

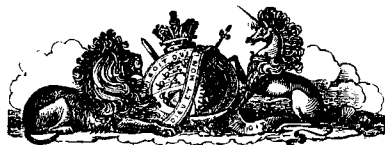
LETTER
OF
JOHN WILKINSON, ESQ.,

DATED THE 4TH FEBRUARY, 1852,

WITH THE
PAPERS CONNECTED THEREWITH,

ON THE
REPORT OF MAJOR ROBINSON,
ON THE
INTERCOLONIAL RAILWAY.

Printed by Order of the House of Commons.



OTTAWA:
PRINTED BY HUNTER, ROSE & COMPANY.
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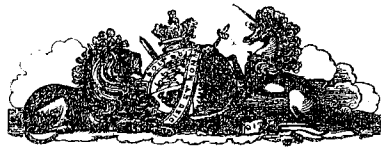
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GENERAL NOTICE

OF A

REPLY BY MAJOR ROBINSON, R.E.,

TO OBSERVATIONS BY MR. WILKINSON ON HIS REPORT OF THE
EXPLORATORY SURVEY FOR THE HALIFAX AND QUEBEC RAILWAY.

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FREDERICTON, 4th February, 1852.

SIR,—Some time has elapsed since you communicated to me by desire of His Excellency the Lieutenant Governor, a copy of a reply by Major Robinson, dated 30th March, 1849, to my observations on his Report on the exploratory survey of the Halifax and Quebec Railway.

The copy referred to would have been returned without delay, had not its contents seemed to require that it should be accompanied by some notice from me, which at moments of leisure was in part prepared; but duties which could not conveniently be interrupted, occasioned my intention to be deferred. Also the temporary discouragements which afterwards befel the design of the projected Railway, tended to deprive the subject of pressing interest.

Having recently become aware that the reply in question has been printed amongst the papers of the Imperial Parliament, and in consequence of renewed public interest in the subject, attracted attention, it seems proper that my silence should not be liable to misconception. It may in few words be some explanation to say, that I have entertained an anticipation yet undiminished, that events would show more clearly perhaps than any notice of mine, the insufficiency of the reply, and that it was unnecessarily hasty to permit the language employed to obscure the merits of the chief points at issue in the guise of a complicated, if not unseemly, personal controversy.

A principal statement relied upon by Major Robinson, was, as soon as possible after I was aware of it, contradicted by testimony appealed to by himself, and which is contained in documents filed in your office, to which public reference could be made when necessary, and to which I may now take occasion to refer, agreeably to my original intention.

The objectionable remarks and statements of Major Robinson are too numerous to be severally noticed, but such as are material I will, with one exception, notice in their order. The exception to which I refer, is comprised in his remarks tending, not to answer my observations, but to question their competency. For this purpose he tortuously ascribes to me, views relative to gradients which I could only regard as absurd; which I have at no time entertained, much less professed or advocated. He thereupon assumes the merit of differing from me in those views, and of convicting me, as he pretends, of at least doubtful competency.

Upon this point I have entertained substantially the views which I believe to have been sanctioned by the best authorities, since the experiments on the Liverpool and Manchester Railway conducted by the Chevalier De Pambour, and published by him in 1835-6—subsequent experiments have somewhat differed in their results, but not essentially.

In my report dated 3rd March, 1849, on the preliminary survey of the proposed line

of Railway between Saint John and Shediac, and printed in the Journals of the House of Assembly, is a short explanation of those views.

It is perfectly consistent with what is there stated, because proved by experience, that an ascent of 1 to 49 may be "practicable" though "objectionable;" and locomotive engines are daily ascending much steeper inclinations both in England and America, not always for "very short distances," but in the instance of the Lickey incline upon the Birmingham and Gloucester Railway, the distance is 2 miles 3.35 chains, upon an acclivity nearly 25 per cent. more severe.

Major Robinson commences his reply by stating the position which I filled in the exploratory survey in 1847. I am not aware whether this may be material or whether he may so consider it. My professional services are at the disposal of the Provincial Government. He was pleased to apply for them, and they were granted under the circumstances stated in the correspondence Nos. 1, 2 and 3, appended.

The object, he says, which I had to accomplish, was to find a practicable line through the country between the River Saint Lawrence and the Restigouche for about 70 miles, "and by so doing, to complete the exploration of a central and direct route through New Brunswick to the Saint Lawrence. The account of this exploration is given in his Report, which forms Appendix No. 3 to the general Report. *It was entirely unsuccessful. The difficulties of the ground tried by him were too great to be surmounted.*"

I am not aware of any statement in the Report adverted to, of entire failure, or of difficulties "too great to be surmounted." The facts remaining to be ascertained are too important, and the labor yet to be performed, in order to ascertain them, much too great, to warrant my assuming the responsibility of such a statement.

As to the ascent of 1 in 49, of which he is so solicitous to shew his disapprobation, it is obviously not recommended, much less advocated by me. Unable to deny, however, that it is "practicable," he consoles himself with the idea that it is "next to impracticable," with the fancied aggravation that "it is *most probable* there *would be* others of a similar nature." He says that "he should condemn such a line and look for another." He ought to have remembered that this was precisely what I did, as proved by the whole tenor of my report, referred to by himself as "Appendix No. 3."

It was soon discovered after the exploration had commenced, that nearly the whole of the portion of the country under consideration, was perfectly unknown for railway purposes; and that the best existing maps did not give a correct idea, even of its system of valleys. That no satisfactory knowledge of its difficulties or facilities could be obtained without a thorough examination of its whole face.

Therefore, as far as the insufficient limits of one season would permit, the valleys offering favorable indications, were traversed; every hill and every tree likely to afford the most ready and satisfactory information, were climbed; numerous sketches of mountain ranges and passes, with approximate triangulations, partly by theodolite from the tops of the highest hills, or by compass more frequently from the tops of the highest trees, were made, in order to obtain the bare extent of topographical knowledge indispensable to a safe judgment as to the situation of the easiest avenues of the country.

Upon such knowledge already obtained, and yet remaining to be acquired, it is incumbent on me to state that the country has not been sufficiently explored; that the facilities it affords are only partially known, and remain to be fully discovered.

The whole area immediately in question, within the limits of which it is desirable to seek for the most favorable ground that may be afforded, is about 2000 square miles. This is wholly uninhabited, but the larger part is fit for settlement. The materials of a sufficient exploratory knowledge of probably one half of that extent, were obtained in 1847. But the labor of obtaining that knowledge was, it must be admitted, greatly increased by Major Robinson's anxiety to keep as far as possible, from the frontier. He professed not to think it important to complete my exploration; and ascribed only a negative interest to what had been done, which he desired should be disposed of in the shortest manner, and in the least possible time. It seemed right, therefore, that I should recommend to the Provincial Government, through the Surveyor General, the propriety of persevering, and of reducing into an available form for future use, the materials which at great public cost, as well as arduous labour, had been acquired. This recommendation was approved. The correspondence Nos. 5, 6 and 7, appended, will be more fully explanatory.

It is stated by Major Robinson, as already quoted, that my exploration north of the Restigouche, was to "complete the exploration of a *central and direct* route through New Brunswick to the Saint Lawrence." To assent to this form of statement would be to admit that a *central and direct* route from the southward as far as the Restigouche, either had been already explored or was in course of exploration. Neither was the case. The two routes explored southward of the Restigouche are both at an angle of considerable obliquity to the direct or central route. That which Major Robinson treats as the direct route, is at some points from 30 to 40 miles to the westward of the direct and central line. This will be apparent by the simple process of drawing upon a map of the country, a straight line from the Bend of the Petitcodiac to the valley of the Trois Pistoles.

It does not appear that any consecutive portion of this line has been examined; or that its suitability for the object of the proposed Trunk Railway does not remain as much to be ascertained now, as before the late exploration began.

It will be seen that such a straight line strikes, in a remarkable manner, the general course of the longest known branches of the Tobique River, suggesting thereby a route of the greatest probable facility of crossing the main valley of that river.

This route was urged by me upon the attention of Major Robinson, when the parties were organized for the exploration in June, 1847, and not, as he mistakes, first mentioned in a letter dated in August.

The line inclining to the westward of the direct line had been partially explored during the previous season, and another party was formed in 1847 to complete that exploration. A separate party was organized for the exploration of the ground northward of the Restigouche, and assigned to my charge, under the instructions, copy appended, No. 4. It was then settled in compliance with my own desire, that in the event of my finding an easy line or even a "*practicable*" one from the Saint Lawrence to the Restigouche at the first attempt, I should then explore southward during the remainder of the season for the proposed continuation of the route in that direction. With this object, the last clause was added by Major Robinson to my instructions. The date of this document, it will be observed, was the 10th June, 1847.

When I wrote the letter dated August 6th, referred to by Major Robinson, I had a prospect of promptly finding a "*practicable*" line to the Restigouche. I then relied upon the disposal of the whole of the party originally placed under my charge, and with the view to keep the same advantageously and efficiently employed, I devised an arrangement suitable to the emergency, which I communicated to Major Robinson, and which arrangement included a detached and rapid exploration by myself with a small canoeing party, in order to discover in advance any favorable communication which might exist between the right hand branch of the Tobique River and the valley of the Miramichi, as contemplated in the last clause of my instructions.

I was at this time ignorant that Major Robinson had, under some hasty misconstruction of my proceedings, withdrawn in another direction more than half the party, and that he had intentionally withheld from me the barometers; a proceeding of which I was informed only so late in the season as to deprive me of any reasonable hope of retrieving so great a disadvantage. I had only such instruments of my own as I had retained in my personal care, and the absence of the barometers in particular, deprived me of the means of readily ascertaining altitudes as had been contemplated. Thrown upon my weakened resources in this capricious and unexpected manner, it is scarcely surprising that the success of the exploration was jeopardised, and my efforts, in a great measure, obstructed. As Major Robinson has chosen to refer to it, I annex the whole of the correspondence in relation to this unfortunate affair, Nos. 8 to 25.

I did not permit this discouragement to repress my endeavors to make the best use of the remainder of the season. My first exploration from the Saint Lawrence to the Restigouche River, satisfied me that the line, though not "*easy*," was "*practicable*," having only one objectionable gradient, which I believe might be avoided by farther exploration, even on the first route, and so I reported, as in Appendix No. 3 of the final Report of Major Robinson. But I was unwilling to be satisfied even with a merely practicable route, whilst I believed an unobjectionable one could be found. I therefore made no attempt, for the present, to proceed southerly. I continued my efforts to complete as far as possible, not only the first route explored, but also concurrently to trace another which promised more favorably.

Before the party could make much progress in the latter, the winter set in with such decided severity as to oblige us to retreat. Three routes were indeed *partially* explored, but not one of them completely. Just as far as these exploratory labours were incomplete, so far were they unsuccessful.

I will now advert to the summit between the valleys of the Miramichi and Tobique Rivers. It is with no feeling of gratification that I return to this subject, in order to deal with the misconception to which Major Robinson is still willing to adhere, as to the main fact that this summit has not been properly explored, and to show that he is greatly mistaken in his reiterated assertions to the contrary. At the same time, neither his self-delusion or his erroneous assertions seem to derive any extenuating grace or merit, from the personal style in which the latter are conveyed. Unhappily for his case, he thus appeals to the authority of Mr. Grant:—

"In the first season," he says, "this country was traversed by our parties, not only in the direction of the line, but an expedition under Mr. Grant, a Surveyor and Draftsman also of great experience, and of the Crown Land Office of Fredericton, (to whose valuable exertions and zeal, even to the risk of his life, the service is deeply indebted,) was sent up the Tobique Valley for the express purpose of examining that long mountain ridge which continues from the mouth of the Tobique River until it joins on to the highest mountains in the centre of New Brunswick, the object being expressly to find the lowest and most favorable point at which they could be passed."

As far as authority may depend upon breadth of assertion, this leaves nothing to be desired. Major Robinson then proceeds to make statements and extracts, by which he seems to have persuaded himself that very great things were done towards the exploration of the summit under consideration. Unfortunately, however, I must repeat, that he has shewn nothing of the kind. Persons locally ignorant of the country may receive a different impression from those statements, and it may seem that they are confirmed by the extracts given from the unpublished Report of Mr. Grant. But the "Blue Mountain" which Mr. Grant ascended, and from one of the summits of which he made his panoramic sketch, is near the Tobique River, and not probably within twenty miles at the nearest distance of the dividing or geographical summit in question. He does not say that he visited or even saw this summit at any point. He does indeed suggest that "*one of the most important preliminary steps is that of ascertaining the lowest points of transit across it, as the one easiest of access from both directions must become a fixed point, and to a greater or less extent influence both the direction and gradients of the line on either side of it.*"

Were Mr. Grant's undoubted "great experience, valuable exertions and zeal," so appreciated by Major Robinson as to gain for him the attention or consideration due to his very proper, disinterested and highly important suggestion? Or is it indeed true that he has already been sent up the Tobique Valley "*for the express purpose of examining that long mountainous ridge, the object being expressly to find the lowest and most favorable point at which it could be passed.*"

When I was personally applied to in Fredericton by the late Captain Pipon at this period, for any information it might be in my power to afford him relating to his undertaking, he stated to me generally his arrangements and proceedings. He was then (say in the month of September) preparing to pass from the valley of the Miramichi to that of the Tobique, and thence to the Grand Falls of the River Saint John, by the recently explored line for a military road. To the best of my recollection, he expected to find Mr. Grant in the valley of the Tobique, exploring the banks of the river, with a view to ascertain the most favorable sites for crossing. Had he intended, either personally or by the assistance of Mr. Grant, to explore the dividing summit, I think he would have mentioned a matter so important. It was physically impossible, however, at that late period, to pay more than very slight attention to it without defeating his main object, that of a general reconnaissance of the country on the line of the proposed military road as far as the Restigouche.

Living as I have been for several years in friendly communication with Mr. Grant, it would be absurd in me to affect ignorance as to the main facts adverted to, and relating to which neither the public interest or professional duty required any mystery or concealment. It was proper, however, under the circumstances of the present controversy, that I should introduce such facts only as Mr. Grant might choose to state them as a matter of official

courtesy, under sanction of the highest Provincial authority. They are accordingly so presented in the correspondence filed in your office, copies of which are hereunto annexed, Nos. 26 to 28.

