rarely met with in trees so aged; they may be bent and twisted several times in contrary directions without breaking.

Several poles of the greatest length having the end at the foot, and the top of the tree cut off, were tried comparatively with poles of the same dimensions cut from a Riga spar of first class, and the following results were found:

Maximum degree of bending	}	Vancouver Pine.		Riga Pine.	
before rupture at the foot		0m	025.....	0m	028
At the head		0	019.....	0	016
Mean,.....		0	022.....	0	022
Charge of rupture (per centimeters)	}	23k 75.....		21k 00	
squared at the foot		16	11.....	19	03
At the head.....		19	93	20	23
Density of the wood	}	0 636.....		0 726	
at the foot of the tree		0	478.....	0	532
Density at the head.....		0	557	0	624

These experiments give a mean almost identical, for the bending and breaking of the two kinds of wood, while the density differs notably to the advantage of the Vancouver wood.

The only question still undecided is that of durability, the masts and spars of Vancouver are woods rare and exceptional for dimensions and superior qualities, strength, lightness, absence of knots and other grave vices.

Toulon, September 21st, 1860, Signed L. A. SILVESTER, Du Perron, Chief Engineer of 3rd Section."

The following extract from a London Paper, is given by a recent number of the *British Columbian* newspaper :

"The remarks lately made in our columns on the very great value of the DOUGLAS FIR, have led one of the most skilful of our judges of timber to favour us with the following highly important information. This fir wood, Mr. WM. WILSON SAUNDERS, F. R. S., of Lloyd's, has had many opportunities of examining carefully ; and, in order to satisfy one of our largest importers, he has made some careful experiments on its strength and flexibility in comparison with other similar woods. The following table, with which he has favoured us, gives the result, which is in the highest degree satisfactory. Mr Wilson Saunders has a regular machine for these experiments, and the results can be implicitly relied on.

Lengths of the woods enumerated in the following table, carefully squared to $1\frac{1}{4}$ inch, were submitted to pressure of weights pendent from the centre, the lengths being supported between standards exactly 6 feet apart. The weight at which each broke and the amount of deflection from the horizontal line at the time of breaking, are given in the following table :

	lbs.	INCHES.	
Douglas Fir, ...	280	4	Fracture, rough and long.
Pitch Pine, ...	280	4	" short and even.
Canada Spruce....	196	4.7	" short and rough.
Red Pine, ...	168	6	" rough.
Larch—British,...	168	5.2	" short and even.
Deodar from }			
Himalaya, }	... 154	3.8	" short.

Thespecimens experimented upon were carefully selected from the best description of wood, and free from all defects. The deflection is given in inches and tenths of an inch. Each wood had two trials, and the figures give a mean result."

Dr. Lindley commenting on these tables goes on to say :

"It will be thus seen that none of the firs approached in strength the Douglas or the Pitch Pine ; it having required the weight of 280 lbs to break a small bar of their wood, no more than an inch and a quarter square. A hundred and sixty-eight pounds broke a piece of British Larch of the same scantling. Moreover between the Douglas Fir and Pitch Pine, whose strength was equal, there is this great difference, that while the latter snapped short under a pres-

sure of 280 lbs, the Douglas yielded unwillingly with a rough and long rend.

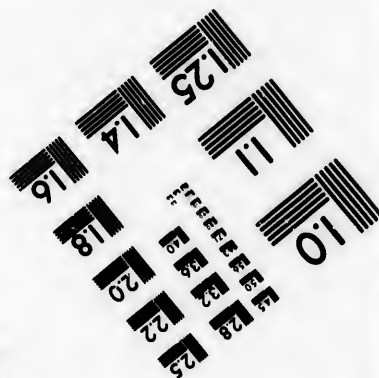
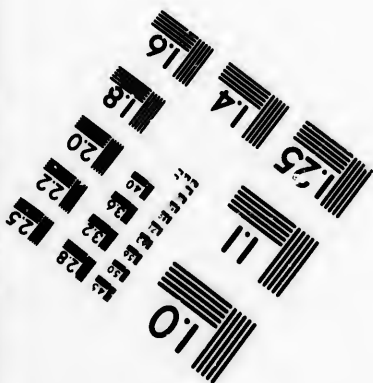
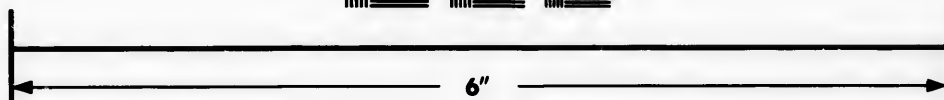
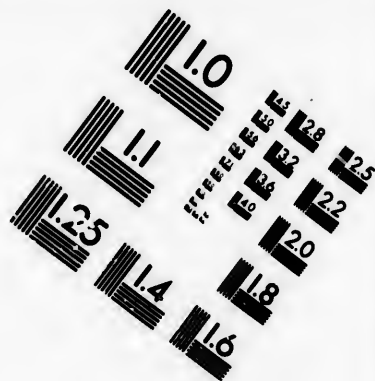
Since our last a further example of this tree has arrived at the International Exhibition, from British Columbia. It consists of 10 horizontal sections of that tree, 309 feet high, to which we formerly alluded, and of which a drawing has been suspended in the building. They are about to be displayed in the Court of British Columbia, and serve to show unmistakeably what a noble tree this is, and how superb an ornament as well as inexhaustible source of wealth to the two Colonies."

