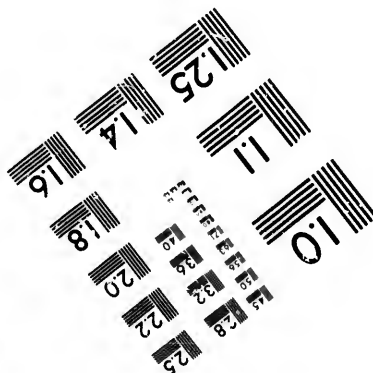
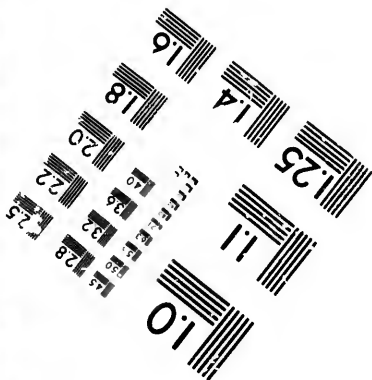
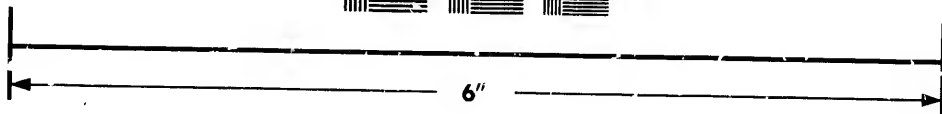
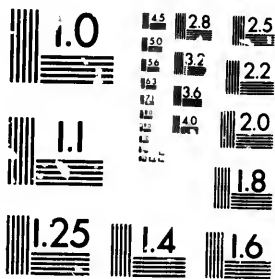


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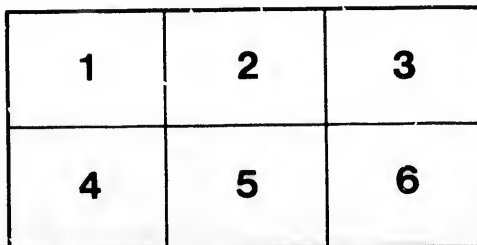
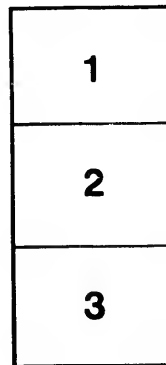
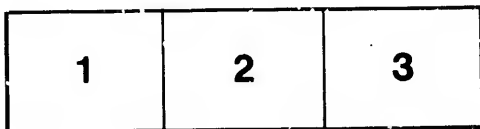
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*Table of routes to be done by the
with respect to connections
with the Pacific*

RAILWAY ROUTES, *by M. McLeod*

CANADA.

BY

M. M^CLEOD,

"BRITANNICUS."

A SERIES OF LETTERS PUBLISHED IN THE MONTREAL "GAZETTE."

*ORC
1874
-12*

PREFACE.

These letters are respectfully submitted under the special circumstances appearing on their face.

I may add, however, in more distinct terms, that I have entered thus somewhat at length—yet too shortly, hurriedly and imperfectly—into this examination of railway routes across our far wilds, feeling that no one else was, it would seem, likely to do so, though needed.

To *public ken*, the whole thing is, and has ever been, it may be said, a sealed book; and yet, on a true appreciation of it—of the great scheme in all its features and bearings—can we—the people of Canada—alone grapple it with that courage and determination, and stern honesty of purpose, which it demands.

PACIFIC RAILWAY ROUTES, CANADA.

LETTERS ADDRESSED TO THE EDITOR OF THE MONTREAL GAZETTE, AND
PUBLISHED IN THAT PAPER IN THE COURSE OF JUNE AND JULY, 1874.

SIR.—The importance and urgency of this subject are such, I humbly think, as to warrant my obtrusion with a few observations which may, possibly, be of some little value in the way of information to all or most concerned. Accidental circumstances, alluded to by Mr. Fleming in his report (page 13), viz., my early life in the far North-West and British Columbia, and the possession of my father's papers, reports, journals, maps, &c., respecting those wilds, have enabled me to give some useful information as to the least known of the regions in question—regions untouched by blue-book, and much untouched by even traveller's tale. Five years ago, when first the scheme of a Canadian Pacific Railway was mooted, I, under the *nom de plume* Britannicus, wrote a series of letters, defining descriptively, in advance of all others, a feasible line for railway from Montreal to the Pacific. That was during the session of Parliament (Dominion), and the information given was practically acknowledged in the House and by the Press. All survey since then, over the greater part of the vast, utter wild in question, has but confirmed the truth and correctness of my statements and estimates in every particular. For instance, as to the distance from East Nipissing to Lower Fort Garry (Red River), via South end of Lake Nipigon, my sections, as projectively given in 1869, aggregate 970 miles. Mr. Fleming's report, as the result of instrumental measurement along the same objective points, is 973 miles. Only three miles of difference! On actual location of the line we may differ even less. His section at this part is run out, however, to Lake Manitoba, "65 miles" (as he states) beyond Red River, which makes his total to that point "1038 miles," as shown in section sheet 9 in his report.

As to the rest of the route—route for railway with its elongation by curves and gradients in conformity with the physical features of the country—my estimates are equally well borne out by Mr. Fleming's report, but that in a manner requiring elimination from his different section sheets, and as I shall hereafter demonstrate.

As to the PEACE RIVER PASS, Mr. Fleming, in page 13 of his report, has been good enough to give me credit for bringing it to his notice. Of this more anon. In the meantime, as to it, I have, *in limine*, to say that the height assigned to it by me was a mere estimate by myself, on data given in large detail and tabulated form in my pamphlet, "Peace River," page xix of my table of heights, and pages 92, 93 and 96 of text, and also in the preface to the work. My object in doing so was, as I state in the preface, "to direct attention at this juncture, to the particular fact, as a present objective point, that the lowest, easiest and best PASS of the Rocky Mountains, in fact the only one which presents—say by such a 'Territorial Trunk Road' (i. e. such kind of road—for Mr. Fleming did not speak of this particular one)—as Mr. Fleming in his memorial to the Imperial and Canadian Governments proposed in 1863—a practical gateway to the Pacific Slope, to the *waggon* of the settler, is the Peace River Pass, and which is less—I make it—than eighteen hundred feet above the sea." The road is indicated by yellow lines in my map to "Peace River." The precise figures as worked out and given for height of the Pass were "1750 feet above the sea."

No one, that I am aware of, had ever measured or even given any sort of estimate of the altitude of this important gateway to our new El Dorado. Mr. Fleming, as he states in his report, despatched, on the strength of my representation, a branch expedition from Edmonton in the Fall of '872, via that Pass, placing in the hands of his staff, for guidance, my pamphlet with its journals of travel from Hudson's Bay to the Pass, and thence to the mouth of the Fraser, via Kamloops, showing the great land in its length and breadth. I refer to this incident, for I perceive that, some way or other (see *Canadian Monthly* of May last) Mr. Horetsky, the gentleman who, from his chief at Edmonton, got my pamphlet as part of his instructions, has received all the credit of bringing this Pass into notice. Mr. Macoun, botanist, his *campagnon de voyage*, does me, in his re-

port, better justice. But to proceed. The height of the Pass, *i. e.* of the water level of the Peace River, in its passage across the Rocky Mountains, has been since measured by Mr. Horetsky, with aneroid, by observations taken at different points, and has been laid by Mr. Fleming at precisely that height, (see his section sheet 7 of Report at the point marked "Finlay River") the western or upper end of the transverse passage of the river through the range. The next object on the route, westwards, of which I gave an estimate of height, was "McLeod's Lake," on the Pacific slope of the range, and which I laid at 1,900 feet above the sea. Measured since by Mr. Fleming's staff, with aneroid, he gives it—in his said section sheet 7, at "1,850 feet above the sea." The next height given by me is that of "Stewart's Lake," forming, with other large lakes, the trough of the northern half of British Columbia. This I laid at 1,800 feet above the sea. After careful measurement since by Mr. Horetsky, with aneroid, Mr. Fleming's Report gives it, in said section sheet 7, at that, *precisely*. I may state in explanation that I went into this matter of heights to show that this northern plateau of British Columbia is low enough to admit of profitable agriculture and advantageous settlement, notwithstanding its high latitudes, viz., from latitude 53° to 56°; and moreover, that it offers probable easy, or comparatively easy access, by territorial roads, and ultimately, perhaps, by railway—*i. e.* secondary railway—across British Columbia.

For a transcontinental railway, however,—one to be the shortest and best possible between Atlantic and Pacific ports, and wholly on British ground,—I, at the very outset, advocated the *Yellow Head Pass* (old familiar ground to me), and thence, as indicated by the green line in my map to the "Peace River" Pamphlet, to Bella Coola, at the head of the North Bentinck Arm. Allow me to give, from letter 8 of my Britannicus letters of 1869, already alluded to—see slip sent you—a summary of sections of the route proposed by me:—

Terminal Points	Length Miles.	Cost per mile.	Total.
		\$	\$
Montreal to Ottawa, via Vaudreuil.....	106	25,000	2,625,000
Ottawa to summit between Lake Nipissing and Ottawa River..	190	30,000	5,700,000
Nipissing to Michipicottan River.....	820	35,000	11,120,000
Michipicottan River to Fire Steel River....	310	40,000	12,400,000
Fire Steel River to Selkirk (Red River) Settlement.....	340	35,000	11,900,000

Selkirk (Red River) to Edmonton.....	750	20,000	15,000,000
Edmonton to Milton Pass (Yellow Head)	250	30,000	7,500,000
Milton Pass to Bella Coola (North Bentinck Arm).....	400	60,000	24,000,000
Total.....	2,660		\$90,245,000
			Pay \$100,000,000

So I wrote, and so all Parliament read, in June-July, 1869. Since then, as we all know, "cost"—iron, labor, &c.,—has increased at least 25 per cent—but on this branch of the subject I enter not. It is of routes—and as known to me—that I would speak. In giving the above facts there is, I feel, a seeming egotism. It is repugnant to me; but I must show credential, and present some measure of credibility in this pleading. Shall continue in my next.