By this correspondence it will be seen, that with the permission of His Excellency the Lieutenant Governor, the following questions were proposed to Mr. Grant:—

1. To what extent has the line of the dividing summit between the Tobique and the Miramichi Rivers been examined?

2. To what extent has Mr. Grant any personal knowledge of that summit?

3. To what extent does the summit in question remain unknown?

To which Mr. Grant replies—

1. I cannot say to what extent the ridge separating the Tobique and Miramichi waters has been examined, as it was done under Captain Pipon's own immediate superintendence.

2. I have no personal knowledge of the summit in question, for the reasons already stated. My instructions were to "*examine the valley of the Tobique, and to ascertain the best Bridge sites along that river.*"

3. I believe no survey of it has been made, except to a limited extent, in the neighbourhood of the point passed by Corporal Dumble, of the R. S. and M., and his party, in extending the northward line.

Besides this very important, not to say conclusive testimony, as to the unknown character of the central territory of New Brunswick, it is necessary only to refer to the Parliamentary Map of the explorations which have been made, in order to perceive at a glance that there is a maximum breadth of at least seventy miles untouched by those explorations, and with respect to which Major Robinson must of necessity be incompetent to offer information of any practical weight or value. With respect to the summit in question, it will appear on reference, that the explorations made embrace only two points of that summit, scarcely two miles apart, leaving the most interesting portions of the same, for a distance of at least fifty miles in a straight line, absolutely unknown.

Whilst the map referred to is under notice, I may, perhaps, with propriety, point out the liberties which have been taken in the representation of the country explored by me between the rivers Restigouche and Saint Lawrence.

The discrepancies will be seen upon comparison of the sketch of the exploration of that country, with the reduced representation of the same in the Parliamentary Map. That sketch accompanied my Report, Appendix No. 3, to Major Robinson's final Report. It is the most recent and authentic representation of the previously very little known region in question, derived from my personal observations and surveys, acquired at great pains, and compiled with as much care and scrupulous attention to accuracy, as the little time to which he restricted me would permit.

It was also of interest to the pending question of the intercolonial boundary, that there should be neither suppression nor misrepresentation of known facts, especially by any one to whose fair and impartial consideration that question was in any manner referred.

Returning to the summit under consideration, south of the Tobique River, Major Robinson reluctantly admits that "it is of course within the limits of possibility that there may exist some gap in this chain by which it could be passed at a somewhat lower level, *but it is highly improbable that there should be, and that it should have been unknown to the Indians, and undiscovered by our exploring parties.*"

In answer to my second question already referred to, Mr. Grant says, "I purposed making an examination of such parts of the ridge as my own observations, as well as the suggestions of the Indians, led me to believe were most approachable from either side, to what appeared the lowest summit levels. With this intention, I was in the act of making a section survey from the Tobique River towards it, which Captain Pipon directed me to abandon, as he had himself for the time sufficiently examined it." From my own knowledge, as already stated, it was physically impracticable for Captain Pipon to have given more than a very small portion of his attention to this summit; and in answer to my third question, Mr. Grant says, "I believe no survey of it has been made except to a limited extent."

The unguarded statements, not to say unworthy insinuations, in which Major Robinson has permitted himself to indulge in relation to this matter, are such as to invite criticism.

He disingenuously imputes to me an anticipation of failure of the party south of the Restigouche, to find a "*practicable*" line. Practicability is a comprehensive and convenient term. My anticipation was that they would fail to find a line that could be recommended. The result of the exploration on the line examined, as I refer, was creditable to the parties, but its adoption has not been recommended by Major Robinson, nor do I recommend it. He says that I proposed to "intrude" upon the ground of that party, that the failure was upon my own ground, and that the winter found me still embarrassed in the highlands at the head of Green River. The disingenuousness and fallacy, both of the charge of proposed intrusion south of the Restigouche, and of imputed failure north of that river, have been shewn, by reference to documents and correspondence annexed. The winter did not find me embarrassed in the highlands at the head of Green River, nor within twenty miles of them, nor am I accustomed to be embarrassed by highlands. The real embarrassment I experienced has been already explained, and is exhibited in detail in the annexed correspondence.

The statement that "large parties were employed at great expense for two seasons on the central and direct line," has been disproved. It is obviously and inexcusably wrong.

"Year after year," it is pretended, "explorations might be continued to be made, and great expenses incurred, in the hope of finding a better line, or improving upon the one last found, and parties interested would still say that every effort had not been exhausted."

The fallacy of this excuse is not mitigated by an improper insinuation, whether warranted or not; I believe it to be wholly unfounded: The only interested parties whose interest can be of overruling importance in the determination of the line to be selected for construction, are those on whom must fall, whether directly or indirectly, the responsibility of the expenditure. To such parties it may be of utility to know that every gap and depression in the whole range of highlands from the source of the River Saint John to the northwestern source of the Connecticut River, a distance of about 200 miles of most difficult ground, were discovered, not "year after year," but in about *half of one year*, by the joint Commission for determining the Boundary under the Treaty of Washington. It is true that the task was accomplished only by extraordinary exertions and corresponding expense, but those exertions and expense, included also the cutting out of the dividing summit along all its sinuosities, over high peaks and deep ravines, and over rocks and precipices, a width of clear 30 feet through a dense and uninhabited forest. But the principle, without the more laborious details of this process, might be followed in discovering the most favorable gap in the dividing ridge between the Tobique and Miramichi Rivers, with equal promptitude and an incomparably less numerical force than was necessary on the Boundary, and yet, for the object in view, with results equally conclusive.

Not necessarily the *lowest* but the *most favorable* point in this ridge should be discovered, as a governing point for the direction of the line, both north and south of the ridge. Without this preliminary discovery it is obvious that surveys of lines approaching in either direction, might, as it is probable they will prove to be, labor thrown away.

In replying to that part of my observations on his report, in which I object to the only apparent grounds upon which he decides as to the *comparative facility* of two lines from the southern boundary of New Brunswick, northward to the Miramichi, Major Robinson affords no explanation. He refers to opinions of intelligent gentlemen who have passed over, or who have seen the ground, tending to show that it is practicable, but which is not the point involved in my objection. It is still unexplained how he arrives at a preference for a line, the sections of which are, as he terms them, "*not grades for the Railway.*" The obvious and undenied inference from the language of his Report is, that the sections which have been made, present gradients not to be recommended. The excuses are, that they are sections of "straight lines," and that "no attempt was made to contour *the hills.*" Whereas it is just before asserted, that "the whole of this portion of the country is *believed* to be generally *low and flat*, with occasional undulations." And Dr. Gesner's authority is now quoted to shew "that the whole country is remarkably level, and that upon an average, its elevation above the sea will not exceed 20 feet." Also the further authority of Mr. Perley, that "there is scarcely a single hill of any magnitude in the whole of this County,

"(Kent) and the land, especially on the Gulf Shore, is very low and level. It may be described as the most level County in the Province." Major Robinson adds, that Captain Henderson and himself "both passed through it and traversed it from south to north, and found it to be *extremely level and favorable*." Now it would seem to be strange that "straight lines" through such a country as this should present sections "not grades for the Railway," or that hills should require to be "contoured," where scarcely a hill exists.

Notwithstanding the evidence of these sections, Major Robinson holds out the expectation that "with the exception of the *immediate banks of the Saint Lawrence*, this will prove one of the easiest portions of the line." I termed this a gratuitous expectation, not with regard to mere "practicability," for this is a very indefinite term, but with regard to the degree of facility asserted. This still rests upon conjecture. There is no warrant for such expectation. If Major Robinson resolves in this case to place more reliance upon ocular observation, however respectable, than upon instrumental test, to what fate does he consign the rest of his barometrical observations?—They are at once offered to suspicion as mere waste paper.

By way of illustration, I may refer to sections very carefully made with the spirit level on a portion of the identical ground in question, during the year 1848, for the purpose of the Saint John and Shediac Railway. It was only by minute and laborious exploration that easy gradients could be obtained, even by following the valleys. I should therefore not be justified in expecting, much less in leading others to expect, that such gradients can easily be found where the ridges are to be crossed. Of this ground Dr. Gesner also says, that it is "low and level." Though it may be so in a popular sense, which is most probably all that this gentleman intended, I did not find it so in an engineering sense. The ridge intervening between Shediac and the Bend, attains a maximum elevation of upwards of two hundred feet, with a minimum summit level of 143 feet. Corresponding results were obtained by Captain Crawley of the Royal Engineers, assisted by Mr. Grant, in 1842.

In his sailing directions for this coast, Captain Bayfield speaks of the shores of Kouchibouguac Bay as "exceedingly low;" of those of Richibucto River as rising 80 to 100 feet; those of the Buctouche about 200 feet; and of Shediac and vicinity about 150 feet. The last is the same ground, which by careful and repeated levelling, has been ascertained to have an elevation of upwards of 200 feet.

It is of the same country which Major Robinson asserts, that Captain Henderson and himself traversed from south to north, and found "extremely level and favorable." I am not justified in assenting to this description.

I may also observe, that whilst Major Robinson seems to deny, he does in fact only tortuously assent to the justice of my former strictures. With the same materials before him now, as he had then, he changes the terms of the proposition which suggested those strictures, and says that the facility of the ground in question is "perhaps only to be exceeded by the *plateaus and terraces* along the Saint Lawrence." He is quite aware that the "plateaus and terraces" referred to are very materially different from the "immediate banks of the Saint Lawrence," and may, like the ground in question, present, as yet, untried obstacles, though possibly not of a serious character. If therefore he do not put forward this line upon borrowed merits, it stands as yet upon imaginary ones. I hope it may in reality prove "extremely level."

Major Robinson is perplexed to understand how I could enumerate the summits to be intersected by this portion of the line from the inspection of "any mere map," and undertakes in very exaggerated terms to describe how the maps of the interior of New Brunswick are constructed. My official duty and experience in relation to this matter, enable me to estimate the value and authority of this description, which I can therefore regard with the indifference it merits. Unless the number of summits adverted to be misrepresented by his own sanction in the Parliamentary Map, it is evident from this document alone, that I have not overstated them.

To add together the several rises of a line of Railway, in order to shew the aggregate rise, is a matter of common routine, and is not introduced as a question of ingenuity or science. It is quite fair in this way, as an illustration of my argument, to estimate the probable aggregate rise of the portion of the line in question. It is not yet known, that

from the Miramichi Valley to the southern summit of the Tobique, any "falls" may be necessary in order to aggravate the rise to that summit, though the unscientific course of exploration with which he is anxious to rest satisfied, does involve the grave objection of such intermediate falls.

He affirms, that in contending for the central line, I can "*foresee* no impracticability "in getting through or over two ranges of highlands." I hope I am not obstinately insensible to the advantages of the central line, if it may prove eligible upon due examination, which he is so anxious to prevent. I also confess that I have no desire to adopt his method of "*foreseeing*" either impracticabilities or facilities, but prefer that the facts should be properly ascertained.

He asserts that I do not "object to some of the heaviest gradients known in railway "practice." Happily this assertion, as I believe, rests only upon his own authority. He adds that I "*foresee*" alarming cuttings and embankments through the most level district of New Brunswick. I disclaim his faculty of *foreseeing* in such cases, and merely objected, as I continue to object, to such "expectations" as he recommends, in opposition to the evidence of his own sections, that heavy works may not be necessary in order to obtain easy gradients.

With reference to the military question, illustrated by the supposed case of the relative security of a line of Railway through the centre of Great Britain, with branches to either coast, and a line which should follow the immediate coast of the Island, Major Robinson has no hesitation in deciding in favor of the latter, because as he thinks, in order to be equally secure, the branch lines of the other must be infinitely multiplied. Why multiply them beyond advisable intercommunication at or near their contact with the coast?

The climate of New Brunswick, he justly observes, would protect the coast for half the year, but the interior is comparatively safe the whole year. The difference is between half safe and wholly safe.

Major Robinson recommends the coast line, because it would protect and derive revenue from existing settlements on the Gulf Shore; forgetting that it would desert and be deserted by the interest and sympathies of all the other settlements of New Brunswick. He condemns a central line, because it would, as he thinks, "turn its back" upon the Gulf settlements without equivalent advantages to others; whilst the truth is, it would turn its benefits, by means of judicious branches, equally and impartially upon all settlements alike. To use his own words, he cannot see "any one advantage to any other portion of the "country *save and except* to diminish by a few miles, the distance at which it would pass "from Fredericton."

On the subject of probable revenue, Major Robinson excuses me of "depreciating" the advantages of the proposed Trunk Railway by calling in two additional Railways which he prophesies "may or may not, at some remote period, be made, viz.: from Saint Andrews "to Quebec and from Saint John to Quebec." What I said was, that "the central line "would convert these branches into most important auxiliaries—the circuitous one would "turn them into rivals." I am not ashamed of these truisms. They were advanced, not to depreciate a line of Railway between Halifax and Quebec, but to show its true interests.

By the relinquishment of the British claim to the territory, originally intended for the more direct route of the line from Quebec to Saint Andrews, the distance will be increased. But the open harbours of the Bay of Fundy may still be reached by routes exclusively through British territory, say 150 to 170 miles shorter than the shortest that, under the same condition, can be traced to Halifax, and more nearly 250 miles shorter than the line recommended by Major Robinson. It was therefore no disparagement of the line to Halifax to assert the manifest importance of making it as short as possible. Such line is more truly disparaged by recommending in effect that it should be made as long as possible.

To say that the two lines in question "may or may not be constructed," is only to give them the same negative character which as yet belongs to the long line. According to probability and experience, the prospect is much in favor of the earlier construction of the shorter lines.

As to the comparative cost of transportation by the long line to Halifax, and the short

lines to the Bay of Fundy, Major Robinson disposes of it by *believing* in the perpetual non-existence of the latter, unless aided by the Imperial Government in "*preference*" to the line to Halifax. He assigns no reason why they may not be *equally* aided, or why the weight of Imperial assistance should be applied exclusively to give a "monopoly" to one locality, even "for six months in the year."

