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NORTH AMERICAN BOUNDARY.

SUPPLEMENTARY REPORTS

RELATING TO

THE BOUNDARY

BETWEEN THE

BRITISH POSSESSIONS IN NORTH AMERICA

AND THE

UNITED STATES OF AMERICA,

UNDER

THE TREATY OF 1783.

Presented to both Houses of Parliament by command of Her Majesty.
1842.

LONDON:

PRINTED BY T. B. HARRISON, ST. MARTIN'S LANE.



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SUPPLEMENTARY REPORTS

RELATING TO

THE BOUNDARY

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THE BRITISH POSSESSIONS IN NORTH AMERICA

AND

THE UNITED STATES OF AMERICA,

UNDER

THE TREATY OF 1783.

No. 1.

*Viscount Palmerston to Lieutenant Broughton and
Mr. J. D. Featherstonhaugh.*

Gentlemen,

Foreign Office, June 1, 1840.

COLONEL MUDGE and Mr. Featherstonhaugh, the Commissioners who were appointed on the 9th of July, 1839, to explore and survey the Territory in dispute between Great Britain and the United States of America, having been prevented by the advanced period of the season, from completing their examination and survey of that portion of the Boundary Line claimed by the United States, which lies north of the St. John, and in the vicinity of the River St. Lawrence; and Her Majesty's Government having determined that such examination and survey should now be completed, I have to acquaint you that you have been selected as joint-surveyors for that service.

I have accordingly to instruct you to lose no time in preparing the equipments and in selecting the instruments which will be requisite for this expedition, and you should get ready to proceed thereupon with the least possible delay.

It is intended that you should embark on board the steamer "Britannia," appointed to sail from Liverpool for Halifax on the 4th of July.

Upon landing at Halifax you will proceed forthwith to Fredericton, and you will there place yourselves in communication with Lieutenant-Governor Sir John Harvey, who will be instructed to furnish you with all requisite assistance and advice.

You will be accompanied from hence by Corporal McQueen, of the Royal Sappers and Miners, who was in the service of the Commissioners during the whole of their expedition in 1839; and you will take with you, upon your survey, such further assistance, either from the Sappers and Miners stationed in New Brunswick, or from the civil surveyors of that province, as, after consulting with Sir John Harvey, you may find necessary.

But if upon your arrival at Halifax you should there find any Sappers or Miners who have been employed on the topographical surveys of Ireland, and who are familiar with the use of instruments, you are authorized to request Sir Colin Campbell, Her Majesty's Lieutenant-Governor of Nova Scotia, to direct two of them to be placed under your orders.

After completing your arrangements at Fredericton, you will proceed to the point where the exploratory due north line which was marked out

by the British and American Commissioners in 1817 and 1818, from the monument at the head of the St. Croix, intersects the River St. John, and from that point of intersection, you will proceed along the said line to its northern termination, where it intersects the waters of the Metis; examining and recording the character of the country through which the said line runs, and ascertaining by spirit-levels and by barometrical observations, the heights of the principal points thereof.

It would be desirable that from the northern extremity of the said exploratory north line, you should proceed westward along the line of boundary which is claimed by the United States as far as the head of the Connecticut, and that you should continue your survey along the whole of that line. But the difficulties and impediments which would obstruct your progress through the first portion of the wild district through which that line passes, might be so great, that if you were, in the first place, to make an accurate survey of that portion of the line, you would not have time to examine before the end of the present season, other and more important parts of the said line; and therefore I think it better that you should reserve a minute survey of the first part of the line above-mentioned, until your other labours shall have been concluded.

I have accordingly to direct that, from the northern extremity of the above-mentioned exploratory north line, you should descend the Metis to its mouth in the St. Lawrence, accurately observing and recording the number of feet which the Metis falls during its course.

You will thence proceed westward along the south shore of the River St. Lawrence, making as you go along such general observations as may be practicable as to the character of that part of the country on the south side of the St. Lawrence, along which runs the line that is claimed as the boundary by the United States; and for the better accomplishment of this purpose, you will occasionally ascend such of the streams falling northward into the St. Lawrence as may afford you facilities for ascertaining any important facts.

In thus proceeding along the southern shore of the St. Lawrence, it will be your duty to explore and survey, with all possible accuracy, that portion of the line claimed by the United States which extends from the height of land nearest to the sources of the River Ouelle, and which, upon a map of the American surveyor, Hiram Burnham, alluded to at page 43 of the Report of Commissioners Mudge and Featherstonhaugh, is laid down as passing by the heads of the River Du Sud, and running to the north-west head of Connecticut River. You will take the height of points as you go along. But you will be particularly careful to note the character of the country, at any point at which the line claimed by the United States, as traced on the before-mentioned map of Hiram Burnham, may strike away from any elevated range of Highlands through which it may up to that point have been carried, and may stretch across any considerable tract of low and level land in its course towards the heads of the River Connecticut, dividing in its course, according to Hiram Burnham's map, the sources of the River Du Sud, the sources of the Etchemin, and the eastern sources of the River Chaudière, from the sources of the Mittay-waquam and the south-western sources of the River St. John.

Having made your observations at the point where the line claimed by the United States is represented on the map of Hiram Burnham as striking away from the elevated range of Highlands laid down upon his map, it will be your duty to proceed along the line of Highlands represented on his map as dividing the sources of the rivers last-mentioned, to the north-western head of the Connecticut River.

From the sources of the Connecticut you will proceed to examine the country lying to the westward thereof, in order to ascertain at what distance from the sources of the Connecticut the forty-fifth parallel of north latitude is intersected by the range of elevated land, which, upon Map A of Commissioners Mudge and Featherstonhaugh, is laid down as extending in a south-westwardly direction from the sources of the Ouelle to the forty-fifth parallel of north latitude.

The object of this examination will be to ascertain whether the range of elevated land last-mentioned, and that more southern range, which, as

laid down upon Map A, passes by the sources of the Connecticut, are separated from each other by any considerable distance of space, and whether the intervening district is a mountainous region connecting those two Ridges by a tract of country of a similarly elevated character, or whether that intervening district is comparatively flat and level, and separates those Ridges by the interposition of a country of a different character?

Having completed the survey of the above-mentioned portion of the Disputed Territory, you will transmit your Report thereof to this department with the least practicable delay; accompanying that Report with a copy of the Barometrical Register which you will have kept, recording the various observations you may have made for ascertaining the elevation of the country, and adding thereto a copy of the record of your daily operations by spirit-level from the River St. John to that point where the exploratory due north line intersects the waters of the Metis. To this you will annex sections of the elevations of the country along the lines which you are directed to survey, and a map of the same; accompanying the whole with the daily remarks you may have made with reference to the elevations of the lines of country you will have traversed.

If after the execution of this service, you should still have sufficient time to make any further progress before the season becomes too much advanced, you will then proceed to complete an accurate exploration and survey of the portion of the American line which lies between the River Metis and the sources of the River Ouelle.

But if the winter should set in before you have completed your surveys of the country between the point where the exploratory due north line intersects the waters of the Metis and the sources of the Ouelle, you are further instructed to remain, one or both of you, in America during the ensuing winter, and to take the earliest opportunity, when it shall be practicable, of finishing the survey of that part of the American line lying between the sources of the Ouelle and the waters of the Metis, transmitting, with the least possible delay, to this department, a detailed report of your proceedings. If this contingency should occur, further instructions will be transmitted to you as to the period of your return to this country.

I am, &c.,
(Signed) PALMERSTON.

No. 2.

*Viscount Palmerston to Captain Broughton and
Mr. J. D. Featherstonhaugh.*

Gentlemen,

Foreign Office, May 3, 1841.

HAVING completed the survey of the exploratory due north line to its termination, and descended the waters of the Metis to the mouth of the river of that name in the River St. Lawrence, you will now defer the execution of all that part of your instructions of the 1st of June, 1840, which relates to the immediate examination in a direction westward from the termination of the exploratory due north line, of that part of the line claimed by the United States; from thence to the head of the Connecticut, making the examination of all that part of the country comprehended between those two points; as it is detailed and enjoined upon you in your above-mentioned instructions, subsequent to the investigations which I am now about to instruct you to make in the first instance, and leaving it to be examined at the close of the present season.

Instead, therefore, of proceeding from the waters of the River Metis to the immediate examination of the country lying to the westward, you will proceed, in the first instance, to the head waters of the Connecticut River, and from thence in a north-easterly direction along the Highlands which lie between the waters of the Chaudière River and the waters of Kennebec River,—as laid down in Map A of the Report of Colonel

Mudge and Mr. Featherstonhaugh,—to the Kennebec Road leading to Quebec, taking the elevation of all the highest summits of this chain of Highlands with your barometers, including Bald Mountain and any other conspicuous summits not too distant from your line of operation. From the Kennebec Road before-mentioned you will follow the continuation of the chain of Highlands before-mentioned in a more easterly direction; and as it is laid down upon Map A, extending to Lake Keeaquagam, and dividing the western sources of the Penobscot River from the southern and south-western sources of the River St. John. You will take barometrical observations from the principal summits of this continuation of the Chain, and you will note the point where Mr. Campbell terminated his exploration in the year 1820.

When you have completed this part of your duty you will then proceed from the Kennebec Road before-mentioned, in the direction of Lake Etchemin, and along a line separating the sources of the streams flowing into the St. Lawrence, from the sources of the streams flowing into the River St. John, which line corresponds with the assumed range of hills referred to in Map A before-mentioned, as having been originally brought forward by Hiram Burnham, an American surveyor. Upon this line, which you will pursue in a direct course by the sources of the Du Sud to the River St. Lawrence, you will carefully take the elevations of the country with your barometers, noting the exact nature of the country in your Field Books, especially with reference to any chain of Highlands which has been asserted to exist along the line before referred to. When you shall have completed this branch of the service, you will then attend to the other duties prescribed to you in your instructions of the 1st of June, 1840, and which are not comprehended in the instructions hereby delivered to you, and will carry them all out if the season admits of your doing so.

As it may be found advisable that you should establish two permanent stations for observation by barometer, one at Quebec and the other at Lake Etchemin, you will be furnished with a letter to his Excellency the Governor-General of Canada, requesting him to authorize the necessary facility towards the establishment of one of your observatories in a building on the Queen's Wharf at Quebec.

I am, &c.,
(Signed) PALMERSTON.

No. 3.

Capt. Broughton and Mr. J. D. Featherstonhaugh to Viscount Palmerston.

My Lord,

Quebec, November 28, 1840.

WE have the honour, in laying the result of our work up to this period before your Lordship, to report the proceedings of the Expedition from its commencement.

After completing our arrangements at Fredericton, we proceeded to the Grand Falls on the River St. John, and arrived there on the 12th August; on our arrival we found the woods were in such a state of total wilderness that the eight men we had sent on to clear the exploratory due north line made in 1817—1818, could not effect the clearing at the rate necessary to keep them in advance of the Levelling Party, and consequently we were obliged to encrease their number. This delay rendered it useless proceeding to the woods until a sufficient distance had been cleared to ensure the line-men keeping in advance. We accordingly remained at the Grand Falls, where we established an observatory for standard observations, to which we could refer those afterwards made. Having arranged this, on the 20th we sent off all the provisions by canoes to form a depôt beyond the portage on the Restigouche, reserving only sufficient to last the Levelling Party as far as the Grand River. On the 22nd, the line-men having cleared to within four miles of the Grand River,

we decided to commence the levelling. Our daily proceedings will be found recorded in the annexed Levelling Registry; we therefore proceed at once to observe upon the nature of the ground over which we passed.

Upon reference to the accompanying section, your Lordship will observe, that from the St. John to Grand River, a distance of fourteen miles, the highest elevation is about 530 feet above the St. John, or 830 above the sea, presenting a gentle slope for half its distance, and descending gradually to the Grand River, which is 163 feet above the St. John.

After leaving Grand River, (which, on account of its winding character in this part, is crossed by the line three times in a space of less than a mile,) the country, by a gentle inclination, resumes the height before referred to of about 830 feet above the sea, and then falling off to the Wagan, (a branch of the Restigouche, which rises in the same low valley with a branch of Grand River called the Wagansis,) continues a low flat, as far as the main Restigouche, at a distance of twenty-four miles and a quarter from the St. John. The water in the Restigouche, at this point, is 137 feet above the St. John.

From the Restigouche, the country offers a regular surface not much broken or indented by courses of streams, until at the distance of about seven miles and a half along the exploratory due north line, it attains a gradual elevation of 800 feet above the St. John, and then as gradually descends to the Mempticook, the intersection of which by the due north line is 270 feet above the St. John. On leaving the Mempticook, the ground rises gradually to 1,300 feet above the St. John, and preserves the same general elevation for some miles, but intersected by numerous brooks, (tributaries of the Quatawamkedgwick,) remarkable for the depth and precipitous character of the ravines they form, and the broken appearance they give the country.

Before reaching this last-named river, the ground on the south bank suddenly descends from 1,083 feet above the St. John to only 158, giving a bold and precipitous character to this portion of the country. The Quatawamkedgwick flows in a valley about half a mile wide, the ground on the north side rising in a short distance to an elevation of 1,213 feet above it, and continues rising, but more gradually, until it attains the height of 1,410 feet above the St. John, which is the highest land on the exploratory due north line. The line then for five miles passes along a country gradually falling off to 509 feet above the St. John. Through this depression a tributary of the Quatawamkedgwick flows, called States Brook, which runs in a general north and south direction, at no great distance from the due north line. From this stream the ground rises to 1,121 feet above the St. John, and then begins to descend gradually to the Beaver Stream, its regularity being only broken by two small brooks, tributaries of the Restigouche. To the north of the last of these brooks is an elevation of 1,012 feet above the St. John, which divides the waters of the Bay de Chaleurs from those flowing into the St. Lawrence.

The exploratory due north line terminates in a low swampy flat, through which flows a narrow brook called Beaver Stream, being one of the sources of the Metis, and then diffuses itself into a small lake to the westward. We found on exploring the stream, below this lake for some distance, that it was impassable for canoes, we therefore were obliged to cut a portage sufficient for the passage of baggage and canoes parallel with the stream for about two miles, where, finding the water deeper, we embarked on the morning of the 9th October.

The navigation of the stream we found nearly wholly obstructed by natural dams of fallen timber and alders, which, growing on the banks, had crossed each other; by severe labour we were able to cut and effect a passage for the canoes which had then to be dragged through, and which, owing to the severity of the weather, (it snowing hard,) was a work of great exertion and difficulty. The stream always preserves the same character to Lake Metis, and afterwards, on leaving the lake, changes to a rapid rocky river, very difficult of navigation, and which, although descending, occupied us until the evening of the 15th, when we reached its mouth on the St. Lawrence.

The Barometric Observations along the line will be found under their respective dates, but we beg to refer your Lordship to page 56, where an abstract will be found of the mean results of all the observations made at the Beaver Stream, at the termination of our line, and at the different stations during the course of this river.

It would be superfluous further to take up your Lordship's time with the account of the various difficulties we had to encounter in the course of this long journey, or to dwell upon the many hardships we had to endure we only trust your Lordship will do us the justice to believe we underwent them cheerfully in the execution of this important duty, and that no pains were spared to expedite the commission as far as was practicable.

On arriving at the River Ouelle, we were overtaken by snow, which precluded our re-entering the forest, although preparations were made for that purpose, and we were eventually driven into Quebec by the severity of the weather.

Knowing the importance of transmitting our information to your Lordship at an early period, we have used unremitting diligence in preparing our Report and section, and copies of all our notes in order to lay them before your Lordship as soon as possible after the close of our field duties for the season.

We have, &c.,

(Signed) W. E. DELVES BROUGHTON,
Royal Engineers.

(Signed) J. D. FEATHERSTONHAUGH.

*Levelling Registry of due North Line from the River St. John to the
Beaver Stream.*

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
0					*0·00	R. St. John, abv. Gd. Falls.
1	30	9·92	1·16	8·76	8·76	August 24.
2	77	11·11	1·35	9·76	18·52	
3	106	10·04	0·50	9·54	28·06	
4	212·5	10·98	0·35	10·63	38·69	
5	247	11·42	0·15	11·27	49·96	
6	272	10·60	0·31	10·29	60·25	
7	297	10·81	0·16	10·65	70·90	
8	329	11·75	0·08	11·67	82·57	
9	401	11·40	0·27	11·13	93·40	Hardwood, Yellow Birch, and Maple.
10	451	5·70	0·00	5·70	99·40	
11	724	0·00	0·37	0·37	99·03	
12	899	10·76	0·68	10·08	109·11	
13	1,331	8·70	2·68	6·02	115·13	
14	1,776	7·11	0·51	6·60	121·73	
15	2,110	8·07	0·40	7·67	129·40	
16	2,581	7·71	4·91	2·80	132·20	
17	2,861	8·97	0·49	8·48	140·68	
18	2,999	11·80	0·77	11·03	151·71	
19	3,210	10·09	0·56	9·53	161·24	
20	3,367	11·83	1·10	10·73	171·97	
1	3,504	11·24	0·16	11·08	183·05	
2	3,604	5·04	1·47	3·57	186·62	
3	3,809	11·37	0·21	11·16	197·78	
4	4,044	10·73	1·18	9·55	207·33	
5	4,324	9·90	2·07	7·83	215·16	
6	4,885	4·43	6·05	1·62	213·54	Bench mark, No. 1.
7	5,347	8·33	0·31	8·02	221·56	August 25.
8	5,721	12·56	2·90	9·66	231·22	
9	6,035	9·95	0·30	9·65	240·87	
30	6,370	12·44	0·43	12·01	252·88	
1	6,670	12·44	0·67	11·77	264·65	
2	7,110	9·98	3·66	6·32	270·97	
3	7,703	4·57	4·26	0·31	271·28	
4	8,219	0·69	4·65	3·96	267·32	
5	8,465	17·36	1·86	15·50	282·82	Bench mark, No. 2.
6	8,520	11·22	7·41	3·81	286·63	August 26.
7	8,570	7·41	1·37	6·04	292·67	
8	8,740	11·09	0·13	10·96	303·63	
9	8,920	11·05	1·50	9·55	313·18	
40	9,095	11·12	0·14	10·98	324·16	
1	9,280	10·72	0·47	10·25	334·41	
2	9,440	10·62	0·34	10·28	344·69	
3	9,580	10·84	0·84	10·00	354·69	
4	9,780	10·81	1·06	9·75	364·44	
5	10,045	10·50	3·80	6·70	371·14	Hardwood.
6	10,320	3·80	8·01	4·21	366·93	
7	10,720	1·49	7·38	5·89	361·04	
8	10,970	1·72	2·00	0·28	360·76	
9	11,150	2·80	8·12	6·12	354·64	
50	11,380	0·18	10·17	9·99	344·65	
1	11,410	0·29	13·88	13·59	331·06	
2	11,490	0·60	10·46	9·86	321·20	
3	11,590	0·62	10·89	10·27	310·93	
4	11,660	0·50	10·88	10·38	300·55	
5	11,820	0·21	10·98	10·77	289·78	
6	11,950	0·29	11·01	10·72	279·06	
7	12,040	0·57	10·93	10·36	268·70	
8	12,160	0·33	10·78	10·45	258·25	Cedar swamp.
9	12,370	0·74	11·10	10·36	247·89	
60	12,590	0·88	8·93	8·05	239·84	Small brook running west.
1	12,835	4·98	0·93	4·05	243·89	
2	13,070	10·92	0·85	10·07	253·96	
3	13,345	11·01	0·21	10·80	264·76	
	13,345				264·76	Carried over.