APPENDIX F.

ABSTRACT STATEMENT OF IMPORTS FOR THE YEAR 1862.

Articles.	From Vancouver Island.		From United States.	
	Quantity.	Value.	Quantity.	Value.
Ale and Porter				
in wood.....	5591 gals	4,539 10		
Do. in bottle...	5090 doz	13,825 29		
Agricul. Impts	362 pkgs	7,021 00	1 pkgs	49 00
Axes	172 cs	3,254 75	6 cs	105 00
Bacon & Hams	677818 lbs	118,743 52	27704 lbs	4,862 55
Barley	20777 sks	42,997 25	10007 sks	16,023 86
Beans	598653 lbs	52,957 47	19391 lbs	1,169 89
Beef, salt	243½ brls	3,714 83	10 brls	111 00
Billiard & Bag-				
atelle Tables	9 no	2,749 50		
Bitters	939 cs	6,869 69	58½ cs	437 50
Blankets	12634 prs	56,555 48		
Boots & Shoes	1117 cs	61,505 57	40 cs	2,766 50
Books	68 pkgs	1,527 96		
Bread	922 cs	5,958 17	24 cs	147 92
Bricks	39726 no	614 95		
Butter	117374 lbs	44,312 35	2396 lbs	753 39
Candles	81214 lbs	19,899 39	1060 "	256 00
Camphene.....	3136 gals	5,545 40		
Cheese	28768 lbs	7,043 11	142 lbs	28 40
China merdze.	330 pkgs	3,651 32		
Chocolate	471 lbs	202 54		
Cider	1952 gals	1,194 27		
Cigars	520875 no	31,782 75	13000 no	830 00
Clothing	415 pkgs	47,310 78	1 pkg	150 00
Coal	152 tons	1,904 83		





Photographic Sciences Corporation

**23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503**

2.8
2.5
2.2
2.0
1.8

10
01

IMPORTS CONTINUED.

Articles.	From Vancouver Island.		From United States.	
	Quantity.	Value.	Quantity.	Value.
Coffee	121133 lbs	34,499 98	2678 lbs	193 60
Confectionery..	126 pkgs	1,310 56		
Cordials	440 cs	2,442 88	18 cs	87 50
Drugs & Chms.	442 cs	8,602 58		
Dry Goods	1635 pkgs	157,646 87	48 pkgs	8,202 46
Earthenware ..	140 pkgs	3,143 64	23 "	541 72
Eggs	3324 doz	1,929 83	126 doz	81 12
Fish, preserved	752 cs	11,696 46	17 cs	233 33
Do., dry & salt	437 pkgs	3,615 92		
Fire Arms.....	38 pkgs	2,077 30		
Flour	24700 bris	219,930 46	1349 bris	12,159 13
Fruits, pres'd	319 cs	2,771 24	38 cs	418 24
Do., dried	1241 pkgs	11,819 93		
Do., fresh	2074 "	8,289 40		
Furniture	716 "	9,860 79		
Glass & Glass-ware.....	210 "	2,047 05		
Groceries	1703 "	9,316 92	76 pkgs	367 98
Gunpowder.....	25969 lbs	6,577 24		
Hardware	4614 pkgs	62,234 65	357 pkgs	5,371 34
Hay	89 tons	3,038 24	251 bales	676 83
Harness and Saddlery	722 pkgs	11,224 88	489 pkgs	7,352 03
Iron and Steel	1459 bds	7,646 02		
Lard.....	9722 lbs	19,060 33	1818 lbs	294 40
Leather	107 rolls	4,835 15		
Lime	370 brs	898 50		
Lumber	36884 feet	1,051 83		
Live Stock.				
Horses and Mules and 21				
Camels	1555 head	170,549 00	4932 head	437,333 00
Oxen	305 "	28,950 00	22 "	2,130 00
Bulls	6 "	720 00	3 "	130 00
Cows	15 "	710 00	273 "	13,940 00
Calves	13 "	132 50	28 "	485 00
Beef Cattle ..	567 "	40,793 00	4402 "	232,550 60
Sheep.....	2825 "	19,669 00	4117 "	26,785 00
Hogs	161 "	1,340 50		
Machinery.....	15 pkgs	931 60	2 pkgs	550 00
Matches.....	355 "	5,861 12		
Meat, preserved	551 cs	7,320 40		
Do., fresh	61554 lbs	8,535 24	250 lbs	25 60
Miscellaneous				
Merchandise	6563 pk s	124,533 01	751 pkgs	3,323 00
Molasses	28931 gals	11,120 70	250 gals	222 26
Nails	890 kegs	5,040 24	2 kegs	12 00
Nuts, Almonds	283 pkgs	1,775 62		
Oils, Sweet.....	142 cs	859 50	2 cs	10 00
Do., various ...	6395 gals	7,036 57	35 gals	21 57

IMPORTS CONTINUED.