It is most desirable that the interests of Nova Scotia, New Brunswick and Canada should be in every way closely and harmoniously united. It was not the design of the projected Railway to sever and antagonize them. Unless disturbed by untoward influences, no other than a natural and earnest desire can prevail in New Brunswick, that Nova Scotia should participate justly and liberally in the benefit of so important a work. But to assume that, aided even by exclusive Imperial "*preference*," the whole or even the larger part of the merchandise passing between Canada and Europe, "*timber in scantling*" excepted, will be transported by Railway, even in the most direct, much less in the most circuitous manner to and from Halifax, is too sanguine for serious consideration.

Major Robinson enters upon a laborious vindication of his "*oversight*" on the subject of "*motive power*." "In my Report," he says, "I estimated the cost of transportation from Halifax to Quebec at 11s. per ton, and gave the details shewing how it was derived. It was founded upon the best authorities, viz., the evidence given before the Gauge Commissioners, and the document attached to the Report, Appendix No. 7. I have as yet seen no reason to increase that estimate."

There is no doubt that the evidence referred to as given before the Committee on the gauge question, and the document No. 7, appended to his Report, are proper authorities as to the cost of "*motive power*," and mainly reliable as affording one, but only one, of the elements of the whole cost of transportation. But he has misunderstood these authorities.

The limitation is clear that no expense, or proportion of expense, is intended which is not strictly chargeable to that division of the whole working cost usually comprehended under the name of "*motive power*."

From the results of the working of a line like the Stockton and Darlington, or the Philadelphia and Reading, with a *regular mineral traffic, chiefly descending by the most favorable gradients*, no safe deduction can be made except for lines of a similar character and design. It is nevertheless certain, even in this case, that however small the cost of transportation, only a fractional part can be assigned to "*motive power*."

Even if numerous other sources of information had not been available to Major Robinson, he ought not to have relied upon over-hasty inferences of his own from the evidence on the gauge question, but should have attended to the observations of the Royal Commissioners on the point under consideration.

"It is a common practice," they remark, "with different Railway Companies in their half-yearly reports to their proprietors, to state the percentage of their various expenses under a few distinct heads, as compared with their revenue, and from this it appears that on the Great Western the *locomotive charges* during a period of three years have varied between 8.8 and 11.1, averaging 9.7 per cent. upon their income; and on the London and Birmingham they have varied, within the same period, between 7.9 and 9.36, averaging about 8.6 per cent. on their income."

Now it appears from these results, that the "*locomotive charges*," or those appertaining to "*motive power*," average much less than ten per cent. of the whole revenue of the Railway mentioned, and since they have not been remarkable for excessive profits, it may be inferred that of the whole remunerative income, less than one-tenth is chargeable to the head in question.

To say therefore that the cost of "*motive power*" is the whole cost of transportation, and that "doubling that amount is sufficient to produce a profit," is a fanciful proposition. It has no recognized data for its support. So far from being "founded upon the best authority," it has no authority at all, and can mislead no one conversant with the subject.

On this point it was not difficult to refer to what is practically known under circumstances of nearly the same general character as those which would be incident to the working of the Quebec and Halifax Railway.

An exclusively mineral or flour transportation is an extreme case. These articles must be carried cheap at all hazards where there is a competing navigation, whether inland or by sea; or as a reliable source of freight, be given up altogether.

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The average cost of construction of New England Railroads, has been taken by Major Robinson as a general guide in estimating the cost of the Quebec and Halifax Railway. It will be no more than consistent therefore, as he says, to be guided by the cost of working, as shewn by the same examples.

The Legislature of Massachusetts requires all the chartered Railway Companies of that State to make annual returns of the cost, characteristics and general management, agreeably to a common form. The result of this admirable regulation is to afford at a glance a comparative knowledge of the material points of public interest relating to each of these works. Major Robinson refers to these valuable Reports.

The following table is prepared from some of these documents relative to five Railways, taken indiscriminately, for the year 1847. It exhibits first, the proportion which the cost of "motive power" bears to the total working expenses; and second, the proportion which it bears to the gross revenue, in order to produce the dividends specified:—

**ABSTRACT of the Official Returns of the heads of expenditure on five Railways in the State of Massachusetts, for the year 1847.**

| NAME OF RAILWAY.           | Length<br>Miles. | Maintenance<br>of way. | Motive<br>power. | Miscel-<br>laneous. | Total of<br>working<br>expenses. | Dividends<br>and reserve<br>for depre-<br>ciation. | Total<br>Revenue. | Proportion of cost of<br>motive power to |                   | Rate of<br>dividends<br>for 1847.   |
|----------------------------|------------------|------------------------|------------------|---------------------|----------------------------------|----------------------------------------------------|-------------------|------------------------------------------|-------------------|-------------------------------------|
|                            |                  |                        |                  |                     |                                  |                                                    |                   | Working<br>expenses.                     | Gross<br>revenue. |                                     |
|                            |                  | \$ cts.                | \$ cts.          | \$ cts.             | \$ cts.                          | \$ cts.                                            | \$ cts.           | \$ cts.                                  | \$ cts.           | \$                                  |
| Boston and Maine.....      | 72.9             | 22,581 69              | 32,310 75        | 165,367 38          | 220,259 82                       | 254,923 11                                         | 475,182 93        | 1 to 6 62                                | 1 to 14 71        | 9 <sup>3</sup> / <sub>4</sub> cent. |
| Boston and Providence..... | 41.              | 21,733 42              | 33,556 03        | 121,056 29          | 175,345 74                       | 174,600 00                                         | 349,945 74        | 1 to 5 38                                | 1 to 10 74        | 7 <sup>1</sup> / <sub>2</sub> "     |
| Boston and Lowell.....     | 26.              | 65,195 33              | 91,140 43        | 225,649 87          | 381,985 63                       | 350,000 00                                         | 731,985 63        | 1 to 4 19                                | 1 to 8 03         | 8 "                                 |
| Eastern .....              | 88.2             | 15,140 27              | 12,391 00        | 132,552 18          | 160,033 45                       | 218,600 00                                         | 378,633 45        | 1 to 12 91                               | 1 to 30 56        | 3 "                                 |
| Western.....               | 200.6            | 199,312 08             | 124,111 15       | 618,221 05          | 941,644 28                       | 391,791 78                                         | 1,333,436 06      | 1 to 7 53                                | 1 to 10 74        | 8 "                                 |
|                            |                  | 323,962 79             | 292,509 36       | 1,202,846 77        | 1,570,318 92                     | 1,389,914 89                                       | 3,269,233 81      | 1 to 6 43                                | 1 to 11 17        |                                     |

=15.5 <sup>3</sup>/<sub>4</sub> cent. =3.9 <sup>3</sup>/<sub>4</sub> cent.

According to these returns, therefore, instead of the cost of "motive power" being even the bare working cost, it is a small and uncertain fraction of that amount, varying from a fourth to a thirteenth. Whilst in order to yield the dividends realized on these Railways, the gross revenue, instead of being the duplicate only, must be estimated at from eight to thirty times the cost of "motive power."

It is remarkable also, that the mean portion of the cost of motive power to the *whole revenue* of the foregoing five Railways, which are of the narrow gauge, is nearly the same as that arrived at by the Gauge Committee, as already referred to, for the London and Birmingham Railway.

In one case it is 8.9 per cent., and in the other 8.6 per cent. With whatever speculative views on this point Major Robinson may therefore labor to mislead himself, it is quite certain that well-known practical results on both sides of the Atlantic are not to blame for his error.

In the table which I presented of the comparative cost of transportation from Quebec to the respective ports of Halifax, Saint John and Saint Andrews, I estimated the rate per ton to Halifax at £3 19s. 4d. sterling, because I believed this to be the lowest which could be safely stated for heavy freight.

For the sake of *competition* in certain articles of carriage, the charge might be made indefinitely low, but at a corresponding sacrifice, which must be recovered by heavier charges on other articles.

My estimate was more than three times Major Robinson's fanciful duplicate of the cost of "motive power," or 22s. per ton. Adhering, however, to a mean of practical results in Massachusetts, as well as in England, we are not warranted in stating the ordinary cost of motive power at more than 9 per cent. of a remunerative freight. I say a "mean," because it will be seen how variable an element this is. At this rate, assuming 11s. to be the cost of motive power from Quebec to Halifax, then the total remunerative freight would be £6 2s. 2d. per ton. On the reverse supposition that 22s. is a remunerative freight, then 2s. and not 11s. would be the cost of motive power. It is not necessary to dwell upon the too evident absurdity of these results.

The proportion chargeable to "motive power" in my estimate would be for £3 19s. 4d. at 9 per cent., equal to about 7s. 2d. per ton, or in reality 36 per cent. lower than Major Robinson assumes for the same head of expenditure.

By the foregoing table it is also shown that the average cost of motive power is about 15½ per cent. of the net *working expenses*. Therefore if only 7s. 2d. per ton be the cost of motive power, no less than £2 6s. 2d. per ton would still be necessary merely to cover working expenses, and Major Robinson's estimate of 22s. per ton, so far from affording a profit, would not pay one half of those expenses. At the same time, however low the cost of transportation to Halifax, *and it is desirable that it should be as low as possible*, it would not alter the fact that it would be higher than the cost of transportation to the Bay of Fundy, very nearly in proportion to the difference in distance. This difference, reckoning from the River du Loup, or from the nearest harbour of the Saint Lawrence, would be not far from 100 per cent., and even by the shorter or direct line, probably as much as 60 per cent. against Halifax.

It would be a labor alike vain and tedious to show in detail the misapplied statistics and illusory deductions by which Major Robinson endeavors to sustain a position too evidently at variance with recognized data. I termed the ground work upon which he had built so magnificent an array of calculations an "oversight;" but it was too hard to avail himself of an excusable fallibility; he prefers, with an earnestness worthy of a better cause, to confirm himself in error.

He assails my observations on the importance of a direct trunk line with judicious branches as "quite opposite to the results of Railway experience generally, and the opinions of experienced engineers." "Branches," he says, "are looked upon as costly appendages to trunk lines."

Nothing would of course be more easy than to make branches costly appendages to trunk lines, and much injudicious expenditure to this effect has no doubt been incurred in England; there is at the same time nothing more clearly established than that the *way traffic* is the main source of revenue, and that the most effectual method of increasing this is by means of judicious branches. Major Robinson's assertions are opposed to views which

I believe to have been sustained in Parliament during late discussions on the merits of proposed new lines. Such assertions are not worthy of refutation by the abundant evidence which may be brought against them. I will quote a late authority, who expresses the common sense of this subject:—

“A principle of great importance to be kept in view is to shorten the distance as much as possible between places to which a direct communication is required. The result of experience in Railway formation, has already shown that circuitous routes, not only increase much the expense, but do not afford the advantages required; besides which, the adoption of a circuitous route instead of a straight line, has too often had the effect of injuring the efficiency, if not the general safety of the line.

“The numerous plans of Railways now before the public, proceed therefore chiefly on the principle of a direct communication, and it is considered better for smaller towns to have a branch directly to the larger ones, than that a Railway should perambulate a country, and diverge for their accommodation, at one point at a tangent and at another by a semi-circle from the straight line.”

A system of trunk and branch lines has been recommended by distinguished Engineers both in France and the United States.

Major Robinson next refers to a Report which, in compliance with instructions communicated to me through your predecessor, I addressed to Sir William Colebrooke—“On some of the results of experience in the United States with regard to the use of wood in the construction of Railways, and with reference to the construction of similar works in the Province of New Brunswick.”

An attack, which appears to have been aimed at this document in his Report, he now avowedly repeats, and by means of the same misconstruction.

With regard to one of the examples to which I referred, the Syracuse and Utica Railway, he quotes a document, the authority of which I acknowledge, in order to shew, as he thinks, that the structure of that Railway was “worn out, sunk and gone.” Now if he had attentively examined the whole of the document from which he has so largely and somewhat irrelevantly quoted, he would have discovered that the *superstructure* only was intended, and that in taking the superstructure for the whole Railway, he has committed nearly as great a mistake as in taking the cost of “motive power” for the whole cost of transportation, or the examination of a point for the examination of the whole range of highlands between the Tobique and Miramichi Rivers.

The superstructure of the Railway in question, consisting of the light flat iron rail upon longitudinal bearings or rails of timber, had through eight or nine years’ use, become worn out, or unsuited to a traffic greatly increased beyond the capacity of the original design. There are, perhaps, few Railway superstructures in Europe or America, which have not been renewed in less time, whatever the plan of construction.

Notwithstanding the legal prohibition by which this road has been restricted from the conveyance of freight in competition with the State Canal, with which it runs parallel, it has generally, if not always, paid ten per cent. upon its cost, besides a surplus sufficient for the repair and gradual reconstruction of the works, the superstructure excepted. With one or two exceptions, the shares stand at the highest premium in the list of American Railways. The selection of such an example, in order to condemn its original principle of economy, is not peculiarly fortunate. Moreover, so far from the abolition of wood being a feature of the new superstructure adverted to, I have no doubt that the wood is still retained in one or other of the various forms now almost universally adopted; and that the main difference is in the weight and form of the new iron rail, not very unlike, perhaps, the same construction which Major Robinson, in a momentary obliviousness of the evils of wood, has himself recommended for the Halifax and Quebec Railway, to wit:—“A rail of 65lbs. per yard, supported upon longitudinal sleepers with cross-ties, similar to the rail used upon the London and Croydon line; the wood to be prepared, &c.”

Another example to which I more particularly referred, was that of the Charleston and Augusta Railway. In a document of an official character, which has lately been published, being a communication by John C. G. Kennedy, Commissioner of Census of the United States, to Jules Contin, Minister of Public Works in Paris, in answer to inquiries by the latter on the statistics of Railroads, the example just mentioned receives the following notice:—“The distance is 135 miles. The work was finished in 1833, at the very

"remarkably small cost of \$1,336,615, which sum also included the expense of furnishing the road with engine and passenger and freight cars, and all other necessary equipments. This was the *first* Railroad of any considerable length constructed in the United States, and it is believed to have been the *cheapest* and *most successful*."

After the lapse of 19 years of everchanging opinions, prejudices, theories and costly experiments, this verdict is at least some assurance that a reference to the history of such an example of the economic application of the most available material of a forest country to the construction of a Railroad passing through the same, was not improperly obtruded upon the attention of Sir William Colebrooke and the Legislature of this Province.