Yours,
M. McLEOD.
Aylmer, Q., June, 1874.

LETTER II.

Sir,—As the work of construction of the great iron road in question must, in the main, be from nearest Atlantic port—Montreal—and thence, from shiphold with railway plant from England, and elsewhere perhaps, I assume, for the nonce, this port as a starting point. Thence to the south-east end of Lake Nipissing, the line, as reported by survey, throughout its course of three hundred miles of the Ottawa Valley, presents every facility for railway—with an average gradient of only about two feet per mile, and, probably at no point—none so far as I know, and I have passed over three-fourths of it—none, I say, exceeding ten feet per mile. I speak from personal knowledge and the reports of Messrs. Shanly, Clarke, Keefer (T. C.), Kingsford and Legge, all civil engineers of high repute. By the last named gentleman, the line along the north side, crossing at the Matawan, and thence to the south-east end of Lake Nipissing, has just been examined in exploratory survey, and has been, as your columns showed, most favorably reported on. On the south side from Pembroke upwards, I am not aware of any explorations for railway line having been made, but from what I know of it, although not a civil engineer, I think I can safely say, as I did in 1869, there is a good line for railway. I hope to see, within two years, on both sides of the Ottawa, to Eastern Pacific Railway terminus at Nipissing, railways that shall serve as

freightways from Atlantic seaboard, and from American and our own manufactories of railway enginery and other plant. With return freight in lumber, and perhaps grain—western grain—from port at French River, there would, I presume, be profitable business for half a dozen railways to and from different points, viz., Ottawa, Toronto, Kingston and Montreal, and even perhaps Quebec, not to speak of other lines, Canadian and American, connecting with other Atlantic ports and market points.

The other points for initiatory work in construction which present themselves are, Sault Ste. Marie—if the line be thither bent—and the head of Nepigon Bay; and, perhaps, also at Prince Arthur's Landing, Thunder Bay.

I touch on these points to indicate the possibility of constructing the whole of this section—from Nipissing to Manitoba, not only "after forty years," or "if ever," as shouted, on hustings, our present Ministers of State, and as averred their metropolitan organ, "the Ottawa Times, in their first flush of victory"—but within forty months—I would say. The Americans, when in lowest exhaustion from their late war, built their Pacific Railway—longer and more difficult, in three years, if I mistake not. Why, in the name of common manhood, I would ask, should not we, with the British Exchequer replete at our back, not do likewise? But, on this head, more anon.

You have, Mr. Editor, given a general statement of the different lines (three) of route, in this section—section from Lake Nipissing to Lake Manitoba—reported by Mr. Fleming. I take up No. 2, the shortest and best, according to his own account. He thus defines it, in page 30 of his report:

"Commencing at the south-easterly angle of Lake Nipissing, the whole distance to Lake Ellen (at head of Nepigon Bay) on Nepigon River, is about 550 miles. The line at Lake Nipissing is 730 feet, and at Lake Ellen 604, above sea level. Between these two extreme points, the route passes over two main summits, one about 110 miles northwesterly from Lake Nipissing at an elevation of 1420 feet above the sea, and the other about 70 miles easterly from the River Nepigon, elevated 1400 feet above the sea. Between these two summits, for a distance of over 370 miles, there is a long flat basin, characterized by no great inequalities. The line for this long distance will be generally very level, the ground averaging from 1000

to 1200 feet above the sea; at one point only, River English, does it dip to 830 feet.

"The route, for nearly the whole distance east of Nepigon, runs behind the rugged and elevated belt of country which presents formidable obstacles on the immediate shores of Lake Superior. This rough district is crossed directly back of Ellen, where it is narrow and probably least forbidding. In consequence, about 25 or 30 miles of the line north-easterly from Nepigon River will show heavy work, while the remainder of the distance to Lake Nipissing, about 530 miles, will, it is believed, be comparatively light."

"In ascending Westerly from Lake Nipissing, the rise to the highest point is less, and the length of time occupied in making the ascent considerably greater than in passing from Lake Ontario to Lake Huron by railways in operation across the peninsula of Western Ontario.

"The Great Western ascends 753 feet in 44 miles.

"The Grand Trunk ascends 967 feet in 38 miles.

"The Grey and Bruce ascends 1,398 feet in 52 miles.

"The Northern ascends 748 feet in 27 miles.

"The total rise on the Pacific line northwesterly from Lake Nipissing to the highest summit east of Lake Superior is 690 feet, and the ascent is spread over a distance of 110 miles, thus indicating an average rate of ascent much more favorable than on the Railways alluded to."

Mr. Fleming, in a foot note, states at what particular stations and points the summits occur in the above, and also in other railways in Ontario, giving heights and distances, and showing them all to be less favorable than route No. 2 in question.

"Between the crossing of Red River," continues the report, page 32, "and Lake Ellen, on Nepigon River, the distance is about 416 miles. The diagram shows that the former point is 763 feet above the level of the sea, while the latter is 604 feet; the height of land to be crossed is 1,580 feet above the same level, and about 300 miles easterly from Red River.

"In passing through to Lake Superior from the west, a rise of 817 feet has therefore to be overcome in 300 miles, and a descent of 976 in about 116 miles.

"The Grand Trunk Railway," he adds,

by way of comparison, "between Montreal and Portland, running easterly from Montreal, makes an ascent of 1,360 feet in 144 miles, and a corresponding descent in 153 miles.

"The information obtained suggests," he concludes, "that it will be possible to secure maximum easterly ascending gradients, between Manitoba and Lake Superior, within the limit of 26 feet to the mile, a maximum not half so great as that which obtains," he declares, "on the majority of the railways of the continent."

The route is certainly unexceptionably good, especially in view of the fact, as shown by the report, as the result of careful meteorological observations registered and returned over the whole route during two winters, that "the depth of snow is"—as Mr. Fleming, in page 34-1 of his report, says—"generally less on an average than it is at the city of Ottawa."

An excellent feature in the line is that it touches navigation where best it should, viz., at Nipigon Bay, nearest good port—accessible by rail eastwards, from the Prairie or wheat region—and also, that at the point of crossing Red River, viz., at Lower Fort Garry, called "Stone Fort," it touches the head of Lake Winnipeg navigation, and at Manitoba Lake, does the same service to the chain of large lakes it belongs to—an internal navigation requiring but little for practical and beneficial development.

So much, for the present, as to this "Woodland Section" of 1038 miles, as Mr. Fleming designates and reports it.

Yours,

M. McLEOD.

Aylmer, Q., June, 1874.

LETTER III.

RED RIVER TO YELLOW HEAD PASS.

Sir,—This section embraces what Mr. Fleming very appropriately calls "The Central or Prairie Region"—not that it is all prairie, but that it is chiefly so. The distance assigned, on mere exploratory survey, however, is "1,040 miles," viz., 750 from Red River to Edmonton, and the balance thence to the Pass. The average grade from "Fort Garry to Edmonton" is "2.3 feet per mile." "The immediate ascent to the Yellow Head Pass is not difficult, and the Pass itself is, as it were, an open meadow."

So reports Mr. Fleming, in page 39, when speaking of his forty miles a day ride through it in 1872. From the summit of the Pass to a point "49 miles eastwards" there has been very careful survey, and is reported in pages 143-4. "From the summit the line follows the Miette River down the Caledonian Valley to its junction with the Athabasca, a distance of 18 miles, with a total fall of 352 feet. In the first nine miles and a quarter the fall is only 141 feet, with light work; in the next two miles the fall is 120 feet, but by a slight deviation of the line a grade of 1 per 100 (52.80 feet per mile) can be obtained without heavy works. The rest of the distance to the Athabasca is by easy descending grades, nowhere exceeding 30 feet per mile, and the works will not be heavy." The rest of the route to Edmonton was also surveyed, and is represented—see pages 186-7—as, on the whole, even more favorable. The summit of the Pass is given at 3,746 feet above the sea.

From it to nearest seaport—Montreal—a practicable, and, in every respect, a most favourable route, almost in air line, has been found, with an average gradient low beyond compare, so far as I know, and at no point, in eastward course, exceeding—says Mr. Fleming, as before stated—"26 feet to the mile." I say, "almost in air line," but it is to be remarked, that if *Sault Ste. Marie* be touched, the divergence—and that transversely and diagonally over very rough and rocky ground—will be fully one hundred and fifty miles off the true line. If this American connection be determined on, it would be better to have an independent line, I would say, along the comparative flat immediately back of the Huron shore rim, striking into the Nipissing basin, and there touching railway centre, at the main terminus. Between such line and the one surveyed by Mr. Fleming, along the valley of the Montreal River, there is a continuous uprise—for it scarcely can be called hill—with irregular broken ridges of rock running, in the main, across the line of route. Not to speak of military considerations—and they ought to rule in this matter—such an elongation of line, say over two hundred miles, would materially affect, prejudicially, the commercial character of the route, as the shortest, of railway, from Ocean to Ocean, between the "Great Sailing Arcs," in Northern Atlantic and Pacific, and between mid-Europe and mid-Asia.

To these two main objective points

must all this work of pass-way for traffic and travel between the two "worlds"—East and West—be bent. The Yellow Head Pass in $52^{\circ} 50'$, or about that, of north latitude, is precisely in line, it may be said. The nearest natural ocean port, open to us, thence westwards, is Bella Coola, at the head of the North Bentinck Arm. Its latitude, as determined by Vancouver, Sir Alexander McKenzie, and Lieutenant Palmer, R. E., is about $52^{\circ} 21'$. That of Liverpool as stated in Norrie's navigation tables (a standard authority) is $52^{\circ} 24'$. Lower Fort Garry (Red River crossing) is in about $50^{\circ} 20'$. This last is, for Pacific Railway route in Canada, a defined objective point by nature. The same may be said as to the Yellow Head Pass. From its summit to tide water, N. Bentinck Arm, the distance I assigned in my Britannicus letters was, for *railway route*, with its unavoidable curvature, "400 miles." My map to "Peace River," indicates it.