* The intersection of the River St. John by the exploratory due North Line, has been determined to be 300 feet above high tide at Chapel Bar in the River St. John.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	13,345				264·76	Brought up.
64	13,570	7·46	1·34	6·12	270·88	
5	13,790	11·00	1·32	9·68	280·56	
6	13,920	6·57	4·30	2·27	282·83	
7	14,280	4·30	1·24	3·06	285·89	
8	14,490	4·56	4·56	0·00	285·89	
9	14,720	4·56	2·20	2·36	288·25	
70	15,190	5·26	4·03	1·23	289·48	
1	15,660	2·52	2·24	·28	289·76	
2	16,035	3·58	1·21	2·37	292·13	
3	16,420	9·78	3·91	5·87	298·00	Bench mark, No. 2.
4	16,830	2·34	7·25	4·91	293·09	August 27.
5	17,420	2·81	2·87	0·06	293·03	
6	17,960	7·48	1·96	5·52	298·55	
7	18,210	6·35	0·97	5·38	303·93	
8	18,670	4·63	2·03	2·60	306·53	
9	19,220	2·80	4·54	1·74	304·79	
80	19,810	8·41	3·55	4·86	309·65	
1	19,990	4·98	0·37	4·61	314·26	
2	20,260	11·66	0·32	11·34	325·60	
3	20,620	7·43	0·14	7·29	332·89	Cedar swamp.
4	20,850	8·63	0·11	8·52	341·41	
5	21,220	3·08	0·78	2·30	343·71	
6	21,490	5·87	0·89	4·98	348·69	
7	21,720	10·33	1·33	9·00	357·69	
8	21,910	9·17	1·54	7·63	365·32	Birch and Maple.
9	22,160	9·80	0·52	9·28	374·60	
90	22,320	11·27	0·47	10·80	385·40	
1	22,460	11·30	1·09	10·21	395·61	
2	22,620	10·30	1·67	8·63	404·24	
3	23,020	12·11	1·05	11·06	415·30	
4	23,420	10·23	4·50	5·73	421·03	
5	23,920	4·50	5·10	0·60	420·43	
6	24,120	6·08	4·50	1·58	422·01	
7	24,352	4·50	7·07	2·57	419·44	Bench mark, No. 4.
8	24,865	0·77	2·47	1·70	417·74	August 28, at 163 of 513
9	25,242	10·64	1·19	9·45	427·19	reserved road run-
100	25,645	6·38	1·17	5·21	432·40	ning east and west.
1	25,955	11·60	1·25	10·35	442·75	
2	26,365	7·50	1·18	6·32	449·07	
3	26,870	9·65	4·33	5·32	454·39	
4	27,320	2·61	10·44	7·83	446·56	
5	27,655	2·62	10·28	7·66	438·90	
6	28,065	2·84	4·94	2·10	436·80	
7	28,555	2·31	10·73	8·42	428·38	
8	29,015	1·00	7·01	6·01	422·37	
9	29,275	1·47	10·24	8·77	413·60	
110	29,475	1·82	11·01	9·19	404·41	
1	29,713	0·06	10·70	10·64	393·77	
2	30,030	2·34	1·30	1·04	394·81	Bench mark, No. 5.
3	30,277	7·23	1·88	5·35	400·16	August 29.
4	30,615	5·28	2·30	2·98	403·14	
5	30,975	1·66	8·95	7·29	395·85	
6	31,267	1·10	5·59	4·49	391·36	
7	31,483	5·62	1·97	3·65	395·01	
8	31,788	6·73	1·07	5·66	400·67	
9	32,093	5·97	2·58	3·39	404·06	
120	32,416	7·19	1·70	5·49	409·55	
1	32,672	12·51	1·20	11·31	420·86	
2	32,952	12·30	1·37	10·93	431·79	
3	33,252	10·45	4·00	6·45	438·24	
4	33,567	4·00	4·75	·75	437·49	
5	33,855	2·48	11·11	8·63	428·86	Cedar swamp.
6	34,320	3·60	10·58	6·98	421·88	
7	34,458	0·74	7·82	7·08	414·80	
8	34,718	5·61	4·94	0·67	415·47	
9	34,961	3·94	0·19	3·75	419·22	
	34,961				419·22	Carried up.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	34,961				419·22	Brought up.
130	35,150	9·22	0·35	8·87	428·09	
1	35,323	12·46	0·66	11·80	439·89	
2	35,669	2·31	1·15	1·16	441·05	
3	35,975	3·44	1·15	2·29	443·34	
4	36,166	1·65	1·21	·44	443·78	
5	36,449	3·13	2·12	1·01	444·79	
6	36,645	11·53	0·57	10·96	455·75	
7	36,760	12·90	·87	12·03	467·78	
8	36,973	12·67	·09	12·58	480·36	
9	37,036	13·48	·11	13·37	493·73	
140	37,204	10·	1·53	8·47	502·20	
1	37,372	5·66	10·83	5·17	497·03	
2	37,922	10·21	9·23	·98	498·01	
3	38,328	8·91	0·63	8·28	506·29	
4	38,543	11·70	1·06	10·64	516·93	Hardwood, Yellow Birch, Maple, Pine.
5	38,962	12·13	1·34	10·79	527·72	
6	39,589	11·40	8·64	2·76	530·48	
7	40,043	3·35	11·05	7·75	522·73	
8	40,479	2·15	10·97	8·82	513·91	
9	41,052	·95	7·64	6·69	507·22	
150	41,404	·22	7·55	7·33	499·89	
1	42,006	2·91	7·30	4·39	495·50	
2	42,551	1·57	11·57	10·	485·50	Spring.
3	43,094	3·65	4·56	·91	484·59	
4	43,542	8·14	1·36	6·78	491·37	
5	43,952	4·63	9·90	5·27	486·10	
6	44,387	1·16	11·38	10·22	475·88	
7	44,687	1·83	5·27	3·44	472·44	
8	45,234	3·13	3·82	·69	471·75	
9	45,624	10·62	·55	10·07	481·82	Bench mark, No. 6. August 30.
160	46,151	13·79	1·70	12·09	493·91	Cedar swamp.
1	46,808	13·10	4·75	8·35	502·26	
2	46,940	1·12	10·90	9·78	492·48	
3	47,322	·58	5·39	4·81	487·67	
4	47,890	3·42	11·89	8·47	479·20	
5	48,222	·43	10·25	9·82	469·38	
6	48,502	·86	2·02	1·16	468·22	
7	48,953	8·33	·55	7·78	476·00	
8	49,258	6·46	·69	5·77	481·77	
9	49,572	2·61	3·48	·87	480·90	Hardwood.
170	50,175	4·81	6·64	1·83	479·07	
1	50,634	3·49	6·51	3·02	476·05	
2	51,270	·04	10·73	10·69	465·36	Cedar swamp.
3	51,830	2·56	3·38	·82	464·54	
4	52,336	5·15	1·92	3·23	467·77	Bench mark, No. 7. August 31.
5	53,040	6·73	10·51	3·78	463·99	
6	53,186	·63	10·84	10·21	453·78	
7	53,566	·44	10·39	9·95	443·83	
8	53,850	·11	10·70	10·59	433·24	
9	54,297	1·80	7·78	5·98	427·26	Cedar swamp.
180	54,525	5·98	·91	5·07	432·33	
1	55,078	4·81	1·74	3·07	435·40	
2	55,396	8·07	·76	7·31	442·71	
3	55,932	12·58	1·29	11·29	454·00	
4	56,486	3·41	11·15	7·74	446·26	
5	56,771	·73	11·24	10·51	435·75	
6	56,871	·53	10·75	10·22	425·53	
7	57,064	·00	11·52	11·52	414·01	
8	57,476	·32	11·20	10·88	403·13	
9	57,996	·51	10·76	10·25	392·88	
190	58,432	6·85	10·67	3·82	389·06	
1	59,026	1·15	11·48	10·33	378·73	Brook running west into the Grand River.
2	59,356	7·53	·47	7·06	385·79	At 290, large brook run- ning west.
3	60,056	13·81	11·40	1·91	387·70	
4	60,676	·86	11·44	10·58	377·12	
5	61,052	5·68	1·53	4·15	381·27	
	61,052				381·27	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	61,052				381·27	Brought up.
196	61,497	5·40	10·53	5·13	376·14	
7	61,907	·90	8·35	7·45	368·69	
8	62,549	2·72	7·99	5·27	363·42	At 542, large brook running north-east.
9	62,934	5·21	3·24	1·97	365·39	
200	63,393	4·58	·57	4·01	369·40	
1	63,629	10·02	·17	9·85	379·25	
2	63,985	1·53	·26	1·27	380·52	
3	64,453	9·22	1·87	7·35	387·87	Bench mark, No. S.
4	64,734	10·79	1·83	8·96	396·83	September 1.
5	65,271	10·99	4·16	6·83	403·66	Cedar swamp.
6	65,866	10·41	·45	9·96	413·62	
7	66,220	8·16	1·61	6·55	420·17	
8	66,646	8·29	6·68	1·61	421·78	
9	67,005	3·03	8·77	5·74	416·04	
210	67,461	2·04	1·95	·09	416·13	Hardwood.
1	67,908	7·85	1·05	6·80	422·93	
2	68,283	12·76	·41	12·35	435·28	
3	68,728	2·09	8·19	6·10	429·18	Cedar swamp.
4	69,421	3·42	3·67	·25	428·93	
5	70,281	2·47	10·92	8·45	420·48	Hardwood.
6	70,640	1·67	10·80	9·13	411·35	
7	70,754	·59	10·93	10·34	401·01	
8	70,864	·37	10·75	10·38	390·63	
9	70,959	·35	11·30	10·95	379·68	
220	71,091	·51	10·94	10·43	369·25	Cedar swamp.
1	71,213	·40	11·60	11·20	358·05	
2	71,308	·17	11·13	10·96	347·09	
3	71,412	·09	11·11	11·02	336·07	
4	71,562	·00	11·05	11·05	325·02	
5	71,690	·36	10·67	10·31	314·71	
6	71,809	·50	10·88	10·38	304·33	
7	71,931	·57	10·46	9·89	294·44	
8	72,039	·14	11·40	11·26	283·18	
9	72,136	1·08	10·56	9·48	273·70	Top of steep bank.
230	72,196	·37	10·49	10·12	263·58	
1	72,331	·39	10·79	10·40	253·18	
2	72,488	1·34	9·63	8·29	244·89	
3	72,693	1·87	8·77	6·90	237·99	Strm. 30 ft. wide rning. E.
4	72,953	2·29	1·11	1·18	239·17	Rivulet running east.
5	72,996	11·	1·48	9·52	248·69	Rivulet running east.
6	73,138	13·24	·60	12·64	261·33	Hardwood.
7	73,349	11·33	·63	10·70	272·03	
8	73,871	8·68	9·63	0·95	271·08	
9	73,949	5·84	·64	5·20	276·28	Cedar swamp.
240	74,183	11·79	1·47	10·33	286·60	
1	74,683	8·05	2·78	5·27	291·87	
2	74,933	5·09	·91	4·18	296·05	
3	75,259	3·15	2·79	·36	296·41	
4	75,730	3·29	7·50	4·21	292·20	
5	76,051	1·54	8·34	6·80	285·40	
6	76,416	1·33	6·81	5·48	279·92	
7	76,675	·94	8·40	7·46	272·46	
8	76,925	5·95	1·85	4·10	276·56	
9	77,239	2·37	9·38	7·01	269·55	
250	77,385	1·11	10·74	9·63	259·92	
1	77,512	1·34	10·95	9·61	250·31	
2	77,631	·00	13·08	13·08	237·23	
3	77,750	·76	10·99	10·23	227·00	
4	77,820	1·90	10·99	9·09	217·91	
5	77,867	1·54	10·92	9·38	208·53	
6	77,934	·24	10·03	9·79	198·74	Swampy bank.
7	77,990	·57	15·98	15·41	183·33	September 2.
8	78,026	·00	16·25	16·25	167·08	
9	78,089	1·83	5·70	3·87	163·21	Level of water in Grand River.
260	78,427	4·20	4·17	·03	163·24	Width of river at \perp 115ft.
	78,427				163·24	North bank of river, 14 m., 4,507 ft.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	78,427				163·24	Brought up.
261	78,777	6·87	4·32	2·55	165·79	
2	79,457	2·70	5·21	2·51	163·28	
3	80,143	2·56	7·47	4·91	158·37	
4	80,624	3·88	4·11	·23	158·14	
5	80,903	3·57	8·35	4·78	153·36	Level of water at a bend of the Grand River.
6	81,083	8·35	4·20	4·15	157·51	At 213 feet from the 607
7	81,690	3·02	4·92	1·90	155·61	level of water at another bend in Grand R.
						Level of water.
8	82,103	2·50	8·21	5·71	149·90	
9	82,267	8·21	·72	7·49	157·39	
270	82,504	9·54	·68	8·86	166·25	
1	82,612	10·78	·09	10·69	176·94	
2	82,701	10·33	·84	9·49	186·43	
3	82,940	7·04	·87	6·17	192·60	
4	83,177	3·22	10·07	6·85	185·75	Bench mark, No. 9.
5	83,336	1·45	8·00	6·55	179·20	September 3.
6	83,614	8·95	·76	8·19	187·39	Rivulet running to west.
7	83,722	11·27	·93	10·34	197·73	Cedar swamp with soft and deciduous wood.
8	83,860	10·16	·00	10·16	207·89	
9	84,007	12·26	·59	11·67	219·56	
280	84,163	12·52	·03	12·49	232·05	
1	84,312	10·76	·65	10·11	242·16	
2	84,449	12·07	·45	11·62	253·78	
3	84,618	11·71	·24	11·47	265·25	
4	85,038	11·14	2·26	8·88	274·13	Cedar swamp.
5	85,336	10·20	·50	9·70	283·83	
6	85,526	12·16	·00	12·16	295·99	
7	85,696	10·72	·34	10·38	306·37	
8	85,842	10·63	·35	10·28	316·65	
9	86,024	12·21	·00	12·21	328·86	
290	86,182	11·86	·40	11·46	340·32	
1	86,355	13·62	·00	13·62	353·94	
2	86,444	11·00	·15	10·85	364·79	
3	86,590	10·88	1·09	9·79	374·58	
4	86,708	10·93	·01	10·92	385·50	
5	86,950	7·50	11·12	3·62	381·88	
6	87,003	·23	10·79	10·56	371·32	Cedar bottom.
7	87,085	·66	11·26	10·60	360·72	
8	87,306	·12	11·	10·88	349·84	
9	87,492	10·49	·00	10·49	360·33	
300	87,791	13·04	·19	12·85	373·18	
1	88,106	7·27	·76	6·51	379·69	
2	88,180	10·55	·08	10·47	390·16	
3	88,323	13·27	·31	12·96	403·12	
4	88,426	12·02	1·86	10·16	413·28	
5	88,531	11·94	·00	11·94	425·22	
6	88,611	11·63	·52	11·11	436·33	
7	88,697	11·44	·60	10·84	447·17	
8	88,751	11·44	·08	11·36	458·53	
9	88,809	11·44	·00	11·44	469·97	
310	88,883	11·28	·00	11·28	481·25	
1	89,165	8·16	·30	7·86	489·11	
2	89,235	10·73	·23	10·50	499·61	
3	89,477	7·87	10·60	2·73	496·88	
4	89,998	5·83	11·40	3·55	491·33	
5	90,104	1·24	11·55	10·31	481·02	
6	90,162	·02	11·52	11·50	469·52	
7	90,220	·00	11·02	11·02	458·50	
8	90,548	·68	6·43	5·75	452·75	
9	90,635	10·73	·40	10·33	463·08	
320	90,688	11·34	·13	11·21	474·29	
1	90,801	9·20	·26	8·94	483·23	
2	90,884	12·00	·17	11·83	495·06	
3	90,979	11·33	·41	10·92	505·98	
4	91,316	7·30	10·76	3·46	502·52	
	91,316				502·52	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	91,316				502·52	Brought up.
325	91,488	·23	10·89	10·66	491·86	
6	91,632	·98	10·95	9·97	481·89	
7	91,928	·61	6·72	6·11	475·78	
8	92,152	1·28	11·21	9·93	465·85	
9	92,453	·42	1·07	·65	465·20	
330	92,661	10·02	1·10	8·92	474·12	
1	92,827	10·89	1·47	9·42	483·54	
2	93,023	10·13	3·04	7·09	490·63	Bench mark, No. 10. September 4.
3	93,343	9·93	7·55	2·38	493·01	
4	93,569	1·91	11·43	9·52	483·49	
5	93,676	2·28	11·10	8·82	474·67	
6	93,767	1·43	10·83	9·40	465·27	
7	93,931	·53	9·72	9·19	456·08	Cross a ravine 15 ft. deep.
8	94,025	·82	11·38	10·56	445·52	
9	94,223	1·35	12·24	10·89	434·63	
340	94,417	1·41	10·78	9·37	425·26	
1	94,484	·34	10·55	10·21	415·05	
2	94,508	·59	11·00	10·41	404·64	
3	94,768	2·95	10·34	7·39	397·25	
4	94,932	2·16	5·54	3·38	393·87	
5	95,140	4·02	10·47	6·45	387·42	
6	95,446	1·25	9·60	8·35	379·07	
7	95,603	1·21	11·85	10·64	368·43	
8	95,770	·84	10·70	9·86	358·57	
9	95,953	1·12	11·22	10·10	348·47	
350	96,063	·80	10·91	10·11	338·36	
1	96,223	·74	11·39	10·65	327·71	
2	96,659	·50	4·97	4·47	323·24	
3	96,999	5·78	6·30	·52	322·72	
4	97,183	1·64	4·46	2·82	319·90	At 100 to 183 small brook west.
5	97,592	11·09	·48	10·61	330·51	
6	98,077	4·03	7·19	3·16	327·35	
7	98,479	3·41	1·97	1·44	328·79	
8	99,001	5·53	2·74	2·79	331·58	
9	99,605	10·41	·82	9·59	341·17	
360	99,947	10·36	1·08	9·28	350·45	At 400 small brook west.
1	100,183	10·14	1·82	8·32	358·77	
2	100,386	10·38	1·05	9·33	368·10	
3	100,702	10·67	2·10	8·57	376·67	
4	100,998	9·82	2·84	6·98	383·65	
5	101,310	11·31	·94	10·37	394·02	
6	101,516	10·04	·82	9·22	403·24	
7	101,638	10·48	2·17	8·31	411·55	
8	101,953	10·28	1·63	8·65	420·20	
9	102,164	5·62	2·66	2·96	423·16	Bench mark, No. 11. September 5.
370	102,469	6·06	2·83	3·23	426·39	
1	102,969	7·67	1·27	6·40	432·79	
2	103,331	8·90	1·19	7·71	440·50	
3	103,832	9·84	1·04	8·80	449·30	
4	104,357	6·10	5·14	·96	450·26	
5	104,647	3·32	8·76	5·44	444·82	
6	105,445	3·95	6·35	2·40	442·42	
7	105,468	3·47	3·61	·14	442·28	
8	105,702	2·47	10·51	8·04	434·24	
9	105,961	2·95	8·20	5·25	428·99	
380	106,198	1·35	11·23	9·88	419·11	
1	106,398	2·15	10·92	8·77	410·34	
2	106,716	6·45	2·95	3·50	413·84	
3	107,330	3·57	2·50	1·07	414·91	
4	107,920	4·90	4·63	·27	415·18	
5	108,248	2·60	3·52	·92	414·26	
6	108,546	6·13	·96	5·17	419·43	Bench mark, No. 12.
7	108,744	8·71	1·69	7·02	426·45	
8	108,915	12·68	·94	11·74	438·19	
9	109,032	11·41	·75	10·66	448·85	
390	109,211	4·21	1·51	2·70	451·55	
	109,211				451·55	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	109,211				451.55	Brought up.
391	109,565	10.27	1.02	9.25	460.80	
2	109,881	7.21	.80	6.41	467.21	
3	110,000	12.86	.08	12.78	479.99	
4	110,170	13.95	.46	13.49	493.48	
5	110,413	10.57	.82	9.75	503.23	Burnt land begins.
6	110,900	9.29	1.86	7.43	510.66	
7	111,170	5.37	9.20	3.83	506.83	
8	111,288	2.94	10.73	7.79	499.04	
9	111,414	.65	11.14	10.49	488.55	
400	111,474	.71	10.49	9.78	478.77	
1	111,530	.18	11.50	11.32	467.45	
2	111,585	.30	10.34	10.04	457.41	
3	111,775	.00	11.11	11.11	446.30	
4	111,839	.17	10.82	10.65	435.65	
5	111,953	.35	11.15	10.80	424.85	
6	112,028	.48	11.09	10.61	414.24	
7	112,139	.00	11.06	11.06	403.18	
8	112,216	.65	11.37	10.72	392.46	
9	112,286	.00	11.32	11.32	381.14	
410	112,382	.08	10.86	10.78	370.36	
1	112,475	.14	11.26	11.12	359.24	
2	112,536	.62	11.20	10.58	348.66	
3	112,599	.00	11.58	11.58	337.08	
4	112,650	.82	11.25	10.43	326.65	
5	112,708	.00	10.98	10.98	315.67	
6	112,778	.69	11.19	10.50	305.17	
7	112,824	.48	10.81	10.33	294.84	
8	112,874	.11	10.67	10.56	284.28	
9	112,927	.45	11.80	11.35	272.93	
420	112,982	.15	11.30	11.15	261.78	
1	113,058	.30	11.08	10.78	251.00	
2	113,110	.48	10.82	10.34	240.66	
3	113,180	.02	11.46	11.44	229.22	
4	113,225	.84	11.20	10.36	218.86	
5	113,280	.24	11.13	10.89	207.97	
6	113,384	1.07	11.24	10.17	197.80	
7	113,612	.72	9.61	8.89	188.91	
8	113,755	1.95	9.40	7.45	181.46	
9	113,928	.88	6.66	5.78	175.68	
430	114,544	3.09	6.78	3.69	171.99	
1	115,038	3.63	5.49	1.86	170.13	
2	115,732	5.48	3.56	1.92	172.05	At 100 ft. crosses small branch of Wagan rng.-W.
3	116,467	3.16	7.34	4.18	167.87	At 540. crosses Wagan
4	117,021	3.92	1.96	1.96	169.83	running E. water $3\frac{1}{2}$ ft.
5	117,632	2.97	2.87	.10	169.93	lower than 554.
6	118,366	2.55	2.84	.29	169.64	
7	119,191	5.22	10.86	5.64	164.00	
8	119,821	6.13	3.94	2.19	166.19	
9	120,097	2.25	9.84	7.59	158.60	
440	120,486	3.81	6.17	2.36	156.24	
1	120,858	5.66	5.14	.52	156.76	
2	121,108	7.66	1.43	6.23	162.99	
3	121,497	11.62	2.54	9.08	172.07	At 50ft. main Wagan rng.
4	121,837	7.75	.67	7.08	179.15	E., water 9.92 ft. lower
5	121,951	8.22	1.54	6.68	185.83	than station 442.
6	122,043	10.04	1.01	9.03	194.86	Bench mark, No. 13.
7	122,171	9.72	.65	9.07	203.93	September 6.
8	122,287	10.73	.88	9.85	213.78	
9	122,427	9.60	.16	9.44	223.22	
450	122,620	10.45	.69	9.76	232.98	
1	122,788	11.69	.64	11.05	244.03	
2	123,128	5.62	11.04	5.42	238.61	
3	123,350	1.04	10.84	9.80	228.81	
4	123,530	1.30	11.39	10.09	218.72	
5	123,648	.93	8.36	7.43	211.29	
6	124,161	4.25	8.02	3.77	207.52	
	124,161				207.52	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	139,372				592·47	Brought up.
520	139,600	10·59	1·11	9·48	601·95	
1	139,800	13·06	2·20	10·86	612·81	
2	139,950	10·95	1·59	9·36	622·17	
3	140,250	8·87	5·91	2·96	625·13	
4	140,550	2·83	9·29	6·46	618·67	
5	140,865	2·52	8·84	6·32	612·35	
6	141,065	2·82	11·92	9·10	603·25	
7	141,615	4·99	11·30	6·31	596·94	
8	141,865	1·57	13·36	11·79	585·15	
9	142,165	1·49	12·59	11·10	574·05	
530	142,465	·65	11·90	11·25	562·80	
1	142,665	2·25	9·19	6·94	555·86	
2	142,815	1·23	9·14	7·91	547·95	
3	143,115	5·04	1·93	3·11	551·06	
4	143,352	6·65	3·18	3·47	554·53	
5	143,588	10·23	1·07	9·16	563·69	
6	143,977	6·91	·81	6·10	569·79	
7	144,377	5·84	1·08	4·76	574·55	
8	144,627	7·64	2·27	5·37	579·92	
9	144,877	7·27	1·13	6·14	586·06	
540	145,177	8·07	2·80	5·27	591·33	
1	145,477	6·31	3·22	3·09	594·42	
2	145,760	8·68	1·88	6·80	601·22	
3	145,960	8·21	4·50	3·71	604·93	
4	146,360	4·50	8·50	4·00	600·93	
5	146,710	3·41	6·65	3·24	597·69	
6	147,310	9·23	2·05	7·18	604·87	
7	147,710	4·67	3·18	1·49	606·36	
8	148,154	5·64	7·68	2·04	604·32	
9	148,327	1·03	10·84	9·81	594·51	
550	148,613	2·41	6·60	4·19	590·32	
1	148,852	1·28	11·23	9·95	580·37	
2	149,199	1·04	8·61	7·57	572·80	
3	149,749	·69	9·46	8·77	564·03	
4	150,119	2·65	8·25	5·60	558·43	
5	150,269	1·29	11·80	10·51	547·92	
6	150,506	1·37	10·85	9·48	538·44	
7	150,626	·59	12·06	11·47	526·97	
8	150,726	·00	14·23	14·23	512·74	
9	150,798	1·02	11·66	10·64	502·70	
560	150,863	·64	10·12	9·48	493·22	
1	150,983	·16	11·00	10·84	482·38	
2	151,063	·00	10·61	10·61	471·77	
3	151,168	1·54	10·20	8·66	463·11	
4	151,474	3·34	8·62	5·28	457·83	
5	151,674	2·54	6·64	4·10	453·73	
6	151,974	3·88	9·16	5·28	448·45	
7	152,174	1·49	8·29	6·80	441·65	
8	152,424	2·37	9·43	7·06	434·59	
9	152,524	1·55	10·74	9·19	425·40	
570	152,774	3·61	7·55	3·94	421·46	
1	153,074	1·04	5·27	4·23	417·23	
2	153,374	5·99	2·35	3·64	420·87	
3	153,636	5·79	1·77	4·02	424·89	
4	153,836	4·91	3·96	·95	425·84	
5	154,136	7·38	2·93	4·45	430·29	
6	154,234	6·71	2·02	4·69	434·98	
7	154,317	9·79	·42	9·37	444·35	
8	154,443	10·55	·49	10·06	454·41	
9	154,607	7·62	2·02	5·60	460·01	
580	154,672	10·92	1·05	9·87	469·88	
1	154,812	8·60	·77	7·83	477·71	
2	154,974	10·22	·80	9·42	487·13	
3	155,061	9·45	·73	8·72	495·85	
4	155,171	11·35	1·46	9·89	505·74	
5	155,258	11·12	1·17	9·95	515·69	
	155,258				515·69	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	155,258				515·69	Brought up.
586	155,336	11·11	1·28	9·83	525·52	
7	155,440	10·51	·07	10·44	535·96	
8	155,516	9·27	·25	9·02	544·98	
9	155,566	8·61	·12	8·49	553·47	
590	155,646	10·00	1·44	8·56	562·03	Bench mark, No. 17. September 14.
1	155,701	11·41	·97	10·44	572·47	
2	155,784	10·38	·03	10·35	582·82	
3	155,878	10·30	·43	9·87	592·69	
4	155,960	11·55	·00	11·55	604·24	
5	156,103	10·99	·29	10·70	614·94	
6	156,433	6·69	9·60	2·91	612·03	At 175 ft. (170th M.T.)
7	156,589	2·90	10·40	7·50	604·53	
8	156,958	11·31	2·00	9·31	613·84	
9	157,430	9·60	1·89	7·71	621·55	
600	157,544	10·07	·62	9·45	631·00	
1	157,737	11·91	·29	11·62	642·62	
2	157,866	10·54	·28	10·26	652·88	
3	158,034	10·45	1·53	8·92	661·80	
4	158,483	10·67	9·56	1·11	662·91	
5	158,578	1·79	10·62	8·83	654·08	
6	158,758	1·21	11·05	9·84	644·24	
7	159,066	1·57	11·14	9·57	634·67	
8	159,308	·99	3·15	2·16	632·51	
9	159,572	10·79	1·10	9·69	642·20	
610	159,802	11·42	·09	11·33	653·53	
1	160,002	7·31	·79	6·52	660·05	
2	160,184	11·54	·85	10·69	670·74	
3	160,408	9·01	·00	9·01	679·75	
4	160,534	14·01	·53	13·48	693·23	
5	160,801	10·35	·32	10·03	703·26	
6	161,116	5·85	9·57	3·72	699·54	
7	161,421	2·24	9·86	7·62	691·92	
8	161,738	2·60	11·14	8·54	683·38	
9	161,904	1·38	10·58	9·20	674·18	
620	162,007	·02	11·41	11·39	662·79	
1	162,249	·22	8·66	8·44	654·35	
2	162,711	1·71	6·33	4·62	649·73	
3	163,126	8·73	1·67	7·06	656·79	
4	163,366	8·88	1·34	7·54	664·33	
5	163,542	10·39	·06	10·33	674·66	
6	163,684	10·19	1·76	8·43	683·09	
7	163,854	10·83	1·03	9·80	692·89	
8	163,993	9·52	1·42	8·10	700·99	
9	164,141	11·65	1·49	10·16	711·15	
630	164,403	9·89	1·11	8·78	719·93	
1	164,529	11·45	·58	10·87	730·80	
2	164,686	9·41	2·02	7·39	738·19	
3	165,231	8·54	9·07	·53	737·66	
4	165,416	4·51	9·89	5·38	732·28	
5	165,506	·73	11·14	10·41	721·87	
6	165,818	2·70	10·03	7·33	714·54	
7	165,937	2·37	11·09	8·72	705·82	
8	166,061	·92	9·16	8·24	697·58	
9	166,121	9·16	·00	9·16	706·74	
640	166,228	10·39	1·39	9·00	715·74	
1	166,307	11·85	·70	11·15	726·89	
2	166,386	10·89	·27	10·62	737·51	
3	166,468	11·13	1·22	9·91	747·42	
4	166,573	12·21	·49	11·72	759·14	
5	166,676	11·00	·74	10·26	769·40	
6	166,765	11·13	·94	10·19	779·59	
7	166,861	11·80	·50	11·30	790·89	
8	166,991	14·52	·77	13·75	804·64	
9	167,406	8·60	5·54	3·06	807·70	
650	167,611	2·33	10·15	7·82	799·88	Bench mark, No. 18. September 15.
1	167,756	·06	10·46	10·40	789·48	
	167,756				789·48	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	167,756				789.48	Brought up.
652	167,861	1.81	11.02	9.21	780.27	
3	167,965	1.02	10.69	9.67	770.60	
4	168,065	.42	10.42	10.00	760.60	
5	168,196	.12	10.83	10.71	749.89	
6	168,287	.70	11.24	10.54	739.35	
7	168,373	.90	10.72	9.82	729.53	
8	168,526	.40	1.62	1.22	728.31	
9	168,673	9.98	1.44	8.54	736.85	
660	168,770	11.60	0.70	10.90	747.75	
1	168,868	11.09	0.52	10.57	755.32	
2	169,011	11.83	1.70	10.13	768.45	
3	169,111	11.18	2.04	9.14	777.59	
4	169,473	11.32	1.71	9.61	787.20	
5	169,818	3.81	7.18	3.37	783.83	
6	170,076	4.22	10.13	5.91	777.92	
7	170,261	2.35	10.94	8.59	769.33	
8	170,455	1.89	10.58	8.69	760.64	
9	170,500	.42	11.44	11.02	749.62	
670	170,821	.27	11.11	10.84	738.78	
1	171,311	2.46	8.55	6.09	732.69	
2	171,831	5.47	8.34	2.87	729.82	
3	171,979	2.45	10.90	8.45	721.37	
4	172,161	1.60	10.75	9.15	712.22	
5	172,335	.37	11.39	11.02	701.20	
6	172,467	.57	10.75	10.18	691.02	
7	172,551	.67	11.02	10.35	680.67	
8	172,673	.32	11.24	10.92	669.75	
9	172,852	.68	11.04	10.36	659.39	
680	172,991	1.38	11.25	9.87	649.52	
1	173,121	.37	11.00	10.63	638.89	
2	173,328	1.39	10.70	9.31	629.58	
3	173,586	1.62	11.20	9.58	620.00	
4	173,766	.19	10.91	10.72	609.28	
5	173,961	.38	11.43	11.05	598.23	
6	174,129	2.34	11.04	8.70	589.53	
7	174,211	.57	11.39	10.82	578.71	
8	174,311	.24	14.00	13.76	564.95	Brook running west.
9	174,461	14.00	10.80	3.20	568.15	
690	174,736	7.30	9.02	1.72	566.43	
1	174,836	.31	10.66	10.35	556.08	
2	174,891	.57	10.73	10.16	545.92	
3	174,941	.52	11.15	10.63	535.29	
4	174,981	.41	10.58	10.17	525.12	
5	175,031	.66	11.17	10.51	514.61	
6	175,081	.19	11.20	11.01	503.60	
7	175,205	.26	7.42	7.16	496.44	Surface of water in brook.
8	175,461	6.29	.95	5.34	501.78	
9	175,561	10.11	.00	10.11	511.89	
700	175,761	10.04	.17	9.87	521.76	
1	175,826	10.10	.24	9.86	531.62	
2	175,917	10.65	.55	10.10	541.72	
3	176,001	10.46	.00	10.46	552.18	
4	176,161	11.56	1.24	10.32	562.50	
5	176,486	10.23	.52	9.71	572.21	
6	176,973	8.97	9.60	.63	571.58	
7	177,179	2.08	9.28	7.20	564.38	
8	177,349	2.37	10.30	7.93	556.45	
9	177,451	.45	11.06	10.61	545.84	
710	177,511	.00	11.31	11.31	534.53	
1	177,641	.54	8.13	7.59	526.94	Bench mark, No. 19.
2	177,737	8.05	.21	7.84	534.78	September 16.
3	177,824	10.93	.13	10.80	545.58	
4	177,841	12.30	.65	11.65	557.23	
5	177,888	10.65	.47	10.18	567.41	
6	177,935	10.91	.33	10.58	577.99	
7	178,006	11.20	1.44	9.76	587.75	
	178,006				587.75	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.	
	178,006				587.75	Brought up.	
718	178,053	10.68	.61	10.07	597.82		
9	178,101	9.23	.79	8.44	606.26		
720	178,199	11.02	.89	10.13	616.39		
1	178,301	11.10	1.54	9.56	625.95		
2	178,411	9.65	.54	9.11	635.06		
3	178,501	11.17	.22	10.95	646.01		
4	178,549	9.31	.14	9.17	655.18		
5	178,596	12.53	.25	12.28	667.46		
6	178,679	11.48	.25	11.23	678.69		
7	178,748	11.08	.15	10.93	689.63		
8	178,818	11.64	.20	11.44	701.06		
9	178,891	10.23	.02	10.21	711.27		
730	178,977	10.41	.90	9.51	720.78		
1	179,076	11.54	.36	11.18	731.96		
2	179,191	10.20	.48	9.72	741.68		
3	179,373	13.02	.95	12.07	753.75		
4	179,578	14.48	1.30	13.18	766.93		
5	179,961	5.60	6.15	.55	766.38		
6	180,111	.91	10.52	9.61	756.77		
7	180,261	.75	10.89	10.14	746.63		
8	180,455	.30	10.86	10.56	736.07		
9	180,796	1.08	5.25	4.17	731.90		
740	180,991	10.85	.94	9.91	741.81		
1	181,386	13.37	1.21	12.16	753.97		
2	181,813	3.54	8.69	5.15	748.82		
3	182,024	1.26	10.97	9.71	739.11		
4	182,111	.51	11.15	10.64	728.47		
5	182,231	.76	11.14	10.38	718.09		
6	182,329	.16	11.04	10.88	707.21		
7	182,411	.00	10.80	10.80	696.41		
8	182,514	.10	11.19	11.09	685.32		
9	182,601	.09	11.19	11.10	674.22		
750	182,679	.16	10.64	10.48	663.74		
1	182,761	.99	11.32	10.33	653.41		
2	182,873	1.79	11.24	9.45	643.96		
3	182,961	.70	9.10	8.40	635.56		
4	183,145	7.09	.00	7.09	642.65		
5	183,317	11.86	1.85	10.01	652.66		
6	183,529	10.64	.35	10.29	662.95		
7	183,716	12.33	.78	11.55	674.50		
8	184,261	7.53	10.18	2.65	671.85		
9	184,521	3.65	10.30	6.65	665.20		
760	184,721	1.21	11.32	10.11	655.09		
1	184,873	1.06	10.72	9.66	645.43		
2	185,021	1.88	10.70	8.82	636.61		
3	185,145	.41	10.94	10.53	626.08		
4	185,221	.64	10.44	9.80	616.28		
5	185,396	4.79	1.93	2.86	619.14		
6	185,565	10.47	1.51	8.96	628.10		
7	185,761	13.60	.99	12.61	640.71		
8	185,986	12.82	1.23	11.59	652.30		
9	186,296	10.44	1.77	8.67	660.97		
770	186,661	7.98	1.82	6.16	667.13		
1	186,961	4.53	4.15	.38	667.51		
2	187,073	1.93	10.11	8.18	659.33		
3	187,381	1.05	10.88	9.83	649.50		
4	187,521	1.20	12.70	11.50	638.00		
5	187,631	1.00	10.89	9.89	628.11		
6	187,731	1.28	10.74	9.46	618.65		
7	187,821	1.15	10.44	9.29	609.36		
8	187,915	.15	10.84	10.69	598.67		
9	187,971	.46	10.90	10.44	588.23		
780	188,046	.67	13.80	13.13	575.10		
1	188,121	.31	10.74	10.43	564.67		
2	188,206	.96	10.87	9.91	554.76		
3	188,281	.19	10.57	10.38	544.38		
	188,281				544.38		Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	188,281				544.38	Brought up.
784	188,396	-29	11.18	10.89	533.49	
5	188,461	1.07	10.38	9.31	524.18	
6	188,531	1.69	10.96	9.27	514.91	
7	188,583	1.24	10.72	9.48	505.43	
8	188,686	.80	13.94	13.14	492.29	
9	188,749	.75	15.97	15.22	477.07	
790	188,801	.44	14.49	14.05	463.02	
1	188,853	.16	15.23	15.07	447.95		Bench mark, No. 20. September 17.
2	188,886	.91	15.61	14.70	433.25	
3	188,911	.62	15.54	14.92	418.33	
4	188,951	.48	15.06	14.58	403.75	
5	188,983	.46	15.51	15.05	388.70	
6	189,006	2.07	15.43	13.36	375.34	
7	189,021	3.45	15.75	12.30	363.04	
8	189,036	2.55	15.97	13.42	349.62	
9	189,051	3.54	13.55	10.01	339.61	Surface of water in brook.
800	189,096	13.55	4.96	8.59	348.20	
1	189,111	9.82	.16	9.66	357.86	
2	189,146	12.04	.05	11.99	369.85	
3	189,189	12.37	.33	12.04	381.89	
4	189,461	13.59	1.71	11.88	393.77	
5	189,581	11.85	.23	11.62	405.39	
6	189,653	16.23	.10	16.13	421.52	
7	189,741	14.34	.00	14.34	435.86	
8	189,818	14.43	.70	13.73	449.59	
9	189,973	16.82	.89	15.93	465.52	
S10	190,087	11.95	.77	11.18	476.70	
1	190,211	13.55	1.08	12.47	489.17	
2	190,361	12.01	.33	11.68	500.85	
3	190,513	10.64	.57	10.07	510.92	
4	190,878	10.57	9.35	1.22	512.14	
5	191,161	.48	14.75	14.27	497.87	
6	191,361	8.28	.02	8.26	506.13	
7	191,521	12.49	.09	12.40	518.53	
8	191,684	11.35	.45	10.90	529.43	
9	191,811	11.40	.38	11.02	540.45	
S20	191,929	13.98	.47	13.51	553.96	
1	192,047	14.06	.34	13.72	567.68	
2	192,176	15.50	1.11	14.39	582.07	
3	192,285	13.30	.48	12.82	594.89	
4	192,406	11.48	.28	11.20	606.09	
5	192,487	13.80	.11	13.69	619.78	
6	192,567	15.61	.68	14.93	634.71	
7	192,861	11.43	4.85	6.58	641.29	
8	193,077	.79	12.32	11.53	629.76	
9	193,183	.56	10.89	10.33	619.43	
S30	193,311	.95	15.95	15.00	604.43	
1	193,387	1.23	17.91	16.68	587.75	
2	193,491	.11	16.15	16.04	571.71	
3	193,588	.08	16.12	16.04	555.67	
4	193,683	.52	16.33	15.81	539.86	
5	193,757	.67	15.81	15.14	524.72	
6	193,821	.08	16.33	16.25	508.47	
7	193,882	.19	16.09	15.90	492.57	
8	193,956	.24	14.01	13.77	478.80	
9	194,018	.58	15.65	15.07	463.73	
S40	194,077	.66	16.60	15.94	447.79	
1	194,101	.41	15.67	15.26	432.53	
2	194,141	.00	16.36	16.36	416.17	
3	194,186	.35	15.58	15.23	400.94	
4	194,233	.39	16.92	16.53	384.41	
5	194,261	.92	16.86	15.94	368.47	
6	194,289	2.81	15.81	13.00	355.47	
7	194,311	.29	16.59	16.30	339.17	
8	194,336	.65	15.56	14.91	324.26	
9	194,370	.07	15.52	15.45	308.81	
	194,370				308.81	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore [Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	194,370				308·81	Brought up.
850	194,389	2·35	15·79	13·44	295·37	
1	194,416	2·93	16·61	13·68	281·69	270·62 feet.
2	194,576	4·18	15·25	11·07	270·62	Surface of water in main
3	194,661	15·25	·03	15·22	285·84	stream of Mempticook.
4	194,686	10·70	·10	10·60	296·44	
5	194,729	8·45	1·05	7·40	303·84	September 18.
6	194,761	10·31	·12	10·19	314·03	
7	194,786	11·13	·01	11·12	325·15	
8	194,829	12·03	·10	11·93	337·08	
9	194,870	12·34	·00	12·34	349·42	
860	194,911	12·85	·26	12·59	362·01	
1	194,933	10·72	·26	10·46	372·47	
2	194,969	12·25	·24	12·01	384·48	
3	195,073	14·72	·18	14·54	399·02	
4	195,261	12·16	4·00	8·16	407·18	
5	195,528	4·00	5·22	1·22	405·96	
6	195,621	2·61	11·71	9·10	396·86	
7	195,691	1·19	11·28	10·09	386·77	
8	195,769	·50	11·26	10·76	376·01	
9	195,969	·83	10·83	10·00	366·01	
870	196,196	5·59	·12	5·47	371·48	
1	196,404	11·59	1·38	10·21	381·69	
2	196,528	9·03	·17	8·86	390·55	
3	196,666	17·52	·50	17·02	407·57	
4	196,786	15·99	·42	15·57	423·14	
5	196,967	14·76	·38	14·38	437·52	
6	197,200	11·24	·72	10·52	448·04	
7	197,521	14·05	·34	13·71	461·75	
8	197,681	3·36	11·33	7·97	453·78	
9	197,761	·78	10·49	9·71	444·87	
880	198,011	·53	11·00	10·47	433·60	
1	198,136	·72	10·72	10·00	423·60	
2	198,161	·46	10·91	10·45	413·15	
3	198,311	1·04	10·66	9·62	403·53	
4	198,381	·96	11·03	10·07	393·46	
5	198,441	·63	15·79	15·16	378·30	
6	198,501	·23	15·67	15·44	362·86	
7	198,561	·77	14·97	14·20	348·66	
8	198,611	·99	15·80	12·16	333·85	
9	198,751	·53	12·69	14·81	321·69	Brook running east, water
890	198,921	8·62	·38	8·24	329·93	2 feet lower.
1	198,968	15·62	·21	15·41	345·24	
2	199,021	14·95	·28	14·67	360·01	
3	199,131	16·78	·65	16·13	376·14	
4	199,301	15·61	·29	15·32	391·46	
5	199,361	12·53	·00	12·53	403·99	
6	199,491	11·09	·39	10·70	414·69	
7	199,661	14·80	·39	14·41	429·10	
8	199,776	14·55	·00	14·55	443·65	
9	199,991	16·18	1·23	14·95	458·60	
900	200,091	15·72	·00	15·72	474·32	
1	200,343	14·24	·74	13·50	487·82	
2	200,468	15·32	·58	14·74	502·56	
3	200,601	14·11	·00	14·11	516·67	
4	200,741	16·32	·08	16·24	532·91	
5	200,883	18·11	1·52	16·59	549·50	
6	201,097	10·92	·34	10·58	560·08	
7	201,311	11·19	·77	10·42	570·50	
8	201,479	10·92	·84	10·08	580·58	
9	201,641	7·80	10·73	2·93	577·65	
910	201,743	·69	15·02	14·34	563·31	
1	201,861	·36	8·20	7·84	555·47	
2	201,891	8·20	·07	8·13	563·60	
3	201,961	12·80	·11	12·69	576·29	
4	202,021	13·88	·58	13·30	589·59	
5	202,119	11·31	·04	11·27	600·86	
	202,119				600·86	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	202,119				600·86	Brought up.
916	202,211	15·26	·34	14·92	615·78	
7	202,291	15·12	·29	14·83	630·61	
8	202,404	13·53	·23	13·30	643·91	
9	202,541	17·03	·76	16·27	660·18	
920	202,672	13·84	·51	13·33	673·51	
1	202,883	16·72	·34	16·38	689·89	