After other observations with reference to the same subject, Major Robinson arrives at the conclusion that the principle of the timber viaduct, or as he chooses to style it, the "trestle bridge principle," is bad, and to be avoided. Practical Engineers of great eminence do not arrive at the same conclusion; and even in England, in absence of the motives peculiar to the circumstances of a forest country, there are instances of timber viaducts essentially on the trestle principle, daily sustaining multitudes of passengers by railway.

It is, I trust, unnecessary to recapitulate what has already been stated, in order to shew that the interior of this Province has not been sufficiently explored for the line of the proposed Intercolonial Railway. I will advert only to the motives which exist for properly completing the labor which has been commenced.

In order to exhibit at one view the general advantages to all the Provinces interested, the following Table of approximate distances has been prepared. When the measurements may be accurately made, differences will be found; but for general comparison, I believe that the distances stated are sufficiently accurate. They are taken from the Trois Pistoles River, a point which will probably be common to all lines passing eastward of Lake Temiscouata. In order to give the whole distance between each place in the Table and the City of Quebec, 131 miles should be added, but the comparative difference would remain the same:—

COMPARATIVE TABLE of Distances for assumed systems of Railways in New Brunswick.

|                                                                                                                                                               | BY CIRCUITOUS ROUTE. |                  |             | BY DIRECT ROUTE.   |                  |             | Difference in favor of direct route miles. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------|-------------|--------------------|------------------|-------------|--------------------------------------------|
|                                                                                                                                                               | Trunk line, miles.   | Branches, miles. | Total miles | Trunk line, miles. | Branches, miles. | Total miles |                                            |
| From Trois Pistoles to Dalhousie.....                                                                                                                         | 176                  | .....            | 176         | 82                 | 85               | 167         | — 9                                        |
| to Bathurst.....                                                                                                                                              | 224                  | .....            | 224         | 82                 | 85 + 84          | 215         | — 9                                        |
| to Newcastle.....                                                                                                                                             | 270                  | 12               | 282         | 182                | 60               | 242         | — 40                                       |
| to Shediac.....                                                                                                                                               | 353                  | .....            | 353         | 277                | 5                | 282         | — 71                                       |
| to Edmundston.....                                                                                                                                            | .....                | 70               | 70          | 55                 | 15               | 70          | .....                                      |
| to Colebrooke.....                                                                                                                                            | .....                | 70 + 35          | 105         | 82                 | 30               | 112         | + 7                                        |
| to Woodstock.....                                                                                                                                             | .....                | 105 + 71         | 176         | 82                 | 30 + 71          | 183         | + 7                                        |
| to Saint Andrews.....                                                                                                                                         | .....                | 176 + 80         | 256         | 82                 | 101 + 80         | 163         | + 7                                        |
| to Fredericton.....                                                                                                                                           | 272                  | 80               | 352         | 182                | 40               | 222         | —130                                       |
| to Saint John.....                                                                                                                                            | 341                  | 106              | 447         | 182                | 102              | 284         | —163                                       |
| to Amherst.....                                                                                                                                               | 380                  | .....            | 380         | 304                | .....            | 304         | — 76                                       |
| to Halifax.....                                                                                                                                               | 504                  | .....            | 504         | 428                | .....            | 428         | — 76                                       |
| Total extent of Branch Lines to complete the system.....                                                                                                      | .....                | 454              | .....       | .....              | 523              | .....       | .....                                      |
| Deduct extent of Branch Lines by circuitous route.....                                                                                                        | .....                | .....            | .....       | .....              | 454              | .....       | .....                                      |
| Excess of Branch Lines in order to attain the several distances indicated in favor of direct route, but also saving 76 miles in the extent of Trunk Line..... | .....                | .....            | .....       | .....              | 74               | .....       | .....                                      |

It will be seen that the difference in favor of a central line, by means of branches necessary to the system, are, for communication between Quebec and the principal Ports of New Brunswick, as follows:—

|                |          |
|----------------|----------|
| Dalhousie..... | 9 miles. |
| Bathurst.....  | 9 "      |
| Newcastle..... | 40 "     |
| Shediac.....   | 71 "     |

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|                                                          |            |
|----------------------------------------------------------|------------|
| Fredericton.....                                         | 130 miles. |
| Saint John.....                                          | 163 "      |
| And for Halifax and all other places in Nova Scotia..... | 76 "       |

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The circuitous line, therefore, so far from being really advantageous to any of the Provinces, would be seriously detrimental to all. Passengers, mails and freight would require to be transported between Halifax and Quebec an unnecessary distance of 76 miles, without any equivalent advantage.

The open Harbour of Saint John, so important to the winter trade both of Canada and New Brunswick, would be available to the merchandise of the former only through 163 miles of unnecessary transportation, and an extra impost for railway charges more than equal to the whole freight across the Atlantic.

This consideration alone would be fatal to the circuitous line. It would compel these two Provinces to establish a more direct, economical, and of course a competing line, a line which would also shorten the distance to Halifax, and necessarily command the transportation of through passengers, mails and freight, if not also the troops and military stores. For it is obvious that under such circumstances the policy of exclusive imperial aid or preference to the circuitous line could not be sustained.

The readiest access to the nearest open harbour is also not less important to the winter trade of the ports of the Gulf of Saint Lawrence than to Quebec. All those ports from Miramichi northward would be placed probably upwards of 40 miles more remote from Saint John by the circuitous line than by the necessary branches of the central line. The same ports even by the longer route would be upwards of 40 miles nearer to Saint John than to Halifax, but by the necessary branches of the shorter route this distance would be increased to upwards of 80 miles in favor of Saint John.

The ports of the Bay of Chaleur would also not merely be nearer to Quebec by the central line, but the communication would be through the favorable and fertile valley of the Restigouche, probably every mile of which is fit for settlement. They would also obtain, by the shortest and easiest route, access to the valley of the Upper Saint John and the northern part of the State of Maine.

By means of the central line and its necessary branches, the Port of Fredericton, being also the Seat of Government, would be placed in the most rapid and generally convenient communication with all parts of the Province, and would be 130 miles nearer Quebec than by the circuitous line. The tide navigation of the River St. John would also be connected with the nearest harbour of the St. Lawrence by means of about 240 miles of railway, to the great convenience of both the inland and coasting trade during the summer season.

It is probable that the distance from the St. Lawrence to St. Andrews by a connection with a central trunk line adapted to the common convenience of all the Provinces, would be a few miles longer than if a line were made independently to that point.

The table shews that the probable difference against St. Andrews, would be about seven miles, but with the advantage of joining the trunk line about 82 miles before reaching the Trois Pistoles, and probably one hundred miles before reaching the nearest harbour of the St. Lawrence.

The shortest communication, exclusively through British territory, that can be made between the St. Lawrence and the winter navigation of the Atlantic, will terminate at or near St. Andrews. But it is yet unknown whether it may also be the most favorable, through the whole distance, for the transportation of freight. It would become of greatly increased importance, as an economical and necessarily a competing line for Canadian freight, if a circuitous line by the Gulf of St. Lawrence should be adopted either from necessity or choice.

For the general convenience of New Brunswick, the Harbour of St. John is the most accessible, and by means of the central line will be only about 21 miles more remote from the St. Lawrence than St. Andrews, but must always have great advantages as the centre of the Provincial trade and the principal resort of shipping.

Were a proposition now for the first time offered, that the intercourse between Halifax and Quebec should not pass through New Brunswick, except by the most circuitous route that could be made, it might justly be expected to be repugnant to both Nova Scotia and Canada. But it has, I trust, been shewn, that such a proposition would be at least

equally objectionable to New Brunswick, and that it is for the common interest that the inter-communication should be as direct as the natural facilities of the country will permit.

With reference to military considerations which may be involved, if the authority of Colonel Holloway, commanding the Royal Engineers in Canada, may be regarded as a guarantee, that the line explored for a military road under his direction in 1843-44, was sufficiently remote from the *inland* frontier, then the proposed central route of the trunk railway will be also unexceptionable. Its general course will be still more remote, and its minimum distance from that frontier greater by several miles than that of the line recommended for the military road. Its favorable position with reference to the maritime frontier is not in dispute.

But these as well as my former remarks, are made "much less under any serious anticipations of the eventual importance of avoiding very widely either the inland frontier on the one hand, or the sea coast on the other, than under a sense of the superior importance of constructing a trunk line of Railway, which shall as much as possible bind together both colonial and national interests, and by its intrinsic adaptation to the purpose, independently of any adventitious aid from Government, preclude for all time a reasonable motive for the project of a competing line."

I have, &c.,  
(Signed,) J. WILKINSON.

The Hon. J. R. Partelow,  
Prov. Secretary, &c., &c. &c.

#### APPENDIX.

##### No. 1.

(Copy.)

SECRETARY'S OFFICE, 7th June 1847.

SIR,—I am directed by His Excellency the Lieut. Governor, to apprise you that Major Robinson has applied to His Excellency for permission to avail himself of your services in assisting him in his exploration and survey of the proposed line of Railway from Halifax to Quebec, and that His Excellency having considered the important and urgent nature of that service, and that the work may be otherwise delayed, has been pleased to consent to your undertaking that employment with Major Robinson and Capt. Henderson, and that it shall be done without prejudice to your station and standing as compiler in the Crown Land Office.

I have, &c.,  
(Signed,) JOHN S. SAUNDERS.

John Wilkinson, Esq.

##### No. 2.

(Copy.)

FREDERICTON, NEW BRUNSWICK, 8th June, 1847.

SIR,—I have the honor to enclose you the copy of a letter which I have received this day from Mr. Baillie, Surveyor General, conveying His Excellency Sir William Colebrooke's consent to your temporary employment in the Railway exploration survey under my direction.

I have, &c.,  
(Signed,) WM. ROBINSON,  
Capt. Royal Engineers, Bt. Major.

Mr. Wilkinson.

##### No. 3.

(Copy of enclosure referred to above.)

(N page 383.)

CROWN LAND OFFICE, 8th June, 1847.

SIR,—I have the honor to inform you that your letter of the 20th May, 1847, request-

ing the services of Mr. Wilkinson upon the Railway exploration survey, has been submitted to His Excellency the Lieut. Governor, with such remarks as I deemed applicable to the case. Although the particular duties in which Mr. Wilkinson has hitherto been engaged in this office must of necessity be suspended by his removal, an event which may be attended with much inconvenience both to myself and to the public, yet the highly important nature of the service now being performed by the parties under your command has been deemed an exigency sufficient to authorize the present removal of Mr. Wilkinson to the exploratory survey.

His Excellency therefore being desirous to afford every possible facility for the continuance of operations which in their result must be of great and permanent advantage to this Province, has thought proper to assent to the temporary employment of Mr. Wilkinson in the Railway exploration survey, and Mr. Wilkinson will accordingly cease on the 10th instant to receive his salary as an officer of this Department.

I have, &c.,  
(Signed,) THOS. BAILLIE,  
*Surveyor General.*

No. 4

(Copy.)

THE SAINT LAWRENCE PARTY.

*Instructions for Mr. Wilkinson.*

The Saint Lawrence party will consist of James Mulligan, Assistant Surveyor, Corporal M'Kenzie and Private Campbell, of the Royal Sappers and Miners, and a party of laborers.

Their object will be to explore the best route for a line of Railway between the Saint Lawrence and the Restigouche Rivers, commencing at some point between River du Loup and Trois Pistoles.

In the first instance, the best general course of proceeding will be probably by the Abersquash branch of the Trois Pistoles River to its source, thence across to the Rimouski River, and up its valley, and across to that of the Metamkedgewick River, following the valley of the latter to the Restigouche.

This is suggested as the best possible course from an inspection of the Map; but Mr. Wilkinson will use his own judgment, and be guided entirely by what he deems the best route, when he is actually upon the ground. The portage at the head of Green River has been selected as a good point at which to form a dépôt of provisions.

Mr. Ramsay has been sent to the Grand Falls to examine the state of the provisions there, and will receive orders from Mr. Wilkinson as to the quantity to be taken to this dépôt, and the manner of carrying it up that river.

Another dépôt of provisions will be formed at as early a period as possible, at the mouth of the Metamkedgewick River, the orders for which, and the quantity to be sent, will be given by Major Robinson.

Mr. Wilkinson, if he sees fit, may form any other dépôt at any place he considers advantageous on the Saint Lawrence side.

The barometers not having yet arrived from England, as expected by the steamer, the party must in the first instance proceed to their ground without them.

A copy of a letter addressed to Captain Pilon by Mr. Airy is enclosed, it contains some remarks on the subject of the exploratory survey, which are recommended to Mr. Wilkinson's attention.

At the crossings of streams, notice must be paid to bridge sites; the lengths and heights to clear freshets, ice jams, &c., should be noted down. An account must be kept of the nature of the ground, as soil good or bad for settlement, nature of timber, swamps, &c.

Major Robinson will join the party as soon as he conveniently can with the barometers.

If the party are successful in finding an easy line or practicable one even to the Restigouche River, they will afterwards explore on southerly as far as the provisions and the season will permit them. But if unsuccessful, Mr. Wilkinson will try another line back from the Restigouche to the Saint Lawrence.

(Signed,) WM. ROBINSON,  
*Capt. Royal Engineers, Bt. Major.*

Fredericton, 10th June, 1847.

No. 5.

HALIFAX, NOVA SCOTIA, 11th Dec., 1847.

(Copy.)

SIR,—I have the honor to forward, for your information and guidance, the copy of a letter addressed by me to Mr. Baillie, Surveyor General of New Brunswick, on the subject of your returning to resume the duties assigned to you in his office, from and after the 1st January next.

I have, &c.,  
(Signed,) WM. ROBINSON.  
*Capt. Royal Engineers, Bt. Major.*

John Wilkinson, Esquire,  
Railway Exploration Survey.

No. 6.

(Copy of enclosure referred to in No. 5.)

HALIFAX, NOVA SCOTIA, 11th Dec., 1847.

SIR,—I have the honor to acquaint you that after referring to and considering the tenor of your letter of the 8th June last, conveying the consent of His Excellency the Lieutenant Governor of New Brunswick, to the temporary employment of Mr. Wilkinson of your Department, upon the duties of the exploratory survey for a line of Railway from Halifax to Quebec; and taking into consideration also the present state and progress of that survey, with the great inconvenience it would be to Mr. Wilkinson to remove to Halifax in consequence of the establishment of the office there, instead of at Fredericton as heretofore, as well as the further inconvenience to yourself, and the duties assigned to him in your office, which his continual employment might cause, I feel it incumbent upon me, in consequence, not to retain his services, however valuable to us, for a longer period than is absolutely necessary.