YELLOW HEAD PASS TO PACIFIC OCEAN.

The description of the route from the summit westwards is thus given, in page 144.—"From the summit of the Yellow Head Pass the line follows down the valley nearly due west to the head of Moose Lake 18½ miles, in which the fall is 344 feet; on the first 2½ miles the fall is about 45 feet per mile to Yellow Head lake, thence along the shore of the same 3½ miles level, leaving the average fall for the rest of the distance 20 feet per mile. The line follows the north shore of Moose Lake 8 miles to its outlet at the west end; on this there are easy undulating grades. The works from the summit to this point, 27 miles, will not be heavy. From the outlet of Moose Lake there is very little fall for a mile and a half, but thence to Tête Jaune Cache, 18 miles, the Fraser falls 924 feet, giving an average of over 51 feet per mile. At Tête Jaune Cache the line leaves the valley of the Fraser and turning almost at right angles follows up a valley on a south-easterly course to Cranberry Lake. The distance from Moose Lake to this is about 32 miles, and the average descent is 26 feet per mile." "From Cranberry Lake to the crossing of Canoe River, 3½ miles, is practically level, as the surface of the river is only 20 feet below that of the lake; thence to Albreda lake, 10 miles, there is a rise of 264 feet. This is on the watershed between the tributaries of the Thompson and Columbia

"Fivers, and, by our surveys, is 2,866 feet above sea level."

From this *hinging point* all survey has proved itself too southerly. The true line is westwards, due west, or nearly so, to the head waters of Lake Quesnel, distant, as I estimated, and stated to Mr. Fleming, probably about 50 or 60 miles from the "Cache"—a space unknown to the old fur traders in these parts, and as to which, I saw by a draft of my father's special report on the subject to the Governor and Directory Committee of the Hudson's Bay Company in London, dated "Kamloops, Spring, 1823," when in charge of what was then known as the Thompson's River District, extending from the Rocky Mountains to the Pacific, and from the Columbia northwards, in fact, all what is now British Columbia and part of Oregon, that he thought a trade track through it could be found, and he proposed, to that end, to send two or three men, along with certain Indians, occasionally frequenting Kamloops, called the "Snare Indians," a small mountain tribe of about "60 families," frequenting both sides of the mountains. They failed to return for a year or two, and the matter was left as it had ever been—even to the North West Company's repeated efforts in that way—a something sought, but unfound. Milton and Cheadle, with true British pluck, half did the feat.

Mr. Fleming, when charged with the Pacific Railway, put, at the earliest possible moment—as appears by his Progress Report of 1872—two specially strong "divisions" of his staff, viz., McLennan's and Mahood's, to the task. The former worked his way up from Kamloops, by the North Thompson, to Albreda Lake. The effort—a really splendid one—cost him 87 out of the 100 of his picked mountain train (largely Mexican) of horses and mules. Mahood had been instructed to begin at the mouth of the Quesnel River, and work up thence to the source. He disobeyed orders, arrived at the river, and not finding, as he says, "boats suitable," he allowed himself to be drawn to the glacier heights of Cariboo, where, of course, and as his master knew, and might have told him, there was no pass for railway. Since then this Quesnel route, strange to say, has been untouched, save just recently, by a flying trip by the District Engineer. Of this, more anon, in my next.

Yours truly,

M. McLEOD.

Aylmer, Q., June, 1874.

LETTER IV.

QUESNEL LAKE ROUTE.

Sir,—Resuming this subject where I left it in my last letter, I propose to give, from the report itself, sufficient to indicate the correctness of what I have advanced on this point. Referring to page 129, under the head "Journey to Quesnelle Lake," we have the following from Mr. Marcus Smith, District Engineer:—"Friday, 11th October, I received," (he is addressing Mr. Fleming, then, in 1872, on his trip from ocean to ocean) "your last instructions this morning."

"On the 16th I arrived at the Blue Tent, or 127 mile house." * * * "Next day I reached the 150 mile house." * * * "Monday, 21st October—I started with three white men, two Indians, and a train of seven animals; on the second day's journey the trail crossed a large farm in Beaver Lake Valley, near which we camped. This valley, as far as I could see each way from the adjoining heights, looked remarkably favorable for a line of railway; and as I have already stated, there is but a short neck of land between the head of it and Horse Fly Valley. Next day we arrived at the forks of the Quesnelle river; here there is a thriving village." * * * "24th October—We started with our pack train on a very rough trail up the right bank of the South branch of Quesnelle river, and at the end of 9 miles came to still water, where the boats were lying." * * * "Sent one of the Indians back with the pack animals to Beaver Lake, to pasture till our return."

Proceeding in two boats, a large and small one, he reports:—

"25th October, 2:30 p.m.—Reached Nim's Point, 22 miles from the foot of the lake. The line of the south shore of the lake for the first eight miles is tolerably uniform, and the slopes from the water not very steep; then there are about four miles in which it is rocky and broken to where the six mile creek enters the lake. From this to Mitchell's Landing (south) is a flat beach covered with cottonwood." * * *

"26th October.—" * * * The south shore of the lake, from where we struck it this morning, is an easy wavy line, and the slopes not very steep. All the hills that bound the lake on the south shore are covered with timber from the water's edge to the summit; those on the north are higher, with bald rock."

"27th October.—" * * * Arrived at Slate

"Island (58 miles,) where the axis of the Cariboo slate (gold-bearing) range crosses the lake. In three hours arrived at Limestone Camp (No. 7)—72 miles—where the lake bends due north (magnetic.) The first 16 miles of this day's journey the shore line of the lake runs in easy curves, and though the mountain slopes come down to the water's edge, their inclination is not great. Of the other fourteen miles, six are bold and rocky, but with heavy work, practicable for railway construction; the rest is easy."

"Monday, 28th October—We were within seven miles of the entrance to the second narrows" (79 miles from foot of lake). * * * "Here I had a fine view of the Narrows (N. 45° E. magnetic) twenty miles to the west end of the lake where it runs due north six or seven miles to its head" * * * "This narrow part of the lake is hemmed in by bold rocky mountains, the cliff along the shores rising 200 feet to 300 feet in height, in some places over-hanging. My impression is that the lake here passes through the Cariboo range, for directly westward were the snow-capped peaks that had been on our left (north) of the lake, and a little to the south of east were the peaks, apparently of the same range between the Thompson and Clearwater, and which continued from the Gold range west of the Columbia river. There were no very high mountains visible northwards."

N.B.—My course, as proposed, is from northwards" at this point. The report goes on to say—

"Mr. Barker," the gentleman of the flourishing village" aforesaid, who furnished the boats, and guided Mr. Smith—"confirms this—he says that the Niagara River (head tributary and source of the Quesnel) enters the north-east side of the lake three or four miles from its head, that the falls of this river are about 200 feet high, and for four miles up from this the river is very rapid, then there is dead water for about forty miles, in a wide, swampy basin, where the Indians hunt beaver, &c.

"From repeated readings of the aneroid, I estimated Quesnel Lake to be about 2,580 feet above sea-level." N.B.—Three hundred feet lower than Albrede Lake as already reported.

"The Clearwater River," continues Mr. Smith in page 132 of report, "rises in a range of mountains to the north-east of Quesnelle Lake, which can be reached by a pass (the entrance to which I saw)" —he says himself—"said to be easy and not

"very high. There is then only the short space between Clearwater Lake and the north or Cariboo fork of the Thompson river, about which I can get no information more than that there *certainly is a pass*. I have only met one Indian who had travelled over it some years ago, when he was too young to retain an clear recollection of it. This is undoubtedly part of the Selkirk range, and I have no expectation that a railway could be got through it without a tunnel of considerable length, but this route would shorten the line so much that it is well worth consideration."

Precisely! But why, I would ask Mr. Smith, did he not see to this before, instead of starting, as his report shows, "97 miles down the North Thompson," about 90 miles off—too far south—for even the line proper for Bute Inlet, and at a point over *two thousand feet unnecessarily too low* on this meridian? Section sheets 4 and 5 show glaringly the faults of this line, starting from a point on the North Thompson, 1397 feet above the sea, and between that and the Fraser having to climb heights stated at 3,500 feet, and 3,104 feet above the sea, all which the Quesnel south shore, as described, avoids. As to that "tunnel of considerable length," in Mr. Smith's "mind's eye," it would certainly be interesting to know all, or *something* about it, in an engineering point of view. If I may be allowed—as one to the manor born—to offer an opinion on that point, I would be inclined to say, that the pass there—a point where three ranges meet, and, by law of nature, break into fragments, flanking curve, with moderate gradation—if I may so use such word—would overcome all mountain difficulty. Billowy, rather, and *not mural*, are all our mountains thereabouts. That "tunnel," in fact—good Mr. Smith—should not, I humbly think, be so positively asserted by you! This scheme for Canadian Pacific Railway has "lions enough in the way," in all conscience, without such a one from one employed to remove such big-bears.

In speaking of the difficulty that the fur trade met with in its attempts to penetrate this upper region, with its fine beaver flats of "forty miles" in extent, it was not—I would observe—the height or steepness of the mountains that blocked the way, but the character of the mountain forest—its immense growth, with an underbrush and heavy obstructive swamp flora, which, commencing at a point about 45 miles up the North Thompson—I remember well the beautiful stream, in its placid lower reaches meandering, Facto-

lean—increased upwards to nearly 3,000 feet above the sea. Clearwater River, as any good map—say Trutch's—will show, is only a fork of this North Branch of the Thompson River, whose fork (Clearwater) at its head—a long lake—has a tributary from the east, rising close, apparently less than a mile, from the main fork, a point easily accessible, by stream course, from Albreda Lake. There is no room for tunnallable heights between these waters—waters in common—of the "beaver flats" aforesaid. The "peaks" about wooded to top or snow-capped, but adorn the scene—and to the Road, when made, will but give, in their altitude above road bed, snow-shed in winter and sun-shade in summer.