2	203,061	13·74	·51	13·23	703·13	
3	203,211	16·40	·15	16·25	719·37	
4	203,401	15·93	·27	15·66	735·03	Bench mark, No. 21. September 19.
5	203,711	19·41	·74	18·67	753·70	
6	204,004	15·71	·99	14·72	768·42	
7	204,206	14·46	·47	13·99	782·41	
8	204,411	14·26	·51	13·75	796·16	
9	205,186	13·37	9·12	4·35	800·41	
930	205,391	·63	·15	·48	800·89	
1	205,469	11·58	·02	11·56	812·45	
2	205,573	17·36	·51	16·85	829·30	
3	205,686	17·18	·47	16·71	846·01	
4	205,821	15·89	·32	15·57	861·58	
5	205,986	16·53	·46	16·07	877·65	
6	206,176	16·79	·41	16·38	894·03	
7	206,384	13·94	·21	13·73	907·76	
8	206,531	13·56	·17	13·39	921·15	
9	206,706	16·04	·49	15·55	936·70	
940	207,061	15·41	·65	14·76	951·46	
1	207,231	15·56	·44	15·12	966·58	
2	207,426	6·46	·62	5·84	972·42	
3	207,828	14·49	9·70	4·79	977·21	
4	207,961	·55	15·08	14·53	962·68	
5	208,021	·69	15·38	14·69	947·99	
6	208,111	·07	13·26	13·19	934·80	
7	208,161	·87	14·25	13·38	921·42	
8	208,231	·90	15·80	14·90	906·52	
9	208,301	·58	15·34	14·76	891·76	
950	208,361	1·10	15·86	14·76	877·00	
1	208,411	·44	15·34	14·90	862·10	
2	208,469	·00	14·67	14·67	847·43	
3	208,536	·11	17·20	17·09	830·34	
4	208,579	·05	15·67	15·62	814·72	
5	208,625	·29	16·51	16·22	798·50	
6	208,676	·60	15·56	14·96	783·54	
7	208,711	·16	15·36	15·20	768·34	
8	208,749	·06	16·37	16·31	752·03	
9	208,776	·80	15·73	14·93	737·10	
960	208,811	·17	16·49	16·32	720·78	
1	208,846	·52	16·00	15·48	705·30	
2	208,961	16·00	·54	15·46	720·76	Surface of water in brook running west.
3	209,061	16·66	·20	16·46	737·22	
4	209,181	12·25	·36	11·89	749·11	
5	209,786	18·10	·93	17·17	766·28	
6	210,144	6·33	·14	6·19	772·47	
7	210,561	8·38	1·14	7·24	779·71	
8	210,673	15·04	·04	15·00	794·71	
9	210,926	14·73	·00	14·73	809·44	
970	211,331	11·99	2·49	9·50	818·94	
1	211,661	4·38	7·09	2·71	816·23	
2	211,861	1·06	15·28	14·22	802·01	
3	212,011	1·66	14·53	12·87	789·14	
4	212,239	1·76	13·57	11·81	777·33	
5	212,381	1·73	10·29	8·56	768·77	
6	212,769	14·67	·11	14·56	785·33	
7	212,961	13·41	·22	13·19	796·52	
8	213,167	12·53	1·27	11·26	807·78	
9	213,371	12·10	·95	11·15	818·93	
980	213,576	14·67	1·50	13·17	832·10	
1	213,761	13·77	·92	12·84	844·94	
	213,761				844·94	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	213,761				844.94	Brought up.
982	213,967	13.47	2.92	10.55	855.49	
3	214,311	8.08	4.54	3.54	859.03	Bench mark, No. 22.
4	214,461	9.73	.58	9.15	868.18	September 20.
5	214,551	15.39	.04	15.35	883.53	
6	214,611	16.44	.14	16.30	899.83	
7	214,661	17.65	.14	17.51	917.34	
8	214,801	17.35	.47	16.88	934.22	
9	214,934	15.31	.00	15.31	949.53	
990	215,011	14.83	.23	14.60	964.13	
1	215,181	13.60	.23	13.37	977.50	
2	215,386	13.98	.91	13.07	990.57	
3	215,751	9.46	.09	9.37	999.94	
4	216,019	5.57	14.90	9.33	990.61	
5	216,191	.20	15.07	14.87	875.74	
6	216,481	1.13	13.89	12.76	962.98	
7	216,761	.77	15.58	14.81	948.17	
8	217,061	1.35	6.72	5.37	942.80	
9	217,211	11.50	.32	11.18	953.98	
1,000	217,331	14.57	.79	13.78	967.76	
1	217,451	16.13	.74	15.39	983.15	
2	217,611	12.55	.56	11.99	995.14	
3	217,711	12.78	.12	12.66	1,007.80	
4	217,791	14.74	.66	14.08	1,021.88	
5	217,886	18.10	.22	17.88	1,039.76	
6	217,979	15.87	.35	15.52	1,055.28	
7	218,111	15.21	.08	15.13	1,070.41	
8	218,183	14.73	.05	14.68	1,085.09	
9	218,294	13.61	.37	13.24	1,098.33	
1,010	218,561	13.47	4.00	9.47	1,107.80	
1	218,711	4.00	10.95	6.95	1,100.85	
2	218,813	.39	13.45	13.06	1,087.79	
3	218,891	.60	15.88	15.28	1,072.51	
4	218,961	.25	13.22	12.97	1,059.54	
5	219,026	.62	15.50	14.88	1,044.66	
6	219,101	.54	15.85	15.31	1,029.35	
7	219,161	.00	13.61	13.61	1,015.74	
8	219,224	.23	14.20	13.97	1,001.77	
9	219,279	.63	15.51	14.88	986.89	
1,020	219,361	.43	15.63	15.20	971.69	
1	219,411	1.39	15.88	14.49	957.20	
2	219,486	.74	14.66	13.92	943.28	
3	219,611	.22	14.81	14.59	928.69	
4	219,711	1.02	16.57	15.55	913.14	
5	219,804	.00	17.16	17.16	895.98	
6	219,891	.48	16.50	16.02	879.96	
7	219,976	.58	15.97	15.39	864.57	
8	220,091	.93	17.19	16.26	848.31	
9	220,311	1.78	14.62	12.84	835.47	
1,030	220,461	1.98	13.23	11.25	824.22	
1	220,561	1.46	13.91	12.45	811.77	Bench mark, No. 23.
2	220,661	.43	14.82	14.39	797.38	September 21.
3	220,781	1.66	13.37	11.71	785.67	
4	220,961	1.09	11.45	10.36	775.31	
5	221,291	3.67	.49	3.18	778.49	
6	221,381	13.20	.24	12.96	791.45	
7	221,511	12.15	.36	11.79	803.24	
8	221,588	15.20	.42	14.78	818.02	
9	221,679	13.50	.25	13.25	831.27	
1,040	221,811	14.58	.63	13.95	845.22	
1	221,923	14.54	.53	14.01	859.23	
2	221,991	16.32	.43	15.89	875.12	
3	222,109	16.19	.47	15.72	890.84	
4	222,191	15.29	3.00	12.29	903.13	
5	222,284	3.00	16.02	13.02	890.11	
6	222,411	.99	16.41	15.42	874.69	
7	222,461	.64	15.49	14.85	859.84	
	222,461				859.84	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	222,461				859·84	Brought up.
1,048	222,507	·46	15·82	15·36	844·48	
9	222,557	·00	16·39	16·39	828·09	
1,050	222,591	·00	16·58	16·58	811·51	
1	222,646	·48	16·35	15·87	795·64	
2	222,673	·22	16·11	15·88	779·76	
3	222,711	·53	15·82	15·29	764·47	
4	222,749	·21	17·07	16·86	747·61	
5	222,800	·48	16·00	15·52	732·09	
6	222,854	·74	16·11	15·37	716·72	
7	222,895	·44	16·57	16·13	700·59	
8	222,961	·31	16·16	15·85	684·74	
9	223,005	·58	16·66	16·08	668·66	
1,060	223,067	·08	16·70	16·62	652·04	
1	223,111	·41	16·18	15·77	626·27	
2	223,181	·00	16·30	16·30	619·97	
3	223,253	·74	15·48	14·74	605·23	
4	223,299	·63	15·05	14·42	590·81	
5	223,357	·20	16·03	15·83	574·98	
6	223,397	·09	15·71	15·62	559·36	
7	223,587	1·82	17·31	15·49	543·87	
8	223,673	·75	15·94	15·19	528·68	
9	223,722	1·02	15·90	14·88	513·80	
1,070	223,861	·45	16·28	15·83	497·97	
1	223,921	·11	16·55	16·44	481·53	
2	223,961	·39	15·79	15·40	466·13	
3	224,001	·00	16·14	16·14	449·99	
4	224,061	·10	12·00	11·90	438·09	
5	224,171	13·00	13·00	1·00	437·09	
6	224,371	2·37	9·74	7·37	429·72	
7	224,591	6·84	11·50	4·66	425·06	Brook running east.
8	224,701	11·50	·09	11·41	436·47	
9	224,757	17·10	·57	16·53	453·00	
1,080	224,851	14·01	·07	13·94	466·94	
1	224,898	14·70	·07	14·63	481·57	
2	224,941	14·98	·95	14·03	495·60	
3	225,011	16·50	·64	15·86	511·46	
4	225,111	16·87	·01	16·86	528·32	
5	225,186	15·87	1·15	14·72	543·04	
6	225,291	13·74	·19	13·55	556·59	
7	225,381	16·80	·05	16·75	573·34	
8	225,476	12·09	·42	11·67	585·01	
9	225,549	13·54	·12	13·42	598·43	
1,090	225,621	16·19	·54	15·65	615·08	
1	225,688	13·24	·02	13·22	627·30	
2	225,776	13·65	1·01	12·64	639·94	
3	225,883	16·45	·16	16·29	656·23	
4	225,961	15·25	·21	15·04	671·27	
5	226,011	12·76	·23	12·53	683·80	
6	226,072	14·54	·04	14·50	698·30	
7	226,144	16·11	·11	16·00	714·30	
8	226,181	16·50	·34	16·16	730·46	
9	226,276	15·35	·25	15·10	745·56	
1,100	226,373	13·77	·46	13·31	758·87	
1	226,473	16·20	·07	16·13	775·00	
2	226,561	13·12	·01	13·11	788·11	
3	226,652	15·38	·06	15·32	803·43	
4	226,708	16·22	·69	15·53	818·96	
5	226,767	16·39	·28	16·11	835·07	
6	226,811	16·18	·14	16·04	851·11	
7	226,880	17·19	·00	17·19	868·30	
8	226,943	17·36	·19	17·17	885·47	
9	226,991	16·95	·28	16·67	902·14	
1,110	227,061	17·09	·25	16·84	918·98	
1	227,121	16·93	·03	16·90	935·88	
2	227,201	15·85	1·04	14·81	950·69	
3	227,291	9·58	4·00	5·58	956·27	
	227,291				956·27	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	227,291				956·27	Brought up.
1,114	227,381	4·00	10·62	6·62	949·65	
5	227,641	·63	3·17	2·54	947·11	Bench mark, No. 24.
6	227,721	9·42	·38	9·04	956·15	September 22.
7	228,141	12·55	1·29	11·26	967·41	
8	228,286	16·20	·20	16·00	983·41	
9	228,661	15·70	4·00	11·70	995·11	
1,120	228,746	4·00	12·34	8·34	986·77	
1	228,801	1·26	15·66	14·40	972·37	
2	228,888	·86	16·20	15·34	957·03	
3	228,969	·95	16·49	15·54	941·49	
4	229,081	1·19	16·46	15·27	926·22	
5	229,225	·94	15·59	14·65	911·57	
6	229,321	1·03	16·55	15·52	896·05	
7	229,411	·57	15·87	15·30	880·75	
8	229,591	1·36	15·27	13·91	866·84	
9	229,991	5·29	13·70	8·41	858·43	
1,130	230,191	·52	7·35	6·83	851·60	
1	230,421	3·67	15·58	11·91	839·69	
2	230,491	1·47	15·52	14·05	825·64	
3	230,581	·75	16·53	15·78	809·86	
4	230,691	12·00	·48	11·52	821·38	
5	230,770	15·20	·04	15·16	836·54	
6	230,876	16·40	·14	16·26	852·80	
7	230,996	15·97	·57	15·40	868·20	
8	231,052	16·00	·20	15·80	884·00	
9	231,283	15·41	·61	14·80	898·80	
1,140	231,373	15·92	·42	15·50	914·30	
1	231,487	15·47	·23	15·24	929·54	
2	231,601	17·89	·83	17·06	946·60	
3	231,779	14·20	·31	13·89	960·49	
4	232,061	6·31	14·12	7·81	952·68	
5	232,191	·85	16·00	15·15	937·53	
6	232,286	16·00	·22	15·78	953·31	
7	232,416	15·39	·01	15·38	968·69	
8	232,508	12·57	·09	12·48	981·17	
9	232,595	13·40	·28	13·12	994·29	
1,150	232,691	16·31	·43	15·88	1,010·17	
1	232,903	16·37	·55	15·82	1,025·99	
2	233,286	8·78	·75	8·03	1,034·02	
3	233,395	15·84	·65	15·19	1,049·21	
4	233,498	15·29	·25	15·04	1,064·25	
5	233,587	13·72	·62	13·10	1,077·35	
6	233,691	15·43	·09	15·34	1,092·69	
7	233,811	15·48	·65	14·83	1,107·52	
8	233,951	14·48	·10	14·38	1,121·90	
9	234,021	14·89	·14	14·75	1,136·65	
1,160	234,111	15·08	·34	14·74	1,151·39	
1	234,205	17·08	·10	16·98	1,168·37	
2	234,291	15·28	·37	14·91	1,183·28	
3	234,361	16·98	·16	16·82	1,200·10	
4	234,443	16·82	·03	16·79	1,216·89	
5	234,528	15·17	·15	15·02	1,231·91	
6	234,609	15·89	·34	15·55	1,247·46	
7	234,711	17·68	·25	17·43	1,264·89	
8	234,879	16·61	·28	16·33	1,281·22	
9	235,141	10·58	4·00	6·58	1,287·80	
1,170	235,341	4·00	15·21	11·21	1,276·59	
1	235,451	1·33	16·00	14·67	1,261·92	
2	235,561	·97	16·98	16·01	1,245·91	
3	235,651	1·15	15·92	14·77	1,231·14	
4	235,711	·46	16·18	15·72	1,215·42	
5	235,791	·44	17·97	17·53	1,197·89	
6	235,881	·73	17·17	16·44	1,181·45	
7	235,961	·80	16·28	15·48	1,165·97	
8	236,031	·53	17·33	16·80	1,149·17	
9	236,101	·85	16·98	16·13	1,133·04	
	236,101				1,133·04	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	236,101				1,133.04	Brought up.
1,180	236,161	.75	16.93	16.18	1,116.86	
1	236,231	.00	16.50	16.50	1,100.36	
2	236,301	.44	15.32	14.88	1,085.48	
3	236,370	.34	17.03	16.69	1,068.79	
4	236,419	.69	16.75	16.06	1,052.73	
5	236,473	.59	16.84	16.25	1,036.48	
6	236,511	1.80	19.50	17.70	1,018.78	Small stream running east.
7	236,591	19.50	.37	19.13	1,037.98	
8	236,636	15.26	.69	14.57	1,052.48	
9	236,681	14.55	.63	13.92	1,066.40	
1,190	236,751	12.44	1.32	11.12	1,077.52	Bench mark, No. 25.
1	236,891	16.52	1.10	15.42	1,092.94	September 23.
2	236,982	15.49	.26	15.23	1,108.17	
3	237,061	15.08	.23	14.85	1,123.02	
4	237,141	15.30	.67	14.63	1,137.65	
5	237,227	15.78	.52	15.26	1,152.91	
6	237,311	15.06	.20	15.76	1,168.67	
7	237,484	15.40	.44	14.96	1,183.63	
8	237,748	5.52	15.27	9.75	1,173.88	
9	237,821	.38	17.28	16.90	1,156.98	
1,200	237,891	.28	16.02	15.74	1,141.24	
1	237,961	.64	15.73	15.09	1,126.15	
2	238,011	.87	16.40	15.53	1,110.62	
3	238,091	.46	15.86	15.40	1,095.22	
4	238,151	.71	14.84	14.13	1,081.09	
5	238,213	.15	15.56	15.41	1,065.68	
6	238,291	.38	16.23	15.95	1,049.73	
7	238,346	1.09	16.93	15.84	1,033.89	
8	238,404	.39	16.34	15.95	1,017.94	
9	238,461	.57	16.84	16.27	1,001.67	
1,210	238,561	2.07	20.00	17.93	983.74	
1	238,666	20.00	.47	19.53	1,003.27	
2	238,719	15.39	.35	15.04	1,018.31	
3	238,811	14.00	.68	13.32	1,031.63	
4	238,971	15.80	.37	15.43	1,047.16	
5	139,101	17.15	.36	16.89	1,064.05	
6	239,341	14.58	.81	13.77	1,077.82	
7	239,461	8.84	3.00	5.84	1,083.66	
8	239,696	3.00	13.87	10.87	1,072.79	
9	239,821	1.39	16.40	15.01	1,057.78	
1,220	239,945	.62	16.68	16.06	1,041.72	
1	240,011	1.23	16.91	15.68	1,026.04	
2	240,091	.50	16.29	15.79	1,010.25	
3	240,161	.36	16.10	15.74	994.51	
4	240,230	.36	16.67	16.31	978.20	
5	240,257	.00	11.66	11.66	966.54	Surface of brook E.
6	240,301	10.73	18.73	8.00	958.54	
7	240,417	18.73	.20	18.53	977.07	
8	240,491	13.83	.22	13.61	990.68	
9	240,561	15.65	.03	15.62	1,006.30	
1,230	240,611	15.25	.24	15.01	1,021.31	
1	240,701	14.26	.07	14.19	1,035.50	
2	240,783	14.64	.16	14.48	1,049.98	
3	240,836	14.14	.50	13.64	1,063.64	
4	240,886	13.55	.31	13.24	1,076.86	
5	240,956	16.95	.12	16.83	1,093.69	
6	241,017	14.14	.48	13.66	1,107.35	
7	241,071	13.07	.15	12.92	1,120.27	
8	241,133	12.04	.48	11.56	1,131.83	
9	241,205	14.24	.22	14.02	1,145.85	
1,240	241,311	14.11	.04	14.07	1,159.92	
1	241,461	14.24	.06	14.18	1,174.10	
2	241,876	16.73	.87	15.86	1,189.96	
3	242,146	10.19	4.00	6.19	1,196.15	
4	242,331	4.00	14.08	10.08	1,186.07	
5	242,431	.83	15.02	14.19	1,171.88	
	242,431				1,171.88	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.	
	242,431				1,171·88	Brought up.	
1,246	242,541	·44	17·65	17·21	1,154·67		
7	242,611	·92	16·28	15·36	1,139·31		
8	242,686	·63	16·51	15·88	1,123·43		
9	242,755	·36	17·06	16·71	1,106·72		
1,250	242,811	·28	16·62	16·34	1,090·38		
1	242,872	·32	16·50	16·18	1,074·20		
2	242,946	·95	16·18	15·23	1,058·97		
3	243,003	1·07	17·53	16·46	1,042·51		
4	243,141	·53	16·57	16·04	1,026·47		
5	243,181	1·02	16·48	15·46	1,011·01		
6	243,311	1·49	17·74	16·25	994·76		
7	243,383	1·20	16·05	14·85	979·91		
8	243,511	·12	15·03	14·91	965·00		
9	243,676	1·04	15·68	14·64	950·36		
1,260	243,773	1·03	15·07	14·04	936·32	Bench mark, No. 26. September 24.	
1	243,861	1·69	15·85	14·16	922·16		
2	243,903	·69	6·69	6·00	916·16		
3	243,981	·31	17·85	17·54	898·62		
4	244,061	1·23	16·50	15·27	883·35		
5	244,141	·20	16·63	16·43	866·92		
6	244,211	·42	15·56	15·14	851·78		
7	244,368	·91	17·55	16·64	835·14		
8	244,452	1·06	16·49	15·43	819·71		
9	244,511	·81	16·82	16·01	803·70		
1,270	244,553	·19	16·85	16·66	787·04		
1	244,595	·37	16·63	16·26	770·78		
2	244,811	·20	30·80	30·60	740·18		
3	245,003	30·80	2·69	28·11	768·29		
4	245,031	16·77	·75	16·02	784·31		
5	245,094	13·50	·16	13·34	797·65		
6	245,193	14·65	·57	14·08	811·73		
7	245,315	13·04	1·08	11·96	823·69		
8	245,407	13·01	·22	12·79	836·48		
9	245,528	16·39	·95	15·44	851·92		
1,280	245,614	13·75	·10	13·65	865·57		
1	245,679	15·88	·60	14·98	880·55		
2	245,761	14·94	·49	14·45	895·00		
3	245,861	13·02	·23	12·79	907·79		
4	245,934	14·50	·16	14·34	922·13		
5	246,061	16·36	1·13	15·23	937·36		
6	246,155	14·67	·45	14·22	951·58		
7	246,294	14·37	·52	13·85	965·43		
8	246,411	13·93	·59	13·34	978·77		
9	246,583	16·03	·02	16·01	994·78		
1,290	246,688	16·02	·76	15·26	1,010·04		
1	246,780	13·48	·78	12·70	1,022·74		
2	246,918	16·67	·51	16·16	1,038·90		
3	247,010	15·10	·77	14·33	1,053·23		
4	247,132	15·66	·24	15·42	1,068·65		
5	247,295	15·30	1·16	14·14	1,082·79		
6	247,398	12·73	·35	12·38	1,095·17		
7	247,597	14·04	·22	13·82	1,108·99		
8	247,777	13·50	·78	12·72	1,121·71		
9	247,927	14·67	·43	14·24	1,135·95		
1,300	248,073	13·70	·62	13·08	1,149·03		
1	248,191	14·98	1·02	13·96	1,162·99		
2	248,317	14·99	1·14	13·85	1,176·84		
3	248,421	15·20	2·88	12·92	1,189·76		
4	248,525	13·10	·58	12·52	1,202·28		
5	248,649	16·11	1·13	14·98	1,217·26		
6	248,861	17·40	1·79	15·61	1,232·87		
7	249,075	16·96	·28	16·68	1,249·55		
8	249,261	15·80	·88	14·92	1,264·47		
9	249,424	14·88	·36	14·52	1,278·99		
1,310	249,561	10·61	1·11	9·50	1,288·49		
1	249,811	8·64	·66	7·98	1,296·47		
	249,811				1,296·47		Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	249,811				1,296.47	Brought up.
1,312	250,013	4.40	13.07	8.67	1,287.80	
3	250,170	.84	16.44	15.60	1,272.20	
4	250,399	1.84	16.37	14.53	1,257.67	
5	250,686	1.50	13.99	12.49	1,245.18	
6	250,957	1.89	9.38	7.49	1,287.69	
7	251,261	3.63	4.58	.95	1,236.74	
8	251,652	6.80	1.98	4.82	1,241.56	
9	251,896	11.00	.88	10.12	1,251.68	
1,320	252,089	12.36	1.44	10.92	1,262.60	
1	252,370	15.58	1.60	13.98	1,276.58	
2	252,718	7.57	14.16	6.59	1,269.99	
3	252,811	.26	16.63	16.37	1,253.62	
4	252,897	.45	16.95	16.50	1,237.12	
5	252,955	.40	16.92	16.52	1,220.60	
6	253,011	.48	16.85	16.37	1,204.23	
7	253,061	.77	16.83	16.06	1,188.17	
8	253,118	.32	16.35	16.03	1,172.14	
9	253,169	1.10	17.28	16.18	1,155.96	
1,330	253,221	.80	16.35	15.55	1,140.41	
1	253,272	.43	16.61	16.18	1,124.23	
2	253,329	.79	17.27	16.48	1,107.75	
3	253,382	.15	17.03	16.88	1,090.87	
4	253,446	.39	16.88	16.49	1,074.38	
5	253,504	.67	17.31	16.64	1,057.74	
6	253,561	.21	16.62	16.41	1,041.33	
7	253,614	.17	16.88	16.71	1,024.62	
8	253,684	.49	17.29	16.80	1,007.82	
9	253,735	.64	16.08	15.44	992.38	
1,340	253,799	.64	17.01	16.37	976.01	
1	253,853	.62	16.79	16.17	959.84	
2	253,896	.54	17.60	17.06	942.78	
3	254,068	.70	14.88	14.18	928.60	
4	254,176	1.23	16.65	15.42	913.18	
5	254,211	.15	17.47	17.32	895.86	
6	254,236	.10	16.35	16.25	879.61	
7	254,261	1.16	16.68	15.52	864.09	
8	254,341	4.80	35.80	31.00	833.09	
9	254,596	35.80	2.34	33.46	866.55	
1,350	254,671	13.88	5.36	8.52	875.07	Bench mark, No. 25.
1	254,806	15.90	2.90	13.00	888.07	September 20.
2	254,908	11.42	1.21	10.21	898.28	
3	254,961	12.31	.32	11.99	910.27	
4	255,046	13.52	.28	13.24	923.51	
5	255,167	14.80	1.27	13.53	937.04	
6	255,361	12.45	1.41	11.04	948.08	
7	255,561	7.84	.81	7.03	955.11	
8	255,873	3.00	13.27	10.27	944.84	
9	256,076	1.87	14.00	12.13	932.71	
1,360	256,181	.55	23.00	22.45	910.26	
1	256,273	23.00	.32	22.68	932.94	
2	256,361	14.30	1.90	12.40	945.34	
3	256,809	2.79	17.24	14.45	930.89	
4	256,942	1.42	16.87	15.45	915.44	
5	257,027	.17	16.80	16.63	898.81	
6	257,094	.50	16.57	16.07	882.74	
7	257,161	.79	16.47	15.68	867.06	
8	257,239	.35	17.29	16.94	850.12	
9	257,280	.54	16.87	16.33	833.79	
1,370	257,343	.23	16.95	16.72	817.07	
1	257,379	.00	16.78	16.78	800.29	
2	257,424	.00	17.56	17.56	782.73	
3	257,461	.41	16.94	16.53	766.20	
4	257,521	.16	16.77	16.61	749.59	
5	257,561	.10	17.62	17.52	732.07	
6	257,611	.28	16.37	16.09	715.98	
7	257,719	.33	16.96	16.63	699.35	
	257,719				699.35	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back. Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	257,719				699·35	Brought up.
1378	257,776	·56	17·24	16·68	682·67	
9	257,821	·55	17·29	16·74	665·93	
1380	257,879	·20	16·49	16·29	649·64	
1	257,911	·81	16·73	15·92	632·72	
2	257,927	1·43	17·26	15·83	617·89	
3	257,957	·38	16·83	16·45	601·44	
4	258,015	·35	16·55	16·20	585·24	
5	258,096	·34	77·62	17·28	567·96	
6	258,121	·10	15·21	15·11	552·85	
7	258,161	9·69	13·19	3·50	549·35	Large brook running east.
8	258,476	13·19	·11	13·08	562·43	Level of water.
9	258,579	17·20	·18	17·02	579·45	
1,390	258,661	16·11	·66	15·45	594·90	
1	258,811	13·46	·19	13·27	608·17	
2	258,921	13·60	·76	12·84	621·01	
3	259,061	11·78	·54	11·24	632·25	
4	259,109	14·62	·80	13·82	646·07	
5	259,151	14·92	·69	14·23	660·30	
6	259,203	17·50	·71	16·79	677·09	
7	259,289	15·23	·59	14·64	691·73	
8	259,355	14·17	1·12	13·05	704·78	
9	259,471	13·63	·58	13·05	717·83	
1,400	259,593	14·40	·20	14·20	732·03	
1	259,695	14·56	·47	14·09	746·12	
2	259,871	11·97	1·50	10·47	756·59	
3	259,977	13·44	1·64	11·80	768·39	
4	260,071	14·25	·50	13·75	782·14	
5	260,231	16·76	·54	16·22	798·36	
6	260,531	13·71	4·00	9·71	808·07	
7	260,635	4·00	17·13	13·13	794·94	
8	260,771	·51	6·64	6·13	788·81	Bench mark, No. 28.
9	261,031	3·34	·66	2·68	791·49	September 26.
1,410	261,111	14·62	·42	14·20	805·69	
1	261,171	12·94	·44	12·50	818·19	
2	261,231	10·57	·11	10·46	828·65	
3	261,315	12·19	·56	11·63	840·28	
4	261,411	12·65	·14	12·51	852·79	
5	261,487	13·25	·14	13·11	865·90	
6	261,579	13·24	·11	13·13	879·03	
7	261,681	16·79	·00	16·79	895·82	
8	261,765	15·45	·47	14·98	910·80	
9	261,956	16·68	·00	16·68	927·48	
1,420	262,051	14·88	1·21	13·67	941·15	
1	262,171	16·67	·54	16·13	957·28	
2	262,256	15·39	·09	15·30	972·58	
3	262,341	12·80	·00	12·80	985·38	
4	262,441	13·73	·09	13·64	999·02	
5	262,491	12·81	·34	12·47	1,012·49	
6	262,565	14·33	·15	14·18	1,026·67	
7	262,621	14·87	·00	14·87	1,041·54	
8	262,686	13·09	·11	13·79	1,055·33	
9	262,721	12·47	·16	12·31	1,067·64	
1,430	262,771	14·07	·32	13·75	1,081·39	
1	262,826	16·43	·00	16·43	1,097·82	
2	262,876	15·87	·03	15·84	1,113·66	
3	262,951	16·98	·00	16·98	1,130·64	
4	263,006	14·24	·02	14·22	1,144·86	
5	263,047	15·90	1·26	14·64	1,159·50	
6	263,101	15·48	1·62	13·86	1,173·36	
7	263,171	14·49	·13	14·36	1,187·72	
8	263,211	11·84	1·35	10·49	1,198·21	
9	263,271	15·34	·01	15·33	1,213·54	
1,440	263,336	15·81	·00	15·81	1,229·35	
1	263,396	14·41	·52	13·89	1,243·24	
2	263,466	14·35	·32	14·03	1,257·27	
3	263,531	13·99	·00	13·99	1,271·26	
	263,531				1,271·26	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	263,531				1,271·26	Brought up.
1,444	263,621	13·11	·00	13·11	1,284·37	
5	263,706	16·59	·00	16·59	1,300·96	
6	263,898	4·00	10·30	6·30	1,294·66	
7	264,002	1·90	14·04	12·14	1,282·52	
8	264,061	1·73	10·32	8·59	1,273·93	Bench mark, No. 29.
9	264,121	·59	16·58	15·99	1,257·94	
1,450	264,181	·79	16·61	15·82	1,242·12	
1	264,234	·50	17·11	16·61	1,225·51	
2	264,270	·23	17·43	17·20	1,208·31	
3	264,328	·21	16·81	16·60	1,191·71	
4	264,371	·35	16·20	15·85	1,175·86	
5	264,448	·20	17·10	16·90	1,158·96	
6	264,487	·46	17·12	16·66	1,142·30	
7	264,528	·09	16·85	16·76	1,125·54	
8	264,571	·00	16·77	16·77	1,108·77	
9	264,621	·13	16·41	16·28	1,092·49	
1,460	264,659	·42	16·04	15·62	1,076·87	
1	264,708	·49	16·01	15·52	1,061·35	
2	264,746	·03	17·30	17·27	1,044·08	
3	264,781	·38	7·52	7·14	1,036·94	
4	265,921	·00	750·24	750·24	286·70	
5	266,921	750·24	·00	750·24	1,036·94	Brook 750·24 feet lower than this station. 1,140 feet distance, sighted across the valley.
6	267,271	7·86	3·98	3·88	1,040·82	
7	267,571	12·25	2·29	9·96	1,050·78	
8	267,866	4·19	2·17	2·02	1,052·80	
9	268,181	7·85	8·91	1·06	1,051·74	
1,470	268,431	2·65	14·22	11·57	1,040·17	
1	268,581	3·36	11·31	7·95	1,032·22	
2	268,841	5·67	·45	5·22	1,037·44	
3	268,911	13·64	·89	12·75	1,050·19	
4	268,966	14·78	1·05	13·73	1,063·92	
5	269,086	16·32	·00	16·32	1,080·24	
6	269,141	12·69	1·94	10·75	1,090·99	
7	269,221	13·73	·00	13·73	1,104·72	
8	269,306	15·64	·51	15·13	1,119·85	
9	269,371	14·26	·73	13·53	1,133·38	
1,480	269,429	11·49	·55	10·94	1,144·32	
1	269,495	11·42	·71	10·71	1,155·03	
2	269,551	15·69	1·26	14·43	1,169·46	
3	269,671	11·60	1·09	10·51	1,179·97	
4	269,746	13·16	2·43	10·73	1,190·70	
5	269,821	13·30	·11	13·19	1,203·89	
6	269,939	16·28	·76	15·52	1,219·41	
7	270,242	14·60	2·08	12·52	1,231·93	
8	270,607	8·65	15·29	6·64	1,225·29	
9	270,702	·95	16·70	15·75	1,209·54	
1,490	270,772	1·06	15·42	14·36	1,195·18	
1	270,867	·92	15·90	14·98	1,180·20	
2	270,918	1·20	16·81	15·61	1,164·59	
3	270,980	1·07	15·83	14·76	1,149·83	
4	271,037	·65	16·84	16·19	1,133·64	
5	271,095	·41	16·97	16·56	1,117·08	
6	271,160	·29	16·79	16·50	1,100·58	
7	271,214	·79	16·99	16·20	1,084·38	
8	271,262	·57	17·00	16·43	1,067·95	
9	271,303	0·13	17·68	17·55	1,050·40	
1,500	271,347	1·00	22·00	21·00	1,029·40	
1	271,369	22·00	8·90	13·10	1,042·50	
2	271,506	1·95	12·20	10·25	1,032·25	
3	271,880	·79	16·06	15·27	1,016·98	
4	272,022	2·00	16·93	14·93	1,002·05	
5	272,072	·99	8·23	7·24	994·81	
6	273,122	·00	814·70	814·70	180·11	
7	277,322	814·70	·00	814·70	994·81	Brook 814·70 feet lower than this station. 3,050 feet distance, sighted across the valley.
8	277,422	15·89	·82	15·07	1,009·88	
9	277,476	13·84	1·59	12·25	1,022·13	
	277,476				1,022·13	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	277,476				1,022·13	Brought up.
1,510	277,518	13·15	·00	13·15	1,035·28	
1	277,597	13·52	·13	13·39	1,048·67	
2	277,652	12·80	1·49	11·31	1,059·98	
3	277,737	11·96	1·14	10·82	1,070·80	
4	277,902	11·12	2·11	9·01	1,079·81	
5	278,072	7·79	4·00	3·79	1,083·60	
6	278,252	4·00	14·03	10·03	1,073·57	
7	278,272	2·43	14·26	11·83	1,061·74	
8	278,362	·41	12·24	11·83	1,049·91	
9	278,412	·46	14·08	13·62	1,036·29	
1,520	278,442	·18	15·91	15·73	1,020·56	
1	278,482	·86	15·25	14·39	1,006·17	
2	278,517	·34	15·75	15·41	990·76	
3	278,537	·77	16·18	15·41	975·35	
4	278,572	2·92	16·31	13·39	961·96	
5	278,592	·71	15·38	14·67	947·29	
6	278,604	2·68	10·86	8·18	939·11	
7	278,624	·47	15·79	15·32	923·79	
8	278,647	1·53	15·71	14·18	909·61	
9	278,682	2·75	16·49	13·74	895·87	
1,530	278,716	·03	15·99	15·96	879·91	
1	278,747	·19	15·44	15·25	864·66	
2	278,802	·67	15·05	14·38	850·28	
3	278,825	·58	15·16	14·58	835·70	
4	278,862	1·13	15·53	14·40	821·30	
5	278,907	·45	10·53	10·08	810·22	
6	278,962	·47	16·16	15·69	794·53	
7	279,027	1·55	15·87	14·32	780·21	
8	279,072	1·20	15·53	14·33	765·88	
9	279,112	·93	16·16	15·23	750·65	
1,540	279,137	·05	16·08	16·03	734·62	
1	279,172	1·60	17·31	15·71	718·91	
2	279,202	1·60	15·39	13·79	705·12	
3	279,228	1·73	16·39	14·66	690·46	
4	279,257	·15	16·09	15·94	674·52	
5	279,292	·29	15·96	15·67	658·85	
6	279,322	·55	17·13	16·58	642·27	
7	279,357	·55	15·70	15·15	627·12	
8	279,417	1·55	15·33	13·78	613·34	
9	279,452	1·60	16·63	15·03	598·31	
1,550	279,512	·31	16·95	16·64	581·67	
1	279,547	·39	16·03	15·64	566·03	
2	279,592	·08	17·05	16·97	549·06	
3	279,622	·00	15·74	15·74	533·32	
4	279,682	1·80	15·46	13·66	519·66	
5	279,712	·34	16·06	15·72	503·94	
6	279,737	1·83	14·72	12·89	491·05	
7	279,772	·88	15·46	14·58	476·47	
8	279,822	·39	15·41	15·02	461·45	
9	279,872	1·72	15·59	13·87	447·58	
1,560	279,912	1·50	14·91	13·41	434·17	
1	279,942	1·33	16·36	15·03	419·14	
2	279,967	·59	17·00	16·41	402·73	
3	279,997	·65	14·93	14·28	388·45	
4	280,022	·41	14·19	13·78	374·67	
5	280,062	·00	15·60	15·60	359·07	
6	280,114	1·19	15·28	14·09	344·98	
7	280,152	1·73	14·69	12·96	332·02	
8	280,222	1·02	16·00	14·98	317·04	
9	280,324	·96	15·30	14·34	302·70	
1,570	280,492	5·11	13·19	8·08	294·62	
1	280,532	3·80	14·86	11·06	283·56	
2	280,542	1·14	15·68	14·54	269·02	
3	280,567	4·02	14·90	10·88	258·14	
4	280,667	2·69	11·25	8·56	249·58	Bench mark, No. 32. September 27.
5	280,713	1·01	16·01	15·00	234·58	
	280,713				234·58	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	280,713				234.58	Brought up.
1,576	280,799	1.15	15.86	14.71	219.87	
7	280,857	.22	16.23	16.01	203.86	
8	280,922	.18	16.74	16.56	187.30	
9	281,034	1.27	15.82	14.55	172.75	
1,580	281,117	1.79	15.72	13.93	158.82	
1	281,122	8.68	13.05	4.37	154.45	Level of dam at Island
2	281,572	13.05	4.00	9.05	163.50	15 feet across.
3	281,807	4.00	8.97	4.97	158.53	Level of water in the river
	281,807				158.53	Quatawamkedgwick.
						158.53 Q. 100 ft. wide.
						137.47 R.
						163.24 G. R.
4	282,022	8.97	5.70	3.27	161.80	
5	282,382	6.64	1.28	5.36	167.16	
6	283,597	12.47	3.15	9.32	176.48	
7	283,677	15.30	.72	14.58	191.06	
8	283,731	14.96	.14	14.82	205.88	
9	283,862	13.47	.43	13.04	218.92	
1,590	283,922	13.48	.41	13.07	231.99	
1	283,972	15.27	1.30	13.97	245.96	
2	284,031	15.68	.69	14.99	260.95	
3	284,077	15.47	1.12	14.35	275.30	
4	284,164	15.63	2.25	13.38	288.68	
5	284,260	12.70	.48	12.22	300.90	
6	284,372	13.92	.16	13.76	314.66	
7	284,422	15.92	.68	15.24	329.90	
8	284,467	16.98	.79	16.19	346.09	
9	284,522	16.48	.68	15.80	361.89	
1,600	284,607	16.44	.50	15.94	377.83	
1	284,704	12.67	1.00	11.67	389.50	
2	284,779	16.13	1.27	14.86	404.36	
3	284,822	16.28	.85	15.43	419.79	
4	284,882	16.68	.23	16.45	436.24	
5	284,934	16.62	2.80	13.82	450.06	
6	284,972	16.24	2.50	13.74	463.80	
7	284,992	16.20	2.14	14.06	477.86	
8	285,034	17.18	2.26	14.92	492.78	
9	285,060	16.08	1.91	14.17	506.95	
1,610	285,080	16.41	2.01	14.40	521.35	
1	285,116	16.72	3.03	13.69	535.04	
2	285,147	15.79	2.68	13.11	548.15	
3	285,195	15.70	.28	15.42	563.57	
4	285,237	16.70	2.85	13.85	577.42	
5	285,270	15.28	2.33	12.95	590.37	
6	285,322	16.70	2.40	14.30	604.67	
7	285,357	16.32	2.07	14.25	618.92	
8	285,377	16.24	2.95	13.29	632.21	
9	285,407	17.69	1.82	15.87	648.08	
1,620	285,462	16.35	.03	16.32	664.40	
1	285,482	16.63	2.62	14.01	678.41	
2	285,522	17.44	1.52	15.92	694.33	
3	285,579	14.58	.21	14.37	708.70	
4	285,617	16.68	2.40	14.28	722.98	
5	285,649	17.00	2.53	14.47	737.45	
6	285,689	16.76	1.83	14.93	752.38	
7	285,728	18.21	1.49	16.72	769.10	
8	285,752	16.69	1.33	15.36	784.46	
9	285,774	16.97	2.11	14.86	799.32	
1,630	285,794	17.07	1.81	15.26	814.58	
1	285,831	18.01	1.22	16.79	831.37	
2	285,862	16.76	1.46	15.30	846.67	
3	285,877	16.90	2.30	14.60	861.27	
4	285,914	16.95	2.05	14.90	876.17	
5	285,942	16.35	1.65	14.70	890.87	
6	285,962	16.74	2.35	14.39	905.26	
7	286,005	17.32	2.15	15.17	920.43	
8	286,037	17.21	2.05	15.16	935.59	
9	286,102	15.82	.14	15.68	951.27	
	286,102				951.27	1 over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	286,102				951·27	Brought up.
1,640	286,142	17·53	2·42	16·11	966·38	
1	286,182	17·38	2·39	14·99	981·37	
2	286,227	16·17	1·86	14·31	995·68	
3	286,252	16·05	1·10	14·95	1,010·63	
4	286,292	16·27	·69	15·58	1,026·21	
5	286,322	16·96	·07	16·89	1,043·10	
6	286,352	16·84	·43	16·41	1,059·51	
7	286,385	16·80	·31	16·49	1,076·00	
8	286,418	16·87	·19	16·68	1,092·68	
9	286,446	15·98	·29	15·69	1,108·37	
1,650	286,476	14·53	·32	14·21	1,122·58	
1	286,502	16·25	·39	15·86	1,138·44	
2	286,534	16·00	·00	16·00	1,154·44	
3	286,592	16·00	·00	16·00	1,170·44	
4	286,652	15·55	·11	15·44	1,185·88	
5	286,752	15·48	·89	14·59	1,200·57	
6	287,052	16·58	1·56	15·02	1,215·49	
7	287,672	2·30	10·30	8·00	1,207·49	
8	287,852	12·10	·28	11·83	1,219·32	
9	288,059	16·04	·27	15·77	1,235·09	
1,660	288,217	14·73	·11	14·62	1,249·71	
1	288,350	17·45	·00	17·45	1,267·16	
2	288,477	15·15	·12	15·03	1,282·19	
3	288,572	15·89	·16	15·73	1,297·92	
4	288,662	15·59	·21	15·38	1,313·30	
5	288,799	16·47	·16	16·31	1,329·61	
6	288,895	16·23	·31	15·92	1,345·53	
7	289,047	16·58	·40	16·18	1,361·71	
8	289,317	15·04	4·87	10·17	1,371·88	
9	289,577	4·87	15·87	11·00	1,360·88	
1,670	289,732	2·13	17·28	15·15	1,345·73	
1	289,829	·91	16·90	15·99	1,329·74	
2	289,967	·66	16·91	16·25	1,313·49	
3	290,083	·41	16·58	16·17	1,297·32	
4	290,192	·40	16·50	16·10	1,281·22	
5	290,342	1·34	16·51	15·17	1,266·05	
6	290,467	·65	17·00	16·35	1,249·70	
7	290,642	17·00	·75	16·25	1,265·95	
8	290,745	15·32	·28	15·04	1,280·99	
9	290,887	13·90	·48	13·42	1,294·41	
1,680	291,010	15·14	·35	14·79	1,309·20	
1	291,177	15·00	·35	14·65	1,323·85	
2	291,302	13·68	·07	13·61	1,337·46	
3	291,417	15·37	·10	15·27	1,352·73	
4	291,533	16·82	·26	16·56	1,369·29	
5	291,629	15·92	·57	15·35	1,384·64	
6	291,832	16·57	·13	16·44	1,401·08	
7	292,117	11·36	2·00	9·36	1,410·44	
8	292,487	2·09	17·59	15·59	1,394·85	
9	292,687	·59	14·94	14·35	1,380·50	
1,690	292,992	·08	17·27	17·19	1,363·31	
1	293,277	1·09	16·78	15·69	1,347·62	
2	293,537	1·41	16·55	15·14	1,332·48	
3	293,817	·03	21·00	20·97	1,311·51	
4	294,267	21·00	2·40	18·60	1,330·11	
5	294,454	12·82	·93	11·89	1,342·00	
6	294,629	14·38	·72	13·66	1,355·66	
7	294,777	16·07	·20	15·87	1,371·53	
8	295,017	8·10	1·00	7·10	1,378·63	
9	295,317	1·00	15·00	14·00	1,364·63	
1,700	295,607	·46	13·16	12·70	1,351·93	
1	295,902	·44	17·75	17·31	1,334·62	
2	296,311	·59	11·30	10·71	1,323·91	
3	296,852	2·93	15·53	12·60	1,311·31	
4	296,997	1·19	17·13	15·94	1,295·37	
5	297,117	·74	16·32	15·58	1,279·79	
	297,117				1,279·79	Carried over.