From and after the 1st January next, Mr. Wilkinson will cease to be employed upon the Railway exploration survey, and he will be instructed to consider himself as again at your and His Excellency's disposal from that date.

I beg to return you my best thanks for the kindness with which you lent us his assistance at a time we were much in want of it.

I have, &c.,  
(Signed,) WM. ROBINSON,  
*Capt. Royal Engineers, Bt. Major.*

Thos. Baillie, Esquire, Surveyor General.

No. 7.

FREDERICTON, 31st December, 1847.

(Copy.)

SIR,—I beg leave to represent to you that, contrary to my expectation, I have found the time which expires to-day, inadequate to enable me to complete the service on which I am engaged for Major Robinson, and that a further time of probably not exceeding ten days will be necessary.

In returning therefore to my duties in your Department to-morrow, I am, before resuming the same, under the necessity of requesting an allowance of sufficient time to complete the service mentioned.

I also beg leave further to represent to you, that Major Robinson's view with regard to the country which has been the field of my exploration during the past summer and autumn, not being such as to require any detailed Report or Plan of such exploration, a short general Report, with a small exploratory sketch, are all that, agreeably with his desire, will be prepared.

It seems therefore to be an occasion upon which I may with propriety submit to the Provincial Government, whether in order to prevent the almost total loss of the result of

much arduous labor on a very important part of this Province hitherto comparatively unknown, it would not in their view be desirable, without delay, to add to the records of your Department a detailed plan on a convenient scale, and as accurate as the circumstances of a hurried and imperfect exploration would permit, with such observations as may appear to be necessary or useful.

The time which this labor may require could not be safely estimated beforehand. It is probable that from four to six weeks' close application may be sufficient.

I have, &c.,  
(Signed,)

J. WILKINSON.

To the Hon. Thos. Baillie, Surveyor General.

#### CORRESPONDENCE No. 8 to 25.

No. 8.

*To Major Robinson, R.E.*

CAMP NEAR MOUTH OF GREEN RIVER,  
22nd June, 1847.

MY DEAR SIR,—I find that I cannot make my visit to Green River so short as was at first thought of. Finding the stock of provisions, &c., at Grand Falls not any too much to be transferred to the proposed dépôt near the Restigouche Portage (between the north-eastern head of Green River and Belle Kedgewick) I brought up everything by steamer on Saturday last, (19th) to this point, where I have got the whole safely stored until a fleet of canoes could be engaged for transporting the same to the intended dépôt. I should first of all say that the provisions proved to be in nice order, of the best quality, and had been well taken care of. About 100lbs. of pork which had been brought into store from the woods in bags, did not appear to be in a sufficiently good state to take again into the woods, and Curran is to sell it. This, with eleven new tobogans, and a cask containing some porter in bottles, apparently Captain Henderson's private property, are all that are left in Curran's care. I paid him the storage, &c., as everything proved to be right with the exception of some knives and forks and spoons, of which no exact account appeared to have been taken.

Corporal M'Kenzie and Campbell were in readiness at Grand Falls, and they with a party of 16 men engaged principally after my arrival, accompanied the provision in the steamer to Green River, where we encamped for the night in a house (Bellefleur's) the inmates of which were temporarily absent, first of all safely storing everything in a lock-up building close by, which occupied us several hours after dark.

As my presence at Green River will be quite necessary, until the dépôt at the head of it is established beyond further anxiety, I desired Corporal M'Kenzie and Campbell to go on and join Sergeant Mulligan, with such instructions as will keep them all actively, and I hope effectively occupied until I reach them, as I propose to do by a line through the woods from our intended dépôt to the northeasterly heads of the Abawisquash, and thence by such course as may be suggested by the appearance of the country, towards the Saint Lawrence. There I hope, if favored by the weather and other circumstances, I shall be in time to meet you, with information which will afford you a basis on which to judge of future operations. From all the information I can obtain, little or no difficulty will be found on the Saint Lawrence side of Green River, and perhaps it may turn out that our operations for all the remainder of the season may be transferred to the valley of the Restigouche and onwards.

Not knowing the particulars of Sergeant Mulligan's instructions from you, I am not quite sure whether my further directions may interfere with them in some degree, but I believe not materially. In order, however, that you may be apprised of his probable proceedings, should you happen to fall in with him before I do, I enclose a copy of the memorandum given to M'Kenzie. I learn from Mr. Emerson of Little Falls, that M. Felix Tétu of Trois Pistoles, is the most suitable person there, in whose care to deposit our pro-

visions, &c. The order for provisions is through Mr. Emerson, whose agents in Quebec, Gibb & Lane, are in constant communication by coasting vessels with Trois Pistoles.

We have had wet and dull weather almost all the time since I left home, this day week. The main river and all the streams are consequently quite high. But those who ought to understand the navigation of Green River, say that it is not too high for canoes. I take up as much of our baggage and provisions as seven canoes can safely carry, and proceed in the morning myself in one of them. I have agreed with Joseph Thibideau to take up all the remainder in a tow-boat as far as the third fall, and farther if practicable—but I expect that it will prove necessary to transfer it to canoes for the remainder of the distance. The price is high, 10s. for 200lbs., but on calculation I find that it would cost more by canoes; besides taking more time and consuming so much of the provision during its conveyance.

I leave three or four men behind in charge of the residue of the provision, &c., and to assist Thibideau in the management of the boat and in crossing a portage on the way. This boat is not yet quite ready, and the river is too high for towing, but he says if it continue fair the river will be low enough by the time he is prepared to start. It may afterwards take him four or five days to reach the third fall. It will then take at least as much longer to get the load conveyed in canoes from thence to the dépôt, so that even all things being favorable I shall scarcely be able to commence my route from the dépôt sooner than the 6th or 7th of July. I shall then discharge such men as I do not want; leave two or three to complete the dépôt, put the canoes in order, clear out the portage to the Restigouche, and remain in charge till our return. The distance to the settlements on the St. Lawrence by the proposed route being then upwards of 50 miles, we shall scarcely be able to cut our way and look at the country in less than a fortnight to three weeks according to circumstances, by which time July may be nearly gone, making, say at least a fortnight later for our arrival than I named to Sergeant Mulligan, under an erroneous idea about the facility of ascending Green River and establishing our dépôt. I shall therefore write to Sergeant Mulligan that when he has explored the extreme northeasterly source of the Abawisquash, he will bush and blaze very distinctly a line north  $62^{\circ}$  east by compass for two or three miles, and also in the opposite direction south  $62^{\circ}$  west for five or six miles, and that if he should cross heaths or savannas without trees or bushes he will leave whitened stakes at short distances; or if a lake intervene, he will bush and blaze along shore. Also that he will distinctly mark his distance on a tree or stake at every ten chains, with red chalk, from the point of beginning in either direction, and that from one point of beginning, he will bush out and blaze a distinct path to the nearest navigable part of the Abawisquash.

I shall mark my course in the same manner, especially as I approach the head of the Abawisquash; he will detect my track if I have passed first, as I shall discover his, if he should be first; and thus our passing one another will be prevented. Mulligan should not, however, go farther than the head of the Abawisquash, and after he has marked the cross lines I have mentioned he should return to Trois Pistoles, as I shall continue my way whether I discover his lines or not, though it is very desirable that my exploratory course should be thus connected.

Thanks to the cold and wet weather, the flies are yet very merciful. Hoping shortly to see you,

Believe me, &c.,

(Signed,) J. WILKINSON.

P.S.—Now that the depot at the Grand Falls is cleared out, it may be necessary to have there a farther supply to depend upon for some of the parties, within ten or eleven weeks from this time. It is a question whether such supply could be more economically and promptly placed there from Fredericton to Quebec. I think the probability is in favor of the latter. If so, Mr. Emerson is in practice of the whole routine of the purchase and transportation, and offers to attend to it. I leave the matter to your preference as you may pass this way; I think there ought not to be less than two thousand rations at Grand Falls before the end of September. This however will depend upon the quantity which may be deposited at the mouth of the Grand Fourche of the Restigouche. I shall have about sufficient for three months at least at the head of Green River, independently of the Saint Lawrence dépôt. Dumble may perhaps depend upon the Grand Falls should he fall

short. I omitted to mention that he promptly obtained a tow-boat at the Tobique, and ascended the day after he arrived there.

I will desire Mulligan to send, addressed to you at River du Loup, a copy of my memorandum of instructions sent by M'Kenzie, with a report of what he has done, in case he should arrive before any of the party are out to meet you.

No. 9.

*To Major Robinson, R.E.*

CAMP NEAR MOUTH OF GREEN RIVER,

23rd June, 1847.

MY DEAR SIR,—Having written you fully yesterday as enclosed, under the impression that we should be off this morning, I have little more to add, than that we are to-day kept here by a heavy rain storm, which has all the appearance of being of long continuance. This is the more discouraging, as five additional hands have just joined us, making in all twenty mouths dependent on our provisions, with the river rising instead of falling. But we must do our best.

In passing through Fredericton, I would recommend you to supply yourself with a few pounds in small change. There is scarcely any in circulation here. The English Shilling passes up here for 1s. 3d., and in Fredericton for only 1s. 2½d.

Believe me, &c.,

(Signed,)

J. WILKINSON.

No. 10.

*To Major Robinson, R.E.*

RIVER DU LOUP, 28th June, 1847.

MY DEAR SIR,—The day after I last wrote to you turned out most favorably for the ascent of Green River, though the water was quite high and still rising, which would make progress more tedious. The wet weather had also prevented the caulking and preparing of the tow-boat. These causes of delay made the probable period of the party being quite ready to proceed from the head of Green River, sufficiently distant for me to go over to Trois Pistoles and see that all was right there, and return again without in reality losing any time. Therefore on the morning of Thursday last, (24th,) after I had seen the party fairly on the march at an early hour, I set off for this place, where I learned that M'Kenzie had gone to Quebec in order to procure and forward the provisions and other necessities, whilst Sergeants Mulligan and Campbell had gone to Trois Pistoles. On reaching Trois Pistoles, I was informed by M. Tétu that Mulligan had obtained a temporary supply of provisions and a few cooking utensils, and had gone into the woods by a road leading to his starting place, in order to explore the valley of the Abawisquash, or Boisbouscache as it is termed by the French. He had taken with him besides Campbell, two New Brunswick men, and two Canadian guides whom M. Tétu had recommended. From information obtained from M. Tétu and other sources, it would seem that the Abawisquash and the whole of the River Trois Pistoles are erroneously represented on the United States exparte Map. I have also reason to anticipate that other streams may differ from the same authority. The line of the dividing ridge has most probably been laid down with care, but it now seems doubtful whether equal regard has been paid to the general accuracy of the streams.

A hunter by the name of Ellis, an American, who was with the United States exparte Surveyors, (Professor Renwick's party,) has been strongly recommended by Mr. Jones, Mr. Emerson, and others, as a person more thoroughly acquainted with the whole of the ground from the head of Green River to the Abawisquash, than any other, having hunted upon it constantly for many years. I have seen him and found him very intelligent, and I

should judge also that he is reliable. His terms, however, are high; 10s. per day as a guide. But as I shall not require him more than about a fortnight or three weeks, I have thought it better to engage him, (the price being what is usual for a guide,) and he may save me several days on my route.

I return in the morning to Green River, at the head of which I hope to find myself on the 3rd or 4th of July, and at Trois Pistoles, about the 20th, if all be favorable. On striking the valley of the Trois Pistoles, a Railway cannot approach the tidewater within several miles, but must continue from thence parallel with the shore of the St. Lawrence, upon an elevated plain or terrace, (being one of several such plains or terraces rising in succession one above another,) for a long distance, say 50 or 60 miles, gradually approaching nearer, and as I understand descending to the coast. I should infer from appearances that the point of intersection of the Trois Pistoles will not be at a less elevation than 500 or 600 feet above the sea. At any rate I have desired Mulligan to survey and level along the road from the tidewater to the Abawisquash, in order to ascertain this point.\*

Should there be nothing illusory in these indications, you will remark how favorable a descent nature has prepared.

With regard to the transportation of the Barometers, I am afraid that no other method than by a person on foot, and with great care, could ensure their safety across the Temiscouata Portage, which is excessively rough. In fact the whole of the post road from Fredericton onwards, will hardly permit of carriage conveyance.

Two days before my arrival here, a Mr. Ramsay, of Restigouche, had got through the woods from Metapediac, coming out at the Grand Fourche of the Trois Pistoles, on the Temiscouata Portage, on a reconnoissance for the railway. He had with him an Indian guide, with three other persons. I did not see him, but hear from those to whom he had been speaking, that he had been dissatisfied with his guide, had got confused, and was for two days without provision. He returned immediately by way of the Metis.

Believe me, &c.,

(Signed,)

J. WILKINSON.

P. S.—As it might happen that Lynch would be too far out of the way to reach you immediately on your arrival, should he continue with me, I have therefore desired him to make himself useful with Mulligan for a few days, or until I get through the woods.

No. 11.

To Major Robinson, R.E.

ABOUT 2 MILES ABOVE THIRD FALLS,

Green River, 6th July, 1847.

MY DEAR SIR,—The navigation of the river has been tolerable up to the Third Falls. We attempted to take the tow-boat higher. After a great effort we got on through the falls, and by a constant drag with horses and men, have ascended about two miles farther. Seeing the great saving of time, provision and expense that would have arisen, could the boat have gone all the way, I could not feel satisfied without making the attempt, but the water proves already too low, and falling fast. I have therefore decided on letting her go back, and have sent for a party of ten canoe men, with five canoes. After what we shall take up, it will require about four journeys of the expected canoes to take the remainder. They will also be required for a few days as a carrying party. In meantime so much has the provision delayed the intended surveying party, that I now see no prospect of our being ready before the 12th or 13th, so that it will be late in the month before we can be through to the Abawisquash. It takes 2½ days to ascend from hence to our dépôt, and half a day to return.