Yours,

M. McLEOD.

Aylmer, Q., June, 1874.

LETTER V.

QUESNEL LAKE TO BELLA COOLA.

SIR,—Returning to our starting point in consideration of this Quesnel Lake section of the route, viz., the "large farm" in Beaver Lake Valley, and proceeding westwards we have the following description of the route, in page 123 of the report: "Journey from the 150 mile" (mile, on waggon road along Fraser River bank) "House to the North Branch of the North Thompson River." "Friday, 6th September—At 9 a. m. started on this journey." "We followed the well-worn trail to the forks of the Quesnel, about eight miles, then took an Indian trail running in a more easterly direction. On the second day we entered Beaver Lake valley." Beaver Lake is given at "2,110 feet above the sea." We are now on the right bank of the Fraser, at or near Soda Creek. No survey for crossing at this particular point is reported, but is so at a point a little way—about 10 or 12 miles further down—at the Jose Valley. The report, in page 151, in this matter of crossing the Fraser, runs thus: "The line follows the north shore of William's Lake, 5 miles in length, with undulating grades, and not heavy work, thence down the Jose Valley to the Fraser River, a little over seven miles. Approaching the Fraser, the valley becomes deep and narrow, and the descent more rapid, so that grades of 1 to 1.60 per 100 have to be used, but with no heavy work. The

"line crosses the Fraser at an angle of about 45 degrees, requiring bridging 800 feet" (*Only eight hundred feet—not a "mile at least,"* as Captain Butler pretends, and that, according to him, at a height of "1,200 feet") "long, and 30" (*only thirty*) "feet above the river level, or 1,374 feet above the sea level: it then follows the right or west bank of the river for 17 miles, in which it has to cross the face of some heavy clay slides and high slate rock bluffs, with some grades of 1.20 per 100; in this section there will be some very heavy works, including two tunnels through limestone rock, one of 1,500 feet, and the other 2,000 feet in length."

As to this matter of crossing, it is to be observed that it would be much easier further up the Fraser, but on this point the report is silent.

I am now following this too southerly line merely for the nonce, as no other is given, and at a certain point, viz., apex in the "Chilcotin Plain," marked "3,700 feet above sea level," in section sheet 5, assume it, but merely for determination of distances and comparative reference as to character of route, for indication of my line to Bella Coola. The middle reaches of the Chilcotin Valley might, however, be used in common for the Bute Inlet and N. Bentinck Arm routes. All descriptions of the country traversed, even at such altitude, about 3,500 feet above sea, represent it as a fine rolling plateau, with forest, meadow and prairie, and do that with beautiful and fish-teeming lakes, the whole admirably fitted for agricultural settlement. The description in pages 120 and 121 of the report so represent it, and so I have given forth, for years past, in press, newspapers and books, but unfortunately there have been no members of Parliament of these parts to take up the cause of Upper British Columbia.

In page 121 of the report, speaking of better ground found considerably northwards of that surveyed, in the first instance, the description in the report is as follows:—"We followed up the Fraser Valley two or three miles, then we made a long detour to the north to head out a deep ravine; passing this, we ascended the high level of the rolling plateau, and saw spread out before us, as far as the eye could reach, an undulating grassy plain, dotted with trees,

the water courses and lakes being distinguishable by belts of groves of fir and poplar, and close to us was a deep but open valley, which we could trace far away to the north till lost in the undulations of the plateau. In the bottom of this, right in our course, lay a cultivated farm, to which we descended—1,400 feet—by very steep slopes, and there met the owner, L. W. Riskie, Esq., a Polian gentleman, by whom we were hospitably entertained, &c."

From the Yellow Head Pass, via the "97 miles" divergence down the N. Thompson, and thence over the two intermediate summits aforesaid, to the Fraser via Jose Valley and thence "17 miles further down," and thence to this apex in the Chilcotin Plain of 3,700 feet above sea, the distance is given in section sheet 5, at "334 miles." In section sheet 7, the precise point stated at 3,700 feet in section sheet 5 is not given, but a point marked "Old Fort" (Chilcotin), at a height stated at "3,800 feet above sea, is given—and, as the nearest possible, it may, for calculation of relative distances, be approximatively assumed as the same. From this point to the mouth of Bella Coola River, the distance assigned, on Lieutenant Palmer's measurements, or estimates, is 170 miles of crooked trail track. This, with the 334 miles makes an aggregate of 504 miles. From this, deduct for the "97 miles" divergence at the N. Thompson, say, at least 140 miles, and for the Fraser Crossing, at least 24 miles, and we have, as closely as may be "400 miles" as the probable length of railway route from the summit of the Yellow Head Pass to tide-water Bella Coola, via the south shore of Lake Quesnel, as marked by my railway line in green, in my map to "Peace River," and as advanced in my Britannicus Letters of 1869. I never, of course, actually measured the route, but I had, accidentally, data to go on, which, then—I believe—no one else had, at least, not to the same extent. I might say much on this score, but will not unless forced to do so by controversy—should it arise.

THE BELLA COOLA ROUTE, GORGE AND SEAPORT.

This gorge, or valley rather, with its numerous—13 or 14 I believe—lateral valleys, each with its appropriate river, or

* The calculation, in detail, runs thus: Half of total divergence, on triangulation on base line from east end of Quesnel Lake to meridian of "Old Fort Chilcotin" 72 miles. Reduction as per Lieut. Palmer's estimate, on road track (tortuous) for "road" route between "Old Fort" and "The Precipice," say 25 per cent. on 73 miles—say 25 miles. Reduction, for road, on trail, from "Precipice" to tide water, say 5 per cent. on 97 miles—say four miles. Total reductions for road to Bella Coola, 101 miles—deducted from 505 miles, leaves precisely 402 miles. From which, for the shorter arc of my more northern line, a small deduction is to be made—bringing a result within my original predicate.

streamlet, is, I am convinced, "not half well enough known." The charter prospectus (printed and sent to me) for a waggon road through it, in 1862—thus describes the proposed port, and route thence to Cariboo:—"The North Bentinck Arm possesses an excellent harbour, of sufficient capacity to accommodate the largest fleets at all seasons of the year.

"The country through which the road will pass presents few difficulties of construction, and is studded in every direction with open prairies, lakes and extensive meadows, affording abundant feed for pack animals.

"The town site of Bella Coola is admirably adapted for the formation of a commercial depot for the northern portion of British Columbia, being accessible by steamer from Victoria in forty hours at all seasons of the year. The road would be about 200 miles long, that is to say, from the head of the inlet to the point required on Fraser River—say Alexandria. With the exception of a part of the descent through the Coast Range the trail is decidedly of a level character. This descent, or rather slide, is really the only obstruction, and could easily be overcome or avoided—a fact that must become evident to every one when informed that we passed and returned packed horses over it during our trip last summer" (1861). "From the place where the trail first strikes the Bella Coola River in the Coast Range (that is at the foot of the slide, travelling from the interior to the coast) it runs along its bank the whole way to the head of the Inlet, through a deep gorge or pass in the Mountains, which varies in width from half a mile to five miles."

The report goes on to speak of its practicability, first for "mule trail, ten feet wide," then for waggon road; speaks also of its harbor as "favorably reported on by seafaring men"; of its admirable site for a town, facilities for wharves, docks, &c.; abundant timber; gold, copper, &c.; and fisheries of "cod, halibut, salmon, oulachans, herring, &c., and finally the worthy promoters—one of them (Mr. Ranald McDonald, son of Chief Factor Archibald McDonald), a gentleman born in the country, and thoroughly familiar with it, and the other, John C. Barnston, Esq., barrister, late of Montreal, son of Chief Factor Barnston, Hon. H. B. Co., and now, I believe, a member of the Local Legislature of British Columbia—thus wind up: "So that it appears to us probable enough that the future town

"of Bella Coola will yet be the terminus of the much talked of Pacific Road through British Territory."

I do not, of course, give the above as "authority," or as ground for aught than further enquiry towards authentic determination of the questions of fact involved.

In the meantime I purpose to examine what best evidence we, so far, have on the subject, and which Mr. Fleming's report—an exhaustive effort—presents to us. This in my next.

Yours,

M. McLEOD.

Aymer, Q., June, 1874.

LETTER VI.

SIR,—Continuing under this head, I proceed to show what the report of Lieut. Palmer, R.E., of his survey in Autumn, 1862, as given in Mr. Fleming's report, says of it.

Page 219 of Report:—"North Bentinck Arm, a mere water-filled indentation in the mountains, some 25 miles in length, and from 1½ to 2½ miles in breadth, may be taken as a fair type of the other inlets on the coast." * * * "North Bentinck Arm receives at its head the waters of the Bella Coola or Nookhalk River, a rapid mountain stream, 80 miles in length, which rising beyond the principal crest of the Cascade Mountains, flows through and drains a portion of that range and, subsequently, the chasm or valley formed by the continuation of the mountain walls of North Bentinck Arm." * * * "The valley of the Nookhalk for 40 miles from its mouth is undoubtedly of estuary formation, low, and, in many places, swampy throughout, and to the same process by which, for ages past, the land has been gradually forcing back the waters of the ocean, viz., the deposit of vast quantities of alluvium and drift which have been brought down by the Nookhalk, is to be attributed the existence of the large, flat mud-shoal which extends across the head of the Arm. This shoal, composed of black, fetid mud, supports a rank vegetation of long swamp grass for about half its distance outwards; it is bare at low water spring tides for about 700 yards from high water mark, and at a distance of 800 yards from shore terminates abruptly in a steep shelving bank on which soundings rapidly increase to 40 and soon to 70 fathoms." [Note by myself. * A little dredging will easily improve this.] "Another small

"anchorage is said to exist at the mouth of the Noomamias River, about 3 miles down the north shore of the arm." * * *

"To build wharves and perhaps a few sheds on the rocky shores of the anchorage, and thence a road along the mountain sides to the spot indicated in the accompanying plan as suitable for a town site, is the only method I can arrive at by which to meet the requirements of any future traffic that may occur on this route. The site I have selected is, in fact, the only available ground in the neighborhood, a sloping tract of land of about 1,200 acres in extent, covered with a profuse wild vegetation of clover, vetches, or pea-vine, grass, and berry bushes of various descriptions, timbered in many places and generally dry, but breaking up towards the river and the head of the Arm in low swamps and ponds, and damp, grassy hillocks.