Bench mark, No. 33.
September 30.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	297,117				1,279.79	Brought up.
1,706	297,229	.00	15.28	15.28	1,264.51	
7	297,382	.58	17.02	16.44	1,248.07	
8	297,566	.82	17.07	16.25	1,231.82	
9	297,807	1.41	15.72	14.31	1,217.51	
1,710	298,147	.74	1.08	.34	1,217.17	
1	298,477	11.33	.22	11.11	1,228.28	
2	299,087	9.50	14.38	4.88	1,223.40	
3	299,217	.85	17.04	16.19	1,207.21	
4	299,332	.94	17.53	16.59	1,190.62	
5	299,422	.64	16.49	15.85	1,174.77	
6	299,517	.61	16.93	16.32	1,158.45	
7	299,628	.64	17.56	16.92	1,141.53	
8	299,705	1.44	16.07	14.63	1,126.90	
9	299,870	.70	4.53	3.83	1,123.07	
1,720	300,017	13.71	.36	13.35	1,136.42	
1	300,297	15.11	.83	14.28	1,150.70	October 1.
2	300,637	15.53	1.16	14.37	1,165.07	
3	300,928	10.29	.00	10.29	1,175.36	
4	301,102	12.75	.18	12.57	1,187.93	
5	301,299	15.35	.76	14.59	1,202.52	
6	301,717	11.70	2.00	9.70	1,212.22	
7	302,017	2.00	17.29	15.39	1,196.93	
8	302,217	1.18	24.00	22.82	1,174.11	
9	302,625	24.00	10.35	13.65	1,187.76	
1,730	302,797	.89	15.15	14.26	1,173.50	
1	302,905	.42	16.69	16.27	1,157.23	
2	302,977	1.00	16.13	15.13	1,142.10	
3	303,080	.00	15.48	15.48	1,126.62	
4	303,227	.79	15.85	15.06	1,111.56	
5	303,427	.17	16.55	16.38	1,095.18	
6	304,129	7.65	.59	7.06	1,102.24	
7	304,337	15.10	.36	14.74	1,116.98	
8	304,514	15.90	.35	15.55	1,132.53	
9	304,605	15.26	.05	15.21	1,147.74	
1,740	304,717	15.32	.13	15.19	1,162.93	
1	304,877	15.02	.33	14.69	1,177.62	
2	305,017	16.44	1.73	14.71	1,192.33	
3	305,332	2.67	16.46	13.79	1,178.54	
4	305,507	1.40	14.81	13.41	1,165.13	
5	305,637	1.05	16.05	15.00	1,150.13	
6	305,777	.69	16.29	15.60	1,134.53	
7	305,874	.67	16.90	16.23	1,118.30	
8	306,087	.46	17.13	16.67	1,101.63	
9	306,224	.42	17.44	17.02	1,084.61	
1,750	306,432	.79	16.75	15.96	1,068.65	
1	306,602	.36	14.94	14.58	1,054.07	
2	307,474	.91	16.77	15.86	1,038.21	
3	308,047	.51	17.22	16.71	1,021.50	
4	308,323	1.70	16.70	14.47	1,007.03	
5	308,592	.66	16.59	15.93	991.10	
6	308,777	.67	15.86	15.19	975.91	
7	308,917	.65	16.95	16.30	959.61	
8	309,057	.69	15.95	15.26	944.35	
9	309,297	1.13	17.85	16.72	927.63	
1,760	309,511	.47	15.12	14.65	912.98	
1	309,697	.13	15.78	15.65	897.33	
2	309,799	.73	15.99	15.26	682.07	
3	309,917	.68	26.00	25.32	856.75	Brook running west.
4	310,097	26.00	1.02	24.98	881.73	
5	310,317	13.00	.61	12.39	894.12	
6	310,617	9.84	.78	9.06	903.18	
7	311,037	12.30	1.05	11.25	914.43	
8	311,425	13.06	.11	12.95	927.38	
9	311,667	16.01	.57	15.44	942.82	
1,770	312,125	14.00	.73	13.27	956.09	
1	312,517	10.86	4.00	6.86	962.95	
	312,517				962.95	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	312,517				962·95	Brought up.
1,772	312,817	4·00	13·91	9·91	953·04	
3	313,005	2·31	14·47	12·16	940·88	
4	313,417	2·13	15·21	13·08	927·80	
5	313,737	·42	16·93	16·51	911·29	
6	313,977	2·02	16·94	14·92	896·37	
7	314,107	·52	16·41	15·89	880·48	
8	314,235	·55	16·59	16·04	874·44	
9	314,332	·71	16·99	16·28	848·16	
1,780	314,435	·37	16·33	15·96	832·20	
1	314,507	1·17	16·74	15·57	816·63	
2	314,607	·54	17·24	16·70	799·93	
3	314,692	·49	16·45	15·96	783·97	
4	314,767	·19	17·32	17·13	766·84	
5	314,847	·83	16·91	16·08	750·76	
6	314,923	1·36	16·11	14·75	736·01	
7	315,007	·81	17·51	16·70	719·31	
8	315,112	·70	17·77	17·07	702·24	
9	315,205	·77	16·46	15·69	686·55	
1,790	315,329	·06	15·71	15·65	670·90	
1	315,587	·19	16·40	16·21	654·69	
2	315,802	·48	16·29	15·81	638·88	
3	315,877	·54	12·08	11·54	627·34	Bench mark, No. 34.
4	315,942	·08	15·00	14·92	612·42	October 2.
5	316,017	·75	16·59	15·84	596·58	
6	316,047	·57	16·99	16·42	580·16	
7	316,097	·74	16·60	15·86	564·30	
8	316,132	·49	16·79	16·30	548·00	
9	316,187	·40	16·64	16·24	521·76	
1,800	316,217	·14	16·35	16·21	515·55	
1	316,417	·64	6·67	6·03	509·52	Water in States Brook, 18 feet wide.
2	316,492	6·67	·86	5·81	515·33	
3	316,517	16·85	·00	16·85	532·18	
4	316,569	15·17	·13	15·04	547·22	
5	316,617	13·50	·04	13·46	560·68	
6	316,642	16·01	·07	15·94	576·62	
7	316,682	15·90	·39	15·51	592·13	
8	316,737	15·75	·28	15·47	607·60	
9	316,832	16·47	·52	15·95	623·55	
1,810	317,003	10·55	·15	10·40	633·95	
1	317,267	12·51	4·00	8·51	642·46	
2	317,505	4·00	13·76	9·76	632·70	
3	317,547	1·45	16·01	14·56	618·14	
4	317,611	·04	17·35	17·31	600·83	
5	317,652	·75	16·63	15·88	584·95	
6	317,717	·42	16·62	16·20	568·75	
7	317,842	5·27	4·04	1·23	569·98	At 100 ft., small brook E.
8	317,892	16·22	·23	15·99	585·97	
9	317,923	16·59	·12	16·47	602·44	
1,820	317,967	16·81	·12	16·69	619·13	
1	318,007	14·60	·69	13·91	633·04	
2	318,137	13·98	·35	13·63	646·67	
3	318,317	17·21	1·15	16·06	662·73	
4	319,062	16·21	1·97	14·24	676·97	
5	319,367	10·50	·88	9·62	686·59	
6	319,630	15·60	·02	15·58	702·17	
7	319,907	11·70	·50	11·20	713·37	
8	320,147	15·68	1·52	14·16	727·53	
9	320,407	13·70	·52	13·18	740·71	
1,830	320,616	17·09	·62	16·47	757·18	
1	320,775	14·18	·60	13·58	770·76	
2	320,982	15·22	·43	14·79	785·55	
3	321,217	14·60	1·20	13·40	798·95	
4	321,393	13·04	·05	12·99	811·94	
5	322,177	11·73	2·43	9·30	821·24	
6	322,817	3·81	10·43	6·62	814·62	
7	323,337	1·42	14·22	12·80	801·82	
	323,337				801·82	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	323,337				801·82	Brought up.
1,838	323,657	2·00	16·15	14·15	787·67	
9	323,877	1·45	15·15	13·70	773·97	
1,840	324,012	1·62	11·90	10·28	763·69	Bench mark, No. 35.
1	324,137	·90	14·59	13·69	750·00	October 3.
2	324,329	1·07	16·37	15·30	734·70	
3	324,517	1·13	16·22	15·09	719·61	
4	324,757	·11	14·23	14·12	705·49	
5	324,937	·86	15·95	15·09	690·40	
6	325,187	1·42	15·57	14·15	676·25	
7	325,332	1·97	15·11	13·14	663·11	
8	325,429	·34	15·53	15·19	647·92	
9	325,477	·00	15·33	15·33	632·59	
1,850	325,747	2·68	1·74	·94	633·53	At 60 ft., small brook E.
1	325,835	14·52	·00	14·52	648·05	
2	325,897	12·84	·41	12·43	660·48	
3	325,997	14·25	·70	13·55	674·03	
4	326,147	13·42	1·58	11·84	685·87	
5	326,537	11·86	1·85	10·01	695·88	
6	327,037	7·89	1·37	6·52	702·40	
7	327,367	10·39	1·09	9·30	711·70	
8	327,677	8·59	2·19	6·40	718·10	
9	327,867	14·25	·34	13·91	732·01	
1,860	328,045	16·05	·14	15·91	747·92	
1	328,247	16·98	·03	16·95	764·87	
2	328,507	15·31	·19	15·12	779·99	
3	328,845	13·54	·66	12·88	792·87	
4	329,752	10·91	4·34	6·57	799·44	
5	330,207	3·50	12·28	8·78	790·66	
6	330,677	1·74	14·59	12·85	777·81	
7	330,937	·93	2·13	1·20	776·61	Small brook E., 4 ft. lower.
8	331,587	7·48	5·70	1·78	778·39	
9	331,712	7·92	·56	7·36	785·75	
1,870	332,265	6·70	1·81	4·89	790·64	
1	332,512	11·08	·77	10·31	800·95	
2	332,782	12·99	·89	12·10	813·05	
3	333,052	16·48	·35	16·13	829·18	
4	333,282	12·92	·38	12·54	841·72	
5	333,432	17·00	1·38	15·62	857·34	
6	333,627	15·90	·66	15·24	872·58	
7	333,882	15·00	·45	14·55	887·13	
8	334,287	13·57	4·00	9·57	896·70	
9	334,577	4·00	14·04	10·04	886·66	
1,880	334,815	1·09	16·21	15·12	871·54	
1	334,986	·53	17·19	16·66	854·88	
2	335,052	1·05	13·92	12·87	842·01	
3	335,117	1·15	15·38	14·23	827·78	
4	335,167	·10	15·31	15·21	812·57	
5	335,197	·44	10·75	10·31	802·26	
6	335,287	·80	19·50	18·70	783·56	
7	335,437	19·50	1·05	18·45	802·01	
8	335,507	15·31	·52	14·79	816·80	
9	335,580	16·31	·40	15·91	832·71	
1,890	335,672	15·17	·49	14·68	847·39	
1	335,833	13·30	·44	12·86	860·25	
2	336,067	12·52	2·58	9·94	870·19	
3	336,632	9·19	4·67	4·52	874·71	
4	337,122	7·50	6·25	1·25	875·96	
5	337,392	3·11	9·93	6·82	869·14	
6	337,632	1·62	16·42	14·80	854·34	
7	337,742	·91	16·45	15·54	838·80	
8	337,822	·70	15·52	14·82	823·98	
9	337,887	·45	14·88	14·43	809·55	
1,900	337,949	·70	16·04	15·34	794·21	
1	338,012	1·35	15·64	14·29	779·92	
2	338,051	·37	12·40	12·03	767·89	
3	338,242	·28	16·22	15·94	751·95	
	338,242				751·95	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	338,242				751·95	Brought up.
1,904	338,292	·88	14·89	14·01	737·94	
5	338,352	·24	6·35	6·11	731·83	States brook E., 2ft. lower.
6	338,543	13·64	·35	13·29	745·12	
7	338,587	15·53	·36	15·17	760·29	
8	338,847	11·00	·43	10·57	770·86	
9	338,944	15·96	·01	15·95	786·81	
1,910	339,237	15·52	·10	15·42	802·23	
1	339,507	14·92	4·00	10·92	813·15	
2	339,917	4·00	11·50	7·50	805·65	
3	340,457	3·88	1·88	2·00	807·65	
4	340,717	15·70	·68	15·02	822·67	
5	340,912	15·71	·52	15·19	837·86	
6	341,107	16·70	·54	16·16	854·02	
7	341,231	16·98	1·23	15·75	869·77	
8	341,367	17·54	·35	17·19	886·96	
9	341,562	17·71	·09	17·62	904·58	
1,920	341,782	16·73	·26	16·47	921·05	
1	342,002	18·00	·27	17·73	938·78	
2	342,197	14·54	·42	14·12	952·9	
3	342,637	18·00	1·00	17·00	969·9	
4	342,887	9·10	3·82	5·28	975·18	
5	343,417	3·82	11·41	7·59	967·59	
6	343,947	1·50	10·69	9·17	958·42	
7	344,327	2·76	1·87	·89	959·31	
8	344,567	6·44	·46	5·98	965·29	
9	345,482	3·68	4·08	·40	964·89	
1,930	345,937	3·37	10·86	7·49	957·40	
1	345,974	11·41	22·78	11·37	946·03	
2	346,367	22·78	1·10	21·68	967·71	
3	346,737	14·80	1·60	13·20	980·91	
4	347,412	16·70	1·47	15·23	996·14	
5	347,832	17·10	·66	16·44	1,012·58	
6	348,207	16·93	1·54	15·39	1,027·97	
7	348,437	7·83	3·80	4·03	1,032·00	
8	348,687	3·80	2·50	1·30	1,033·30	
9	349,387	4·46	1·40	3·06	1,036·36	
1,940	349,622	17·20	·79	16·41	1,052·77	
1	349,837	17·83	·32	17·51	1,070·28	
2	350,052	15·47	·66	14·81	1,085·09	
3	350,337	13·20	1·62	11·58	1,096·67	
4	350,637	12·59	1·41	11·18	1,107·85	
5	351,137	17·11	3·88	13·23	1,121·08	
6	351,477	3·88	11·77	7·89	1,113·19	
7	351,737	2·95	16·30	13·35	1,099·84	
8	351,957	1·27	17·02	15·75	1,084·09	
9	352,137	·89	16·85	15·96	1,068·13	
1,950	352,267	1·16	16·57	15·41	1,052·72	
1	352,449	·18	17·07	16·89	1,035·83	
2	352,597	·89	15·59	14·70	1,021·13	
3	352,752	·56	16·17	15·61	1,005·52	
4	352,897	·87	16·96	16·09	989·43	
5	353,043	·78	16·23	15·45	973·98	
6	353,197	·49	17·06	16·57	957·41	
7	353,287	1·07	17·09	16·02	941·39	
8	353,377	·34	17·46	17·12	924·27	
9	353,487	·33	17·22	16·89	907·38	
1,960	353,637	·80	6·83	6·03	901·35	
1	353,737	6·07	7·80	1·73	899·62	
2	353,887	7·80	2·15	5·65	905·27	
3	354,087	10·09	1·16	8·93	914·20	
4	354,337	13·50	1·25	12·25	926·45	
5	354,387	18·01	·52	17·49	943·94	
6	354,517	17·07	·55	16·52	960·46	
7	354,637	15·79	·95	14·84	975·30	
8	354,937	13·58	4·00	9·58	984·88	
9	355,107	4·00	15·43	11·43	973·45	
	355,107				973·45	Carried over.

