

Overland Coach Road.

MINUTE of the Chief Commissioner of Lands and Works on the subject of an Overland Coach Road through British Territory, between the Pacific Coast and Canada, comparing the merits of the various passes through the Rocky Mountains, and showing the extent of this road already built in British Columbia, and what remains to be done to complete it beyond the eastern boundary of the Colony to the head of steamboat navigation on the Saskatchewan.

Little has hitherto been done towards the construction of a trail or roads across the Rocky Mountains north of the 49th Parallel. The primitive paths through the various passes of this Mountain Range, originally tracked out by Indians and only kept open year by year by their travel along them, are still the sole means of communication between British Columbia and the North West Territory.

Some little work was indeed done, years ago, by the Hudson's Bay Company in opening trails through the Leather and Athabasca Passes, to facilitate the passage of their brigades, which at that time carried supplies from the depot east of the Rocky Mountains to Jasper's House, and thence westwards, by the Tete Jaune Cache, down the Fraser River to the various posts in the region of country now included in British Columbia; or southward, by the Athabasca Pass, to the Boat Encampment, and down the Columbia to the posts in Washington and Oregon. But soon after the Company established posts at Fort Vancouver and Victoria, supplied by ships direct from England, communication by these passes was discontinued, and the trails through them lapsed into disuse, and were soon in no better condition than before they were improved by the Hudson's Bay Company's employes. At present, except when travelled over by occasional parties of prospectors or scientific explorers, these, as well as all the other Rocky Mountain passes in British Territory, are made use of by Indians only.

Many of these passes are, however, even in their primitive condition, so easy of passage that horses carry heavy loads over them with facility; and through the Vermilion Pass loaded carts have been driven on the natural roadway unimproved by labor.

But, although the work of building a road over the Rocky Mountains has yet to be commenced, much has already been effected by this Colony towards the consummation of the much desired line of road communication, through British Territory, between the Sea Coast of British Columbia and Canada. In fact more than one-half (in cost) of this work within the limits of the Colony is now complete.

The Cascade Range of Mountains, the great barrier between the Sea Coast of this Colony and its interior districts, which presented a far more difficult engineering obstacle to road-making, and one more expensive to overcome than the Rocky Mountains themselves, has been pierced by two lines of coach road, which, commencing at Yale and Douglas respectively, the limits of steamboat navigation on the Lower Fraser River and its tributary Harrison Lake, unite at Clinton, 136 miles from Yale, on the high rolling plateau in the interior of the Colony, from which junction point the road extends 242 miles further northwards to Cameron-town, in the heart of the Cariboo District, distant altogether 378 miles from Yale.

A branch road 25 miles long, has also been built from the main line; at a point on the Buonavante River, 110 miles from Yale, to Buonavante at the lower (western) end of Kamloops Lake, from which place uninterrupted steamboat navigation extends through Kamloops Lake, and up the South Thompson River, to the upper (eastern) end of Great Shuswap Lake, a distance of 115 miles, and also up the North Branch of Thompson River, which joins the South Thompson at Fort Kamloops, to a distance of 88 miles from the latter post.

These roads, constructed at a total cost of \$1,339,918 (about \$275,000) of which amount the section from Yale to Savona's costs \$830,000 (about \$166,000) are of a character very superior to that of public roads in most young countries. They are 18 feet wide, the surface being covered with broken stone, where (as in most parts along the Fraser, and Thompson Rivers) such material is at hand, or with gravel well cambered up in the centre, with ditches on one or both sides where required.

With the exception of some short pitches as steep as one foot in ten, the sharpest inclines throughout this road are of one foot in twelve, the curves being easy, and the bridges and culverts substantially built of timber.

Loads of seven and eight tons are hauled along them by mules or oxen, at an average draught load of 1,200 lbs. or 1,300 lbs. to each team animal; and the Mail Coaches drawn by six horses travel between Yale and Cariboo at the rate of nine miles an hour.