"On the north side of the river much of the land is heavily timbered within the line of high-water mark with cedar, cotton wood and some species of fir," &c.

"Half a mile from the mouth, and on opposite sides of the Nookhalk are two Indian villages, &c. Two miles further up is another village, population about 1,200 souls. The natives are physically a fine race, tall, robust and active." * * * Navigation of Arm and river is by canoes. * * * Page 222.

"The Nookhalk Valley, which averages from one-half to one and a half miles in width, opening out considerably," (probably to the extent of five miles as reported by McDonald and Barnston) "at the confluences of the principal tributaries, is walled in by giant mountains of from two thousand to six thousand feet in height, presenting the usual variety of scenery met with in mountain travels in this country." * * * Page 223.

"The valley abounds with the natural features usually met with at low altitudes in this country; tracts of heavy forest and dense underbrush, such as we see in the valley of the Lower Fraser, succeeded here and there by groves of alder, willow and swamp woods, occasional open patches of low berry bushes, forests of smaller timber with a comparative absence of brushwood, large alluvial flats, abrupt mountain sides, poor gravelly soil, patches of swamp land, innumerable brooks and sloughs, and large quantities of fallen, and, occasionally, burnt timber. * * *

"Although the present trail passes through a great deal of swampy land,

"there is nothing to prevent a good bridle path or waggon road being carried the whole way to Shtooiht, &c., (57 miles)." Page 224—"Happily, in this valley there is a comparative absence of rocky bluffs running sheer into the river."

"THE GREAT SLIDE" AND MINOR ONES.

"There is an unavoidable slide of fragmentary rock, half a mile in length, at 27 miles from Ko-om-ko-ots, and rock *in situ* would be met with about two miles above Nookkleia, but neither difficulty is likely to prove of a serious nature."

"Atnarko" (river with two tributaries,) Valley is similar in many general characteristics to that of the Nookhalk: as its stream is ascended so do the difficulties of progress increase. The valley, which near its mouth is about one mile in width, gradually contracts, and the mountains, although diminishing sensibly in apparent altitude, become more and more rugged, and frequently jut out in low, broken masses into the stream."

"HERE THE FIRST SERIOUS OBSTACLES TO ROAD MAKING ARE MET WITH. From the crossing of the Cheddeakul" (one of said two tributaries) "to the foot of the Great Slide, mountains crowd closely in upon both sides of the stream; frequent extensive slides of fragmentary trap rocks of all sizes run either directly into the river, or into the low swampy lands bordering it, which are liable to inundation at the freshets, and the Indian trail which winds along their faces is difficult and almost dangerous for travel. These slides vary from 300 to 600 feet in height, and are capped by rugged cliffs extending to an average altitude of 1,500 feet above the river, and since they are unavoidable, the labour of trail making between Shtooiht and the Great Slide" (14 miles) will be considerable, and entail a probable expense of "£1,000" (only one thousand pounds)—"Distance from Bentinck Arm, 57 miles."

"At Cokelin, 1,110 feet above the level of the sea, the trail leaves the Atnarko running about south-east, and strikes to the northward, directly up the face of the Great Slide, at a high angle of elevation."

[Query by myself—Could not a railway line be run *diagonally* across its face, and, if need be, in zigzag?]

"The height of the actual loose rock, as indicated by barometric measurement is about 1,120 feet, the trail barely even winding up this portion,

"but wriggling almost directly up the face in would-be zigzags bitterly trying to pedestrians. Above this it is least among cliffs and hollows dotted with small timber, and rises more gradually until, five miles from Cokelin, an altitude of 1,780 feet (2,890 feet above the sea) is now attained. The trail now emerges on an elevated, rolling district, where the mountains, with whose summits we are nearly on a level, seem of inconsiderable height and lose much of their rugged appearance."—Altered vegetation.—"Down by a gradual descent of 500 feet to the brook Hotharko, a tributary of the Atnarko, and up its valley seven miles in an east-north-easterly direction to its forks, meeting with no serious obstructions but fallen timber and occasional small rock slides. The space between the forks of the Hotharko, which run in south-easterly and west-north-westerly directions, is occupied by a peculiar mountain mass of basaltic rock, 1,350 feet in height, which has received the name

'THE PRECIPICE.'

"The ascent of this mountain is excessively steep, the trail at first running up the back bone of a singular spur, further up winding among crumbling fragments of rock, and finally, reaching by a dizzy path the summit of the perpendicular wall of rock, 100" (only one hundred) "feet high, which crowns the mass, and from which it derives its name."

[Here I would respectfully observe—a tunnel—it seems to me—say about a mile in length, from the eastern slope (slope shown in section sheet 7) of this "precipice" to the base of its "100 feet perpendicular," would bring the line to the head of a system of natural slides and "heavily timbered slopes," which, though steep for ordinary railway gradients, certainly present no feature insurmountable to railway construction and working, as proved, abundantly, under such like conditions, and worse, with higher heights, and steeper gradients, as on the Nevada of California; on the Andes of South America (with average gradients of 500 feet to the mile) for 30 miles together, on Pacific slope; on the Ghauts of India; and on the Alpine heights of Switzerland and other mountain lands, all—save British Columbia—thoroughly or partially railwayed.

At this "Precipice" alone, with its "slides," would special plant and motor be required, in the whole route from

ocean to ocean. The same can scarcely be said as to the Bute Inlet line between the N. Thompson and Fraser, as surveyed, and now given in report.

In Sir Alexander McKenzie's account of this interesting spot, in this Adam Trail, and his, to the Pacific in 1793, we have the following as given in pages 233-234 of Mr. Fleming's report. Approaching from the east, he says: "We continued our route with considerable degree of expedition, and as we proceeded, the mountains appeared to withdraw from us. The country between them soon opened to our view, which apparently added to their awful elevation. We continued to descend till we came to the brink of a precipice. The precipice, or rather a succession of precipices, is covered with large timber, which consists of the pine, the spruce, the hemlock, the birch and other trees. In about two hours we arrived at the bottom, where there is a conflux of two rivers that issue from the mountains."

Reverting to Mr. Palmer's report, we see it stated by him that the distance from Cokelin to the Precipice is "16 miles," and that the "top of the Precipice is 3,840 feet above the level of the sea." "Arriving here," he continues, "the traveller enters on the level of the great elevated plateau which intervenes between the Cascade Mountains and the Fraser. Looking eastward the plateau presents but few objects to attract attention, and the eye grows weary in wandering over a vast expanse of waving forest, unbroken save by the lakes and marshes, which are invisible from the general level." "The summit ridge is crossed at a distance of about fifty-five miles from the Precipice, and a height of 4,360 feet above the sea. The extreme elevations of the rolling plateau are very inconsiderable, seldom more than 800 feet above the general level. Distance from Slide to Alexander" (Alexandria on Fraser River) "180 miles."

Yours,
M. McLEOD.

Aylmer, Q., June, 1874.

LETTER VII.

LEATHER PASS.

TO THE EDITOR OF THE GAZETTE.

SIR,—This is a term applied—or at least was so by the Fur Trade—in a general way to the whole passage from the Northern Bend of the Fraser, eastwards to Jas-

per House. The term "Tête Jaune" was applied rather to the "Cache," and was so called from the color of the hair—not unfrequent amongst French-Canadians of Breton and Northern France origin—of an enterprising French trapper, of the name of Decogne, who used the singularly appropriate locality—an immense hollow, but comparatively level, of some 70 square miles in area, amongst the mountains there—for his "Cache" or *entrepôt* in his line of work.

CACHE TO NORTH FRASER BEND.

The Pass was, in my time in those parts, and for some years after, a highway not only for loads—leather principally—but for the sick and even paralytic seeking medical aid in Canada, from all parts of British Columbia, even from the Babine country. I, however, never passed through it, nor approached it nearer than Old Henry House (Miette), 18 miles from the summit.