\*At this time the party had no Barometers, and it was uncertain whether they could be obtained in time to be useful at this point.

We have been greatly favored by the weather since the rain, but now more rain would be of great service.

I intend all my letters so far, to reach you before you leave Fredericton, as I hope they will.

Believe me, &c.,  
(Signed,) J. WILKINSON.

No. 12.

*To Major Robinson, R.E.*

CAMP, LITTLE FALLS, 14th July, 1847.

DEAR SIR,—After my note from Third Falls, Green River, you will not expect to receive one dated so soon from hence. I told you our difficulty of getting up our main supply of provisions, and the arrangement I had made. We had, however, sufficient already at our intended depôt, added to what we could take up with us in our canoes, to enable us to make the intended exploration northwestward towards the Saint Lawrence. We camped at the last fork on the 9th. I made some preliminary explorations of the vicinity. Our camp was about a mile and a half or two miles below the depôt, near the portage on the N. E. branch. On the morning of the 10th, I sent forward a part of the canoes to go as far as the water would permit, with some provision, up the N. W. branch, sending the remainder of the crews to bring down the provision and other things from the depôt, in order to follow. In a short time, the latter returned with the intelligence that they had found almost everything we had left there burnt up. This was a painful and disheartening circumstance. I have no reason to suppose that the fire originated in any carelessness on the part of any one. The fire which the men had used for cooking, they say was put out with water before their leaving the place. I had also observed that it was not near the place where the provision was left. The most probable explanation is the fact of some lucifer matches which were supposed to be spoiled by getting wet, having been left in the lid of a wooden box in the sun to dry. The day of our absence was exceedingly bright and hot, and in the evening a fresh breeze sprung up. These circumstances may account for the disaster. I can as yet discover no others that are adequate. I have desired Ramsay particularly to examine the place and report. Under this disappointment, I have altered my plan of exploration a little. I immediately sent back all the canoes to join the others expected from below, in order to transport the main stock of provision as fast as the low state of the water will permit, from the point where it was left by the tow-boat to our depôt above, leaving with Ramsay a few hands to bush exploratory lines in both directions N. E. and N. W. until the canoeing is done, when he is to bush and chain northwestward to the extreme head of the northwest branch. In the meantime, I am on my way to make an exploration by canoe of the country between that point and where I expect to fall in with some of Mulligan's work, and perhaps may see him. I have also ordered a new supply of carrying straps, cord for the cradles, &c., which were amongst the articles burnt, to be sent up as soon as possible.

The loss of provisions was four barrels of pork and five barrels biscuit, with some articles of minor importance. On the whole, I hope by this change of plan to redeem the inconvenience occasioned by our loss, and that we shall still have ample provision. I hope to be down here again in 12 or 14 days at furthest, when it is probable I shall either hear from or meet you. I should recommend that the Barometers be not carried over the portage to River du Loup. They can be carried by canoe to the point where required, as I can explain when I see you.

Believe me, &c.,  
(Signed,) J. WILKINSON.

## No. 13.

*To Mr. Wilkinson.*

LITTLE FALLS, MADAWASKA, 26th July, 1847.

MY DEAR SIR,—I arrived here on Friday night from the Grand Falls, and was in hopes to have seen you. Mr. Emerson's clerk informs me that you have proceeded up the River to the Temiscouata Lake and up the Tuladi, and were to return here shortly. Your letter of 22nd June, I received at Dalhousie. On learning from it that you intended to proceed across from Green River to the head of the Abisquash, and being fearful in consequence that Corporal M'Kenzie would be at a loss with his party how to proceed, I requested Capt. Henderson, who was going through the Kempt Road as far as the Metis, to go on to Trois Pistoles and see the party there. By a letter from him, dated 11th July at River du Loup, which I received at the mouth of the Tobique River on the 21st, I learned that he found Corporal M'Kenzie at the Trois Pistoles, apparently at a loss what to do; that he had been to Quebec for provisions and canteens for Sergeant Mulligan's party, who were about some 12 miles out on a portage road towards the Abisquash, and that the party were expecting me daily.

Capt. Henderson went out to see Sergeant Mulligan, but he had moved his camp and he failed in finding him. On his return he directed Corporal M'Kenzie to proceed up the Abisquash immediately. This is the last I have heard of that party.

Your letter of the 28th June from River du Loup, and that of the 6th July from the head of Green River, I received at Fredericton on the 17th inst. Your letter of the 14th went to Fredericton, and has reached me this morning.

I am sorry to learn of the accident by which so much provision was lost, but of course it could not be helped, accidents will happen. I only regret it as it prevented you going across the country to join the party there, who want some one to take charge of and direct their movements.

If you have not seen them and give them instructions on your present excursion, and I hardly suppose you can, for they were to go in an opposite direction, I wish you to follow me on to River du Loup for the purpose of going to them immediately. I have some business to do at Quebec, which will prevent my joining them for an indefinite period.

Believe me, &amp;c.,

(Signed,) WM. ROBINSON.

## No. 14.

*To Major Robinson.*

CAMP, LITTLE FALLS, 5th Aug., 1847, 7 a.m.

MY DEAR SIR,—I regret that the post hour permits me to write you only a hurried and short note. The Courier is now detained whilst I am writing. His hour heretofore was about 10. I arrived here quite late last evening, found no one in attendance at the Post Office, and had to wait for some time before I got my letters. It is unfortunate that I should not have been in time to meet you,—exceedingly tedious navigation of head streams, the chief cause of my delay. I have found and surveyed quite sufficiently for an exploratory survey, a most favorable route from the head of Green River to the valley of the Abawisquash, when I was just in time to meet Sergeant Mulligan and party. They have done well, and I gave Sergeant Mulligan directions which would occupy him two or three days to carry out, when he would immediately return to wait your arrival, or for intelligence from you, employing himself meanwhile in exploring southwest, and from the valley of the Abawisquash. Corporal M'Kenzie seems to have been under some misapprehension when he saw Capt. Henderson.

With regard to the Barometers, I think they would now be most usefully employed at the heads of Green River, and thence eastward. Mulligan has levelled from the tide-water of the Saint Lawrence to a connection with my exploratory survey. The levels of

the latter will be determined sufficiently near by triangulations, which the facilities of the country enabled me to make.

But what would it avail that we have found, and shall be able to submit a plan of a good route from the valley of the Saint Lawrence to the valley of the Restigouche? How desirable it is that we should be sure of the most favorable and direct route that the country will permit, in continuation towards the Bend of Petiteodias?

I hope you will approve of sending Mulligan and his whole force to Madawaska, in order to join me at some point, about which, in meantime, I would have directions prepared. I would at once come over and see you, and talk the matter over, but it is doubtful whether before this you would not have gone to Quebec, and my journey would be lost. I will therefore send with this, directions to Mulligan, agreeably to the above suggestions, desiring him to leave everything in a secure and good state at M. Tétu's, and bring his men, tents, baggage, &c., this way. I should also be very glad to receive any instructions or suggestions from you at same time, or as soon as you can write.

Believe me, &c.,

(Signed,)

J. WILKINSON.

No. 15.

*To Major Robinson, R.E.*

CAMP, LITTLE FALLS, 6th August, 1847.

MY DEAR SIR,—I hope you would duly receive my note of yesterday, per mail. I had then no time to be very explanatory, but before I again get out of reach, it is necessary I should be a little more so. I think it very probable, that before this time you have seen Sergeant Mulligan and party, and have heard from them an account of their proceedings, and also of the circumstances of our junction in the valley of the Abawisquash.

I was afraid I might keep you waiting at Little Falls, or would have descended the valley; but at the same time felt that it would be for the present unnecessary. The description of it by Mulligan and Campbell, added to the levels which they had taken, left no anxiety on my mind as to the practicability of this portion of the route.

I made a personal examination of that part of the valley connected with my own exploration, and they assured me that I saw a sample of the rest, down to the main stream of the Trois Pistoles; or rather that the point at which I found them, was the least favorable which they had passed.

I have already informed you (yesterday) that I deem the survey that I have made from the vicinity of the northwesterly head of Green River to the Abawisquash, to be sufficient for the objects of an exploration; the relative heights of sundry remarkable peaks seen from different points of the ground, as determined by triangulation, will afford the means of such a continuation of levels from the tidewater of the Saint Lawrence to the head of Green River, as will make the conveyance of the Barometers over that portion of the route, dispensable for the present. Any material error will be checked by the barometrical heights, commencing at the last fork of Green River, as I intend Mulligan should level back from thence to the most easterly point of my exploration.

I will now explain to you what movements I have in view at present, so that you may be under as little uncertainty about them as I can help, for I cannot foresee that I shall be able to adhere to them, as this must depend upon what I discover during my progress; such has been the case since I commenced.

First of all then, Mulligan is to level as I have said, up the North West Branch of Green River, and thence to a stake at the inlet of a small lake, as I shall fully explain to him, designating the most easterly point of my exploration. He will find his course already bushed, chained and marked, perhaps, by Ramsay. I am supposing that another theodolite will now be at command, and that M'Kenzie will at the same time level in the opposite direction, or up the North East Branch of Green River—Ramsay and his men bushing and chaining for him. Some part is perhaps already bushed and chained.

At the head of this stream I conjecture, from appearances in that direction, will be

found low ground, leading into an opposite valley falling into the Restigouche. Whether such opposite valley may be that of Pseudo River, marked on the Maps, or some other, examination will shew. I place no very strong reliance upon the Maps. But if a favorable opening and opposite valley be found, as I think probable, M'Kenzie will continue levelling down the Restigouche slope until he strike the exploratory north line levelled by Captain Broughton and Mr. Featherstonhaugh, at some point to be identified. Here he may cease levelling, and make thence a compass survey down the valley to the main South West Branch. In the meantime Mulligan will be through his section, if prosperous, and canoes will be ready to convey himself and party down the Grand Fork, and up the South West Branch\* to a point which I hope to have selected by previous examination, and from which point he will survey and level southeasterly, according to such directions as I trust I shall have ready for him.

Having seen these operations fairly commenced at the head of Green River, I propose to proceed with Campbell and the Barometers, across the portage to the Grand Fork of the Restigouche, down the same to the depôt, and thence up the South West Branch, on both banks of which, making explorations as I proceed, in order to select some point which shall be a closing one for M'Kenzie, and a starting one for Mulligan. I shall then proceed to Grand Falls, in order to ascend the Tobique to its head branches. Through the valley of one of these, I hope to make a junction with Mulligan, perhaps by that of the Sisson Branch, or at any rate to satisfy myself as to the feasibility of a junction. Thence returning to the main stream, I hope to be able to ascend the right hand branch to its source, and to find a pass thence to the valley of either Clear Water or Rocky Brook, descending to the main valley of the South West Branch of Miramichi River.

Many hindrances and disappointments may of course occur to retard me, and I may make discoveries which will materially change my ideas of the country, but such is the general line of exploration which I think you will agree with me ought to be attempted in order to feel assured whether nature may have denied all facilities to a direct line.

It is very probable that Corporal Dumble will not only find a feasible line where he is, but finish at an early period. If so, I should be glad if your arrangements and views would permit of his recommencing at Boiestown or vicinity, and exploring thence in the direction I have suggested, as he has already some knowledge of that part of the country.

It will be desirable to have a little provision deposited at the Tobique valley, say one barrel pork and other things in proportion, for my party only, in ascending the Tobique River.

If the above suggested arrangements all go on, I shall be put at the Grand Falls about the last week in August, on my way to the Tobique, when I hope to have a chance of seeing you somewhere, at any rate that I shall be sure of finding letters from you at the Grand Falls. I am anxious to be on the most difficult part of the exploration about the time the flies take their leave.

Believe me, &c.,

(Signed,) J. WILKINSON.

P.S.—I hope you will be able to leave me a nautical almanac for Mulligan to bring in from River du Loup—I should also be glad of a good sextant and artificial horizon.

The men I have with me have had a severe drag of it during our late expedition, and did their duty with great patience and cheerfulness. I wish to consult you about some small gratuity to each in acknowledgment, should their conduct continue to be good, for I am afraid I shall be obliged to expect a great deal from them yet.

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\*By the "South West Branch" is intended that branch of the Restigouche River which continues to bear the name of the Restigouche above its confluence with the "Grand Fork" or Quatawamkewick, though it is doubtful whether the latter do not ordinarily discharge the greater volume of water.

No. 16.

*To Major Robinson, R.E.*

CAMP, LAST FORK, GREEN RIVER,

25th August, 1847.

MY DEAR SIR,—Nearly three weeks have now elapsed since I wrote to you from Little Falls, under uncertainty, however, whether my letters would reach you at River du Loup, or have to follow you to Quebec. Having also at that time been absent from the party at the head of Green River nearly a fortnight longer than I intended, without opportunity of knowing how they were going on, it was under some perplexity that I decided that it would be preferable to write to you fully, rather than follow you personally, at the risk of missing you after all, especially as I had acquainted myself exactly with the situation and proceedings of the party at Trois Pistoles. I hope, indeed have scarcely any doubt, you would receive my letters; one sent by mail, and another by express, accompanied by instructions to Sergeant Mulligan in case of your absence. I am therefore becoming a little uneasy at the non-arrival of the Trois Pistoles party at this place, as I supposed it would be practicable for them to be here some days since. On leaving Little Falls I hastened to ascertain what Ramsay had accomplished up here, and met him within half a day's journey of the Fork, returning from the end of his bushing for a distance of 25 miles; terminating, as I soon discovered from his description, within about half a mile of the easterly extreme of my personal exploration. He did not know, however, that he was so near my last mark, nor had I any earlier opportunity than that of my own return, of communicating to him any directions on the subject. It was my intention to reach him before his return, but unexpected delays prevented.

From Ramsay's description, the valley of the North West Branch proved favorable all the way to its head; but in descending from the pass leading to the valley of the middle branch of the Toledé, there was appearance of the fall being too great. I therefore sent for a further supply of provision, and returned with the party in order to examine the whole of the ground, and to complete the connection of the several explorations. I found no obstacle except the descent from the pass in question. To the eye, indeed, in passing over it, and especially viewed as I saw it at first, from an elevated position at a distance, it seemed so moderate and gradual as to give an impression of its practicability. Upon testing it, however, by the relative elevation of the ground at its summit and at its base, which the commanding view afforded by neighboring peaks enabled me approximately to determine, I am afraid that it must be avoided, and that we must abandon the Green River valley altogether.