Articles.	From Vancouver Island.		From United States.	
	Quantity.	Value.	Quantity.	Value.
Oats	2446 bus	4,437 29	661 sks	829 61
Opium	410½ lbs	6,170 50		
Paints	157 pkgs	747 07		
Potatoes	2969 bus	4,727 94	237 bus	336 28
Pork, salt	363 brls	8,026 00	14½ brls	300 20
Personal effects	134 pkgs	2,286 60	8 pkgs	125 00
Plants	38 "	843 50		
Poultry	61 doz	654 75	10 doz	52 50
Quicksilver ...	23 flks	966 37		
Rice	1205958 lbs	81,409 95	7700 lbs	409 75
Rope & Cordage	1009 coils	7,920 68	29 coils	254 06
Salt	753 pkgs	3,444 90	22 pkgs	86 87
Seeds, Grain...	125 "	782 55		
Do, Garden, &c.	87 "	1,018 11		
Shot	144 sks	520 53		
Soap	3497 bxs	7,687 12	279 bxs	361 00
Stationery	377 pkgs	4,820 55	13 pkgs	676 00
Sugar	688918 lbs	71,465 06	8277 lbs	653 70
Spirits	23233 gals	56,265 34	2409½ gals	6,143 49
Tar and Pitch	10 brls	57 75	4 brls	28 00
Tea	47749 lbs	24,454 40	845 lbs	287 40
Tin & Tinware	350 pkgs	2,301 90	2 pkgs	15 00
Tobacco	57886 lbs	43,578 79	5551 lbs	2,731 64
Vegtbls Onions	592 pkgs	2,350 29	1 pkgs	1 46
Do., preserved	435 cs	3,724 90	32 "	125 50
Do., fresh	123 pkgs	285 90	18 "	33 20
Wine, Cham... ..	481 bks	7,393 37		
Do. Chinamed.	1435½ gals	1,926 50		
Do., Claret	3232 "	5,288 00		
Do., various ...	4452 "	13,773 31	390 gals	856 40
Wheat	1037 bus	1,809 77	18 bus	21 50
Windowsashes and doors ...	214 bds	2,231 32		
Woodenware ..	360 pkgs	1,425 06	4 pkgs	18 00
Yeast Powders	532 "	13,538 01	13 "	412 70
Waggons	73 no	15,793 75	4 "	550 10
Government Stores		19,068 32		
		\$2013,393 82		\$787,447 19

Total value of Imports for the year 1862 \$2,800,840.91

Do. do. do. 1861 1,414,399.73

Shewing an increase of \$1,386,441.18

IMPORTS AND EXPORTS.

YEAR.	V. I.	U. S. A.	SHIPS ENTERED.	TONNAGE.
1859	£162,528	£14,770	119	14,125
1860	201,396	55,254	11,400	31,551
1861	226,642	56,237	11,686	16,025
1862	402,800	157,568		

APPENDIX.

APPENDIX G.

RATES OF DUTIES OF CUSTOMS NOW LEVIABLE UPON GOODS AND ARTICLES IMPORTED INTO BRITISH COLUMBIA.

	s.	d.
Flour, per barrel,	3	1½
Bacon, salt and dried Pork, per lb.	0	1
Beans, per 100 lb.	1	3
Barley, per 100 lb.	1	3
Butter, per lb.	0	2½
Candles, ,,	0	2½
Lard, ,,	0	1
Rice, per 100 lb.	3	1½
Tea, per lb.	0	2½
Coffee, ,,	0	1½
Sugar, ,,	0	1
Ale and Porter in bottle, per doz.	1	8
Ale and Porter in wood, per gallon,	0	7
Wine in wood and bottle, ,,	2	1
Bitters, per gallon,	2	1
Blankets, per pair,	2	1
Cheese, per lb.	0	2½
Opium, ,,	2	1
Dried fish, per lb.	0	1
Salt fish, ,,	0	0½
Chinese Medicated Wine, per gallon,	3	1½
Dried vegetables, (Chinese) per lb.	0	1
Salt vegetables, ,,	0	0½
Spirits, per gallon,	6	3
Horses, Oxen, Mules, per head,	4	2
Sheep, and Goats, ,,	2	1
Tobacco, per lb.	0	6½
Flour, 196 lb. per barrel,	3	1½

On all other articles a duty of 10 per cent on the value thereof.

APPENDIX H.

HARBOUR DUES.

	£	s.	d.
For every Sailing Ship or Vessel above 30 tons register either entering or leaving the said Port, per ton register,	0	0	3
For every steam vessel either entering or leaving the said port, per ton register,	0	0	2
For every vessel of and under 30 tons, including boats and canoes,	0	7	6

PILOTAGE,

For every vessel clearing for, or entering from parts beyond sea, viz,			
If less than 6 feet draught of water,	5	0	0
If more than 6 feet, and less than 7 feet draught of water,	5	10	0
And for every additional foot of water up to 12 feet,	0	10	0
And for every additional foot of water above 12 feet,	0	15	0

INLAND NAVIGATION.

Every steamer trading on the Fraser River and not trading to any part beyond sea, per ton register per annum,	0	2	0
---	---	---	---

APPENDIX I.

The following Tables of the Revenue and Expenditure for the years 1859, 1860, and 1861 have been kindly given for insertion:

GOVERNMENT OF BRITISH COLUMBIA.

REVENUE FOR THE YEARS 1859, 1860, 1861.