From the summit of the Pass to the Cache, the latest re-survey has determined most favourably, as shown by report already cited, the question of railway line. The distance of the Cache from the summit is given at "50 miles," its height, "2,500 feet above sea level." From the Cache the trend of the Fraser is in a general course N.W., until at a point for which "Giscome's Portage" may be assumed, it bends sharply, and strikes due south. This turning point may be laid at $54^{\circ} 25'$ N. latitude. The Fraser at the Cache may be laid at $52^{\circ} 55'$. The trending is therefore, it may be said, 100 miles due north, and all that off the true line to N. Bentinck Arm Port. The distance from the Cache to this bend has never, so far as I am aware, been measured. In section sheet 6, under head "Fraser River," there is a point marked "248" (i.e., miles from summit of Y. H. Pass), with a line of "altitude," marked "1,900" (feet above sea level), but there is no name or designation given to the point. I assume it to be the extreme northern point of the bend, as in distance and height (river level) it agrees with or very closely approximates the distance and height assigned by me, in my pamphlet "Peace River," page 113, under head "Tête Jaune Cache." The gradient, from 2,500 to 1,900 feet, in the distance (assumed in sheet) viz., 198 miles (river course, navigable to canoes, and without falls) would average scarcely two feet and a-half per mile. From "Giscome Portage," which, by the way, was never a trade-route, to a point in section sheet 7, marked "Cross Black or West Road River," the distance, in sheet, is 95 miles;

thence to "Bentinck North Arm (Pacific Tide Water)," according to the same sheet is "215 miles," which, however, being tortuous Indian trail, to avoid lakes and swamps, would, for road route, as Lieut. Palmer explains, be reducible, according to his calculation, about 25 per cent, save as to that part, "73 miles," from the head of the Arm to the top of the Precipice. I assume that Mr. Fleming has taken Mr. Palmer's trail distances as given in report. As to the rest of this line, viz., from crossing of West Road River to Bend of Fraser, and thence to the Cache, no measurement of distance or height has, so far as I am aware, ever been made by any one. For lack of better, I take the figures given in section sheets 6 and 7. They stand thus:—

	Miles.
From Yellow Head Pass (Summit) to Cache.....	50
From Cache to Giscome Portage.....	198
From Giscome Portage to crossing of West Road River.....	95
From crossing of W. Road R. to Tide Water N. Bentinck Arm.....	215
Total.....	558

Reducible, probably, to 500 for railway route—the whole way, and especially from a point about 45 miles S.W. of Giscome Portage to the Precipice, admitting, I believe, almost an air line—say 175 miles—making my calculations thus, including also a reduction on the "198 miles" given for the distance from the Cache to Giscome Portage:—

	Miles.
Summit Y. H. Pass to Cache (measured).....	50
Cache to Giscome Portage (not measured).....	175
Giscome Portage to Precipice ".....	120
Precipice to Tide, N. Bentinck Arm (measurement).....	73
Total.....	518
Replacing to Yellow Head Pass (Mr Fleming's estimate and measurement of part).....	2013
Total.....	2531

I take the liberty of giving these figures, in case it should prove, on survey—if such survey ever be made—that the Quesnel Lake line, as I have indicated, is too unfavorable for a option. I really think, now, it would be found considerably shorter than I have advanced. At the same time, in point of gradients, it will assuredly be less favorable than the Northern Fraser River Bend Route. The latter route, Mr. Fleming, as he says in his report, has ever looked to as an alternative certainly for access to the Chilcotin Plateau, even for route to "Bute Inlet." North Bentinck Arm, I would observe, is fully a hundred miles or more north of Bute Inlet, and is certainly two-

thirds of that distance (say about 70 miles) nearer the N. F. Bend, and, I humbly think, is equally accessible by rail; we have, at least, no evidence to the contrary. In any case, "Bute Inlet," as I shall hereafter show, is out of the question—is a political anomaly and physical impossibility for such a terminus as our highest and ultimate behests require, however well it may serve the special local—but purely local—interests to which all effort in this great matter seems, most strangely—most unfortunately, so far—to have been bent. On this point, I can only repeat what I have said in my "Peace River" pamphlet, page 103:—"Surely, it is not," I ask, in protest against *non-exploration of all British Columbia*, "that the 'men of the south of British Columbia who hold present rule,' (April, 1872) 'are afraid to open to public view the 'grand middle and north of the magnificent country in their trust?'"

Exploration, not only of British Columbia, but of our whole vast North and North-West regions yet untouched by authentic record, and of which the very people of Canada, called on to give so largely of their financial resources for development, know less than they do of the centre of Africa. It struck me also that such exploration should precede the instrumental work of survey for railway. Hence my Britannicus letters of 1869, inviting it. On the strength of them, as avowed by the Finance Minister (Hon. Sir John Rose) in moving the item, when asked *cur bono?* by the Hon Mr Holton, "£300,000 sterling"—besides the like sum for payment to the Hudson's Bay Company for their surrender of charter rights—was *unanimously* voted—*voted specifically for exploration—eo nomine.*

I was in the House at the time, and of course, with much interest, noted what occurred and was said.

In 1872, early during session in April, seeing nothing done in that way—for the railway survey staff, with its incidental cumber and procrustean measure of work, could not do such flying duty—I wrote my pamphlet, headed "Peace River," touching, in exposition to further invite exploration, the *whole field* from Hudson's Bay to Pacific, and from our Arctic coast to the Columbia River. I did so, as before said, from personal knowledge and my father's and other well-garnered papers, maps, &c., and other special information as to the regions in question. From Sir James Douglas—the highest authority as to the geography of British Columbia—for he has spent nearly half a century there, and most of

the time as its local chief ruler—I received, in recognition of my pamphlet and letters, a note, in warmest terms, of date 3rd April, 1873, from which, as being essentially of public moment and not "private," in its strict sense, I proceed to give the following extracts. As a matter of form I ought, perhaps, to ask his leave, but in the present emergency there is no time for it.

[Extract.]

"Dear Mr. McLeod,—I have had the pleasure, &c." * * * "Your notes and tables of distances [given in much detail in pamphlet] must have been," he says, "of immense service to Mr. Fleming in preparing his last annual report, which, before I received your letter showing how he acquired his information, greatly surprised me by its fulness of detail and evident familiarity with the leading physical features of the country, as well as the breadth and vigor with which it grappled and dealt with the whole subject of the overland route.

"I must certainly add my testimony to that of Mr. Fleming"—(Mr. Fleming had spent some hours with him, in 1872, in his trip from ocean to ocean)—and," he adds, "of many other friends and supporters of the grand Canadian enterprise, as to the extreme importance of your literary contributions in promoting the work." * * * "I retain a lively recollection of your worthy father. It was at 'Isle à la Croix' that I had the pleasure of seeing him, about the year 1821 or '22." * * * "We never met on the west side of the mountains, as he left before I came to the Columbia Department." He then goes on to inform me, in correction of my statement in the pamphlet, that it was he saved my father's life from Indians at the Dalles of the Columbia, that it was not he, but the celebrated *botanist*, Douglas.

Of course, I do not pretend that it was from me alone that Mr. Fleming got all such information as could be got only from us old Hudson's Bay and North-west people, who, in those stirring old times in the far North, travelled much more than they do now, but, up to the time of starting his survey, I do not know from whom else, especially as to the interior of British Columbia, he could have got it, save from Governor Sir James Douglas.

I may add—on this point of acknowledgment and approval, in most cases, in marked terms—of my pamphlet, the following authorities:—

The Colonial authorities [Secretary of

Pacific same never, avoid route, scible, 25 per miles," top of Flem- tances of this Road nce to ance or e, ever of bet- cection

Miles.	
to	60
.....	198
West	95
water	215
.....	558

railway pecially . of Gisa admit- line—say thus, he "198 from the

Miles.	
(ed) .. (A	175
(ed) ..	230
mea-	73
.....	518

tem- at of 2013 2531

g these on sur- e—that have in- tception. e found ave ad- point of be less Fraser route, in his an al- the Chil- Bute In- ould ob- or more nly two-

lateral X

State for the Colonies] England—His Excellency the Earl of Dufferin,—His Honor Lieutenant Governor Morris, Manitoba and North West Territories,—The Hon. Hudson's Bay Company, by its Governor and Board of Directors in London—a body not given to such "small-moving," and whose act has, to me, a special value, in that it excuses my apparent violation of much of their traditional esoteric,—The Surveyor General of Dominion Lands [Colonel Dennis]—Mr. Crosby—statistician, and compiler [with much merit] of Lovell's Gazetteer of British North America [a standard work, and in which, under the heads "British Columbia," and "North West Territories," my statements, tabulated, and in descriptive order, as to the economic areas, relatively, of "wheat," and other economic resources, and general geodesy of the whole vast terrain in question, are given, in my own words, with due credit, by name, to me, and that with the long list of corroborative authorities consulted on the subject by the compiler.] I might add to the list, the Hon. Mr. Langevin and others. But coming back to the question of route:—

FRAZER BEND TO NORTH ARM, GARDNER'S INLET.

From this Fraser River Bend—a hinging point—say Giscome's Portage, to the north-east corner of the head of the northern arm of the Gardner Inlet, a point determined by Vancouver as Latitude $54^{\circ} 4' N$, Longitude " $231^{\circ} 19'$ " as he puts it, (in old style), but which, now, may be stated at $128^{\circ} 41' W$. of Greenwich,—the distance, in air line, is, I estimate, about 240 miles—assuming Giscome Portage (eastern end) at $122^{\circ} 35' W$. Longitude, and, as aforesaid, at $54^{\circ} 25' N$. Latitude.

It is, I believe, available throughout, and without "heavy work" or gradients beyond 20 or at most 30 feet per mile at any point, not even in approaching tide-water. The course would be to old Fort Fraser, (50 miles, West by S. from Fort St. James), thence along the south-side—all fine plain and lake country, almost level—of the North-West Branch of the Fraser—thence along a chain of lakes, known to the old Fur Trade as the Nateotain Lakes to a summit lake—reported as of the same chain—whence by a river marked "Salmon River" in the H. L. Co's. charts, as copied by Arrowsmith—see my map to "Peace River"—the water is represented to flow to the Pacific. I refer to this in my pamphlet, page 105, thus, in giving certain extracts from a work,

citing Chief Factor Harmon's Journal, which journal I had not seen, however, at the time I wrote. Extract—"1812, "January 20th, I have returned from "visiting five villages of the Nateotains," (Note by Ed. (i. e. myself) "Tribe between Fraser's Lake and crest of the "Cascade Range, at the head of Salmon "river, which strikes at Hopkins' Point, "the head of the northern arm Douglas' "channel or canal of Gardner's Inlet" "built," says Harmon, "on a lake which "gives origin to a river that falls into "Gardner's Inlet. They contain about "two thousand inhabitants, who subsist "principally on salmon and other small "fish, and are well made and robust. "The salmon of Lake Nateotain have "small scales, while those of Stuart's "Lake have none." [Note by Ed. (myself.) "The only solution of the apparent "anomaly is that the Nateotain, or Nuteotum, as I have seen it elsewhere "spelt, salmon is a different kind, probably the powerful *Ekwon*—of which, "more anon, which had taken the short "cut from the sea to the height, via the "Salmon River."