From the Cariboo terminus of this road, and from Savona's, as well as from intermediate points along the road, various routes may be traced to the different passes of the Rocky Mountains. But before a judicious selection can be made of the line for a wagon road to the territory east of the Rocky Mountains, it will be necessary to determine by more exact and detailed engineering explorations and surveys than those above described, which of these passes presents the least obstacles to the construction and maintenance of a road through it, as well as the greatest advantages in its approaches, not only as regards engineering facilities, but with respect also to the character of the country to be passed through on either side of the mountains, its soil, climate, freedom from inroads of hostile Indians, and general capabilities for settlement, and especially in relation to its accessibility from the existing lines of communication in this Colony and to the eastward.

The following remarks embody the most reliable information extant on this subject; and the accompanying opinions and estimates based thereon are advanced in anticipation of the results of such a detailed survey as has just been suggested.

The passes through the Rocky Mountains at present known from the reports of various explorers, commencing with the Leather Pass, the most northerly point by which it would be practicable for a road connecting

the Fraser River Valley with the navigable waters of the Saskatchewan to cross this range, and enumerating thence southward to the 49th Parallel, are as follows, with their respective altitudes as far as they have been reliably determined by actual observation:

1 Leather Pass.....	Altitude 3,760 feet.
2 Athabasca.....	" 7,000 "
3 Howse's.....	" 4,500 "
4 Kicking Horse.....	" 5,210 "
5 Vermilion.....	" 4,933 "
6 Kananaski.....	" 5,700 "
7 Crow's Nest.....	" 6,300 "
8 Kootenay.....	" 6,300 "
9 Boundary.....	" 6,030 "

Of these the Athabasca Pass, although otherwise very favorably situated, is so elevated, steep and rugged as to be quite impracticable for a coach road. The six last enumerated passes, although generally easy of passage, and in other respects available for road communication, are too far south for the purpose of such a line of connection between the sea-coast of British Columbia and the Canadas as is now under consideration; it having been determined by actual survey that no practicable route exists for a road through the three parallel ranges of mountains lying between the Lower Fraser Valley and the Rocky Mountains, viz.: the Cascade immediately east of the Fraser; the Gold Range west of the Columbia; and the Selkirk Range in the Big Bend of the Columbia, and between that river and the Kootenay River, except that on which the road is now built from Yale up the Fraser and Thompson River Valleys to Savona's, thence by Kamloops, through the Eagle Pass, at the upper end of Great Shuswap Lake, to the Columbia River at the Great Eddy below the Little Dalles, and northward along the valley of that river, by the Boat Encampment, and round the Big Bend southward past the mouth of Howse's Pass, of which line a more detailed description will be given further on, in connection with the Howse's Pass Route.

The position of these southern passes is therefore, as regards their accessibility from the west coast, very disadvantageous when compared with that of Howse's Pass. But they are still more ineligibly placed in respect to the approaches to them from the eastward; for these passes all debouch to the east into valleys, the waters of which are tributary to the South Saskatchewan, passing through a region of country beset with predatory Indians, and sterile and unattractive in comparison with the rich belt of land further north, through which the North Saskatchewan flows.

Through this rich district along the North Saskatchewan, a line of communication between British Columbia and the Red River Settlement must pass, by whatever route it may cross the great watershed of the continent; indeed it may safely be taken as an established fact that such a line of communication must intersect the North Saskatchewan at Fort Edmonton, or some point higher up stream, so as to take advantage to the utmost of the long extent of navigable water of that river.

From such point, however, the southern passes are entirely cut off. They may therefore be dismissed from further consideration in relation to an overland route through British Territory, the choice for which is thus narrowed down, as to the point of crossing the Rocky Mountains, to an alternative between the Leather Pass and Howse's Pass.