Levelling Register.—Continued.

No. of Station.	Distance in feet from the River St. John.	Back Sight.	Fore Sight.	Difference.	Total height in feet above the River St. John.	Remarks.
	355,107				973·45	Brought up.
1,970	355,195	1·82	7·82	6·00	967·45	
1	355,212	7·82	1·82	6·00	973·45	
2	355,368	1·82	16·12	14·30	959·15	
3	355,490	1·23	16·65	15·42	943·73	
4	355,500	2·20	17·62	15·42	928·31	
5	355,690	1·23	8·39	7·16	921·15	Brook running E.
6	355,750	8·39	4·65	3·74	924·89	
7	355,900	13·97	·45	13·52	938·41	
8	356,020	15·22	·45	14·77	953·18	
9	356,200	15·92	·39	15·53	968·71	
1,980	356,690	17·55	·23	17·32	986·03	
1	357,160	7·08	2·16	4·92	990·95	
2	357,800	15·52	4·00	11·52	1,002·47	
3	358,100	4·00	15·40	11·40	991·07	
4	358,410	1·41	14·02	12·61	978·46	
5	358,580	1·09	15·98	14·89	963·57	
6	358,700	1·03	16·98	15·95	947·62	
7	358,800	·64	17·12	16·48	931·14	
8	358,900	·50	17·15	16·65	914·49	
9	358,985	·04	16·93	16·89	897·60	
1,990	359,100	·35	17·28	16·93	880·67	
1	359,450	·74	16·13	15·39	865·28	
2	359,630	2·38	14·54	12·16	853·12	
3	359,750	1·04	16·37	15·33	837·79	
4	359,810	·99	9·80	8·81	828·98	Bench mark, No. 37. October 6.
5	359,900	·39	16·80	16·41	812·57	
6	360,075	·70	16·44	15·74	796·83	
7	360,218	·00	16·29	16·29	780·54	
8	360,390	1·44	16·67	15·23	765·31	
9	360,475	·00	17·28	17·28	748·03	
2,000	360,604	1·69	14·34	12·65	735·38	
1	360,928	2·57	17·15	14·58	720·80	
2	361,117	1·57	16·96	15·39	705·41	
3	361,617	2·12	14·94	12·82	692·59	
4	361,792	1·28	6·84	5·56	687·03	
5	362,218	3·01	9·11	6·10	680·93	
6	362,520	1·82	12·44	10·62	670·31	Bench mark, No. 38. Beaver Stream.
7	362,825	3·01	7·22	4·21	666·10	
	362,825				666·10	
68 miles, 4,785 feet.						

ABSTRACT.

Height of water in Grand River, above the St. John	..	..	163·24 feet.
Ditto in Restigouche	..	..	137·47
Ditto in Quatawamkedgwick	..	..	158·53
Ditto in Beaver Stream..	..	..	666·10

(Signed) W. E. DELVES BROUGHTON,
Royal Engineers.

(Signed) J. D. FEATHERSTONHAUGH.

*Registry of the State of Instruments on arriving at the Grand Falls.
August 14, 1840.*

	A.		Th. A.	Th. D.	
No. 1	29·252	.....	68½	68½	} Troughton's. Newman's.
No. 2	29·293	.....	58½	"	
	29·288	.....	68½	"	
411	743·3	.....	20	20	
413	743·05	.....	"	"
414	743·15	.....	"	"	Bunten's.
416	743·0	.....	"	"
418	743·1	.....	"	"

MEMORANDUM.

	Newman, No. 1.	Do., No. 2.
Capacity	$\frac{1}{11}$	$\frac{1}{12}$
Neutral Point	29·802	29·802
Capillarity Att.	+·042	+·042
	<hr/>	<hr/>
Temp. Fahr.	1000	1000
	68°	68°

Record of Barometric Observations.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks, &c.
1840 August 24, 8 A.M.	Grand Falls *	A.	29·134	68	69	North wind; cloudy and threatening rain.
		No. 1	29·148	67½		
		411	740·1	20		
12		A.	29·234	69½	70	
		No. 1	29·246	61½		
		411	741·3	21		
4 P.M.		A.	29·30	70	70	
		No. 1	29·314	70		
		411	742·7	21		
August 25, 8 A.M.	Grand Falls	A.	29·526	59	61	North-west wind; cloudy.
		No. 1	29·524	57½		
		411	747·6	16		
12		A.	29·534	65½	66	
		No. 1	29·540	65½		
		411	748·0	19		
4 P.M.		A.	29·520	72	72	
		No. 1	29·526	72		
		411	748·2	22½		
August 26, 8 A.M.	Grand Falls	A.	29·562	50½	51½	Wind north-west.
		No. 1	29·564	49½		
		411	747·7	11		
12		A.	59·554	69	69	
		No. 1	29·562	68		
		411	749·2	21		
4 P.M.		A.	29·564	72½	73	
		No. 1	29·550	72		
		411	749·2	23		

* The Observatory at the Grand Falls is 100 feet above the surface of the St. John, at its intersection by the exploratory due North Line.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 August 27, 8 A.M.	Grand Falls	A. No. 1 411	29·620 29·616 749·7	53 $\frac{1}{2}$ 51 $\frac{1}{2}$ 12	54 $\frac{1}{2}$	Wind north-west.
12		A. No. 1 411	29·652 29·654 753·0	74 $\frac{1}{2}$ 72 24 $\frac{1}{2}$	76	
4 P.M.		A. No. 1 411	29·646 29·666 752·8	74 $\frac{1}{2}$ 74 24	75	
August 28, 8 A.M.	Grand Falls	A. No. 1 411	29·762 29·756 755·0	61 59 $\frac{1}{2}$ 17	63	Wind south-east; clear weather.
12		A. No. 1 411	29·734 29·750 755·1	73 72 23	73	
4 P.M.		A. No. 1 411	29·684 29·70 754·2	76 75 $\frac{1}{2}$ 24 $\frac{1}{2}$	76	
August 29, 4 A.M.	Grand Falls	A. No. 1 411	29·704 29·714 753·9	62 61 17	63	Wind south; heavy and cloudy wea- ther.
12		A. No. 1 411	29·712 29·720 754·2	72 70 $\frac{1}{2}$ 22 $\frac{1}{2}$	73	
4 P.M.		A. No. 1 411	29·684 29·692 753·7	75 $\frac{1}{2}$ 75 24 $\frac{1}{2}$	76	
8 A.M.	On due north line station, No. 111, p. 8.	2 413 414 416 418	29·388 746·6 747·1 746·3 746·9	60 15 $\frac{1}{2}$ 15 $\frac{1}{2}$ 15 $\frac{1}{2}$ 15 $\frac{1}{2}$	60	
August 30, 8 A.M.	Grand Falls	A. No. 1 411	29·634 29·650 752·4	60 $\frac{1}{2}$ 60 16	61	Wind south.
12		A. No. 1 411	29·612 29·624 752·1	67 66 $\frac{1}{2}$ 20	68	Wind south-east; cloudy.
4 P.M.		A. No. 1 411	29·562 29·582 751·0	68 $\frac{1}{2}$ 68 $\frac{1}{2}$ 20 $\frac{1}{2}$	68 $\frac{1}{2}$	Wind south; cloudy.
4 P.M.	On due north line station, No. 173, p. 9.	2 413 414 416 418	29·188 740·8 741·0 740·0 740·9	68 19 $\frac{1}{2}$ 19 $\frac{1}{2}$ 19 $\frac{1}{2}$ 19 $\frac{1}{2}$	66	
August 31, 8 A.M.	Grand Falls	A. No. 1 411	29·364 29·388 745·9	64 63 $\frac{1}{2}$ 13	64	Wind south; cloudy.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 August 31, 12	Grand Falls	A.	29·350	68	68	Wind south-west.
		No. 1	29·376	67		
		411	745·4	20		
4 P.M.		A.	29·330	69	69	Wind south-west.
		No. 1	29·360	68		
		411	744·9	20½		
8 A.M.	Due north line station, No. 173, p. 9.	2	29·008	52	62	
		413	735·8	17		
		414	736·2	17		
		416	735·9	17		
		419	735·8	17		
4 P.M.	Due north line station, No. 203, p. 10.	2	29·038	70	68	
		413	737·6	21		
		414	737·7	21		
		416	737·5	21		
		418	737·4	21		
September 1, 8 A.M.	Grand Falls	A.	29·292	58	58½	Wind west; cloudy.
		No. 1	29·314	55		
		411	743·0	14½		
12		A.	29·270	64	64	Wind west; heavy.
		No. 1	29·296	64		
		411	743·3	18		
4 P.M.		A.	29·262	65	55	Wind west; thunder and showers.
		No. 1	29·286	64		
		411	742·6	19		
4 P.M.	Due north line on north bank of Grand River, six feet above the level of the water.	2	29·202	59	62	
		413	741·3	16		
		414	741·5	16		
		416	741·4	16		
		418	741·6	16		
September 2, 8 A.M.	Grand Falls	A.	29·324	50	50½	Wind south; cloudy.
		No. 1	29·340	49		
		411	743·1	10		
12		A.	29·270	64½	64½	Strong breeze; wind south-south-west.
		No. 1	29·292	64		
		411	743·0	18½		
4 P.M.		A.	29·230	60	60	Wind south, with rain.
		No. 1	29·252	60		
		411	742·3	16		
8 A.M.	Due north line on north bank of Grand River, six feet above the level of the water.	2	29·274	48	48	
		413	742·6	9		
		414	742·7	9		
		416	742·6	9		
		418	742·4	9		
September 3, 8 A.M.	Grand Falls	A.	29·216	56	56	Wind west.
		No. 1	22·232	55		
		411	741·3	13½		
12		A.	29·250	59	59	
		No. 1	29·268	58½		
		411	741·9	15		

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 September 4, 4 P.M.	Grand Falls.....	A. No. 1 411	29·612 29·624 750·5	67 66 19½	67	Wind north-west; clear.
8 A.M.	On Line Station, No. 385, p. 12.	2 413 414 416 418	29·190 740·65 740·9 740·85 741·0	53½ 12 12 12 12	53	
September 5, 8 A.M.	Grand Falls.....	A. No. 1 411	29·674 29·680 751·5	44 43 7	45	Wind north-west; thick fog.
12		A. No. 1 411	29·650 29·666 752·3	67½ 67 21	70	Wind south; clear.
4 P.M.		A. No. 1 411	29·604 29·618 751·9	68½ 69 20½	68½	Wind south; cloudy.
September 6, 8 A.M.	Grand Falls.....	A. No. 1 411	29·466 29·482 748·3	55½ 55 13½	56	Wind north-west; cloudy.
12		A. No. 1 411	29·448 29·474 748·1	65½ 65 19	67	Wind north-west; cloudy.
4 P.M.		A. No. 1 411	29·408 29·430 746·8	68½ 68½ 20½	69	Wind north-west; cloudy.
8 A.M.	On north side of the Res- tigouche, opposite the mouth of the Wagan, five feet above water.	2 413 414 416 418	29·406 746·7 747·2 746·8 747·1	54 12½ 12½ 12½ 12½	54 12½	
12	At same place	2 413 414 416 416	29·418 746·1 746·5 746·1 746·2	68½ 20	67	
September 7, 8 A.M.	Grand Falls.....	A. No. 1 411	29·548 29·562 747·4	53½ 52 12½	54½	Wind north-west; cloudy.
12		A. No. 1 411	29·572 29·604 750·5	69½ 68 21	70½	Wind north-west; clear.
4 P.M.		A. No. 1 411	29·598 29·610 751·1	73 72 23	74	Wind north-west; clear.
September 8, 8 A.M.	Grand Falls.....	A. No. 1 411	29·562 29·578 750·1	54 52½ 12½	54	Wind south.
12		A. No. 1 411	29·544 29·564 750·2	70 69½ 21	70½	Wind south-east; sultry.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 8, 4 P.M.	Grand Falls	A. No. 1 411	29·492 29·510 749·0	72 72 22½	72	Wind south-west; cloudy.
8 A.M.	On north bank of Restigouche, five miles below the due north line, twelve feet above the level of water.	2 413 414 416 418	29·540 750·0 750·2 750·0 750·1	55 13 13 13 13	54 13	
Sept. 9, 8 A.M.	Grand Falls	A. No. 1 411	29·322 29·334 744·2	62 62 17	62	Wind south-west; cloudy.
12		A. No. 1 411	29·316 29·338 744·2	70 69½ 21½	71	Wind south.
4 P.M.		A. No. 1 411	29·290 29·314 743·7	70 69½ 21	70	Wind south; heavy clouds, with rain.
8 A.M.	On north bank of the Restigouche, five miles below due north line, twelve feet above the level of the water.	2 413 414 416 418	29·272 743·3 743·3 742·9 743·3	61 16 16 16 16	60½ 16	
Sept. 10, 8 A.M.	Grand Falls	A. No. 1 411	29·204 29·228 741·6	61 60½ 16	61	Wind south; thun- der clouds.
12		A. No. 1 411	29·220 29·244 742·2	68 67 20	68	Heavy.
4 P.M.		A. No. 1 411	29·212 29·230 741·9	64½ 64½ 18	64	Showery.
Sept. 11, 8 A.M.	Grand Falls	A. No. 1 411	29·220 29·238 741·2	53 53 11½	53	Wind north-west; heavy rain.
12		A. No. 1 411	29·206 29·226 741·1	55 54½ 12½	55	Rain.
4 P.M.		A. No. 1 411	29·270 29·286 742·3	55 54½ 13	55	Wind north-west; clearing.
Sept. 12, 8 A.M.	Grand Falls	A. No. 1 411	29·552 29·554 748·0	45 45 7	45	Wind north-west; cloudy.
12		A. No. 1 411	29·574 29·578 750·6	51 51 11	51½	Wind north-west; clearing.
4 P.M.		A. No. 1 411	29·578 29·592 750·8	56½ 56½ 14	57	Wind north-west; cloudy.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 12, 8 A.M.	Seven feet above high water mark, Campbell Town, on Baie des Chaleurs.	413 414 416	765·5 765·9 765·4	10 10 10	49	
12		413 414 416	765·2 765·6 765·3	12 12 12	52½	
4 P.M.		413 414 416	765·6 766·1 766·1	17½ 17½ 17½	64	
4 P.M.	At station No. 577, on due north line, p. 15.	2 418	29·242 742·5	57 14	55 13	
Sept. 13, 8 A.M.	Grand Falls.....	A. No. 1 411	29·670 29·690 752·2	42½ 41½ 6	42½	Slight frost; wind north-west.
12		A. No. 1 411	29·704 29·710 754·0	58½ 57½ 15	58½	Wind north-west.
4 P.M.		A. No. 1 411	29·584 29·592 753·9	61 61 15½	61½	Wind north-west.
8 A.M.	At the same station at Campbell Town.	413 414 416	768·2 768·4 768·2	13 13 13	52½	
12		413 414 416	767·5 768·1 767·7	16 16 16	60½	
4 P.M.		413 414 416	767·6 767·6 767·4	17 17 17	61½	
8 A.M.	At station No. 577, on due north line, p. 15.	2 418	29·318 744·7	40½ 6	41 5	
4 P.M.		2 418	29·336 744·6	58½ 13½	56 13	
Sept. 14, 8 A.M.	Grand Falls.....	A. No. 1 411	29·652 29·658 753·7	43 42 6	42½	Wind north-west; showery.
12		A. No. 1 411	29·608 29·626 752·3	56 55 13½	56	Wind north-west.
4 P.M.		A. No. 1 411	29·562 29·576 751·1	57 56½ 13½	57	Wind north-west; cloudy.
8 A.M.	At station No. 557, p. 15, as yesterday.	* 2 418	29·420 743·8	38 2½	37½	
Sept. 15, 8 A.M.	Grand Falls.....	A. No. 1 411	29·360 29·378 745·6	49 48½ 9½	49	Wind north-west; heavy rain.