The steep part of the descent is for the first three miles, which I should wish to be levelled before a final judgment be formed; but I do not think it necessary to level any other part of the route thence to the Abawisquash. There may be questions of detail to consider, but I think the inclinations at all other points are unexceptionable, many miles indeed are quite level. I also think it quite improbable that any other pass, through the height of land to the valley of the St. Lawrence, can be found so favorable as that at the head of Lac des Isles, and that such change in the route as may be necessary to avoid the valley of Green River, would be most advisably sought for with a view to an approach to this pass if possible. From the general idea I have formed of the relative elevations of the valleys of the Toledé, Rimouski and Restigouche, as compared with the valley of Green River, I am inclined to believe that the three former only are likely to afford the necessary facilities for our object,\* though it will be by a more circuitous route.

The directness of the route by the valley of Green River, recommended as it seemed to be by other favorable indications, gave it, however, a claim to be first examined.

I enclose a rough diagram to elucidate my observations, which perhaps would otherwise be obscure.

In consequence of the difficulty, or at least apparent difficulty which I have stated, it is now necessary that I should not leave this part of the ground as I at one time intended, without being satisfied that no difficulty is left behind either by the route we have already examined, or by some other to be discovered.

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\*Keeping far from the frontier.

I send this out by a messenger both to Grand Falls and Little Falls, at one of which places I hope he will find letters from you, and perhaps may find you personally. I hope to have certain tidings about the Trois Pistoles party by his return; but in the meantime am expecting them every hour.

We shall now go on with our explorations in the valley of the Restigouche and Rimouski, with a view to an improved route.

Believe me, &c.,  
(Signed,)

J. WILKINSON.

No. 17.

To Mr. Wilkinson.—(Received 7th September.)

RIVER DU LOUP, 1st August, 1847.

MY DEAR SIR,—I have been down to Trois Pistoles. I found Corporal M'Kenzie there; he had come in for provisions. From him I learned the state of your party under Mulligan. They had progressed about nine miles beyond the Forks of the Trois Pistoles. Sergeant Mulligan had, however, explored further on, and reports the valley of the Abawisquash favorable for 15 or 20 miles, when it becomes unfavorable.

By going to Quebec and waiting at Trois Pistoles until set to work by Captain Henderson, Corporal M'Kenzie has lost upwards of three weeks. From his account to me, they were at a loss what to do next.

I wrote to Sergeant Mulligan, and have given him orders to cut on as fast as he can in an easterly direction, following any valley and stream he may find favorable, until he reaches the Main Branch of the Rimouski. Then to follow this stream up to its source and gain the summit level, or ridge dividing the waters flowing into the Saint Lawrence from those running into the Restigouche. Upon this ridge to halt, and get up by hired Canadians a good stock of provisions before proceeding onwards to the Restigouche. But I expect long before this point is attained, that you or myself will have been with the party. I wish you to join them immediately, and pursue the plan laid down as above, which is the same as that intended when at Fredericton, when the party started.

On the Rimouski River, according to Arrowsmith's Map, there is a Fork formed by a stream running from the eastward, from Lake Folliet; this stream heads with the source of the Metis. While the main body are pushing on from the head of the Rimouski, I should like a reconnoissance to be made up this stream. By a report of a Mr. Ramsay, of Dalhousie, who has been a good deal employed by Captain Henderson, there is a favorable line up the Metapediac, and by a stream named Metallies Brook, as far as the head waters of the Metis. It will be desirable, therefore, to ascertain if this tributary of the Rimouski would afford a favorable junction with it.

A dépôt of provisions at this Fork might be desirable, to support the onward party working south, and by hiring Canadians at Trois Pistoles, a good party of them would get up in a few days as much as would suffice the whole party. At the head of the Rimouski, the Green River dépôt could not be a long way off, and if Mr. Ramsay makes a smoke from some conspicuous point near it, he could be easily found, and the provisions then be made available.

Enclosed is a list of provisions now in store at Tétu's, with the exception of some which were taken by Corporal M'Kenzie. For his small party there is enough for three months, but when you join, it will be necessary perhaps to get a further supply down from Quebec. If you should so consider it, write an order to Messrs. Gibb & Lane, 50, St. Peter Street, and they will send you any amount you order.

I proceed on to Quebec to-morrow, and intend to purchase, if I can, three Barometers for this party, rather than risk the expense and breakage of bringing them from Halifax.

In my directions to Mulligan, I told him to push on and not suffer chaining and leveling with the Theodolite to delay his onward movements. The season is advancing, and we have a great deal of ground to get over. We will make a Barometer section of the route, after it has been cut.

Corporal Dumble and party have finished their exploration south of the Tobique, and are now, I hope, advancing northward well on to the Restigouche. He reports favorably of his southern work, and of having found some easy grades on the Gulquac. I have not heard of or from Captain Henderson, since the 14th instant. It is probable I may go on from Quebec to Montreal, and pay my respects to the Governor General. It is rather uncertain therefore when I return to Trois Pistoles. I am going to find my way to Quebec through the back settlements, for the purpose of examining the ground, and ascertaining the fact of the favorable terrace spoken of.

Believe me, &c.,  
(Signed,) WM. ROBINSON.

No. 18.

To Mr. Wilkinson.—(Received 7th September.)

QUEBEC, 9th August, 1847.

MY DEAR SIR,—I have just received your note of the 5th instant, from the Little Falls. You are, I am quite sure, doing what you think best, to work out the object we have in view; but in so doing, the party under Sergeant Mulligan are receiving from you and me contrary orders. You have suggested and ordered them, if I understand you rightly, to give up where they are at present working, and to go round somewhere to the Madawaska River to join you. No line that passes anywhere near the frontier will meet with toleration from me, until every other line tried proves abortive.

Sergeant Mulligan and party must therefore continue to proceed according to the orders I gave them at Trois Pistoles, and I write to him to that effect by this post, which leaves early this afternoon.

My intentions were from the first, that you should have led and directed this party in person; but under present circumstances I think it will be better that you should now act independently of them, and as you have found a favorable line from the head of the Green River to the Abisquash, have the goodness to extend your exploration southeasterly from there, and endeavor to join on to Corporal Dumble's exploration to the Tobique Valley. He must be now some miles on the north side of that River, working onward from the ox-bow bend at the mouth of Gulquac, where his principal depôt of provisions was established.

I have succeeded in purchasing two Barometers here, and hope to get a third from Montreal in the course of a few days, when I shall return with them to Trois Pistoles, and take them out to Sergeant Mulligan's party. You must therefore leave him entirely to me, with your own present party continue your exploration independently, bearing in mind that the frontier is to be kept at the greatest possible distance.

I should like to have a sketch of your line, as explored from the head of Green River to the Abisquash.

Believe me, &c.,  
(Signed,) WM. ROBINSON

No. 19.

To Major Robinson, R.E.

GRAND FALLS, 11th September, 1847.

MY DEAR SIR,—Whilst descending Green River on the 7th instant, I received your letters of 1st and 9th August. The man whom I had sent out with a letter for you, on the 25th August, and other business, did not return in due time, which added to my continued uncertainty about Sergeant Mulligan and party, and the necessity I felt for additional men, induced me to come down. My messenger, it appears, had fallen sick, and after some delay had sent another man in his stead.

With regard to your letter from Quebec of the 9th August, you will do me the justice to believe that it is with no little concern I discover that we are not acting in concert. On

looking again at your letter of the 26th July, which I found you had left for me at Little Falls, and which I received there on the 4th August, I observe that you say, that provided I had not already seen and given instructions to Sergeant Mulligan and party, during my late excursion, you wished me to follow you on to River du Loup for the purpose of going to them immediately, as you had some business to do at Quebec which would prevent you from joining them for an indefinite period.

Now, it happened that I had seen Sergeant Mulligan and party, and had given them instructions, with the condition, however, as with all my instructions to them, that they were to be acted upon only in the absence of instructions from you. The case, therefore, in which I was to follow you to River du Loup, did not exist, and I had no motive to do so, except to see you personally, which I had very anxiously wished. I had been pushing through many difficulties, early and late, in order to get back to Little Falls within the time I had estimated, for the purpose of meeting you there, and having a full personal consultation. It was therefore no small disappointment to me to find myself too late to see you before you had gone on to River du Loup, and were probably on your way to Quebec.

I had also the additional anxiety on my mind, of a party working at the head of Green River, nearly a fortnight longer than I had intended, without personally directing them. Let me now state, somewhat briefly, what I had looked for as the result of a personal consultation with you at Little Falls. First of all, I had evidence to satisfy you that Arrowsmith's Map, on which our consultations and arrangements in Fredericton had in some degree been founded, was quite wrong in several material points, not wrong, perhaps, as a copy, but because the original, the United States *ex parte* Map, from which the copy is made, is erroneous. My doubts were created by inquiries, after my arrival at Grand Falls, which made me very desirous of obtaining a general personal knowledge of the country intervening between the head of Green River and the Abawisquash, before attempting to lead the party beyond the valley of the latter. I therefore made the preliminary examination which appeared so desirable. The result was, in my own unworthy judgment, to prove that the heads of the Toledi, the Abawisquash, and necessarily, at least the western branch of the Rimouski, have, on Arrowsmith's Map, merely a fanciful representation, not founded on correct knowledge; that the most favorable communication with the valley of the Abawisquash is at the head of Lac des Isles, and is not shown on the Map at all, whilst what we conjectured at Fredericton, as barely probable, a series of valleys like that of the highest on North West Branch of Green River, erroneously marked on the Map as "Second Fork," does in reality exist, and runs nearly parallel with the valleys of the Grand Fork of the Restigouche or Kedgewick and Rimouski, at a mean distance of perhaps ten or fifteen miles.

Now, if my memory does not mislead me, I think it was understood in Fredericton, that according to their appearance on the Map, it was your opinion, and in which I entirely concurred, that the valleys of the Grand Fork of the Restigouche and Rimouski seemed to offer the only favorable route in continuation from the valley of the Abawisquash. That therefore this route was the one most obviously suggested for exploration. But it was also apparent, that if a parallel series of valleys like that which I have spoken of should happen to exist, and should afford favorable inclinations, it might prove to be the more desirable route, as cutting off a considerable distance.

Upon this general understanding, I conceived your instructions to me on the subject to be founded. For you say, "In the first instance, the best general course of proceeding will probably be by the Abawisquash Branch of the Trois Pistoles River to its source, and thence across to the Rimouski River, and up its valley, and across to that of the Matankedgewick River, following the valley of the latter to the Restigouche. This is suggested as the best probable course from an inspection of the Map, but Mr. Wilkinson will use his own judgment, and be guided entirely by what he deems the best route when he is actually on the ground."

I could not of course deem any route the "best," until I had examined at least more than one. But you did not decidedly require us to ascertain the merits of several lines.

You say, "If the party are successful in finding an easy line, or a practicable one even, to the Restigouche River, they will afterwards explore on southerly as far as their provisions and the season will permit them."

Now, throughout my proceedings, I have kept in view those general instructions, which I deemed, as I am sure they were, founded on mutually clear and good understanding at Fredericton. Having then made an examination of the route I have mentioned, appearing favorable as it did from the valley of the Abawisquash, nearly to the valley of the Restigouche; having taken sufficient notes of it for a general report and exploratory sketch; and seeing no necessity for Sergeant Mulligan and party crossing with baggage and provision from the Abawisquash, through a long distance of unbushed forest, to the head of Green River, whilst the journey might be more promptly, easily, and economically performed by way of the Temiscouata Portage, and thence by canoe by way of the Madawaska, Saint John and Green Rivers; could I have had the opportunity of personally explaining to you at length all these circumstances, I think the result must have been at least a more fortunate understanding. But I leave to yourself to judge what kind of instructions were most suitable for me to give to Sergeant Mulligan, situated as I was, and as I have explained, at Little Falls, while you were so far out of the way of personal consultation.

I gave Sergeant Mulligan such instructions as under the circumstances seemed almost unavoidable, not knowing he had any others from you, rather inferring indeed from your letter of 26th July, that you should leave him to receive them from me. There could not, however, be any contrariety in my orders, for they were, expressly, to be observed only in case he had no other orders from you, but which latter, now more than a month after their date, I am informed he had received.

On the subject of instructions, perhaps, I ought to express my surprise that Corporal M'Kenzie should have deemed them so unsatisfactory, or obscure, as to be at a loss what to do. I am quite sure that he was desirous to do the best he could, and that he must have been under some mistake. I sent instructions by Private Campbell, and afterwards by a messenger, addressed indeed to Sergeant Mulligan, but intended for all, which I deemed more than sufficient to keep them fully and effectively employed from the time of their arrival at Trois Pistoles until I saw them on the 27th July. No part of the exploration southwestward, which I had deemed very desirable and relied upon finding in progress, had been done. In the absence of any apparent motive, I inferred that Corporal M'Kenzie might have some private reason for his inactivity, which he wished to explain to yourself.

I should prefer to add nothing more, but in order to prevent misconstruction, will say one word as to your rebuke for my supposed approach too near the frontier with my exploratory route.

There is no part of it as yet within 25 or 30 miles of the frontier. It is generally 10 or 12 miles, or more, in a straight line to the eastward of the route explored by Captain Simmons, for a military road; and is, at the present point, farther from the frontier than a considerable portion of the route which I understand Corporal Dumble to be exploring under your own direction. As the consequence of my imputed indiscretion however, you now require me to leave the Trois Pistoles party entirely to yourself, and to continue my exploration independently, adding the injunction "that the frontier is to be kept at the greatest possible distance." I can hardly doubt that you are under some wrong impression about the route I have examined, for if it be in your opinion too near the frontier, the continuation of the same by the route in progress of exploration by Corporal Dumble is at least as objectionable.