LEATHER PASS ROUTE.—The summit of the Leather Pass is the least elevated of all the known passes of the Rocky Mountains north of the 49th Parallel, being only, according to Dr. Rae, 3760 feet above the sea. From Tete Jaune Cache at the western end of this pass of the Fraser River, in Latitude 52° 48' north, Longitude (about) 119° 50', to Henry's House nearly due east, the distance is about 95 miles, the watershed being situated 25 miles west of Henry's House.

From Henry's House the pass turns nearly due north, and follows this course along the Athabasca River 25 miles to Jasper's House, at the eastern outlet of the pass. The total length of this pass is thus about 120 miles, in which distance no great obstacles to the construction of a road are presented by the natural formation of the ground, the chief difficulties being the swampy nature of the soil in places, and the frequent crossings of mountain streams.

From Jasper's House to Fort Edmonton, the distance by the present line of travel is about 250 miles, through a rolling country gradually descending to the East, but in great part swampy, very deficient in grass or other feed for stock, and offering but little inducement for settlement. The distance from Jasper's House to the navigable water of the Saskatchewan may, however, be reduced to about 160 miles, by adopting a line intersecting that river at the junction with it of Brazeau River. This line would pass through a country materially the same as that between Jasper's House and Edmonton, and on which the chief road-making difficulties would be the great extent of swamps to be passed through.

The whole distance from Tete Jaune Cache to steamboat navigation on the Saskatchewan thus appears to be 280 miles, and the cost of constructing this length of road, of the character of those above described already built in this Colony, may be approximately estimated at \$650,000.

From Tete Jaune Cache the Fraser River is stated to be navigable for steamers with some three or four interruptions, where falls and rapids occur, necessitating portages at these points, to Quesnelmouth, 320 miles from Yale, on the coach road between Yale and Cameron-town.

The information obtained from persons who have travelled along this portion of the Fraser in canoes is too incomplete and wanting in detail to form the basis of any just estimate of its facilities for steamboat navigation; enough is known, however, to warrant the conclusion that the impediments to navigation will on practical investigation be found far more numerous and serious than they are now supposed to be by those who favour this line of route. At all events it is certain that this long line of water carriage, even if practicable at any time, can be made available only for a short period during the summer and autumn; and as the construction of a road along the Fraser from Quesnelmouth to Tete Jaune Cache is out of the question, not only on account of the distance between these points (330 miles), but especially

because of the numerous steep and rugged bluffs which oppose the passage of a road along the banks of the river, it is evident that the Upper Fraser cannot be depended on as a permanent route of communication across the continent.

The distance from Tete Jaune Cache to Cameron-town (nearly due west), the terminus of the coach road from Yale, is not more than 80 miles as the crow flies, and it would therefore appear at first glance a matter of course that an overland route through the Leather Pass should be built by this route. But the intervening space is a sea of high rugged mountains, so broken up into deep valleys and steep ridges that from present information it seems impossible to connect the two points by a road of practicable curves and gradients, and we have therefore to seek in some other direction for a line of road between Tete Jaune Cache and the Lower Fraser.

The most practicable route for such a road appears to be by a line running due south from the Cache, across the upper waters of Canoe River (which falls into the Columbia at the Boat Encampment), over the divide (about 2,800 feet above the sea level), between that stream and the North Thompson, and down the valley of the latter river by Fort Kamloops, to a junction with the present terminus of the coach road at Savona's.

The distance from Tete Jaune Cache to Savona's by this route is 235 miles, the last 180 miles of which run through an open or lightly timbered bunch grass country along the banks of the North Thompson River and Kamloops Lake, which are navigable for steamers throughout this distance, and on which waters in fact a substantial and powerful steamboat of 200 tons burden, built by the Hudson Bay Company, is now plying.

The upper portion of this road between the Cache and the open country on the Lower Thompson (a distance of 105 miles) would pass through a dense forest most of the way, but no high or steep summits have to be crossed, nor any serious engineering obstacles encountered.

The cost of a road between Tete Jaune Cache and Savona's may therefore be safely estimated at not more than \$400,000.