* 2 Contains air, and no further dependence can be placed upon its registry.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 15, 12	Grand Falls	A. No. 1 411	29·364 29·388 745·2	54½ 53½ 12	54	Wind north-west; rain.
4 P.M.		A. No. 1 411	29·394 29·412 745·8	49½ 50 9½	49½	Wind north-west; rain.
8 A.M.	At station 639, p. 16, due north line.	2 418	28·750 729·8	47½ 8	46	
4 P.M.	At station 699, p. 17, six feet above the station, on due north line.	2 418	28·950 735·0	54 11½	51	
Sept. 16, 8 A.M.	Grand Falls	A. No. 1 411	29·528 29·536 747·6	47 46½ 8½	47½	Wind south.
12		A. No. 1 411	29·592 29·600 749·2	60 59 16½	62	Wind west.
4 P.M.		A. No. 1 411	29·596 29·610 749·8	67 66½ 19½	67	Wind south-west.
8 A.M.	At station 699, p. 17, as yesterday.	2 418	29·068 737·9	42 4½	40½	
Sept. 17, 8 A.M.	Grand Falls	A. No. 1 411	29·608 29·620 751·0	47 45½ 8½	47½	Wind south-west.
12		A. No. 1 411	29·606 29·620 751·7	67 67 19½	69	Wind south.
4 P.M.		A. No. 1 411	29·562 29·572 750·8	71½ 71½ 22	72	Wind south-south- west.
Sept. 18, 8 A.M.	Grand Falls	A. No. 1 411	29·554 29·560 749·9	51½ 50½ 11	52	Wind south.
12		A. No. 1 411	29·564 29·576 750·3	57½ 57 9½	58	Wind south.
4 P.M.		A. No. 1 411	29·560 29·574 750·3	61 60½ 16	61	Wind south.
8 A.M.	At four feet below station 855, p. 20, on due north line.	2 418	29·320 744·6	43 6½	43	
Sept. 19, 8 A.M.	Grand Falls	A. No. 1 411	29·480 29·506 748·6	50 49½ 10½	52	Wind south-south- east.
12		A. No. 1 411	29·414 29·430 747·0	59 58½ 15½	60	Wind south-south- west.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 19, 4 P.M.	Grand Falls	A. No. 1 411	29·302 29·320 744·4	58½ 58½ 15	58½	Wind south-south-east.
8 A.M.	At four feet above station 913, p. 20, on due north line.	2 418	29·012 735·7	51 9½	48½	
Sept. 20, 8 A.M.	Grand Falls	A. No. 1 411	28·898 28·920 734·0	52 51½ 11½	52½	Wind south-west; cloudy and rain.
12		A. No. 1 411	28·844 28·874 732·7	57½ 56½ 14	58	Wind south-west.
4 P.M.		A. No. 1 411	28·798 28·832 731·6	56½ 56½ 13½	56½	Wind south-west; heavy rain.
Sept. 21, 8 A.M.	Grand Falls	A. No. 1 411	28·882 28·890 733·7	44½ 44 7	44½	Wind west.
12		A. No. 1 411	29·016 29·038 735·0	51 50½ 10½	51	Wind west.
4 P.M.		A. No. 1 411	29·046 29·066 737·0	50 50 10	50	Wind west.
12	At station 1,076, p. 23, five feet above station on due north line.	2 418	28·632 737·1	50 9	46½	
Sept. 22, 8 A.M.	Grand Falls	A. No. 1 411	29·414 29·432 742·8	38 37½ 3	37	Wind north-west; much rain and sleet.
12		A. No. 1 411	29·482 99·498 746·3	39 39 4	39	Wind north-west, blowing hard; snow.
4 P.M.		A. No. 1 411	29·512 29·522 746·7	38½ 37½ 3½	38	Wind north-west; moderating.
8 A.M.	On Quatawamkedgwick, eight feet above the level of the river, on due north line. P. 31.	413 414 416	743·9 743·8 743·7	3½ 3½ 3½	38	
Sept. 23, 8 A.M.	Grand Falls	A. No. 1 411	29·552 29·554 750·1	36 36 2	35½	Wind south; sleet constant.
12		A. No. 1 411	29·588 29·600 750·6	41 40 5	41	Wind south-south- east; clearer.
4 P.M.		A. No. 1 411	29·616 29·622 750·9	44 43½ 6½	44½	Wind north west.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 23, 8 A.M.	Eight feet above water, Quatawamkedgwick, on due north line.	413	748·3	1½	35½	
		414	748·7	1½		
		416	749·1	1½		
12		413	746·7	7½	43	Rain.
	414	746·7	7½			
	416	749·5	7½			
8 A.M.	Three feet above station 1,190, p. 25, on due north line.	2	28·466	32	31	
		418	722·9	—¼		
Sept. 24, 8 A.M.	Grand Falls	A.	29·838	35	34½	Wind north-west; frost.
		No. 1	29·834	34½		
		411	755·0	1½		
12		A.	29·864	48½	49½	Wind north-west.
	No. 1	29·876	47½			
	411	758·5	9½			
4 P.M.		A.	29·824	55	57	Wind north-west.
	No. 1	29·831	55			
	411	757·4	13½			
8 A.M.	Same place as yesterday ..	413	755·0	—½	30	
		414	755·0	—½		
		416	755·3	—½		
12		413	756·1	14	54	
	414	756·5	14			
	416	756·3	14			
4 P.M.		413	754·1	8	46½	
	414	754·5				
	416	754·1				
Sept. 25, 8 A.M.	Grand Falls	A.	29·774	35	35	Wind south-south-west; frost and thick fog.
		No. 1	29·774	34½		
		411	755·8	1½		
12		A.	29·760	59½	61½	Wind west.
	No. 1	29·770	58			
	411	755·8	16½			
4 P.M.		A.	29·704	65	66½	Wind south-west.
	No. 1	29·716	65			
	411	754·6	18½			
8 A.M.	At the same place as yesterday.	413	753·1	1½	33½	Frosty.
		414	753·1	1½		
		416	752·8	1½		
12		413	752·8	20½	63½	
	414	753·1	20½			
	416	752·6	20½			
4 P.M.		2	29·566	56	55	
	413	750·9	13½			
	414	750·6	13½			
	416	750·7	13½			
	418	751·3	13½			
Sept. 26, 8 A.M.	Grand Falls	A.	29·630	40	40½	Wind south-east.
		No. 1	29·638	39		
		411	752·3	4½		

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 26, 12	Grand Falls	A. No. 1 411	29·636 29·646 752·4	64½ 64 19	67	Wind south-east.
4 P.M.		A. No. 1 411	29·576 29·590 751·4	68 68 20	68	Wind south-east.
8 A.M.	Same place as yesterday ..	2 413 414 416 418	29·524 749·6 750·0 749·6 746·8	43 5½ 5½ 5½ 5½	42 42	
4 P.M.		2 413 414 416 418	29·442 747·5 747·6 746·7 747·4	61 14½ 14½ 14½ 14½	57	
Sept. 27, 8 A.M.	Grand Falls	A. No. 1 411	29·426 29·438 747·2	53½ 53 12	54	Wind south to south-west; misty.
12		A. No. 1 411	29·374 29·392 746·3	63 62½ 17½	63½	Wind south-east to south-west.
4 P.M.		A. No. 1 411	29·334 29·350 745·0	64 64 18	64½	Wind south-west.
8 A.M.	Same place as yesterday ..	2 413 414 416 418	29·314 744·0 744·4 744·4 744·3	52 10 10 10 10	51	
4 P.M.		2 413 414 416 418	29·224 741·9 742·0 741·9 742·0	64 12½ 12½ 12½ 12½	61½	
Sept. 28, 8 A.M.	Grand Falls	A. No. 1 411	29·426 29·438 745·2	46 46½ 8	46½	Wind north-west; rain.
12		A. No. 1 411	29·466 29·476 745·6	45 45 6	45	Wind north-west; frequent showers.
4 P.M.		A. No. 1 411	29·470 29·474 745·8	50 49½ 10	50½	Wind north-west to south-west; clearing.
8 A.M.	At same place as yesterday, on the Quatawankedgwick.	2 413 414 416 418	29·348 745·0 745·0 744·6 744·9	42 6 6 6 6	44	
12	At station I, 655, p. 32, at the top of mountain, above river.	2 413 414 416 418	28·284 717·8 718·0 717·9 718·3	50½ 10 10 10 10	46½	

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 Sept. 29, 8 A.M.	Grand Falls	A. No. 1 411	29·556 29·562 747·8	37 36½ 2½	37	Wind south-west; dark fog and frosty.
12		A. No. 1 481	29·576 29·590 749·1	53 52 12½	54½	Wind north-west.
4 P.M.		A. No. 1 411	29·568 29·582 749·3	60 60½ 16	60½	Wind south-west.
8 A.M.	At station 1,719, p. 33, on due north line, twelve feet below station.	2 413 414 416 418	28·472 722·4 722·4 722·3 722·5	44 8 8 8 8	44½	
12	Same station.....	2 413 414 416 418	28·484 722·6 723·0 722·5 722·4	54 13 13 13 13	54	
Sept. 30, 8 A.M.	Grand Falls	A. No. 1 411	29·496 29·512 748·2	45 44½ 7	45½	Wind south-south- west; thick fog.
12		A. No. 1 411	29·558 29·568 749·1	58 58 14½	58	Wind north-west, blowing hard.
4 P.M.		A. No. 1 411	29·598 29·602 749·4	57½ 57 14	58	Wind north-west, moderating.
8 A.M.	Same station as yesterday..	2 413 414 416 418	28·416 721·0 721·0 720·9 720·8	49 10 10 10 10	51½	
4 P.M.	At station 1,764, p. 33, on due north line.	2 413 414 416 418	28·752 729·6 730·2 729·8 730·0	50 10 10 10 10	49	
October 1, 8 A.M.	Grand Falls	A. No. 1 411	29·842 29·838 754·6	34 33 1	33½	Wind north-west; frost.
12		A. No. 1 411	29·840 29·842 756·6	47½ 47½ 9	48½	Wind north-west.
4 P.M.		A. No. 1 411	29·830 29·830 756·8	54 54 13	51	Wind south-west.
8 A.M.	Same place as yesterday, on due north line, 1,764, p. 33.	2 413 414 416 418	28·976 734·5 735·4 735·0 734·4	29 1½ 1½ 1½ 1½	29	Hard frost; mercury rising fast.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 1, 4 P.M.	At station on the rivulet ..	2 413 414 416 418	29-280 743-2 743-5 742-9 743-7	41 5 5 5 5	41	
October 2, 8 A.M.	Grand Falls	A. No. 1 411	29-810 29-810 755-8	33 32½ —½	33	Wind west-south- west; frost.
12		A. No. 1 411	29-789 29-800 756-0	41½ 40½ 5½	42 42	Wind west-south- west; rain.
4 P.M.		A. No. 1 411	29-778 29-778 755-7	45½ 45 7½	45	Wind south-south- east; misty.
8 A.M.	Same place as last evening.	2 413 414 416 418	28-250 742-9 743-2 742-7 742-5	29½ 1 1 1 1	29½	
4 P.M.	On margin of the Caribou Plain, station 1,868, p. 35	2 413 414 416 418	29-000 736-4 736-5 736-5 736-7	42 5 5 5 5	41½	
October 3, 8 A.M.	Grand Falls	A. No. 1 411	29-602 22-612 751-8	48 47½ 8½	48	Wind south-south- east; misty.
12		A. No. 1 411	29-478 29-492 748-9	54 53½ 12	54½	Wind south-south- east; rain and mist.
4 P.M.		A. No. 1 411	29-344 29-360 745-3	59 58½ 15	59½	Wind south-south- east; constant rain.
8 A.M.	Station same as last evening, 1,868, p. 35.	2 413 414 416 418	28-842 731-8 732-2 731-6 732-1	46½ 8 8 8 8	46½	
4 P.M.	Four feet above station 1,907, p. 36.	2 413 414 416 418	28-610 725-8 725-9 725-7 726-1	55 13 13 13 13	55	
October 4, 8 A.M.	Grand Falls	A. No. 1 411	29-432 29-442 744-9	39 38½ 4	39	Wind south-west; rain.
12		A. No. 1 411	29-418 29-426 745-4	50 49½ 10½	50½	Wind south-west; clearing.
4 P.M.		A. No. 1 411	29-396 29-410 745-3	54 54 12½	54½	Wind south-west.

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 4, 8 A.M.	Four feet above station 1,907, p. 36, same as yes- terday.	2	28·682	37	47	Unsettled squally weather.
		413	727·9	3		
		414	728·1	3		
		416	727·5	3		
		418	728·2	3		
12	Same place	2	28·692	46	46	More settled.
		413	727·0	8		
		414	727·2	8		
		416	727·0	8		
		418	726·9	8		
4 P.M.	Same place	2	28·626	45	46	Calm.
		413	726·7	7½		
		414	726·7	7½		
		416	726·6	7½		
		418	726·3	7½		
October 5, 8 A.M.	Grand Falls	A.	29·494	45½	45½	Wind south-west.
		No. 1	29·512	45		
		411	746·7	7½		
12		A.	29·454	53½	55	Wind south.
		No. 1	29·468	53		
		411	746·9	12		
4 P.M.		A.	29·384	64	64½	Wind south-south- west.
		No. 1	29·402	63½		
		411	746·2	18½		
4 P.M.	At five feet above station 1,977, p. 37;]	2		44	43	Weather — raining very heavily. No. 1, which came up with the others too unsettled to register.
		413	722·9	6	43	
		414	723·2	6		
		416	722·9	6		
		418	723·5	6		
October 6, 8 A.M.	Grand Falls	A.	29·396	49½	49½	Wind south-west; rain.
		No. 1	29·412	49½		
		411	745·1	10		
12		A.	29·426	49½	50	Wind north-west; clearing.
		No. 1	29·440	49½		
		411	745·4	10		
4 P.M.		A.	29·450	54	55½	Wind south-west.
		No. 1	29·462	53½		
		411	745·9	12½		
8 A.M.	At same station as last evening.	2	28·450	39	38½	Rainy bad weather.
		413	721·9	3½		
		414	722·4	3½		
		416	722·1	3½		
		418	722·3	3½		
4 P.M.	On Beaver Stream, at due north line.	413	731·4	9	47	
		414	731·5	9		
		416	731·4	9		
		418	731·8	9		
October 7, 8 A.M.	Grand Falls	A.	29·646	37½	37½	Wind north-west; frost.
		No. 1	29·650	36½		
		411	750·3	3		

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 7, 12	Grand Falls	A.	29·724	44	44	Wind north-west.
		No. 1	29·724	43½		
		411	752·3	7		
4 P.M.		A.	29·744	48½	48½	Wind north-west.
		No. 1	29·744	48		
		411	752·5	9½		
8 A.M.	Camp on Beaver Stream, same as last evening.	413	734·8	—½	32½	Hard frost.
		414	735·2	—½		
		416	734·8	—½		
		418	734·7	—½		
12	Same place	413	737·8	8	40	
		414	738·	8		
		416	738·5	8		
		418	737·9	8		
4 P.M.		..	..	..	..	Arrived too late from exploring.
October 8, 8 A.M.	Grand Falls	A.	29·786	33	34	Wind north-west; frost.
		No. 1	29·790	31		
		411	753·9	1		
12		A.	29·730	56	56½	Wind south-east.
		No. 1	29·740	55		
		411	754·9	13½		
4 P.M.		A.	29·630	60	60	Wind south-east and south-west.
		No. 1	29·640	59½		
		411	752·9	15½		
8 A.M.	Same station as last evening	413	739·2	—1½	29	
		414	739·3	—1½		
		416	739·0	—1½		
		418	739·0	—1½		
October 9, 8 A.M.	Grand Falls	A.	29·772	36	35	Wind north-west; frost.
		No. 1	29·774	35½		
		411	755·1	2		
12		A.	29·810	40	43	Wind north-west; strong wind.
		No. 1	29·812	40		
		411	755·8	4½		
4 P.M.		A.	29·784	43	43	Wind north-west; blowing hard.
		No. 1	29·786	43		
		411	755·7	4½		
October 10, 8 A.M.	Grand Falls	A.	29·828	34	34	Wind north-west; hard frost.
		No. 1	29·830	34		
		411	757·0	1½		
12		A.	29·760	40	40	Wind north-west.
		No. 1	29·768	39½		
		411	755·9	4½		
4 P.M.		A.	29·696	43½	44	Wind north-west.
		No. 1	29·706	43½		
		411	754·4	6½		
October 11, 8 A.M.	Grand Falls	A.	29·348	32	32	Wind south-west; hard frost.
		No. 1	29·364	31		
		411	745·5	0		

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 11, 12	Grand Falls	A. No. 1 411	29·242 29·262 742·9	39½ 39½ 4½	39½	Wind south-west; misty.
4 P.M.		A. No. 1 411	29·064 29·088 738·4	42 41½ 5½	42	Wind south; dark mist.
S A.M.	Five feet above the Beaver Stream, at about six miles below north line.	413 414 416 418	730·3 730·2 730·3 730·2	-1 -1 -1 -1	30	
12	About nine miles below the north line, at the head of the Lake forming the mouth of Beaver Stream, five feet above water.	413 414 416 418	729·1 729·0 729·2	5 5 5	36	
October 12, S A.M.	Grand Falls	A. No. 1 411	28·844 28·870 731·3	46 46 7½	45½	Wind north-west; heavy rain.
12		A. No. 1 411	28·900 28·928 732·2	44½ 44½ 7	44½	Wind north-west; clearing.
4 P.M.		A. No. 1 411	28·964 28·990 733·6	44 44 6½	44	Wind north-west; cloudy.
S A.M.	About one mile on Lake Metis, twenty feet above water.	413 414 416 418	719·6 719·9 719·8 719·7	4 4 4 4	38	
12	About two miles below the Lake, five feet above water.	413 414 416 418	722·6 722·5 722·3 722·5	4½ 4½ 4 4½	29	
October 13, S A.M.	Grand Falls	A. No. 1 411	29·186 29·202 738·9	37½ 37 3	37	Wind north-west; rainy.
12		A. No. 1 411	29·206 29·224 739·6	41 41 5½	41½	Wind north-west; snow.
4 P.M.		A. No. 1 411	29·232 29·246 741·0	42½ 42 6	42½	Wind north-west.
S A.M.	Camp half-way down second Lake, ten feet above water.	413 414 416 418	730·7 730·8 730·6 730·4	2½ 2½ 2½ 2½	37	
12	Five miles lower down the stream, five feet above the water.	413 414 416 416	732·3 732·4 732·4 732·4	5½ 5½ 5½ 5½	38	

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 14, 8 A.M.	Grand Falls	A.	29·070	37	37	Wind south; slight frost.
		No. 1	29·090	36½		
		411	738·5	2½		
12		A.	29·028	44½	44½	Wind south-south- west; rain.
		No. 1	29·046	43½		
		411	737·4	6½		
4 P.M.		A.	29·102	50	50½	Wind west; rain.
		No. 1	29·124	50		
		411	738·1	10½		
8 A.M.	On Metis, at the end of first portage, eight feet above water, below Small Falls.	413	732·6	2	35	Portage about one mile and a quarter.
		414	732·4	2		
		416	732·4	2		
		418	732·2	2		
12	On banks of the Metis, about six miles below last camp, five feet above water.	413	735·5	6	42	
		414	735·6	6		
		416	735·5	6		
		418	735·9	6		
4 P.M.	At the Fourche of the River Metis; direction south-south-east; five feet above water.	413	742·2	5	40½	
		414	742·4	5		
		416	742·2	5		
		418	742·5	5		
October 15, 8 A.M.	Grand Falls	A.	29·352	35½	35½	Wind south-west; hard frost.
		No. 1	29·358	35		
		411	742·4	2½		
12		A.	29·386	42	42	Wind north-west.
		No. 1	29·400	41½		
		411	743·1	5½		
4 P.M.		A.	29·424	42	41½	Wind south-west.
		No. 1	29·438	42		
		411	744·1	5½		
8 A.M.	Camp on banks of Metis, about seven miles from Fourche, five feet above water.	413	750·8	1½	34	
		414	750·9	1½		
		416	750·7	1½		
		418	751·1	1½		
12	About one mile above the Grand Portage, twelve feet above water.	413	753·1	6	42	
		414	753·1	6		
		416	752·9	6		
		418	753·3	6		
October 16, 8 A.M.	Grand Falls	A.	29·568	29	28½	Wind north-west; hard frost.
		No. 1	29·580	28		
		411	749·0	-2		
12	At ten miles above the Grand Falls on River St. John.	A.	29·774	43½	46	Wind north-west; some snow. Barometer three feet above the level of water.
		No. 1	29·790	43½		
		411	756·7	6		
4 P.M.	The Observations at the Grand Falls were discon- tinued to-day at 8 A.M.					

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 16. 8 A.M.	Mouth of Metis River: high-water mark.	413 414 416 418	767.3 767.2 767.0 767.3	2 2 2 2	34	
12		413 414 416 418	768.9 768.9 768.7 769.0	5½ 5½ 5½ 5½	38½	
October 17. 8 A.M.	Twenty-one miles above the Grand Falls, on the River St. John.	A. No. 1 411	29.994 30.006 761.6	36½ 38 1½	33	Wind north-east.
12	Grand Island.....	A. No. 1 411	30.018 30.032 762.0	43½ 40 5½	38½	
8 A.M.	Mouth of River Rimousky, high-water mark on St. Lawrence.	413 414 416 418	774.1 774.4 774.2 774.4	1 1 1 1	1	
October 18, 8 A.M.	At the foot of Little Falls on the River St. John, or mouth of the Mada- waska.	A. No. 1 411	29.986 30.006 761.5	29 27½ —½	31½	Wind north-west; hard frost.
12	North end of Barnard Island, eight miles above Little Falls.	A. No. 1 411	29.952 29.974 760.9	57½ 52½ 12	54	
8 A.M.	Ten feet above high-water mark, Rivière de la pointe au Mé, one league from Trois Pistoles.	414 416	773.6 773.6	—1 —1	—2 —2	
12	Mouth de la Rivière de la pointe à la Loupe, four feet above high-water mark.	413 418	774.1 774.1	7 7	4	
October 19, 8 A.M.	Entrance of Lake Temis- quata.	A. No. 1 411	29.730 29.740 754.1	37 38 1½	34	Wind west-south- west; hard frost. Two feet above water.
12	North end rock in Lake Temisquata, nine miles below head of Lake.	A. No. 1 411	29.638 29.650 752.8	49 48½ 9½	48½	Wind south. Two feet above water.
4 P.M.	At barracks on Temisquata Lake.	A. No. 1 411	29.562 29.584 750.9	51½ 51½ 10½	51½	Wind south-west. Two feet above water.
8 A.M.	High tide. River du Loup.	413 414 416 418	767.3 767.1 766.9 767.0	7 7 6½ 6½	5	

Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.	Th. D.	Remarks.
1840 October 19, 12	High tide. River du Loup.	413 414 416 416	765·2 765·2 765·0	10 10 10	9	Broken.
October 20, 8 A.M.	Barracks on Lake Temis- quata, as yesterday.	A. No. 1 411	29·414 29·444 747·2	64½ 63½ 18	63	Wind west-south- west.
12	Opposite thirty-three mile post, on portage.	A. No. 1 411	28·828 28·854 732·3	56½ 57½ 14	56	Wind west.
4 P.M.	Top of Loon Mountain, on portage, within 300 yards of twenty-nine mile post.	A. No. 1 411	28·398 28·414 721·2	50½ 51 10½	50½	
8 A.M.	Same place as yesterday, at Du Loup.	413 414 416	759·2 759·5 759·1	13 13½ 13½	12 12 12	
4 P.M.	Same place.....	413 414 416	760·9 760·9 760·9	10½ 10½ 10½	10 10 10	
October 21, 8 A.M.	100 yards north of twenty mile post, on portage one and half feet above water.	A. No. 1 411	28·978 28·990 735·7	40 40 3½	36½	Wind north-west. Of small stream.
12	At the bridge over the St. Francis, level with water.	A. No. 1 411	29·152 29·174 740·4	52½ 54 11	51½	Wind west-north- west.
8 A.M.	High water mark. Rivière du Loup, as yesterday.	413 414 416	764·6 764·5 764·5	7½ 7½ 7½	7 7 7	
12	Same place.....	413 414 416	764·6 764·5 764·3	11½ 11½ 11½	10½ 10½ 10½	
4 P.M.	Same place.....	413 414 416	762·6 762·7 762·5	11½ 11½ 11	10 10 10	

Abstract of Barometric Observations made at Beaver Stream and various Stations on the Metis, to its Mouth in the St. Lawrence, above high tide at Chapel Bar, in the River St. John.

At Beaver Stream	1,012 feet.
Six miles below North Line	954
Nine miles below North Line	902
First Lake Metis	847
Two miles below Lake	820
Second Lake Metis	779
Three miles below Lake	743
Seventeen miles below Lake, at the Portage.	615
Six miles below Portage	455
Fourche to the eastward	325
Seven miles below Fourche	210
One mile above the Falls	137
Mouth of the Metis River	-130

No. 4.

Captain Broughton and Mr. J. D. Featherstonhaugh to the Earl of Aberdeen.

My Lord,

London, February 11, 1842.

WE have the honour to report, for your Lordship's information, that in pursuance of the instructions dated 3rd of May, 1841, received from Viscount Palmerston, we proceeded to make an exploration of the country named in those instructions; the result of which we now submit to your Lordship, accompanied by a general plan of the country and a section of the line passed over, together with a registry of the barometric observations taken along its entire course.

On the 21st of June, we proceeded from Quebec to the extreme western point on Lake Memphramagog, when having ascertained that it was bounded on its western side by a chain of lofty mountains, we passed as near as practicable along the 45° north lat. to its intersection with the Connecticut River. This portion of the country is mountainous and broken, and is deeply indented by streams.

On ascending the Connecticut from the 45° north lat. to its head, we crossed its tributaries on the western side, including Hall's Stream, Indian Stream, and Perry's Stream; these being the three largest which occur, but which are all inferior in volume to the main stream or Connecticut.*

From the head of the Connecticut (which is a small lake) the country becomes extremely mountainous; the general direction of the chain north-easterly, averaging at least 2,500 feet above the tide water in the St. Lawrence at Quebec, and presenting a visible mountainous elevation of about 800 feet above the general level of the country as far as the monument on the Kennebec road.

On arriving at the Kennebec road, we visited the highest summit of the Bald Mountain Ridge, elevated about 3,624 feet above the tide water at Quebec. This is a spur breaking off from the main Ridge about six miles south-west of the monument on the Kennebec road, which, pursuing an easterly direction, divides the branches of the Moose River (a tributary of the Kennebec) from the Penobscot waters.

An extensive view of the country was obtained from this mountain, with which the result of our subsequent explorations fully agreed: confirming the fact, *that the chain of Highlands from the Connecticut River, on reaching the sources of Metjarmette, continues on in a north-easterly direction, crosses the northerly branches of the Penobscot, and then becomes identified with the Keeaquagum mountains, south of the St. John*: whilst the country between the Metjarmette and the Etchemin presents the appearance of an extensive plain, bounded on the north, by a chain of lofty mountains, stretching far to the west, and occupying the line of Highlands which is the continuation of that line claimed by the United States.