HEADS OF RECEIPT.	1859 AND PART OF 1858			1860			1861		
	£	s.	d.	£	s.	d.	£	s.	d.
Customs Duties.....	17849	7	7	29702	8	7	32864	18	11
Harbour Dues	572	3	1	611	3	5	317	6	2
Head Money.....	224	12	0	1054	0	0	446	12	0
Seizures and Fines.....	459	10	2	115	18	11	67	6	0
Tonnage Dues				3669	5	3	3701	8	4
Inland Navigation Licenses				93	10	0	52	8	0
Customs Fees				11	12	0	18	1	0
Land Sales.....	18923	5	8	11075	12	1	5703	15	0
Land Revenue.....				69	11	3	785	19	9
Free Miners' Certificates.....	508	0	0	1436	0	0	1925	0	0
Mining Receipts General.....	1372	12	7	807	5	4	765	6	5
Spirit Licenses } united	4374	3	1	1628	12	10	1837	2	9
Trading Licenses } in 1859				551	0	0	843	0	0
Road Tolls				539	7	6	6296	10	8
Rents (inclusive of Land)...	538	16	0	278	3	6			
Postal.....	157	1	7	121	7	5	131	1	1
Fines, Forfeitures, and Fees	367	10	9	562	9	4	538	13	5
Fees of Office.....				226	17	6	617	6	10
Miscellaneous	1356	18	4	274	14	5	402	18	6
Rents (exclusive of Land)...	262	4	0	369	9	0	749	17	0
Deposits	108	15	6	40	1	9	10	12	0
Mule Tax				30	0	0			
Interest.....				11	12	10			
Refund				8	6		17	15	4
Sale of Government Prop'ty							173	16	11
Bullion Exchange.....							87	1	4
Re-imbursements in aid of expenses incurred by Go- vernment							8	0	0
Excise Duties							34	0	0
Road Debentures issued				5200	0	0	2250	0	0
	47125	0	4	58526	11	5	60645	17	5
Imperial Government	39391	4	3	24518	5	6	18513	0	3
Loan							1951	4	5
Treasurer, balance due him							2321	13	3
	£86516	4	7	83044	16	11	83431	15	4

EXPENDITURE FOR THE YEARS 1859, 1860, 1861.

HEADS OF EXPENDITURE.	1859 AND PART OF 1858			1860			1861		
	£	s.	d.	£	s.	d.	£	s.	d.
Salaries, Fixed	4514	18	7	5190	7	11	7141	16	1
do. Provisional & Tem.	19476	4	0	9179	19	2	12353	7	3
Office Contingencies	1250	7	11	1043	19	9	2081	2	1
Allowances	136	4	0	1018	9	4	530	7	10
Revenue Service, Exclusive of Establishments.....	761	17	11	179	1	7	221	11	8
Police and Gaols, do.	24	7	0	792	14	0	2556	9	7
Works and Buildings.....	7344	7	11	3725	19	0	3079	18	5
Roads, Streets, & Bridges...	1905	4	1	21076	16	10	29010	10	10
Harrison River Road	292	1	0						
Surveys and Explorations...	3726	3	1	1635	15	8	1881	12	3
Transport.....	2419	10	2	1263	9	4	4512	8	4
Miscellaneous	6650	14	10	317	0	10	469	8	10
Stores	651	16	5						
Fines, Forfeitures, and Fees	56	19	4						
Rents.....	30	4	0	38	0	0	174	0	0
Administration of Justice...	108	11	6	194	1	3	7	0	0
Charitable Allowances				200	0	0	449	3	10
Refunds				135	0	0	884	2	3
Conveyance of Mails				41	3	0			
General, Ex. of E.				359	4	7	291	9	4
Light Houses.....							600	0	0
Interest.....							68	1	10
Bullion Exchange							49	19	9
Redemption of Bonds				780	0	0	3620	0	0
	39449	11	9	47171	2	3	69982	10	2
Military Expenditure.....	37374	5	8	24688	7	3	20993	18	9
	£ 76823	17	5	71859	9	6	90076	8	11

APPENDIX K.

STATISTICS OF CRIME.

The number of cases entered on the books of the House of Correction, New Westminster, from October 27th, 1860, up to May 31st, 1862, was.....164
of these there were discharged.....81
Number convicted,83

And these figures represent, not the crime of New Westminster alone, but also *to some extent* of the whole country, seeing that criminals in the upper Towns are usually, after receiving sentence, sent to the Prison at New Westminster. Cases of light offence, and also a small percentage of graver ones, occurring in the other towns are not included, these offenders not having been sent to New Westminster.

Tables shewing the list of persons received into the House of Correction from May 31st, 1861, to May 31st, 1862, with their several crimes and respective nationalities.

CRIMES.	NO. OF CASES.	SENTENCE.
Murder,	2	Death; in 1 case reprieved.
Accessory before fact, murder, 1		7 years imprist. hard labour.
Felony,	1	10 years, do. do.
Larceny,	8	24 hours to 2 months' do.
Selling Spirits to Indians,	5	1 month to 3 months' do. or heavy fine.
Horse Stealing,	2	2 months and 2 years, do.
Stabbing,	1	14 days, do. do.
Riotous,	2	7 days and 14 days, do.
Assault,	7	1 to 3 months, or fine, do.
Total,	29	

Of these the nationalities were as follows :

English,	1
Irish,	3
Americans,	3
Dane,	1
Mexicans,	5
Kanakas,	3
Indians,	8
Half-breeds,	5
Total,	29
In addition to which there were cases of Drunkenness,	23
General Total	52

APPENDIX L.