There may exist routes (as some persons have stated) branching from the line just described, by way of the Wentworth or Clearwater tributaries of the Thompson, and intersecting the present coach road somewhere about Lake LaHache (210 miles from Yale). But the advantages which either of such deviations would offer in any respect over the route just described to Savona's, are, to say the least, extremely doubtful, whilst on the other hand their disadvantages are obvious enough, of which it will be sufficient to specify one, namely: that, whilst these routes must cross over to Lake LaHache through a district generally rough and timbered, and much intersected by swamps, the line to Savona's passes almost entirely through a nearly level prairie country.

In reference to this route from Tete Jaune Cache to Savona's, it should also be mentioned that, besides the continuous navigation from Savona's, extending thence 120 miles up the North Thompson as before described, there are stretches of navigable water of some fifty miles in extent on the upper portion of this river, which would be found of great avail both in the construction of the road and in assisting traffic along it.

It may therefore be assumed that should a road from the North West Territory cross the Rocky Mountains by the Leather Pass, it would follow this route down the Thompson to Savona's to reach the Lower Fraser; and taking Yale as the western, and the junction of the Brazeau River with the North Saskatchewan as the eastern terminus, the distance by this line, and probable cost of constructing along it a coach road of a similar character to that already built in this Colony, may be thus recapitulated:

Line	Distance	Of which navigable by Steam	Estimated cost of constructing a road
Yale to Savona's.....	235 miles	None	400,000
Savona's to Tete Jaune Cache.....	235 miles	120 miles	650,000
Total.....	470 miles	120 miles	\$1,050,000

Of this line 305 miles remain to be built within the limits of this Colony, as an estimated cost of \$610,000.

Howse's Pass Route.—Rocky Mountain House (3200 feet above the sea level) in Latitude 52° 20' north, Longitude 119° 10' west, and sixty miles up stream from the mouth of Brazeau River, may be taken as virtually the eastern terminus of the route by way of Howse's Pass, as from that point the Saskatchewan is navigable for stern wheel steamers of light draught throughout its entire course of the Great Rapids, 12 miles from its embouchure into Lake Winnipeg; and from thence also the country eastward is so open, and descends in so gradual and even a plain to Fort Garry, that a road may be led across it in any direction, with but little expense.

The line of this route would follow up the Saskatchewan to its source, and cross the watershed 145 miles from Rocky Mountain House, at an elevation of 4,500 feet (740 feet higher than the summit of the Leather Pass). In this distance the only material engineering difficulties occur in the last 20 miles, along parts of which the road would require to be protected from the force of the mountain torrents, which at certain seasons inundated the river valley.

The crossing of the divide by this pass, in Latitude 51° 00' north, is stated by Dr. Hector to be very easy, indeed almost imperceptible, and he had but little difficulty in taking his loaded pack-horses through to the Columbia, although no trail now exists through this pass, that formerly used by the North-West Fur Company having long since become overgrown and obliterated.

The entire distance from Rocky Mountain House to the Columbia is 175 miles, and the cost of constructing this section of road may be set down at \$360,000.

The distance from Blueberry River down the Columbia to The Eddy, (in Latitude 51° 00' north Longitude about 118° 00' west), at the eastern end of the Eagle Pass through the Gold Range, which divides the Columbia Valley from Great Shuswap Lake, is 165 miles.

This section was carefully examined in 1866 by Mr. Moberly, Assistant Surveyor General of this Colony, with a special view to the construction of a coach road, and his report establishes the fact that such a road may be built without great expense along either bank of the Columbia; no extensive difficulties occur to oppose the passage of a road, and at several points the river is so contracted that it may be spanned by a bridge of not more than 150 feet in length. The cost of such a road from Blueberry River to the Eagle Pass has been estimated at \$412,000.