From the monument on the Kennebec road to the Metjarmette the Range continues more northerly, and is of a somewhat lower elevation, averaging about 2,200 feet above the tide water in the St. Lawrence at Quebec, and presenting a visible elevation of about 600 feet above the general level of the country.

The chain of mountains continues as stated above, in the same north-easterly direction, broken through in many places by small branches of the Penobscot, until it reaches the southern sources of the St. John, where, dividing them from the Penobscot waters, it becomes identified with the Keeaquagum mountains, as laid down upon Map A accompanying the Report laid before Parliament in 1840.

* No doubt can possibly exist to any one who has travelled this portion of the country, as to neither of the above Tributaries being the main river Connecticut, as has been asserted.

On leaving this continuous chain, at the heads of the Metjarmette, to cross the plain to Lake Etchemin, which lies nearly due north from thence, the country assumes a totally different character, and may be represented in general terms as a flat morass; for the highland features cease altogether, and no chain or ridge is any longer observable to break its flat character. It is true, that an isolated mound here and there occurs, and that, like many other table-lands, it is an elevated flat; Lake Etchemin, which is upon its extreme edge, being about 1,248 feet above high tide in the St. Lawrence at Quebec; but many parts of the plain are lower than Lake Etchemin itself, and for miles around, nothing is to be seen but a country of similar appearance.

This portion of the country was twice explored *on different lines*, and on both occasions we came to the same result, viz: *That this is an extensive plain about twenty-five miles in breadth, intervening and cutting off the Highlands claimed by the United States of America, from any connection with the Range extending from the heads of the Connecticut to the heads of the Metjarmette*, these Highlands being, however, represented on the American map of Mr. Burnham as existing and crossing this plain between these points.

In a north-western direction from Lake Etchemin, and distant about five miles, a lofty Range, which, as has been before stated, is the continuation of the line claimed by the United States, crosses the River Etchemin and the road to Quebec, and continues to the south-westward; whilst the same chain running from Lake Etchemin in a north-easterly direction, divides the waters of the Du Sud from some of the western sources of the St. John, until at length losing, with some abruptness, its lofty character, it gradually ceases altogether before it reaches Black River, and an extensive swamp of spruce trees commences, which extends for about twelve miles, and in which the sources of Black River and the River Ouelle take their rise.

In thus briefly noticing the nature of the country we passed over, it has been our desire not to trespass too long on your Lordship's time; and we beg to refer to the accompanying Map and Section, which we trust will furnish every desired information. It only remains, therefore, to state, that from the circumstance of its having been an unusually dry summer, the streams were very often dried up at their sources, which exposed our party to such privations that our Indians and guides repeatedly deserted us; this occasioned so much delay, that on arriving at the River Ouelle, the season was too far advanced to permit us to proceed any further; we, therefore, returned to Quebec to make the necessary arrangements for returning to England.

We have, &c.,

(Signed)

W. E. DELVES BROUGHTON,

Royal Engineers.

(Signed)

J. D. FEATHERSTONHAUGH.

Explanation accompanying the Barometric Registers.

A prefatory notice of the mode of conducting the annexed barometrical observations, and of the construction of the barometers used in them, is deemed advisable.

The barometers which were selected for the summer's operations, were sixteen in number, thirteen of them made by M. Bunten, Paris, of the syphon construction—the zero being in the middle, and reading with verniers from it, both up and down, the sum of these readings being the height of the mercurial column in millimètres, tenths and (by estimation) hundredths.

The other barometers were graduated in English inches and tenths, reading with a vernier to two thousandths of an inch. One of Troughton and Simms's construction (A), with a guage or zero point, to which the surface of the mercury in the cistern is to be carefully adjusted by a screw beneath, before an observation can be made. And two made by Newman (No. 1 and 2) without a guage point, for which a correction by computation is necessary, as also for capillarity.

After several comparisons of all the instruments, it was deemed advisable to take with us only a certain number of the syphon barometers, and to leave the rest in the observatories at Quebec and Lake Etchemin. Therefore, three of the syphon barometers were selected to be sent to Lake Etchemin, four to Quebec, and the remainder, six in number, were reserved to accompany the expedition through the woods. The large mountain barometer of Troughton and Simms, with one of Newman's were also left at Quebec, whilst the other of Newman's was sent to Lake Etchemin; but both of these last barometers had sustained so much injury during the previous year, that no dependence could be placed upon their indications.

The syphon barometers were divided into sets in such a manner that the means of each set should harmonize as much as possible, and thus avoid the necessity of making any correction for individual error. Whenever opportunity offered, these sets were again compared with each other, and, if required, such alterations were made as to correct any difference in the means of each set.

It was found that such a discrepancy occasionally existed between the barometer (A) of Troughton and the syphons, which could not be charged to the latter, on account of individual agreement, that it was also thought most advisable to reject its registry as being very often erroneous, probably on account of the great precision and nicety required in adjusting the zero, and possibly owing to some damage it might have received during the two previous years.

The registry, therefore, is given in millimètres and tenths, and the temperatures in degrees both of Fahrenheit and centigrade thermometers.



Comparison of Barometers at Quebec, May 23rd, 1841.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.	
59	15 $\frac{3}{4}$	411	762·65	762·67	3,049·86 ÷ 4 = 762·46.
	15 $\frac{3}{4}$	413	762·50	762·52	
	15 $\frac{3}{4}$	414	762·65	762·67	
	16	416	762·00	762·00	
	15 $\frac{1}{2}$	377	763·00	763·05	2,288·30 ÷ 3 = 762·77.
	15 $\frac{3}{4}$	418	762·40	762·45	
	16	429	762·80	762·80	
	15 $\frac{3}{4}$	456	761·90	761·92	4,576·54 ÷ 6 = 762·75.
	16 $\frac{3}{4}$	457	763·00	762·92	
	15 $\frac{3}{4}$	458	763·00	763·02	
	15 $\frac{3}{4}$	459	762·65	762·68	
	16	460	763·10	763·10	
16	461	762·90	762·90		

Comparison of Barometers at Quebec, May 25th, 1841.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.	
59	16	411	756·20	756·20	3,024·68 ÷ 4 = 756·17.
	16 $\frac{1}{4}$	413	756·30	756·28	
	16	414	756·20	756·20	
	16	416	756·00	756·00	
	15 $\frac{3}{4}$	377	756·30	756·32	2,268·34 ÷ 3 = 756·11.
	16 $\frac{1}{2}$	418	756·00	755·95	
	16 $\frac{3}{4}$	429	756·10	756·07	
	16 $\frac{1}{2}$	456	755·30	755·25	4,536·25 ÷ 6 = 756·04.
	16 $\frac{1}{2}$	457	756·30	756·25	
	16 $\frac{1}{2}$	458	756·30	756·25	
	16 $\frac{3}{4}$	459	755·90	755·82	
	16 $\frac{1}{4}$	460	756·40	756·38	
16	461	756·30	756·30		

Comparison of Barometers at Quebec, May 27th, 1841.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.	
61	18 $\frac{3}{4}$	411	758·8	758·72	3,035·91 ÷ 4 = 758·98.
	18 $\frac{3}{4}$	413	758·6	758·52	
	18 $\frac{3}{4}$	414	759·5	759·42	
	18 $\frac{1}{2}$	416	759·3	759·25	
	18 $\frac{3}{4}$	377	758·9	758·82	2,276·25 ÷ 3 = 758·75.
	18 $\frac{1}{2}$	418	758·9	758·85	
	18 $\frac{1}{4}$	429	758·6	758·58	
	18 $\frac{1}{2}$	456	758·5	758·45	4,555·30 ÷ 6 = 759·21.
	18 $\frac{1}{2}$	457	759·8	759·75	
	18 $\frac{1}{2}$	458	759·9	759·85	
	18	459	758·9	758·90	
	18	460	759·3	759·30	
18 $\frac{1}{2}$	461	759·1	759·05		

Record of Barometric Observations made at the Fixed Observatories, and at the Principal Stations along the lines of Survey.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.		
				F.	C.	F.	C.			
1841 June 3. 8 A.M.	Queen's Wharf	411	759·4	52	11	50½		Wind north-west; cloudy.		
		413								
		414								
		416								
	St. Anselme	456	745·6	47	8	45				
		457								
458										
12	Queen's Wharf	411	759·4	60	15½	59½				
		413								
		414								
		416								
	Frampton Hill	456	730·2	56	13	51				
		457								
451										
½ P.M.	Queen's Wharf	411	758·9	62	16½	61				
		413								
		414								
		416								
	Bridge on L'eau Chaude.	456	734·9	62	16½	58				
		457								
458										
June 5, 8 A.M.	Lake Etchemin, five feet above water..	377	722·5	53	11½	53		Wind north-west; cloudy.		
		418								
		429.								
	Ridge five miles south of Lake Etchemin.	456	718·9	52	11¼	50	10		Wind north-west.	
		457								
		458								
June 9, 8 A.M.	Custom-house, 25 feet above high tide in the St. Lawrence.	411	759·6	65	18½	63½		Wind east; rain.		
		413								
		414								
		416								
		456								
	Lake Etchemin	377	726·9	62	16¾	62½				
		418								
		429								
	½ P.M.	Custom-house	411	759·0	67	19¼	65¾			Wind south, gentle.
			413							
			414							
			416							
456										
Lake Etchemin		377	726·6	68	20¼	68½		Wind south-west.		
	418									
	428									

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 June 10, 8 A.M.	Custom-house	411	759·8	69	20 $\frac{3}{4}$	65 $\frac{1}{2}$		Wind west.
		413						
		414						
		416 456						
Lake Etchemin	377	727·4	76	24 $\frac{1}{2}$	75 $\frac{1}{2}$		Wind west.	
	418							
	429							
4 P.M.	Custom-house	411	756·1	74	23 $\frac{1}{2}$	75 $\frac{3}{4}$		Wind west.
		413						
		414						
		416 456						
Lake Etchemin	377	724·5	71	21 $\frac{1}{2}$	72 $\frac{1}{2}$		Wind west.	
	418							
	429							
June 12, 8 A.M.	Custom-house	411	757·9	71	21 $\frac{3}{4}$	67		Wind north-east.
		413						
		414						
		416						
Lake Etchemin	377	724·0	65	18	59		Wind north-west.	
	418							
	429							
4 P.M.	Custom-house	411	757·5	70	21	71 $\frac{1}{2}$		Wind north-east.
		413						
		414						
		416						
Lake Etchemin	377	724·9	67	19 $\frac{1}{4}$	65		Wind north-west.	
	418							
	429							
June 16, 8 A.M.	Custom-house	411	759·9	68	20	65		Wind north-west.
		413						
		414						
		416						
Lake Etchemin	377	725·8	52	11	52 $\frac{3}{4}$		Wind north.	
	418							
	429							
12	Custom-house	411	760·2	69	20 $\frac{1}{2}$	72		Wind west, cloudy.
		413						
		414						
		416						
Lake Etchemin	377	727·1	61	16 $\frac{1}{4}$	60		Wind north.	
	418							
	429							
June 17, 8 A.M.	Custom-house	411	765·1	59	15 $\frac{1}{4}$	58 $\frac{1}{2}$		Wind south-east, fair.
		413						
		414						
		416						
Lake Etchemin	377	731·6	54	12 $\frac{1}{4}$	55		Wind north-west.	
	418							
	429							

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 June 18, 8 A.M.	Custom-house.....	411 413 414 416	767·5	69	20½	65½		Wind east, fair.
	Lake Etchemin	377 418 429	734·3	59	15½	60½		Wind east.
June 19, 8 A.M.	Custom-house.....	411 413 414 416	766·2	60	15½	58½		Wind north-east, rainy.
	Lake Etchemin	377 418 429	732·8	53	11½	53½		Wind east, rain.
June 20, 2 P.M.	Custom-house.....	411 413 414 416	765·2	63	17	62		Wind east, clear.
	Lake Etchemin.....	377 418 429	731·6	56	13	56		Wind westerly.
June 21, 8 A.M.	Custom-house.....	411 413 414 416	768·0	68	20	65		Wind east, clear.
	Lake Etchemin.....	377 418 429	734·8	56	13	57		Wind south.
4 P.M.	Custom-house.....	411 413 414 416	766·8	72	22	74		Wind north-north- east.
	Lake Etchemin	377 418 429	734·1	71	21½	71½		Wind south-east.
June 22, 8 A.M.	Custom-house.....	411 413 414 416	764·8	72	22½	69		Wind north-east, clear.
	Lake Etchemin	377 418 429	731·8	61	16½	63		Wind west, clear.
12	Port St. Francis....	456 457 458 459 460 461	764·2	68	20	67	19·5	Wind west, clear. Wind west.
	Custom-house.....	411 413 414 416	763·4	72½	22½	71½		Wind, north-east.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 June 22, 12	Lake Etchemin....	377 418 429	731·0	72	22	73		Wind west.
	Baie Le Févre.....	456 457 458 459 460 461	763·7	74	23½	74	23½	Wind west.
2 P.M.	Custom-house.....	411 413 414 416	762·6	75	24	80½		Wind north-north-west.
	Lake Etchemin....	377 418 429	730·6	77½	25½	79		Wind west.
	St. Zephyra	456 457 458 459 460 461	760·0	78	25½	76	24½	
4 P.M.	Custom-house	411 413 414 416	762·0	77	25	79½		Wind west.
	Lake Etchemin....	377 418 429	730·5	83	28½	83		Wind west.
	Wendover	456 457 458 459 460 461	756·6	78	25½	77	25	Wind west.
June 23, 8 A.M.	Custom-house	411 413 414 416	759·6	70	21	68½		Wind north-east; raining.
	Lake Etchemin....	377 418 429	727·9	66	19	67		Wind south.
	Wickham	456 457 458 459 460 461	750·0	71	21½	70	21	
10 A.M.	Custom-house	411 413 414 416	759·6	70½	21½	68½		Wind north-east; cloudy.
	Lake Etchemin....	377 418 429	727·9	68	20	68½		Wind south-west.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 June 23, 10 A.M. 2 P.M.	Durham	456	744.5	75	24	74	23½	Wind south-west.
		457						
		458						
		459						
		460						
	Custom-house	411	759.4	74½	23¾	75¾		Wind east; cloudy.
		413						
		414						
		416						
	Lake Etchemin....	377	727.8	74	23¾	74½		Wind south-west.
		418						
		429						
Melbourne.....	456	750.3	78	25½	73½	23	Wind south-west.	
	457							
	458							
	459							
	460							
June 24, 2 P.M.	Custom-house	411	765.7	62	16¾	62¾		Wind north-east.
		413						
		414						
		416						
	Lake Etchemin....	377	732.0	64	17¾	64		Wind north-east.
		418						
		429						
	Sherbrooke, 20 feet above the river St. Francis.	456	752.3	69	20½	67	19½	
		457						
		458						
		459						
		460						
June 25, 12	Custom-house	411	765.1	59	15	58½		Wind north-east.
		413						
		414						
		416						
	Lake Etchemin....	377	731.9	59½	15¾	60		Wind north-east.
		418						
		429						
	Sherbrooke, same place.	456	752.2	71	22	72	22¾	
		457						
		458						
		459						
		460						
4 P.M.	Custom-house	411	764.4	60	15¾	59¾		Wind north-east; raining.
		413						
		414						
		416						
	Lake Etchemin....	377	731.2	61	16	62		Wind north-east.
		418						
		429						

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.	
				F.	C.	P.	C.		
1841 June 25, 4 P.M.	Sherbrooke, same place.	456 457 458 459 460 461	751.8	73½	23	72½	22½	Wind north, fair.	
June 26, 4 P.M.	Custom-house.	411	760.2	61½	16½	60½		Wind north-east, raining.	
		413							
		414							
		416							
	Lake Etchemin.	377	727.6	65½	18½	66½		Wind south-east, raining.	
		418							
		429							
	Compton.	456	739.6	73½	23	72½		22	Wind south, rain- ing.
		457							
458									
459									
460									
June 27, 4 P.M.	Custom-house.	411	760.1	73½	23	75½	Wind south-west.		
		413							
		414							
		416							
	Lake Etchemin	377	728.6	75	24	76	Wind north-west.		
		418							
		429							
	Stanstead.	456	733.7	75½	24½	78	25½		
		457							
		458							
		459							
		460							
June 28, 8 A.M.	Custom-house.	411	758.8	65¼	18½	64½	Wind east, rain.		
		413							
		414							
		416							
	Lake Etchemin.	377	726.0	64	17¾	64	Wind north-west, rain.		
		418							
		429							
	Stanstead, same place	456	730.7	69	20½	67	19½	Wind south-west.	
		457							
		458							
		459							
		460							
	4 P.M.	Custom-house.	411	757.4	66	19	68½	Wind north-east.	
			413						
			414						
			416						
		Lake Etchemin	377	724.7	68½	20¾	66½	Wind north-east.	
			418						
429									

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 June 28, 4 P.M.	Stanstead, same place	456 457 458 459 460 461	731.2	67½	19¾	66	19	Threatening rain.
June 29, 8 A.M.	Custom-house.....	411 413 414 416	757.5	70½	21½	69½		Wind south-west.
	Lake Etchemin.....	377 418 429	725.8	67	19½	67		Wind north-west.
	Stanstead, same place	456 457 458 459 460 461	733.1	67½	19¾	67	19½	Wind south-west, fine.
2 P.M.	Stanstead, same place	459 460 461	732.2	78	25¾	78	25¾	Wind south-west.
	Lake Memphramagog.	456 457 458	742.0	79¾	26½	79¼	26¼	Wind south-west.
4 P.M.	Custom-house.....	411 413 414 416	756.2	71¾	22	71½		Wind south-west, rain.
	Lake Etchemin.....	377 418 429	724.3	72	22¾	72		Wind west, rain.
June 30, 8 A.M.	Custom-house.....	411 413 414 416	756.3	73½	23	71½		Wind south-east.
	Lake Etchemin.....	377 418 429	724.3	65	18¾	65		Wind north-west.
	Stanstead.....	456 457 458 459 460 461	732.0	71¾	22	70	21	Wind north-west. Heavy rain all night.
4 P.M.	Custom-house.....	411 413 414 416	753.7	76	24½	74½		Wind south-west.
	Lake Etchemin.....	377 418 429	722.6	71¾	22	72		Wind west.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.	
				F.	C.	F.	C.		
1841, July 1, 8 A.M.	Custom-house.....	411	754.6	73½	23	71½		Wind south-west.	
		413							
		414							
		416							
	Lake Etchemin	377	722.1	65	18¼	63¾		Wind west.	
		418							
		439							
	Fourche R. Coaticook.	456	728.7	69	20½	68	20		
		457							
		458							
		459							
		460							
2 P.M.	Custom-house.....	411	754.7	73½	23	74¼		Wind west.	
		413							
		414							
		416							
	Lake Etchemin	377	722.4	69	20½	69¾		Wind west.	
		418							
		429							
	Settlement in Bassford.	456	729.9	74¾	23¾	75	24	Tube broken.	
		457							
		458							
		459							
		460							
July 3, 2 P.M.	Custom-house.....	411	760.5	67½	19¾	66½		Wind north-north-west; change.	
		413							
		414							
		416							
	Lake Etchemin	377	727.1	59½	15¼	60		Wind west.	
		418							
		429							
	Junction of Leech Stream with Connecticut River, 10 feet above water.	456	735.5	61¾	16½	61	16	Wind west.	
		457							
		458							
		459							
		461							
4 P.M.	Custom-house.....	411	760.2	69	20½	67½		Wind north-west.	
		413							
		414							
		416							
	Junction of Leech Stream with Connecticut River, 10 feet above water.	456	735.4	62½	17	61¾	16½	Wind west.	
		456							
		458							
		459							
		461							
	July 4, 8 A.M.	Custom-house.....	411	761.4	65½	18¾	66		Wind south-east; clear.
			413						
			414						
416									
Lake Etchemin		377	727.7	53¾	12	54½		Wind north-west.	
		418							
		429							

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 July 4, 8 A.M.	Same place, Leech stream.	456 457 458 459 461	736·2	56 $\frac{3}{4}$	13 $\frac{3}{4}$	53	11 $\frac{1}{2}$	
July 6, 8 A.M.	Custom-house.....	411 413 414 416	756·1	65	18 $\frac{1}{4}$	65 $\frac{1}{2}$		Wind north-east.
	Lake Etchemin....	377 418 429	723·5	59	15	61		Wind south-west.
	Second or Middle Lake of Connecticut River, 5 feet above water.	456 457 458 459 461	709·8	61 $\frac{3}{4}$	16 $\frac{1}{2}$	60	15 $\frac{1}{2}$	Wind south-west.
July 7, 8 A.M.	Custom-house.....	411 413 414 416	757·4	73 $\frac{1}{2}$	23	72		Wind south-west.
	Lake Etchemin....	377 418 429	724·4	59	15	60		Wind west.
	Connecticut River, between first and second lakes.	456 457 458 459 461	708·1	59	15	56 $\frac{3}{4}$	13 $\frac{3}{4}$	
July 8, 8 A.M.	Custom-house.....	411 413 414 416	759·7	73 $\frac{1}{2}$	23	73		Wind south-west.
	Lake Etchemin....	377 418 429	726·3	57	14	59 $\frac{1}{2}$		Wind north-west.
	First Lake Connecticut.		703·8	56 $\frac{1}{4}$	13	57	14	
12	Custom-house.....	411 413 414 416	759·0	73 $\frac{1}{2}$	23	72 $\frac{3}{4}$		Wind north-west.
	Lake Etchemin....	377 418 429	726·5	66	19	66 $\frac{1}{2}$		Wind west.
	Top of ridge dividing the Connecticut and Margalloway.	456 457 458 459 461	684·8	63	17 $\frac{1}{4}$	61 $\frac{3}{4}$	16 $\frac{1}{2}$	
4 P.M.	Lake Etchemin....	377 418 429	726·5	68	20	68 $\frac{1}{2}$		Wind west.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.	
				F.	C.	F.	C.		
1841 July 8, 4 P.M.	Ridge dividing the Connecticut and St. Francis waters.	456	693·0	64½	18	69	16½	Wind west.	
		457							
		458							
		459							
July 9, 8 A.M.	Custom-house.	411	759·1	66	19	66½		Wind west, fine.	
		413							
		414							
		416							
	Lake Etchemin.	377	727·7	57½	14½	57½		Wind west.	
		418							
		429							
	Swamp sources of St. Francis, north of 1st lake Connecti- cut.	456	714·5	59	15	55½	13		
		458							
		457							
		459							
	4 P.M.	Custom-house.	411	758·0	65½	18½	66½		Wind south, rain- ing.
413									
414									
415									
Lake Etchemin.		377	726·7	57	14	58½		Wind south-west, raining.	
		418							
		429							
The same swamp . . .		456	717·9	64½	18	61½	16½		
		457							
		458							
		459							
July 10, 12		Custom-house.	411	752·9	65½	18½	66		Wind south-west, cloudy.
	413								
	414								
	416								
	Lake Etchemin.	377	719·8	55½	13	56		Wind south-west, raining.	
		418							
		429							
	Top Ben D'Urbin ..	456	686·6	51½	10½	51	10½		Wind south-west, raining.
		457							
		458							
		459							
	2 P.M.	Custom-house.	411	753·2	67	19½	67		Wind west, rain-
413									
414									
416									
Lake Etchemin.		377	720·5	57½	14½	58		Wind south-west, rain.	
		418							
		429							
Ben D'Urbin same place as noon		456	687·6	52	11	52	11		Wind south-west, rain.
		457							
		458							
		459							
461									

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 July 11, 10 A.M.	Custom-house.....	411	757·2	64	17 $\frac{3}{4}$	64		Wind north-west, clearing.
		413						
		414						
		416						
	Lake Etchemin.....	377	723·9	53	11 $\frac{1}{2}$	53 $\frac{3}{4}$		Wind north-west.
		418						
		429						
	Top of ridge.....	456	689·2	48	9	48	9	Wind north-west, fair.
		457						
458								
459								
461								
2 P.M.	Lake Etchemin.....	377	724·1	58 $\frac{3}{4}$	14 $\frac{3}{4}$	58 $\frac{3}{4}$		Wind west,
		418						
		429						
	In a swamp.....	456	698·4	56 $\frac{1}{2}$	13 $\frac{1}{2}$	55 $\frac{3}{4}$	13	Wind west, fair.
		457						
		458						
		459						
		461						
	4 P.M.	Lake Etchemin.....	377	724·0	61	16	61 $\frac{1}{4}$		Wind west, fair.
418								
429								
Top of ridge.....		456	685·4	54 $\frac{1}{2}$	12 $\frac{1}{2}$	53 $\frac{3}{4}$	12	Fair.
		457						
		458						
		459						
		461						
July 12, 8 A.M.		Custom-house.....	411	757·6	70 $\frac{3}{4}$	21 $\frac{1}{2}$	68		Wind west, clear.
	413							
	414							
	416							
	Lake Etchemin.....	377	724·0	54	12 $\frac{3}{4}$	54 $\frac{1}{2}$		Wind west.
		418						
		429						
	Gipp's peak, estima- ted 300 feet below the top.	456	684·5	50	8	46	7 $\frac{3}{4}$	Wind north-west, clear.
		457						
		458						
		459						
		461						
10 A.M.	Lake Etchemin.....	377	724·0	58	14 $\frac{1}{2}$	58 $\frac{1}{4}$		Wind west.
		418						
		429						
	Small river foot of Gipp's peak.	456	706·7	55 $\frac{1}{2}$	13	55 $\frac{1}{2}$	13	
		457						
		458						
		459						
		461						
	12	Lake Etchemin.....	377	724·2	60	15 $\frac{3}{4}$	60		Wind north-west, fair.
413								
429								
Top of ridge.....		456	694·7	58	14 $\frac{1}{4}$	60	15 $\frac{1}{2}$	Wind north-west.
		457						
		458						
		459						
		461						

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.	
				F.	C.	F.	C.		
1841 July 12, 4 P.M.	Custom-house.....	411	757.0	70½	21½	70		Wind north-west, lowering.	
		413							
		414							
		416							
	Lake Etchemin....	377	724.2	62¾	17	63		Wind north-west.	
		418							
		429							
	Arnold's River....	456	706.7	59	15	58	14½		
		457							
		458							
		459							
		461							
July 13, 10 A.M.	Custom-house.....	411	758.2	73	22¾	72		Wind south-west, clear.	
		413							
		414							
		416							
	Lake Etchemin....	377	725.1	64¾	18	66½		Wind west.	
		418							
		429							
	Top of Mount Gos- ford.	456	665.2	61	16	61½	16½		
		457							
		458							
		459							
		461							
12	Lake Etchemin....	377	725.7	70	21	69¾		Wind west.	
		418							
		429							
	Top or ridge.....	456	694.2	65	18½	65	18½		
		457							
		458							
		459							
		461							
	5 P.M.	Lake Etchemin....	377	726.5	74½	23¾	76	24½	Wind west.
			418						
			429						
		Summit of mountain, six miles south of Lake Macanamac.	456	691.7	67	19½	68	20	
457									
458									
459									
461									
July 14, 8 A.M.		Custom-house.....	411	759.9	75¾	24¼	73		Wind south-west, clear.
			413						
			414						
			416						
	Lake Etchemin....	377	727.2	62	16¾	64		Wind west.	
		418							
		429							
	Camp.....	456	704.7	61	16	61	16	Wind south-west, clear.	
		457							
		458							
		459							
		461							

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.						
				F.	C.	F.	C.							
1841 July 14, 10 A.M.	Lake Etchemin	377 418 429	727·6	70½	21½	71½		Wind south-west.						
	Ridge	456 457 458 459 461							707·8	70½	21½	70½	21½	
12	Lake Etchemin	377 418 429	727·8	74½	23¾	75		Wind south-west.						
	Two miles north-east of last station.	456 457 458 459 561							724·9	71	21½	70	21	Wind south-west.
2 P.M.	Lake Etchemin	377 418 429	727·4	73½	23	74		Wind south-west.						
2½ P.M.	Ridge	456 457 458 459 461							719·4	70½	21½	71½	22	
3 P.M.	Lake Etchemin	377 418 429	727·1	73½	23	73½		Wind south-west, rain.						
	Highest point of peak.	457							713·4	71½	22	71¾	22	
4 P.M.	Lake Etchemin	377 418 429	726·8	73½	23	73½		Wind south-west, rain.						
	Bottom of hill	456 457 458 459 461							720·9	68½	20¼	70	21	
July 15, 8 A.M.	Custom-house	411 413 414 416	754·8	76	24½	74		Wind west ; showery.						
	Lake Etchemin	377 418 429							723·3	68	20	68¾		Wind south-west.
	On ridge	456 457 458 459 461													694·9	66¾	19¾	68	20
10 A.M.	Custom-house	411 413 414 416	754·9	74¾	23½	74								

Record of Barometric Observations.—*Continued.*

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.						
				F.	C.	F.	C.							
1841 July 15, 10 A.M.	Lake Etchemin	411 413 414 416	723·9	70½	21½	71		Wind south-west.						
	In swamp	456 457 458 459 461							723·7	71½	22	70¾	21½	Wind west; showery.
July 16, 4 P.M.	Custom-house	411 413 414 416	762·1	75	23¾	74		Wind south-west; clear.						
	Lake Etchemin	377 418 429							729·4	70½	21½	71½		Wind north-west.
	Lake Macanamac . . .	456 457 458 459 461													728·0	71	21¾	70½	21½	Wind south-west; fine.
July 17, 8 A.M.	Custom-house	411 413 414 416	765·8	70½	21½	71		Wind north-west; fine.						
	Lake Etchemin	377 418 429							730·7	55½	13	56		Wind south-west.
	Top of mountain ..	456 457 458 459 461													696·3	56¾	13¾	56¾
10 A.M.	Lake Etchemin	377 418 429	731·5	64	18	66		Wind south-west.						
	Summit of ridge	456 457 458 459 461							690·8	61	16	61¾	16½	
12	Lake Etchemin	377 418 429	731·7	68½	20¼	69½		Wind south-west; fine.						
	Foot of ridge	456 457 458 459 461							714·6	68	20	67¾	19¾	
2½ P.M.	Lake Etchemin	377 418 429	731·7	71	21¼	73		Wind south-west.						