BRITISH COLUMBIA.

PROCLAMATION NO. 9, A.D. 1861.

By His Excellency JAMES DOUGLAS, Companion of the Most Honourable Order of the Bath, Governor and Commander-in-Chief of British Columbia and its Dependencies, Vice-Admiral of the same, &c., &c.

WHEREAS, under and by virtue of an Act of Parliament, made and passed in the Session of Parliament held in the 21st and 22nd years of the Reign of Her Majesty Queen Victoria, entitled "An Act to provide for the Government of British Columbia," and by a Commission under the Great Seal of the United Kingdom of Great Britain and Ireland, I, JAMES DOUGLAS, have been appointed Governor of the said Colony, and have been authorized by Proclamation under the Public Seal of the said Colony, to make laws, institutions, and ordinances for the peace, order, and good government of the same;

And whereas it is expedient to amend and consolidate the laws

affecting the settlement of unsurveyed Crown Lands in British Columbia;

Now, therefore, I do hereby declare, proclaim, and enact as follows:

Repeal of former Proclamations.

I. The Proclamation issued by me, under the Public Seal of the said Colony, dated the 4th day of January, 1860, and the Pre-emption Amendment Act, 1861, and the Pre-emption Purchase Act, 1861, are hereby repealed.

Purchasers since the 20th June to hold on the ordinary terms of Pre-emption.

II. All purchasers of unsurveyed land in British Columbia, who shall have made their purchases subsequently to the 20th day of June, 1861, and previously to the 27th day of August, 1861, shall hold the land purchased under precisely the same terms and conditions of occupation and improvement as are mentioned in the said Proclamation of the 4th day of January, 1860, with regard to lands Pre-empted without purchase.

British subjects, and aliens who shall take the oath of allegiance, may acquire the right to hold land, and to purchase the same when surveyed, on certain conditions.

III. That from and after the date hereof, British subjects and aliens who shall take the Oath of Allegiance to Her Majesty and Her Successors, may acquire the right to hold and purchase in fee simple, unoccupied and unsurveyed and unreserved Crown Lands in British Columbia, not being the site of an existent or proposed Town, or auriferous land available for mining purposes, or an Indian Reserve or Settlement, under the following conditions.

The settler shall enter into possession and record his claim to any quantity not exceeding 160 acres.

IV. The person desiring to acquire any particular plot of land of the character aforesaid, shall enter into possession thereof, and shall record his claim to any quantity not exceeding 160 acres thereof, with the Magistrate residing nearest thereto; paying to the said Magistrate the sum of eight shillings for recording such claim.

A holder of land may acquire additional land contiguous to the 160 acres, by paying an instalment of the purchase money.

V. Any person in possession of 160 acres of land as aforesaid, may acquire the right to hold and purchase any further tract of unsurveyed and unoccupied land aforesaid, over and above the quantity of 160 acres aforesaid, and contiguous thereto, upon payment to the nearest Magistrate of the sum of 2s. 1d. per acre for the same, as and by way of instalment of the purchase money to be ultimately paid to the Government upon the survey of the same land.

Proposing purchaser shall hold and record.

VI. Any person so paying such deposit shall enter into possession and record his claim to such last mentioned tract of land, in manner hereinbefore prescribed.

Description of the land, how to be stated.

VII. The claimant shall in all cases give the best possible description of the land to the Magistrate with whom his claim is recorded, together with a rough plan thereof, and identify the plot in question by placing at the corners of the land four posts, and by stating in his description any other land marks of a noticeable character.

Rectangular shape, or as nearly as possible proportion of the lines.

VIII. Every piece of land sought to be acquired under the provisions of this Proclamation, shall, save as hereinafter mentioned, be of a rectangular shape, and the shortest line thereof shall be at least two-thirds the length of the longest line.

Natural boundaries may be adopted in certain cases.

IX. Where the land sought to be acquired is in whole or in part bounded by mountains, rocks, lakes, swamps, or the margin of a river, or by other natural boundaries, then such natural boundaries may be adopted as the boundaries of the land sought to be acquired, and in such case it shall be sufficient for the claimant to show to the satisfaction of the Magistrate, that the said form conforms as nearly as circumstances permit to the provisions of this Proclamation.

Lines of adjacent claims may be adopted.

X. If the land sought to be acquired be bounded by a claim, the line of such claim may be adopted by the person so seeking to acquire, notwithstanding any irregularity in such line which may have been occasioned by the adoption of a natural boundary by the claimant of the adjacent claim.

Enclosed spaces may be adopted, notwithstanding any irregularity of shape.

XI. Where a piece of land is partially or entirely enclosed between two or more claims, the claimant may acquire such enclosed piece, notwithstanding any irregularity of form, or disproportion in length, of any of the sides.

Boundaries to run as nearly as possible according to the points of the compass.

XII. The boundaries shall run as nearly as possible by the cardinal points of the compass.

Purchase on Survey.

XIII. When the Government Survey shall extend to the land claimed, the claimant who has recorded his claim as aforesaid, or his heirs or devisees, or in the case of the grant of a certificate of improvement hereinafter mentioned, the assigns of such claimant shall, if he or they shall have been in continuous occupation of the same land from the date of the record aforesaid, be entitled to purchase the land so acquired, or in respect of which such deposit shall have been paid as aforesaid, at such rate as may for the time being be fixed by the Government of British Columbia, not exceeding the sum of 4s. 2d. per acre.