In connection with this, in page 99 of my pamphlet, I say, "I refer to all "these salmon streams" (speaking of the Skeena, Fraser and the "Salmon River" now in question) "as being, probably, "possible highways for man as for the "salmon which are found in their source "lakes on the very plateau now marched "on. No salmon has ever been seen or "known to top in its leap fourteen feet in "any British stream. Possibly the 'Ekwon' (hereafter described) of our Pacific "may, in his special lithe and strength, "do more, but certainly not more than a "foot or two. These facts are measure, "approximate at least, in the question "or problem of feasibilities for railway "or roadway of some kind from this "plateau to the ocean."

The description given in Vancouver's report—page 255 of Mr. Fleming's—represents the point in question at the mouth of the said Salmon River, as one of exceptional features, with a "low "valley, three or four miles wide, forming nearly a plain, covered with tall "forest trees, mostly of the pine tribe, "extending some leagues to where the "distant mountains appear to connect "the two ranges." There, possibly, may be our *Eureka*; but alas! it is a little too far north for our Grand Trunk Road to China. For home service it would, however, answer well—say for our modern Eldorado—richest in the world

probably—just discovered in northern British Columbia.

Yours,
M. McLEOD.

LETTER VIII.

PEACE RIVER PASS TO NORTH GARDNER'S INLET.

TO THE EDITOR OF THE GAZETTE.

Sir,—The following is my estimate on this head—estimate unavoidably vague, but still based on *some data*, as given in pages 21 to 25, and 96 to 106 in the text of my pamphlet "Peace River," and in pages xii, xiii, xviii and xix of my tables of distances and heights in the same.

Mr. Horetzky (a mere ex-Hudson's Bay clerk, so far as I know, and probably employed by Mr. Fleming for his pedestrian experience as such) not being, it would seem, a railway engineer, nor furnished with any instruments to make any observations— which probably he could not make—in determination of latitude, longitude or *distances*; and as in what he does give of these last, he varies very little indeed from those given by Sir George Simpson, Mr. McDonald, and myself, and as to *heights*, perfectly accords with *me*; I may say, although mine were mere calculations from journal entries, in a canoe voyage of over three thousand miles from Hudson's Bay to the mouth of the Fraser—from Ocean to Ocean—and his are, professedly, "aneroid measurements," I am forced to rest on *my own data*, as reported and given in my "Peace River." Peace River Pass is, as I show in page 90 of my pamphlet, in about Latitude 56° 18'—236 miles north of the Yellow Head Summit.

The following is my estimate of *Railway* route by it:—

Peace R. Pass to McLeod Fort— continuous average grade 1½ feet per mile.....	110 miles.
McLeod Fort to Foot St. James, undulating, with probable max. gr. 20 feet per mile..	80 "
Fort St. James to Gardner Inlet North, along South side of N. W. Branch of Fraser, un- dulating at the beginning and end, but level in middle....	210 "
	400 "
Add—Nipissing to Red River—(measured)	973 m.
Red River to Peace R Pass—my estimate.	1150 m. 2123 "
Nipissing (E) to N Gardner Arm, Total.....	2523 "

Maximum height, say 2,200 feet above the Sea.

Here, it may be well to give in *justa* relation, the route to the same Pacific point, via the Yellow Head Pass.

Nipissing to Red River—(measured).....	973 miles.
Red River to Edmonton—(estimate).....	750 "
Edmonton to Pass [Y H]—(measured).....	288 "
Summit [Y H] to Cache—(measured).....	50 "
Cache to N Fraser Bend—(estimate).....	186 "
Thence to N Gardner Arm—(estimate).....	265 "
	2512 "

Maximum height, 3,748 above the Sea:—
Add for height above that of the Peace R route—operative
equivalent..... 100 "

Total..... 2612 "
COMPARATIVE ESTIMATE OF TOTALS.

Yellow Head Route with operative equivalent	2,612 miles.
Peace R. Pass Route	2,523 "
	89 "
Balance in favor of latter, say.	100 "

That is for N. Gardner Arm, but the same might be fairly assumed for the South Arm. The South Arm would be a little nearer, but, on the other hand, the approach to it would, most probably, be considerably higher.

Of the gorges of the Cascade Range, north of the Georgian Gulf, there remains but that—if such there be, as is probable—at the head of the Dean Inlet. I know nothing about it—but would have done so, I think, had it been known to the Fur Trade in those parts; and I have under my hand and possession the best, and perhaps fullest record of the whole history, in all working detail, of the coast trade of the Hon. H. B. Co. from its very initiation. However, I see in Governor Trutch's splendid map of British Columbia the largest river through the range, in those latitudes, marked to the head of Dean Inlet. The head of the inlet is in about 52° 52', and is apparently about 40 miles nearer the N. Fraser Bend than is the N. Gardner Inlet, and is about the same distance as South Gardner Inlet, from that common shunting point. In the Arrowsmith map before me—one used of old, and still, by the H. B. Co. in its work, and constructed from the Company's own charts—there is only a dotted line—signifying unexploration—from it

to a point about midway on the trail between old Fort Chilcotin and the head of the North Bentinck Arm. My idea is, that about there, there is a gorge, giving outflow to those "larger" (larger in comparison to the mountain waterfalls immediately in view on the mountain sides) "torrents," which, according to Vancouver, (see report, page 249) "appeared to owe their origin to a more general and "permanent source." He is speaking of the Cascade Canal, near the head of Dean's Inlet, and means, I presume, source inland. The trough of the Dean Inlet gorge is, however, clearly not that of the Gardner Inlet, and is considerably higher, probably averaging 2,500 feet, or rather more, above sea. It certainly should be at once explored, and, in fact, the whole Cascade coast and range, from Bentinck Arm to Naas.

Before leaving them, I would say a word as to these

INLETS AND THEIR NAVIGATION.

All of them—yes, the whole coast of British Columbia, has for three quarters of a century past been the resort—constant resort—in all seasons, of coasting traders, ships, brigs, schooners, and other craft, British, American, Mexican, Russian and others, and I never heard nor read of a wreck on it. And further, I take it upon me to say, that according to the whole world's record of marine disaster, there is, comparatively to its trade and usage, no safer coast anywhere, unlighted though it be. Vancouver's charts and reports—our only best authority yet as to those PARAGES—prove it. For instance as to the "Burke Channel"—first explored by him—and of which the North Bentinck Arm is one of the heads—he thus reports to Her Majesty's Admiralty, see page 245 of Mr. Fleming's report, "May 26th: With a gentle breeze from the E.N.E. we stood" [exploring an unknown sea, with many a rocky wild of isles innumerable] "we stood up Fitzhugh's Sound" [leading into the channel] in the evening, with "all the sail we could spread." The Sound opens to the broad ocean. "This by four "the next morning," he goes on to say, "brought us to the arm leading to "Point Menzies, whose extent was left "undetermined, and where in a cove on "shore, about eight miles without its entrance, I expected to join the Chatham." In the preceding page he speaks also of a remarkably fine cove, large and safe for ships, in the same passage to the Burke Channel but further in, which he designated "Safety Cove," marked also, I perceive, in Lieut. Governor Trutch's

map. Also, we have "Bella Bella," a present snug harbour and trading post, referred to by Mr. Horetsky, and into which the Hudson Bay Company's little trading steamer, in *mid-winter*, safely bore him. But of those "Pender Rocks" that this gentleman speaks in his book as "obstructing navigation," neither the Trutch map, in its fulness and correctness of the coast of British Columbia, nor Mr. Fleming's report, in its exhaustive fidelity, make any mention. The same kind of mischievous misstatement and blackening, to make some point sinister, is made by this same "dedicator to the Hon. Mr. Mackenzie," as to Bella Coola as a harbour.

The coast, rough and broken though it be—corresponding much with that of Cornwall, Ireland, Scotland and Norway—in fact, their counterpart, but in grander scale, as is the Pacific to the Atlantic, is, to use the words of old "King of Borva" of the Hebrides, "A grand coast for fine harbours." Further—they all open out on the best *coaling stations* in the world, Fitzburgh Sound having on the one side, north, the Queen Charlotte Islands, with their numerous fine harbours, with coal equal to finest English, and which has sold in San Francisco at \$20 per ton—also good anthracite—and all most abundant and accessible. On the other side, south, is the north-western end of Vancouver Island, with its admirable harbours and excellent coal, abundant and ready to tumble from seam direct into ship's hold, it may be said. To the more northern inlets, such as Gardner's—Vancouver Island is scarce in course to China, it is true, but is so to Australia, the South Pacific, and to San Francisco, and Western Mexico, Central and South America. The Queen Charlotte Islands, in their mineral wealth and fine climate, and abounding fishing grounds, must become, quickly, of first importance. They are worth ten Alaskas.

To Vancouver Island, however, does Providence seem to point for *Rule-Seat* of the Northern Pacific, yea of all the Pacific. An aggregation of remarkably good natural harbours and docks, chiselled out as it were by nature, easily accessible, and having everything required for safety in port, lying just on the great sailing arc of the Northern Pacific, according to Maury chart; with the finest of climates for active life; good soil and flora; and coast line low enough for a railway from Victoria to Fort Rupert—a railway which may well be made as part of our Pacific Grand Trunk—it may, and I sincerely hope to yet see it, as a result, sentimental of

my poor father's subscription, (£500 stg.) with others, nearly 40 years ago, to the Puget's Sound Agricultural Association in connection with it, the great entrepôt, the newer London and Liverpool combined of a greater Britain in a wider Ocean. Ships will, it seems to me, not lose time to beat up the Straits of Fuca to the American Railway Terminus up Puget's Sound; easier for them would it be to discharge at Victoria, Barclay Sound, Quatsino Sound, or Port Rupert, and thence may connection be made with both Railway Termini, British and American. From Victoria to Bella Coola is only thirty hours, perhaps only twenty-four hours' steaming.