But in acting independently, I cannot be wrong in going as far from the frontier as you propose to go yourself in continuation from Trois Pistoles to the Restigouche; and as the season is rapidly advancing, I have left directions with Ramsay about going on with the further explorations yet to be made, in order more fully to ascertain the practicability of the route I have examined; and will now form a sufficient canoeing party, in order to make what I have from the beginning intended, in unison with your own wishes, an examination and sketch of the South West Branch of the Restigouche or Charodé, and the Grand Fork or Kedgwick, to its head, if the state of the navigation will permit; and also, if practicable, to make portage, and descend by the Rimouski, precisely by the route you propose to examine, and thus shall hope effectually to co-operate with you in accomplishing the object before the season prevent, and to save you besides much trouble and anxiety in forwarding provisions, as you propose, to the head of the Rimouski.

I will forward this by mail, under cover, to M. Tétu, desiring him to forward it to you by express, if no other communication exist.

Believe me, &c.,

(Signed,)

J. WILKINSON.

P.S.—I enclose a sketch of the rivers and tributaries, by John Ellis, the hunter. He promised, indeed agreed in writing, to join me in July, but I have not seen him since. His sketch is greatly out of proportion, as he is conscious, but gives an idea of what streams exist, and of their approximate relative position. It affords no idea of distances however, except where actually marked.

The navigation of head streams is so uncertain, that with necessarily imperfect preparation, and so little time for my object, I may be defeated, but will try my utmost.

I enclose also a rough diagram explanatory of what has further been done, and is now in progress at the North East Branch of Green River. I surveyed from the dépôt to the point *a*, and found a considerable stream extending a long distance to the north. The passage by Moose Valley is difficult, though I am not prepared to say impracticable. It would be so to the point *a*, but there is a possibility of a favorable escape round Central Peak, to a more southerly valley, perhaps that of the main Charodi.

There are, however, two other much lower and more favorable looking passes in the situations marked *b* and *c*. Ramsay is exploring both these, and making a connection of the former down the supposed Pseudo to the point *a*.

This exploration will be done probably in the course of next week, after which he is to explore another valley of the North West Branch, with a view to a more favorable escape thence, either by way of the Rimouski, or a more northerly valley of the Toledi.

I am anxious to have time after reaching the head of the Kedgwick, to examine all his work, and then return by whichever pass he finds lowest and most favorable from the North West Branch of Green River to the Charodi.

No. 20.

To Major Robinson, R.E.

WAGAN PORTAGE, 30th Sept., 1847.

MY DEAR SIR,—An unexpected opportunity has occurred of my writing to you again, though in doubt how to direct, and whether my letter may reach you.

I had commenced my exploration of the South West Branch of the Restigouche, (or Charodi) from the Wagan towards its head, when a severe case of sickness of one of my best and most useful hands sadly embarrassed me.

My party was already weak enough, and I had relied a good deal upon the local information of the sick man in my intended exploration of the Quatawamkedgewick, or Great Fork, to its head, whence if possible as I said before, at least to make a connection with the head of the Rimouski, if I could not descend it. I succeeded, however, in exploring by canoe nearly 20 miles up the South West Branch, making long returns nightly to my camp, in order to give the sick man the benefit of as much quiet and rest as the circumstances would permit. By going to the labor and delay of further cutting out, I could have ascended the stream apparently some miles higher. But I deemed myself within about 10 or 12 miles from the south westerly point of our exploration of the North East Branch of Green River, a diagram of which I sent you, and intend as soon as I can to complete this connection and to make further lateral explorations by land. When quite ready to proceed down stream, and up the Quatawamkedgewick, the sick man had been getting so much worse, that there appeared rather a probability of his dying in camp than of his getting better.

The poor fellow notwithstanding, was as generously regardless of his suffering in his present state, as he was unsparing of his great physical strength and ability in the service when well. I met with him accidentally in ascending the Toledi, and engaged him for his local knowledge of that river and its branches. His name is Charles M'Kinnon. He has proved a most useful and efficient man. When he appeared to think, as there was great reason to fear, that he was dying, he was anxious not to retard my movements for

an hour, but assured me he was ready whenever I was to go on. As it was practicable, however, to get him within reach of medical assistance and proper attention, though at a sacrifice of perhaps four or five days of time, when every hour is very valuable, it seemed incumbent upon me to send him back to Little Falls, where Dr. Pant resided, and where he was most desirous to go. I have therefore returned to this point in order to send back two men and a canoe in charge of M'Kinnon,\* as they can go from hence to the settlement if all be well, without camping. They are to bring back an additional man. In meantime, as this is an interesting point, I can advantageously employ myself in further exploring and viewing the neighborhood until the men return, when I intended to proceed immediately to the Fork in order to ascend the Quatawamkedgewick. But the season is now so far advanced, and my preparations were unavoidably so imperfect, that I no longer hope to reach the source of that stream, much less to descend the Rimouski. For the same reason there is no prospect of my getting southeastward of the Restigouche, though my work will necessarily be connected with Corporal Dumble's, provided he emerge anywhere on the right bank of the South West Branch, or touch any part of the exploratory North Line.

It is necessary to complete the interior explorations at which I left Ramsay engaged, as soon as possible, in order to avoid being entangled by the season. I shall most probably be so situated as to descend by way of Green River to Grand Falls, when the season may oblige me to discharge the men, unless I find there other directions from you.

I observe there are some names on my engagement list, the dates of commencement belonging to which you may have occasion for, as the men are in Sergeant Mulligan's party. I therefore send you a memorandum of them; and also of an advance of £1 to George Lynch.

I hope you are suffering no inconvenience from so much wet weather, and that your exploration is going on prosperously, though not so rapidly as you will of course be anxious to see it.

Believe me, &c.,

(Signed,)

J. WILKINSON.

No. 21.

To Major Robinson, R.E.

QUATAWAMKEDGEWICK & GREEN RIVER PORTAGE,

16th October, 1847.

MY DEAR SIR,—After I had passed you on the 12th, I regretted much that I did not entreat you to camp within speaking distance for the night, as I had a great deal to say to you, more than was convenient to say in the middle of the river.

As to the principal matter however I must be brief. It is with regard to another short line of exploration which I have kept in view all the season, and shall very reluctantly leave the ground without passing over it. I think there is yet time, without the season prove unusually unfavorable.

You will, I think, have much the same idea of the Quatawamkedgewick as I have. That the inclination of the valley is no doubt within a favorable limit, but that it can be made available only by very expensive rock cutting, embanking and bridging through a great part of its extent.

If such corrections can be made on the other routes explored, as to bring the inclinations within favorable limits, and *I am not prepared to say they cannot be so brought*, it will also be most probably at a very objectionable amount of expense. Hence, the exploration of another route, as long as it may remain possible to find one sufficiently exempt from such difficulties, will be necessary before the construction of the work can be advisably commenced. Whilst, therefore, there remains a strong probability that we can find such a route during the short remaining part of the present season, I hope you will think the effort worthy of being made, even at some sacrifice and inconvenience.

What I propose is to commence my exploration of the head of the Restigouche, through lateral valleys of the Green River, with the valley of the Squatuck. If I had not a very favorable expectation of the result, I should not of course make the proposition,

\*Who died shortly afterwards.

especially at a time when the advanced state of the season is a strong inducement to abandon the idea.

Now, it will greatly expedite our labors, and render it much more satisfactory, if you would permit your stationary Barometer, if you have one, to remain until our return to Grand Falls, and also of course to allow a Sapper to pass with two other Barometers over our line.

In order to save tedious description, which after all might be obscure—whilst the men are carrying over the portage, I have prepared the enclosed diagram to explain my meaning. The dotted red line is the proposed route. After getting into the valley of the Squatuck, we know that the inclination is highly favorable, and if I do not mistake there is also abundance of flat margin; hence to the Abawisquash is already explored.

I send out this by express, in order to intercept you before leaving the Grand Falls. I hope you had a safe journey at least, but can hardly think you would have a very pleasant one. The snow storms, hard frosts, the Wagon and its portage, I hope, however, are by this time only things of recollection under more agreeable circumstances.

Believe me, &c.,

(Signed,) J. WILKINSON.

You will remark that Corporal Dumble's line is very direct with our Green River route and intended descent of the principal branch of the Restigouche, which I find the Indians call the Coon-a-mitek.

OCTOBER 17TH.

Whilst writing the foregoing, I had not seen Ramsay, whom I found out of the way. I now learn from him, that there are no Barometers here, and also, that besides some of the provisions being out of the way, we have not the number of carrying bags or canoes which I had been counting. The efficiency of the party is therefore not what I had expected, but we must do the best we can. The same canoe which brings out this, will also bring down M'Kenzie and Campbell, who I hear will be ready and waiting for this opportunity, but I have not seen them. As there are no roads upon which we can rely upon for our return, and to have to leave any one to bush their way out, would entail a much greater expense and loss of time than either incurred by canoe. I may therefore, perhaps, with the return of the canoe now descending, find it necessary to have another brought in, and also a small additional supply of sugar, the stock of which I find is disproportioned to the other provisions remaining.

The sick man\* is so far well as to be able to work again, and instead of further adding to our embarrassment, greatly relieves us.

No. 22.

*Major Robinson, R.E.*

CAMP NEAR 3RD FALLS, GREEN RIVER,

6th November, 1847.

MY DEAR SIR,—I was disappointed at the return of my messenger of the 16th ult., to receive no tidings of your safe arrival, but hoped that it occurred shortly afterwards, though I have since had no opportunity of hearing.

I do not know what may be your address, as I forgot to ask you, and only suppose it probable that it may be River du Loup from what Ramsay infers from what you had said to him.

We have surveyed from the North East Branch of Green River down another principal Branch, to the intersection of Captain Simmons' explored route, and thence up another Branch to the farthest part of my exploration of the Restigouche. We have returned so far, where I am discharging six of the men, and intend proceeding with the rest, 18, by the route which I mentioned, to the Squatuck, if the weather will permit; but the snow is now falling fast, and something will depend upon the result, as our provisions remaining are barely sufficient, even if we should be favored by the weather. I hope to

\*Not M'Kinnon before mentioned.

be at Grand Falls on or before the 20th; shall I see you there, or where, or how shall I direct to you?

Believe me, &c.,  
(Signed,)

J. WILKINSON.

No. 23.

To Mr. Wilkinson.—(*Received late in November.*)

LITTLE FALLS, 26th October, 1847.

MY DEAR SIR,—I am going to Trois Pistoles for the purpose of discharging and paying off the men remaining with Sergeant Mulligan, and settling accounts with Messrs. Tétu and Seaton.

I hope to hear, before my return, of your doing the same with *every man* of your parties.

Your employment of so many men, without first consulting me, will cause me some pecuniary embarrassment, but I believe there will be funds enough lodged at the Bank of Fredericton to meet the demand for the laborers' wages.

Mr. Ramsay must be allowed some eight or ten days to give in his books and papers in the best order he can.

Yours truly,  
(Signed,) WM. ROBINSON.

No. 24.

To Mr. Wilkinson.—(*Received 27th November.*)

LITTLE FALLS, 26th October, 1847.

DEAR SIR,—You will find a note from me at the Grand Falls, requesting you to pay off immediately every man of your parties, except Mr. Ramsay, who must have a few days allowed him to give in his books properly.

Yours truly,  
(Signed,) WM. ROBINSON.

(*Vide Nos. 5, 6 and 7.*)

No. 25.

To Major Robinson, R.E.

FREDERICTON, 31st December, 1847.

MY DEAR SIR,—The 31st December has arrived, when, contrary to my expectation, I find my Report for you yet unprepared. The sketch I have completed only this morning, having been unable to devote to it less time without making a very unsatisfactory and distorted representation of the lines explored. A rough approximation is all that, under the circumstances, can be pretended. The time will, of course, make no difference with regard to my connection with the Exploratory Commission; but I am not the less anxious that you should not be disappointed, and hope to have every thing out of my hands, say within ten days, I hope less than this time.

Believe me, &c.,  
(Signed,)

J. WILKINSON.

No. 26.

FREDERICTON, 19th June, 1849.

(Copy.)

SIR,—Having occasion, in the course of some remarks which it seems proper that I should submit to His Excellency the Lieutenant Governor, to refer to the authority of Mr. Grant, of the Crown Land Department, relative to the topography of a part of the interior of the Province of New Brunswick, I am desirous that he may, with His Excellency's permission, furnish replies to the following questions:—

1. To what extent has the line of the dividing summit between the Tobique and Miramichi Rivers been examined?

2. To what extent has Mr. Grant any personal knowledge of that summit?  
 3. To what extent does the summit in question remain unknown?

I have, &c.,  
 (Signed,) J. WILKINSON.

To the Hon. J. R. Partelow,  
 Prov. Secretary, &c., &c., &c.

No. 27.

SECRETARY'S OFFICE, FREDERICTON,  
 24th July, 1849.

SIR,—Your communication of the 19th June last, was immediately forwarded to Mr. Grant, who was above the Grand Falls at the time, and I have now the honor, by direction of His Excellency the Lieutenant Governor, to transmit a copy of his reply thereto for your information.

I have, &c.,  
 (Signed,) J. R. PARTELOW.

John Wilkinson, Esq.,  
 Civil Engineer, Fredericton.

No. 28.

FREDERICTON, 19th July, 1849.

SIR,—I regret that having received your favor, enclosing Mr. Wilkinson's queries, while absent in a distant part of the country on duty, has caused me to overlook making an early reply.

The answers will be found written in Mr. Wilkinson's own communication, which I now beg leave to return to you enclosed.

I have, &c.,  
 (Signed,) JOHN GRANT.

To the Hon. J. R. Partelow,  
 &c., &c., &c.

*Answer to 1st Question.*—I cannot say to what extent the ridge separating the Tobique and Miramichi waters has been examined, as it was done under Captain Pipon's own immediate superintendence.

2nd. I have no personal knowledge of the summit in question, for the reason already stated. My instructions were to "*examine the valley of the Tobique, and ascertain the best bridge sites along that River.*" I nevertheless proposed making an examination of such parts of the ridge as my own observations, as well as the suggestions of the Indians, led me to believe was most approachable from either side, to what appeared to be the lowest summit levels. With this intention I was in the act of making a section survey from the Tobique River, towards it, which Captain Pipon directed me to abandon, as he had himself for the time sufficiently examined it, while he, at the same time, desired me to give my attention to the country on the northwest side of the Tobique River.

3rd. I believe no survey of it has been made, except to a limited extent in the neighborhood of the point passed by Corporal Dumble of the R. S. and M., and his party, in extending the northward line.

(Signed,) JOHN GRANT.