Certificate of improvement to be issued when improvements have been made to the extent of 10s. per acre

XIV. When the claimant, his heirs or devisees, shall prove to the nearest Magistrate by the evidence of himself and of third parties, that he or they has or have continued in permanent occupation of the claim from the date of record, and has or have made permanent improvements thereon to the value of 10s. per acre, the said Magistrate shall grant to the said claimant, his heirs or devisees, a certificate of improvement in the form marked A, in the Schedule hereto.

When Certificate of Improvement has been issued the holder may sell or deal with the land.

XV. Upon the grant of the certificate of improvement aforesaid, the person to whom the same is issued may, subject to any unpaid

instalments, sell, mortgage, or lease the land in respect of which such certificate has been issued, but no interest in any plot of land acquired in either of the methods aforesaid, shall, before payment of the purchase money, be capable of passing to a purchaser, unless the vendor shall have obtained such certificate of improvement as aforesaid.

Conveyance on payment of the purchase money.

XVI. Upon payment of the purchase money, a conveyance of the land purchased shall be executed in favour of the purchaser, reserving the precious minerals with a right to enter and work the same in favour of the Crown, its Assignees and Licensees.

Compensation to owner whose land may be taken or injured in certain cases.

XVII. In the event of the Crown, its Assignees or Licensees, availing itself or themselves of the privileges (other than the taking of land required for roads) mentioned in clauses 25 and 26, a reasonable compensation for the land taken, wasted, or damaged shall be paid to the person whose land shall be taken, wasted, or damaged as aforesaid, and in case of dispute the same shall be settled by a jury of six men, to be summoned by the nearest Magistrate.

Priority of title.

XVIII. Priority of title shall be obtained by the person who, being in possession, shall first record his claim in manner aforesaid.

Cancellation of claim on permanent cessation of occupation.

XIX. Whenever any person shall permanently cease to occupy land acquired in either of the methods aforesaid, the Magistrate resident nearest to the land in question may, in a summary way, on being satisfied of such permanent cessation, cancel the claim of the person so permanently ceasing to occupy the same, and record the claim thereto of any other person satisfying the requisitions aforesaid.

Deposits and improvements forfeited on cancellation.

XX. All deposits paid in respect of such forfeited claims, and all improvements, buildings and erections thereon, shall, (subject to the appeal hereinafter mentioned,) on such cancellation, be absolutely forfeited; and such claims, improvements, buildings and erections shall, subject to the appeal hereinafter mentioned, be open to settlement by any other person.

Appeal.

XXI. The decision of the Magistrate, may be appealed by either party, to the decision of the Judge of the Supreme Court of Civil Justice of British Columbia.

Security on Appeal.

XXII. Any person desirous of appealing in manner aforesaid, may be required before such appeal be heard, to find such security as may be hereafter pointed out by the Rules or Orders hereinafter directed to be published.

Procedure.

XXIII. The procedure before the Magistrate and Judge respectively, shall be according to such Rules and Orders as shall be published by such Judge with the approbation of the Governor for the time being of British Columbia.

Ejectment or trespass by holder.

XXIV. Whenever a person in occupation at the time of record

aforesaid, shall have recorded as aforesaid, and he, his heirs, or (in the case of a certificate of improvement) his assigns, shall have continued in permanent occupation of the same land since the date of such record, he or they may, save as hereinbefore mentioned, bring ejectment or trespass, against any intruder upon the same land, to the same extent as if he or they were seized of the legal estate in possession in the same land.

Saving of right to search and get Gold in favour of free miners.

XXV. Nothing herein contained shall be construed as giving a right to any claimant to exclude free miners from searching for any of the precious minerals or working the same, upon the conditions aforesaid.

Power to Government to re-take land for public purposes.

XXVI. The Government shall notwithstanding any claim, record, or conveyance aforesaid, be entitled to enter and take such portion of the land acquired in either of the methods aforesaid, as may be required for roads, or other public purposes.

Water for mining purposes may be taken.

XXVII. Water privileges, and the right of carrying water for mining purposes, may, notwithstanding any claim recorded, be claimed and taken upon, under or over the said land so pre-empted or purchased as aforesaid, by free miners requiring the same, and obtaining a grant, or license from the Gold Commissioner, and paying a compensation for waste or damage to the person whose land may be wasted or damaged by such water privilege or carriage of water, to be ascertained in case of dispute in manner aforesaid.

If new claim taken up the old one is lost.

XXVIII. If any person being already registered as a claimant, register a claim to any other land not being contiguous thereto, the land so previously claimed shall, *ipso facto*, be forfeited, and shall, with all improvements made thereon, be open to settlement by any other person.

Arbitrament of Magistrate.

XXIX. In case any dispute shall arise between persons with regard to any land so acquired as aforesaid, any one of the parties in difference may, before ejectment or action of trespass brought, refer the question in difference to the nearest Magistrate, who is hereby authorized to proceed in a summary way to restore the possession of any land in dispute to the person whom he shall deem entitled to the same, and to abate all intrusions, and award and levy such costs, and damages as he may think fit.

Short Title.