BUTE AND BURRARD INLETS.

As to the only other Inlets calling for notice, viz., Bute Inlet and Burrard Inlet, I have only one word—a sad one—to say. They were, or at least Burrard was our best for railway terminus. Now, both are blocked to us by the guns—foreign—of San Juan!

PEACE RIVER PASS AND OTHER PASSES.

Peace River Pass is thus described in Mr. Horetsky's report as given in Mr. Fleming's, Page 49. "We experienced a very strong current all the way up to the Finlay Branch (70 miles), i.e. 70 miles from the head of the Portage at the east end of this river Pass, and encountered two rapids or falls. From the head of the Portage to within a few miles of the Finlay, the Peace flows through the entire Rocky Mountain range. For 30 or 40 miles from the head of the Rocky Mountain canyon, the valley is encompassed by mountains of not very great altitude, but a little east of the "Rapide qui ne parle pas," the main range begins, and the river flows through it for about 25 miles, and until within a few miles of the Finlay Branch, and within this distance, peaks 4,000 and 5,000 feet above the eye, extend back north and south as far as visible."

"The banks within this valley are very rugged. There are gravelly terraces here and there, but steep and projecting rocky points occur at frequent intervals, and in many places the mountains rise up sheer from the river, necessitating," avers Mr. Horetsky, "in the case of road, many deviations and heavy works of construction."

I want to "nail" this statement, Mr. Editor. Captain Butler, the last, and certainly not least, but, with Professor Macoun, the fullest and best authority on this point, thus describes the particu-

lar rocky points in question, of the way. In page 266 of his "Wild North Land," says Butler, "We were now on the mountains. From the low terrace" (N. B. This was on the 8th May, at Spring flood) "along the shore they rose in stupendous masses; their lower ridges clothed in forests of huge spruce, poplar and birch, &c." Page 287. "For two days we journeyed through this vast valley," (i. e. through the range proper, approaching the head of the Pass) "along a wide, beautiful river, tranquil as a lake, and bearing on its bosom, at intervals, small isles of green forest, &c." "Thus we journeyed on. On the evening of the 8th of May we emerged from the Pass."

This description of *impedimenta* is unfortunate; but in connection with it, it ought to be stated that this same Mr. Horetsky—a subordinate officer, who seems to have ignored his chief, in his duty—has, *primo*, published, in advance of, and forestalling Mr. Fleming's report, a book, being a report of this same expedition in so far as he took part in it. It is "by permission" "dedicated to the Hon. Alexander Mackenzie, Premier, &c.," "by the author."

I refer to the incident as something—I shan't say monstrous—but certainly out of the ordinary course of nature in official life political. Mr. Fleming is our paid Chief Engineer—our servant. As such, at our, the *public's* cost, he employed this subordinate to do certain work, viz: to get and bring to the table of our House of Commons that precious thing, I—as Mr. Fleming so honestly states in his official report—had pointed out—had, as he says, "particularly drawn his attention to," viz: the "solution of the McLeod theory," as honest John Macoun calls it—as to the Peace River Pass—Master subordinate finds it—just as told in my very pages in his hand. It became, then, in ordinary official dealing, a sanctity, to be laid before the people in due course by its delegated high-priest, His Excellency the Governor-General, by the ministry—subordinate still, in a sense of his Minister *ad hoc*. The thing—yet covered in the hands of this subordinate—is taken to Mr. Mackenzie, is offered to *him*, individually, in a sense. He takes it: abuses it, to the public detriment, and uses it, in a way, to his own sinister ends.

Secundo—This description of *impedimenta* is unfortunate; but in connection with it, it ought to be stated that Mr. Horetsky is himself claimant to the "*trouville*"—that, I believe, is the term

used by him, or some one who writes for him—to another: a "better" pass, "probably," as he contends—further South, some 40 or 50 miles, called—by the Indians, for no white man has yet seen it—the "Pine River Pass." Fortunately, his companion, Professor Macoun, who had no such "mare's nest" in his mind's eye, to divert him from the due appreciation of the *important* physical facts, to specially examine which, and truthfully report thereon, this "Branch Expedition was despatched by Canada's Chief Engineer, gives us, in his most able report, a somewhat different account, thus. Page 97 of Mr. Fleming's report:—"The Peace River valley, *through the mountains*" (the italicization is my own; the words are his) "as far as I can judge" (better judge than, so far as I know, one who had never had experience in railway construction) "*presents no very serious difficulties to the construction of either a railway or waggon road.*"

He then describes, at much greater length than Mr. Horetzky, the special features of the Pass and its approaches from the east, facility of bridging, "about eight miles below Hudson Hope, and the road to be carried up the left bank of river all the way through the mountains." . . . "Having passed down the Fraser and over the Nevada," he continues, "since seeing Peace River, I can say *decidedly*" (the italics are Mr. Macoun's) "that there is no comparison between them. The nearest approach to Peace River, in appearance, is that of the Fraser between Fort Hope and Harrison River" (all smooth and open) "where no canons exist, and to give a correct idea of the extent of the" (ibid.) "chief difficulties of the Peace River, I may add they do not extend over more than about 6 miles."

As to snow difficulty, as well as the general features of the Pass, the truth is fairly stated by me, with authorities on page 96 and preceding pages in my pamphlet Peace River. In final citation I give it:

"There is, in fact, no snow difficulty whatever at the Peace River Pass, not even in mid-Winter; the threshold is ever clear as that of an open gateway—ever clean swept by every wind of heaven. It is the most magnificent gateway between the two worlds" of this earth, and bears the isotherm of strongest human development. A great Territorial Road [with branches] direct to it, and there striking the centre of a gold region probably the richest in

"the world, would fast people the whole intervening ocean of wheat field."

In this description I am fully borne out, not only by the authorities above stated, but those older authorities, whose position and active interests and life at the time, as leaders in the Fur Trade, forbade attractive coloring to the eyes of the world, of their new pastures; but they were men of truth. In Sir Alexander McKenzie, Sir George Simpson, Chief Factor Harmon, Chief Factor McDonald, [Fur Traders all], I find evidence enough to enable me to say:—Messrs. Macoun and Butler are *decidedly* right, and Mr. Horetzky as *decidedly* wrong.

So much for routes.

On other branches of this great theme—the scheme as *at present* laid—its executive and political aspects, and, so-called, "financial basis," I would like to offer a few remarks, but they are scarcely proper to me, in my own name. As to this matter of routes, I had to defend myself, when attacked and almost robbed of my just credit as to the same.

Thanking you for your generous columns,

I am, Mr. Editor,
Yours ever,

M. McLEOD.

Aylmer, Q., June, 1874.

LETTER IX.

TO THE EDITOR OF THE GAZETTE.

SIR,—The conclusions I arrive at, on the above, are briefly as follows:—

1. That exhaustive survey has determined Mr. Fleming's "Route No. 2," as laid in section sheet 9 of his report, as not only feasible, but as the best possible; in every respect, from Eastern Terminus to the Prairie Region.
 2. That in British Columbia, exhaustive survey has *proved the necessity* of looking to some point *North* of the Georgian Gulf for a Western Terminus.
 3. That a thorough, or at least, sufficient exploration, by competent and reliable men, should be made of all British Columbia, from the Rocky Mountains to the Cascade Range, between latitudes 52° and 57° N., for Railway route.
 4. That in the meantime, between Red River and Nipissing Terminus, the work of construction should at once proceed, with all possible energy.
- That in British Columbia, the line from

Victoria to Nanaimo should at once be made.

And that in Manitoba, with like urgency, the Pembina Branch should be "pushed through."

All this may, I presume, at once be begun with the eight millions of dollars, or at least half of that, now being raised in England on the pretension that the great scheme is to be faithfully and earnestly begun and carried out.

INCIDENTAL

to the above is the consideration of "ways and means." This branch of the subject is beyond what I intended to touch on, but, as I have already done so in my Britannicus letters of 1869, in the course of which the editor of the *Ottawa Times* of that day yielding, after controversy, to the force of my argument against alienation of the "Crown Domain" in areas of such extent as to create a predominating class interest to the jeopardy of individual political liberty; and to my argument also that the "Crown Domain"—so called—is a holding merely in trust by this Government for due administration, and only administration, in permanent national behest, happily suggested a system of *hypothecation* of lands to the end sought. Issue about 8 July, 1869—or about then—I have not the precise words. The "idea" struck me with much force, and I really think it is, as matters now are, the most practicable one that has yet been mooted: adopting it, I respectfully conclude,

5thly. That our best North-West and British Columbia lands, to adequate ex-

tent, should be *hypothecated*, and in due course, for settlement, be sold, on terms to attract, and that the proceeds should be appropriated to the establishment of a sinking fund to meet railway debentures.

This, with Imperial aid in fair measure, and a moderate Pacific Railway tax, amply compensated by beneficial returns in a thousand shapes, ought, I humbly think, to be a financial basis that none should complain of.

6thly. But, above all, this great Canadian enterprise must not be made the plaything, or worse, of political parties; but as a work vital to our national existence, must be *nonerthly* as well as intelligently dealt with; and, moreover, be urged with all our power.

The scheme as at present laid before us, by the present Government, in its executive and financial aspects is, I think, utterly impracticable. In fact, their whole policy, from first to last, in it, has been one really of obstruction, though latterly (probably to raise money in England) they give it seeming countenance. The subterfuge is too transparent for us at home, here. They speak of "selling a charter." There was no sale of charter. But that aside. *They, really*, are selling not only a railway charter, but our *charter of charters—that which we acquired at Runnymede*; for on this scheme—its success, or its failure—rests, I take it, the question of all British charter right—question of BRITAIN IN AMERICA.

Yours ever faithfully,

M. McLEOD,

Aylmer, June, 1874.