Mr. Moberly reports however that this portion of the Columbia River did not at the season when he examined it (September) appear to him so available for steamboat navigation as had been supposed. The steamer Forty-nine now plies between Colville in Washington Territory and Death Rapids, 40 miles above the Eagle Pass; and above Death Rapids the river is again navigable to the neighbourhood of The Boat Encampment, a distance of 40 miles more.

But above this point there are several rapids which Mr. Moberly considered quite impassable by steamers, and which would therefore render further contiguous navigation below the month of Blueberry River impracticable.

The Eagle Pass was discovered in 1865 by Mr. Moberly, and has been subsequently surveyed by Government and a line of road marked out through it.

Previous to Mr. Moberly's discovery of this pass it had been supposed that the Gold Range was a continuous chain of high mountains, opposing an insuperable barrier to any road between the Columbia and Fraser River Valleys.

The summit of Eagle Pass, however, is only 230 feet above high water in the Columbia River, and 407 feet above the level of Great Shuswap Lake, and the snow disappears from it in the beginning of April. From the Columbia River to the point where the Eagle River empties into Great Shuswap Lake is a distance of 37 miles, over which a road can be made for about \$80,000. From this point there is as before mentioned uninterrupted steamboat navigation 115 miles to Savona's, and steamers may also run 6 or 8 miles up Eagle River.

To continue this route by land however to Savona's, the line of road would leave the Eagle River Valley at the Three Valley Lake (20 miles from the Columbia), and run nearly due South through a wide grassy valley across a low divide to the head waters of the Spillmecechene or Shuswap River, which it would follow down past the mouth of Cherry Creek to a point about 70 miles from the Columbia. Thence leaving the Shuswap it would run through a district of open prairie and sparsely timbered land, abounding in rich pasturage, and along which are scattered several farming settlements, by a course about west, 25 miles to the head of Okanagan Lake, and then 45 miles north-west to the South Thompson, and down the southern banks of that river and of Kamloops Lake, 40 miles through an open grass country, very easy to make a road over, to Savona's.

The distances by this route, and the estimated cost of constructing a road by it, are therefore as follows:

Line	Distance	Of which navigable by Steam	Estimated cost of constructing a road
Yale to Savona's.....	235 miles	None	400,000
Savona's to Tete Jaune Cache.....	235 miles	120 miles	650,000
Total.....	470 miles	120 miles	\$1,050,000

Of this line 375 miles lie within the limits of this Colony, a road for which distance would cost \$732,000.

It is thus apparent that there is very little difference in the distance by these two routes between the head of navigation on the lower Fraser and the navigable waters of the North Saskatchewan, and that the expense of connecting these two points by road is materially the same by either route. The choice between them must therefore depend on more general considerations, in respect of which their rival merits can only be determined after more exact enquiry has been made, and fuller information obtained, and as to which it would therefore be premature to hazard any conjecture at present.

Although in the foregoing remarks the head of navigation on the Lower Fraser has been treated as the western terminus of an overland route, there is nothing to prevent the line of road being continued, whenever the requirements of traffic call for its construction, from Yale down either bank of the river to New Westminster (a distance of 95 miles), which town is already connected by a road nine miles in length with Burrard Inlet, a harbour of great extent and ample depth of water, accessible at all times by vessels of the largest class.

feetly surveyed, and are therefore only partially known. It is however certain that the distance from Quesnelmouth to the Coast is less by either of these lines than by way of the Fraser River. There is also but little doubt that either line is practicable for a road, although presenting obstacles to road-making, the difficulties and cost of which have been greatly under-estimated, especially in the case of the Bute Inlet route.

But when it is taken into consideration that the construction of this latter road from Bute Inlet to Quesnelmouth, a distance of 230 miles, is advocated as a competing line to the coach road already built from that point to Yale, the character and capacity of which have been above described, it can hardly be believed that in the present state and prospect of business in this Colony, such an undertaking can be seriously contemplated, nor is it reasonable to suppose that so unnecessary a section of new road from Quesnelmouth, running through wild tracts of land without a single white inhabitant, to a harbour of inferior character, at the mouth of a narrow valley, affording hardly space for the site of a town, and but little land fit for cultivation, should, in place of the well established line to Yale, be made part of a scheme for connecting the Sea Coast of British Columbia with the Canadas, or that this latter most important object should be weighted down with the superfluous cost of its construction.