XXX. This Proclamation may be cited as the "Pre-emption Consolidation Act, 1861."

{
L. S.
}

Issued under the Public Seal of the said Colony, at Victoria, Vancouver Island, this 27th day of August, in the year of Our Lord One Thousand Eight Hundred and Sixty-One, and in the Twenty-fifth Year of Her Majesty's Reign, by me,

JAMES DOUGLAS.

By His Excellency's Command,
WILLIAM A.G. YOUNG.

GOD SAVE THE QUEEN.

SCHEDULE A.

I hereby certify that _____ has satisfied me by evidence of (naming the witnesses, and detailing any other evidence upon which the Magistrate has come to his judgment) that _____ of _____ has made improvements to the extent of 10s. an acre on _____ acres of land, situated at _____

Signed,
this _____ day of _____

APPENDIX M.

THE FOLLOWING IS AN ABSTRACT OF THE PROCLAMATION ALLOWING GRANTS OF LAND TO MILITARY AND NAVAL OFFICERS.

I, JAMES DOUGLAS, do proclaim that from and after the date hereof (1st Jan. 1863.) Military and Naval Officers in Her Majesty's Service, of the rank hereinafter specified, shall be entitled without pay to free grants of unoccupied and unsurveyed Country land in the amounts and manner following, that is to say :

	ACRES.
Field Officers, of 25 years' service, in the whole,.....	600.
Field Officers, of 20 years' service and upwards, in the whole,.....	500.
Field Officers of 15, or less, years' in the service, in the whole,.....	400.
Captains of 20 years' service and upwards, in the whole,.....	400.
Captains of 15 years' service or less, in the whole,.....	300.
Subalterns of 20 years' service and upwards, in the whole,.....	300.
Subalterns of 7 years' service and upwards, in the whole,.....	200.

Every person desiring to take advantage of the privileges aforesaid, shall, before obtaining the same, produce to and leave, with the Chief Commissioner of Lands and Works for British Columbia, a certificate from the office of the General Commanding-in-Chief in England, or from the office of the Lords Commissioners of the Admiralty showing that the settlement of the said person in a British Colony has been duly sanctioned, and showing also the rank and length of service of such person; but nothing herein contained shall entitle any person to any of the privileges aforesaid, except such person shall at the time of settling be either on half pay or full pay, unless the person settling shall have quitted the service for the purpose of settling in a British Colony as hereinafter mentioned.

APPENDIX N.

I. LIST OF PRICES AT NEW WESTMINSTER.

Flour £2 8s. per barrel of 196 lbs., or 24s. per cwt. (the cwt. being literally 100 lbs.), the loaf of 2½ lbs. 1s.; in cheaper times flour is 32s. per barrel; Beef 1s. to 15d. per lb., sometimes 7½ per lb.; Mutton 1s. 3d. per lb.; Rice 5d. or 6d. per lb.; Sugar 7½d. to 8d per lb.; Tea 3s. to 4s. per lb.; Coffee 2s. per lb.; Bacon 10d. and

1s. per lb.; Beans 8d. per lb., sometimes 2s. per lb.; Milk 4s. per gallon; Salt Butter 2s. 6d. per lb.; Beer 2s. 6d. to 4s. per gallon; Sherry, in wood or glass, £1 10s. per gallon; Champagne do.; Claret 6s. per gallon; Whiskey 16s. per gallon wholesale, £1 10s. per gal. retail; Salmon 2d. to 6d. per lb.; Dried Apples 7½d. to 10d. per lb.; Soap 8d. per lb.; Candles 2s. per lb.; Tobacco 4s. per lb.

II. LATEST WHOLESALE PRICES AT LILLOOET, MARCH, 1863.

Flour 6d. per lb.; Beef 1s. per lb.; Bacon 3s. per lb.; Beans 1s. 9d. per lb.; Rice 8d. per lb.; Sugar 1s. per lb.; Butter 3s. per lb.; Coffee 2s. per lb.; Tea 4s. per lb.; Dried Apples 2s. per lb.; Tobacco 8s. per lb.

III. LATEST QUOTATIONS AT RICHFIELD, FEBRUARY, 1863.

Flour 3s. 9d. per lb.; Beef 1s. 8d. per lb.; Bacon 5s. 5d. per lb.; Beans 4s. per lb.; Sugar 5s. per lb.; Butter 10s. per lb.; Coffee 5s. 5d. per lb.; Tobacco 16s. per lb.; Candles 16s. per lb.

APPENDIX O.

MINERS' OUTFIT.

The following articles are essential :

2 Woollen Shirts,	a strong pair of trousers,
4 pairs Worsted Socks,	an India-rubber coat,
a pair of leather top-boots,	2 pairs of blankets,
a pr. of India rubber mining boots,	a small tent.

APPENDIX P.

The following tables of distances are given by Dr. Rattray, (*Vancouver Island and British Columbia*, page 134.)

DISTANCES FROM HONG KONG TO ENGLAND BY THE DIFFERENT ROUTES.

	MILES.	DAYS.
Distance from Hong Kong to British Columbia	6053	21 (steam.)
„ British Columbia to Halifax	2536	6 (railway.)
„ Halifax to Southampton.....	2532	9 (steam.)
• Total...	11,121	36

Distance by Cape of Good Hope (Hong Kong to Southampton)	12,000	110
„ Overland, by Suez (Hong Kong to Southampton)	9,467	50-60
„ British Columbia (Hong Kong to Southampton)	11,121	36

DISTANCES FROM SYDNEY TO ENGLAND BY THE DIFFERENT ROUTES.