The various routes of route above referred to are shown on the accompanying sketch map.

JOSEPH W. TRUTCH,
19th February, 1868.
Lands and Works Office,
New Westminster, B. C.

BRISTOL'S Sarsaparilla

IN LARGE BOTTLES.

when the blood is thick, the circulation clogged and the humors of the body rendered unhealthy, by the gross and greasy secretions of the winter months. This food though powerful, detestable cleanses every portion of the system, and should be used daily.

A DIET DRINK
by all who are sick, or who wish to prevent sickness. It is the only genuine and original preparation for

THE PERMANENT CURE
OF THE MOST DANGEROUS AND CONFIRMED CASES OF Scrofula or King's Evil, Old Sores, Boils, Tumors, Abscesses, Ulcers,

GENUINE HONDURAS SARSAPARILLA
TRUST AND RELIABLE CURE FOR SYPHILIS.

FOR SALE EVERYWHERE.
Hostetter, Smith & Dean,
San Francisco.

LIQUOR CARBONIS DETERGENS

Concentrated Alcoholic Solution of the PURE COAL TAR SOAP

W. V. WRIGHT & CO.,
SOLE PROPRIETORS,
WHOLESALE AND EXPORT DRUGGISTS,
MANUFACTURING CHEMISTS, &c.,
SOUTHMARK STREET, LONDON, S.E.

NOTICE.
TENDERS FOR THE PUBLIC GENERAL GIVING WEIGHT TO ANY PERSON OR PERSONS ON ACCOUNTS AS WE WILL NOT BE RESPONSIBLE FOR ANY DEBT INCURRED BY ANY PERSONS.

Henry and Elizabeth Mortimer,
April 11th, 1868.

Saturday, April 18

We have not, hitherto taken a general review of the matters of grave interest which have been under consideration during the present session, although the recess taken on holidays is the most favorable place before our readers of the spirit and purpose of the legislation which has so far passed. It is gratifying to see the attendance of the members of the House in the present season of the year, and the absence of local or class parties to interfere with the measure introduced, and the higher in the Colony, and few of them have been overlooked.

Members have left an excellent example, and their constituents, and of Parliamentary procedure have manifested, as will our reports, a liberal vigilance over the interests of the Colonists at a distance, which, in our opinion, towards convincing evidence of mind that they have, the least desire to do every measure of good in the Victoria. The our foreign commerce by of drawbacks—the regular to protect our home kinds, the construction open up our immediate lands for occupation, ment of mutual benefit Corporations among have been so beneficial the advocacy of a liberal possession of mineral land subsidiary and inferior the principal features of action. Other member constituencies on the been equally diligent and with equal propriety as far as the revenue will admit, an extension, abolition of injury, the establishment of the upon a footing that will reach the most distant appears to us the Colony much good from the present Legislative session, all the vexed and in upon the Capital of Colonies has been set and dignified manner, will remove forever the tentation it has fostered immediate result of this to draw a united action, and all classes to carry out successfully we have enumerated, a ready manifests itself liberality of hitherto operations and expenditure of our Judiciary is in receive a settlement of wishes and interests generally, according to appearances, without exception behind a feeling of angry. A due regard for the welfare of the Colony, and the maintenance of the Bill, so that it will not debtor's prison nor a dishonest fugitives. The the Howe Sound Copper will have a very good ing attention to the of a uniform system in our mineral lands. In the most agreeable a tures of the legislation unanimous expression, the part of the Government, with a view respect to our shores, a development of our which this petition draws attention to our, Mining beyond doubt, at this two principal resources