Sydney to Southampton, by Cape of Good Hope	11,880 miles,
do. do. Suez	11,219 „
do. do. Cape Horn	12,746 „
do. do. Panama	11,115 „
do. do. Vancouver Island.....	11,794 „

APPENDIX Q.

A TABLE OF THE LATITUDES AND LONGITUDES OF SOME PLACES
IN BRITISH COLUMBIA, AS DETERMINED BY THE ROYAL ENGINEERS.

Prepared at the Office of Lands and Works, by order of
COL. R. C. MOODY, R.E.

An absolute value for the Longitude of New Westminster, namely 8h. 11m. 33.3s. West of Greenwich, was obtained by observations made during six lunations in 1859-60, by Captain Parsons and Corporal Leech, R.E., the results being corrected for errors in the moon's places in the Nautical Almanac. The other Longitudes are chronometric measurements from New Westminster; those of Point Garry, Langley Barracks, Hope, Yale, Douglas, and Lillooet have been repeated, but the value of the remainder of the determinations is that which may be attached to the transport of one chronometer.

STATION.	LATITUDE		APPROX.	
	NORTH.		LONG. WEST.	
Alexandria, - - -	52°33'40"		122°26'56"	
Anderson, - - -	50 32 13		122 35 22	
Antler, - - -	52 58 44		121 26 22	
Asananny, - - -	52 24 40		126 30 7	
Beaver Creek, Cut Off Valley, -	51 7 6		121 39 59	
Beaver Lake, Sellers' Hotel -	52 29 19		121 55 4	
Beaver Pass house, Lightning Creek, -	53 3 58		121 52 49	
Bridge River, mouth, -	50 45 33		122 3 53	
Bridge Creek house, - - -	51 39 2		121 24 58	
Campment du Chevreuil. - - -	49 20 57		121 8 34	
Cameron's Farm, 12 m. from Cottonwood	53 1 38		122 14 28	
Campment des Femmes, - - -	49 32 29		120 45 28	
Glanthopeen Lake, - - -	52 8 53		124 20 43	
Cottonwood, - - -	53 0 33		122 5 7	
Cokelin, - - -	52 22 41		125 50 24	
Douglas, - - -	49 45 20		122 11 4	
Esquimalt, V. I., Duntze Point, -	48 25 49		123 26 46	
(Fort Colville, U. S., - - -	48 38 3		118 7 19	
Fort George, - - -	53 53 29		122 45 1	
Fountain, - - -	50 44 44		122 1 26	
Garry Point, - - -	49 7 5		123 11 17	
Green Lake, opposite Crescent Island,	51 23 4		121 29 9	
Harrison River, mouth, - - -	49 14 25		121 54 34	
Hat River, mouth, - - -	50 54 7		121 33 30	
Hope, - - -	49 22 21		121 27 58	
Keithley, - - -	52 45 21		121 28 32	
Ko-om-ko-otz, - - -	52 22 36		126 47 34	
Lake La Hache, East end, (camp), -	51 49 41		121 35 57	
Lake La Hache, West end, - - -	51 51 50		121 44 10	
Langley Barracks, - - -	49 12 9		122 35 14	
Lillooet, Court House, - - -	50 41 49		122 2 28	
Lillooet Lake, 29 mile house, -	50 3 0		122 35 42	
Lytton, - - -	50 13 45		121 40 19	
Marmot Lake, - - -	53 0 25		121 35 33	
NEW WESTMINSTER, - - -	49 12 47		122 53 19	
Nimpoh, (camp), - - -	52 22 51		125 13 48	
North River, opposite mouth, -	50 39 3		120 27 20	

APPENDIX.

xxxiii.

TABLE OF LATITUDES AND LONGITUDES CONTINUED.

STATION.	LATITUDE		APPROX.	
	NORTH.		LONG. WEST.	
Okanagan Lake, head of, - -	50	21 13	119	26 35
Osoyoos Lake, - - -	49	1 52	119	36 55
Pavillon Mountain, North base, -	50	59 15	121	58 37
Pemberton, - - -	50	17 32	122	43 15
Puntzee, - - -	52	12 10	124	2 24
Quesnelle River, mouth, - -	53	0 17	122	27 6
Quesnel River, Lower Ferry, Donaldson's	52	58 15	122	26 52
Quesnell River, Forks, - -	52	39 42	121	42 52
Round Prairie, Philips' Farm, -	52	47 57	122	23 49
Richfield, Court house, - -	53	3 9	121	33 55
Salmon River, Grand Prairie, -	50	28 34	119	47 35
Seton, - - -	50	40 18	122	5 47
Seton Lake, West end, - -	50	42 25	122	26 43
Shtcoilt, - - -	52	21 36	126	5 16
Snowshoe house, 7 miles from Antler,	52	55 0	121	27 22
Swift River, mouth, - - -	53	7 39	122	28 34
Tahartee Lake; - - -	52	24 32	123	2 49
Vanwinkle, Court house, - -	53	1 31	121	44 42
Vermillion Forks, - - -	49	27 42	120	28 52
Williams Lake, Court house, -	52	9 24	122	13 32
Yale, - - -	49	33 44	121	25 58