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 July 17. 2½ P.M.	Summit of ridge ..	456 457 458 459 461	696·0	69	20½	70	21	
	4 P.M. Lake Etchemin ..	377 418 429	731·7	75	24	77		Wind south-west.
	Small rivulet	456 457 458 459 461	716·8	67¾	19¾	67¾	19¾	
4½ P.M.	Lake Etchemin ..	—	731·7	75	24	77		Wind south-west.
	Highest point of hill	—	711·6	67	19½	67¾	19¾	
July 18, 10 A.M.	Custom-house.. ..	411 413 414 416	764·9	73	22¾	72¾		Wind south-east; clear.
	Lake Etchemin ..	377 418 429	732·4	70	21	71		Wind south-east.
	Top of ridge	456 457 458 459 461	705·8	70	21	69	20½	Wind north-west; fine.
12	Lake Etchemin ..	377 418 429	732·3	76½	24¾	73		Wind south-east.
	Small stream	456 457 458 459 461	715·0	75¼	24	74¾	23¾	Wind south.
2 P.M.	Lake Etchemin ..	377 418 429	732·1	74½	23½	75¾		Wind south-east.
	On ridge.. ..	456 457 458 459 461	715·1	77	25	76½	24¾	
4 P.M.	Custom-house.. ..	411 413 414 416	764·0	77½	25¾	75½		Wind north-west; clear.
	Lake Etchemin ..	377 418 429	731·9	79	26	80		Wind south-east; clear.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 July 18, 4 P.M.	Top of ridge	456	709·9	72½	22½	73	22½	
		457						
		458						
		459						
		461						
July 19, 8 A.M.	Custom-house ..	411	763·6	74½	23½	72½		Wind south-west.
		413						
		414						
		416						
	Lake Etchemin ..	377	730·9	61	16	61½		Wind south-east.
		418						
		429						
	Small Lake, Kennebec Source	456	722·8	62¾	17	62¾	17	
		457						
		458						
		459						
			461					
10 A.M.	Lake Etchemin ..	377	731·3	66	19	66		Wind south-east.
		418						
		429						
	Top of ridge	456	713·2	68	20	69	20½	
457								
458								
459								
		461						
12	Lake Etchemin ..	377	731·6	70	21	70		Wind north-west.
		418						
		429						
	Cedar Swamp	456	717·1	70½	21½	70½	21½	Wind north-west; fair.
457								
458								
459								
		461						
2 P.M.	Lake Etchemin ..	377	731·7	70½	21½	72		Wind north-west.
		418						
		429						
	On small brook flowing into Chaudière.	456	722·6	69	20½	69	20½	Wind north-west.
457								
458								
459								
		461						
4 P.M.	Custom-house ..	411	764·1	75¾	24¼	74		Wind north-west.
		413						
		414						
		416						
	Lake Etchemin ..	377	732·3	74½	23½	75		Wind north-west.
		418						
		429						
	Top of ridge	456	705·4	69	20½	68	20	
		457						
		458						
		459						
			461					
5½ P.M.	Lake Etchemin ..	—	732·5	74½	23½	76		
	Top of ridge	—	697·5	69	20½	69	20½	

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 July 20. 10 A.M.	Custom-house ..	411	770.4	74½	23¾	74½		Wind south-west; fine. Wind west.
		413						
		414						
	Lake Etchemin ..	377	737.3	69	20½	71		
		418						
		429						
	Source Du Loup ..	456	719.7	70	21	69	20½	
		457						
		458						
459								
461								
12	Lake Etchemin ..	377	737.7	74½	23½	76		Wind west.
		418						
		429						
	Source Du Loup ..	456	723.9	74¼	23½	74½	23½	
		457						
		458						
461								
2 P.M.	Lake Etchemin ..	377	737.5	75¾	24¼	77		Wind west. Wind west.
		418						
		429						
	Top of ridge	456	707.9	73	22¾	71	21¾	
		457						
		458						
461								
4 P.M.	Lake Etchemin ..	377	737.3	75	24	76		Wind west.
		418						
		429						
	Foot of ridge	456	716.8	72	22¼	71¾	22	
		457						
459								
July 21, 10 A.M.	Custom-house ..	411	769.0	74	23¼	74		Wind south-south- west; cloudy. Wind west.
		413						
		414						
		416						
	Lake Etchemin ..	377	736.7	69¼	20¾	69¾		
		418						
		429						
	Top of ridge	456	707.5	75	24	72½	22½	
		457						
		458						
		459						
	12	Lake Etchemin ..	377	736.3	74¼	23½	76			Wind west.
418								
429								
Small brook		456	724.1	79½	26½	79½	26½	
		457						
		459						

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 July 21, 2 P.M.	Lake Etchemin ..	377 418 429	735.5	79	26	79½		Wind west.
	Lake Emilie, du Loup water.	456 457 458 459	726.4	79	26	79½	26½	
	Lake Etchemin ..	377 418 429	734.0	77	25	77	25	
	Sandy Hill	456 457 458 459	687.4	70½	21½	70½	21½	
July 22, 8 A.M.	Custom-house.. ..	411 413 414 416	762.2	76½	24½	76		Wind south-west.
	Lake Etchemin ..	377 418 429	731.0	68	20	68½		Wind west.
	Sandy Hill stream ..	456 457 458 459	721.3	73½	23	71½	22	Wind west; fine.
	Lake Etchemin ..	377 418 429	730.6	76	24½	76½		
10 A.M.	Sandy Bay settlement, Hilton's.	456 457 458 459	721.4	82	27½	81	27½	
	Lake Etchemin ..	377 418 429	728.5	72½	22½	73		Wind west; rain.
2 P.M.	Monument on Kennebec road.	456 457 458 459	709.4	73½	23	73½	23	
July 23, 8 A.M.	Custom-house.. ..	411 413 414 416	764.8	77	25	75½		Wind south-east.
	Lake Etchemin ..	377 418 429	730.5	61½	16½	64		Wind west; cloudy.
	Monument on Kennebec road.	456 457 458 459	712.1	69	20½	70	21	
	Custom-house.. ..	411 413 414 416	764.7	77½	25½	76½		

Record of Barometric Observations.—*Continued.*

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.	
				F.	C.	F.	C.		
1841 July 23. 10 A.M.	Lake Etchemin ..	377	732.3	69	20½	70		Wind west.	
		418							
		429							
	Monument	456	712.5	70¼	21¼	70	21		
457									
458									
459									
4 P.M.	Lake Etchemin ..	377	732.0	77¼	25¼	78½			
		418							
		428							
	Intersection of Ken- nebec road and Metjarmette.	456	743.4	85	29½	85	29½		
457									
458									
459									
July 24, 8 A.M.	Custom-house.. ..	411	764.6	72	22¼	71½		Wind north-east.	
		413							
		414							
		416							
	Lake Etchemin ..	377	731.9	63	17¼	64			Wind south-east.
		418							
429									
Bridge at St. Henri, 15 feet above water	456	758.9	73½	23	72¼	22½			
	457								
	458								
	459								
July 26, 2 P.M.	Custom-house.. ..	411	761.4	75	24	74½			
		413							
		414							
		416							
	Lake Etchemin ..	377	728.2	66¾	19¼	67½		Wind north ; cloudy.	
		418							
429									
July 31, 12	Custom-house.. ..	411	762.6	70¾	21½	69			
		413							
		414							
		416							
	Lake Etchemin ..	377	730.2	67¼	19½	68		Wind east.	
		418							
429									
Aug. 1, 2 P.M.	Custom-house.. ..	411	763.1	70	21	69		Wind south-west.	
		413							
		414							
		416							
	Lake Etchemin ..	377	731.2	68½	20½	69½			Wind west.
		418							
429									
Aug. 2, 12	Custom-house.. ..	41¼	765.9	74	23¼	72		Wind south-west.	
		413							
		414							
		416							

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 2, 12	Lake Etchemin ..	377 418 429	734.4	75	24	76		Wind south-west.
Aug. 3, 12	Custom-house. . .	411 413 414 416	766.3	79	26	77		Wind west.
	Lake Etchemin ..	377 418 429	734.8	75	24	76		Wind west.
Aug. 4, 4 P.M.	Custom-house ..	411 413 414 416	761.2	78	25½	77		Wind south-west.
	Lake Etchemin ..	377 418 429	730.1	72½	22½	73		Wind west.
Aug. 5, 4 P.M.	Custom-house ..	411 413 414 416	761.4	73½	23	73		Wind west.
	Lake Etchemin ..	377 418 429	729.6	70	21½	70		Wind west.
Aug. 6, 12	Custom-house ..	411 413 414 416	762.6	71¾	22	71½		Wind north-west.
	Lake Etchemin ..	377 418 429	730.1	67¾	19½	68		Wind east.
Aug. 7, 4 P.M.	Custom-house ..	411 413 414 416	762.3	78	25½	76½	24½	Wind south-west.
	Lake Etchemin ..	377 418 429	730.5	74½	23½	77		Wind south-east.
	St. Joseph's ..	456 457 458 459	751.0	77	25	77½		
Aug. 8, 4 P.M.	Custom-house ..	411 413 414 416	763.2	79	26½	78	25½	Wind south-west.
	Lake Etchemin ..	377 418 429	731.5	77	25	78		Wind south.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 10, 10 A.M.	Custom-house ..	411	765·0	71½	22	70½	21½	Wind south-west.
		413						
		414						
	Lake Etchemin ..	377	732·0	59	15	59		Wind west; cloudy.
		418						
		429						
	Monument on Ken- nebec Road. same as July 22, 2 P.M.	456	712·3	59	15	58		Wind north-west.
		457						
		458						
459								
				tube broken.				
12	Lake Etchemin ..	377	732·2	63	17½	63½		Wind west.
		418						
		429						
Monument	456	712·0	63½	17½	64½		Wind south-west.	
	457							
	458							
4 P.M.	Lake Etchemin ..	377	732·3	67	19¾	68½		Wind west.
		418						
		429						
Monument	456	712·1	69	20½	65½			
	457							
	459							
Aug. 11, 12	Custom-house ..	411	766·3	65	18½	64	18	Wind north-east.
		413						
		414						
		416						
	Lake Etchemin ..	377	733·2	65	18¾	65¾		Wind south-east; cloudy.
		418						
		429						
	Monument	—	712·8	74¾	23¾	74		Wind south-east.
4 P.M.	Lake Etchemin ..	377	732·7	68	20	68¾		
		418						
		429						
Monument	—	712·0	69	20½	70			
5 P.M.	Monument	—	711·3	63¾	19¾	67½		
	Meadow at foot of Bald Mountain, south side.	456	721·0	68	20	66½		
		457						
		458						
462								
Aug. 12, 12	Custom-house ..	411	761·8	73½	22	72¾	22½	Wind west.
		413						
		414						
		416						
	Lake Etchemin ..	377	730·3	64	17¾	65		Wind west.
		418						
		429						
	Monument	—	709·8	65		69		Fine.
Bald Mountain ..	456	671·0	61½	16½	62½		Wind north-west.	
	457							
	458							

Record of Barometric Observations.—*Continued.*

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 12, 2 P.M.	Lake Etchemin ..	377 418 429	729·8	68	20	69		Wind west; cloudy.
	Monument	—	709·5	70½	21½	69		
	Bald Mountain ..	456 457 458	670·0	64½	18	65½		
Aug. 13, 8 A.M.	Custom-house ..	411 413 414 416	761·7	71½	22	66	19	Wind west; clear.
	Lake Etchemin ..	377 418 429	727·8	57	14	57½		Wind north-west.
	Monument	—	707·5	59	15	60		
Aug. 16, 10 A.M.	Custom-house ..	411 413 414 416	768·1	71	21½	71	21½	Wind south-west; clear.
	Lake Etchemin ..	377 418 429	736·5	63½	18½	66½		Wind south-west; clear.
	Monument	456 457 458	716·4	70½	21½	70½		Wind south.
3 P.M.	Lake Etchemin ..	—	735·0	77	25	80½	27	Wind west; fine.
	On ridge, 2 miles north-east from Monument.	—	702·7	78	25½	74		Wind west.
4 P.M.	Lake Etchemin ..	377 418 429	734·8	81	27½	82		Wind west; fine.
	Camp side of ridge, 3 miles from Monument.	456 457 458	707·1	75	24	75		Wind north-west; fine.
Aug. 17, 8 A.M.	Custom-house ..	411 413 414 416	764·3	75	24	74	23½	Wind west; fair.
	Lake Etchemin ..	377 418 429	732·4	65½	18½	66½		Wind west; fine.
	Same as last evening	456 457 458	704·9	65½	18½	66		Wind north-west; fine.
10 A.M.	Lake Etchemin ..	377 418 429	732·4	75	24	75½		Wind north-west; fair.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 17, 10 A.M.	On Lake, Du Loup water, 7 feet above.	456 457 458	710·7	75 $\frac{3}{4}$	24 $\frac{1}{4}$	72		Wind west.
	11 A.M. Lake Etchemin ..	—	732·4	76 $\frac{1}{2}$	24 $\frac{3}{4}$	77 $\frac{1}{2}$	25 $\frac{1}{2}$	Wind north-west; fine.
	Top of ridge, 1 mile north-east of Lake.	456 457 458	705·5	77 $\frac{1}{2}$	25 $\frac{1}{2}$	75		Wind west.
12	Lake Etchemin ..	477 418 429	732·3	78	25 $\frac{1}{2}$	80		Wind west.
	Small brook	456 457 458	711·4	82	27 $\frac{3}{4}$	79		
3 P.M.	Lake Etchemin ..	—	732·0	83	28 $\frac{1}{4}$	83 $\frac{3}{4}$	28 $\frac{3}{4}$	
	Camp on small brook.	456 457 458	715·4	84	29	83 $\frac{1}{2}$		
Aug. 18, 8 A.M.	Custom-house ..	411 413 414 416	761·9	74 $\frac{1}{4}$	23 $\frac{1}{2}$	74	23 $\frac{1}{4}$	Wind west; heavy.
	Lake Etchemin ..	377 418 429	730·8	68	20	69		Wind south-west; heavy.
	Same as last evening	456 457 458	714·8	72 $\frac{1}{2}$	22 $\frac{1}{2}$	72 $\frac{1}{4}$		Wind south-west; fine.
10 A.M.	Lake Etchemin	377 418 429	731·2	74 $\frac{1}{2}$	23 $\frac{3}{4}$	76		Wind south-west; fine.
	Half a mile east from Camp.	456 457 458	712·2	79 $\frac{3}{4}$	26 $\frac{1}{2}$	76 $\frac{1}{4}$		Wind south-west.
11 A.M.	Lake Etchemin ..	—	731·0	77	25	80 $\frac{3}{4}$	27	Wind south-west.
	One mile and a half east of Camp.	456 457 458	706·0	80	26 $\frac{3}{4}$	79		
2 P.M.	Lake Etchemin ..	377 418 429	730·3	82 $\frac{1}{4}$	28	84		Wind south-west.
	Top of ridge	456 457 458	707·4	84	29	82 $\frac{1}{2}$		
3 P.M.	Lake Etchemin ..	—	730·2	83 $\frac{1}{4}$	28 $\frac{1}{2}$	84 $\frac{1}{2}$		Wind south-west; cloudy.
	On top of ridge ..	456 457 458	701·1	85 $\frac{1}{4}$	29 $\frac{1}{2}$	81 $\frac{1}{2}$		Wind south-west; cloudy.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 18, 4 P.M.	Lake Etchemin ..	377 418 429	730·1	84	29	85		Wind south-west.
	On Lake flowing into Portage River, 6 feet above water.	456 457 458	712·5	81	27½	79		Wind south-west.
Aug. 19, 8 A.M.	Custom-house	411 413 414 416	761·3	72½	22½	72½	22½	Wind south-east.
	Lake Etchemin ..	377 418 429	729·0	65½	18½	66½		Wind south-west; rain.
	Same as last night ..	456 457 458	712·2	66	19	66½		Wind south-west; rainy.
10 A.M.	Lake Etchemin ..	377 418 429	729·4	67½	19½	68		Wind west; rain.
	Top of ridge between the two Portage Lakes.	456 457 458	704·8	67½	19½	66½		Wind north-west; heavy.
11 A.M.	Lake Etchemin ..		729·5	67½	19½	68	20	
	New Portage Road		719·2	70	21	67½		
2 P.M.	Lake Etchemin ..	377 418 429	729·7	70½	21½	71		
	Portage Lake ..	456 457 458	720·4	68½	20½	68		
Aug. 20, 8 A.M.	Custom-house ..	411 413 414 416	765·0	74½	23½	71½	22	Wind south-west; clear.
	Lake Etchemin ..	377 418 429	731·2	60	15½	61		Wind north-west; clear.
	Portage Lake ..	456 457 458	722·5	66	19	67		Wind south-west; foggy.
Aug. 21, 4 P.M.	Custom-house ..	411 413 414 416	761·6	81½	27½	80½	27	Wind west; hazy.
	Lake Etchemin ..	377 418 422	730·7	79	26	80		Wind south-west; clear.
	Penobscot Lake ..	456 457 458	721·8	77	25	74½		

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 22,	Observations discontinued at Quebec..							
4 P.M.	Lake Etchemin ..	377 418 429	730·5	63½	17½	63½		Wind south-east; cloudy.
	Portage Lake ..	456 457 458	721·0	60	15½	59½		
Aug. 23,	Lake Etchemin ..	377 418 429	733·5	52¾	11½	53		Wind south-east; fine.
	Portage Lake ..	456 457 458	725·3	53¾	12	55½		Wind east.
2 P.M.	Lake Etchemin ..	456 457 458	734·5	64½	18	64½		Wind east.
	Portage Lake ..	456 457 458	724·8	65½	18½	64½		Wind east.
Aug. 24, 10 A.M.	Lake Etchemin ..	377 418 429	737·3	57	14	59½		Wind west; fine.
	Highest point between Portage Lake and Penobscot Lake on Indian Portage.	456 457 458	726·5	60	15½	60		Wind west; clear.
12	Lake Etchemin ..	377 418 429	737·6	65½	18½	64½		Wind west; fine.
	Penobscot Lake ..	456 457 458	729·3	64½	18	66		Wind west; fine.
2 P.M.	Lake Etchemin ..	377 418 429	737·5	68	20	69		Wind south-west; clear.
	Top of small hill ..	456 457 458	719·3	69	20½	69		Wind south-west; clear.
Aug. 25, 8 A.M.	Lake Etchemin ..	377 418 429	736·2	46½	8	47		Foggy.
	Top of Hill ..	456 457 458	721·2	57¾	14½	55		Wind south-west.
10 A.M.	Lake Etchemin ..	377 418 429	736·9	62	16¾	61½		Wind west.
	Small brook, Met- jarmette.	456 457 458	728·3	61½	16½	62		Wind west.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 25, 12	Lake Etchemin ..	377 418 429	736·5	66	19	68		Wind south-west.
	Swamp	556 457 458	727·9	73½	23	71		Wind south-west.
2 P.M.	Lake Etchemin ..	377 418 429	736·1	71	21½	72		Wind south-west.
	Top of dividing land	456 457 458	720·8	72½	22½	69½		
Aug. 26, 10 A.M.	Lake Etchemin ..	377 418 429	733·0	62½	17	63		Wind south-east.
	Division of south branch of the Met-jarmette and Penobscot water.	455 457 458	711·4	66	19	67		
12	Lake Etchemin ..	377 418 429	732·9	68	20	68½		Wind south-west; fine.
	On hill, same as 10 A.M.	456 457 458	711·1	72½	22½	73½		Wind south-west; fine.
	* St. Henri bridge, same as July 24, 8 A.M.	411 443 414	758·2	81½	27½	79	26	Wind south-west; fine.
2 P.M.	Lake Etchemin ..	377 418 429	732·5	71½	22	73		
	Two miles from St. Henri, on the road to Lake Etchemin.	411 413 414	755·8	83½	28½	81½	27½	
4 P.M.	Lake Etchemin ..	377 418 429	732·0	74½	23½	75		Wind south-west.
	Two miles from St. Henri, on the road to Lake Etchemin.	411 413 414	753·3	83½	28½	80¾	27	
Aug. 27, 10 A.M.	Lake Etchemin ..	377 418 429	731·6	61	16	61½		
	Frampton Hill ..	411 413 414	736·5	70¾	21½	70	21	
12	Lake Etchemin ..	377 418 429	731·9	68½	20½	69½		

* These are three of the Barometers which were in the Observatory at the Custom-house, Quebec.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.				
				F.	C.	F.	C.					
1841 Aug. 27, 12	Metjarmette Brook .	456 457 458	720·9	70 $\frac{3}{4}$	21 $\frac{1}{2}$	69 $\frac{1}{2}$						
	Wilson's house ..	411 413 414					741·1	76 $\frac{3}{4}$	24 $\frac{3}{4}$	77 $\frac{1}{2}$	25 $\frac{1}{4}$	
4 P.M.	Lake Etchemin ..	377 418 429	732·0	73	22 $\frac{3}{4}$	73 $\frac{1}{2}$						
	* Ridge between Metjarmette and Penobscot waters.	456 457 458					711·8	71 $\frac{3}{4}$	22	69 $\frac{1}{2}$		
Aug. 28, 10 A.M.	Lake Etchemin ..	377 411 413 414 418 429	735·7	67 $\frac{3}{4}$	19 $\frac{3}{4}$	67 $\frac{1}{2}$					19	Wind south-east; fine.
	* Small lake, Penobscot.	456 457 458					720·7	73 $\frac{3}{4}$	23	73		Wind south-east; fine.
2 P.M.	Lake Etchemin.	377 411 413 414 418 429	736·1	73 $\frac{3}{4}$	23	74 $\frac{1}{2}$					Wind south-east; clear.	
	* Small stream of Penobscot.	456 457 458					729·8	80 $\frac{1}{2}$	27	79 $\frac{1}{2}$	Wind south-east; clear.	
4 P.M.	Lake Etchemin ..	377 411 413 414 418 429	736·0	75 $\frac{3}{4}$	24 $\frac{1}{2}$						23	
	* On ridge dividing Penobscot waters, 300 feet below top.	456 457 458					723·5	79	26	73 $\frac{1}{2}$		
Aug. 29, 10 A.M.	Lake Etchemin ..	377 411 413 414 418 429	737·1	69	20 $\frac{1}{2}$	69						
	* Ridge between two branches of Penobscot.	456 457 458					725·3	71 $\frac{3}{4}$	22	68 $\frac{1}{2}$		

NOTE.—All the observations marked thus, (*) were made to the eastward of the Metjarmette waters.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.				
				F.	C.	F.	C.					
1841 Aug. 29, 12	Lake Etchemin ..	377 411 413 414 418 429	738·0	72 $\frac{3}{4}$	22 $\frac{1}{2}$	72 $\frac{1}{2}$		Wind south-east.				
	* Small branch of Penobscot.	456 457 458							730·3	73 $\frac{3}{4}$	23	73 $\frac{3}{4}$
Aug. 30, 1 P.M.	Lake Etchemin ..	377 416 418 429	734·3	61	16	61		Wind east; raining.				
	† Two and a quarter miles south-east of Lake Etchemin.	411 413 414							737·9	61	16	60
3 P.M.	Lake Etchemin ..	377 416 418 429	733·5	61 $\frac{3}{4}$	16 $\frac{1}{2}$	62		Wind east-south-east; raining.				
	† Three and a half miles south of Lake Etchemin.	311 413 414							732·2	63 $\frac{1}{2}$	17 $\frac{1}{2}$	60
4 P.M.	Lake Etchemin ..	377 416 418 429	733·4	61	16	61 $\frac{1}{2}$		Wind east-south-east; raining.				
	† Four miles south, head of Lake Etchemin.	411 413 414							731·4	61	16	69 $\frac{1}{2}$
Aug. 31, 9 A.M.	Lake Etchemin ..	377 416 418 429	730·8	55 $\frac{1}{2}$	13	56		Wind east-south-east; raining.				
	† Small hill in swamp	411 413 414							726·6	56 $\frac{1}{2}$	13 $\frac{1}{2}$	54 $\frac{1}{2}$
10 A.M.	Lake Etchemin ..	377 416 418 429	730·7	56 $\frac{1}{2}$	13 $\frac{1}{2}$	56 $\frac{3}{4}$		Wind east-south-east; hazy.				
	* Swamp heading small branch of Penobscot.	456 457 458							727·9	59	15	54 $\frac{1}{2}$
	† Branch of La Famine.	411 413 414							730·4	59	15	55 $\frac{1}{2}$
11 A.M.	Lake Etchemin ..	377 416 418 429	730·7	57	14	57 $\frac{1}{2}$		Wind south-east.				

NOTE.—All the observations marked thus, (†) were made between Lake Etchemin and the Metjarmette waters.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Aug. 31, 11 A.M.	† Caribou Plain, three-quarters of a mile from stream	411 413 414	729·8	59	15	55		Raining.
	Lake Etchemin ..	377 416 418 429	730·6	57	14	57½		Wind east; rain- ing.
12	† Caribou Plain ..	411 413 414	729·4	60	15½	56		Wind east.
	Lake Etchemin ..	377 416 418 429	730·1	57	14	57½		Wind south-east; raining.
2 P.M.	† Half a mile south- east of last station.	411 413 414	728·1	58	14½	56½		Wind south-east.
	Lake Etchemin ..	377 416 418 429	729·9	58½	14½	59		Wind south-east.
4 P.M.	* Small brook of Penobscot.	456 457 458	723·4	56½	13½	55½		Cloudy.
	† One mile further on.	414 413 414	727·5	57½	14½	55½		Raining.
	Lake Etchemin ..	377 416 418 429	728·1	54½	12½	55		Wind south-east; foggy.
Sept. 1, 8 A.M.	† Camp	411 413 414	725·1	55½	13	54		Wind south-east; foggy.
	Lake Etchemin ..	377 416 418 429	728·3	55½	13	56		Wind east; rain- ing.
9 A.M.	† Half a mile further on, south-east.	411 413 414	724·5	57	14	55		Wind east; rain- ing.
	Lake Etchemin ..	377 415 418 429	728·4	56½	13½	57		Wind south-east; heavy.
10 A.M.	† Small stream, La Famine waters.	411 413 414	725·9	57	14	54½		Wind south-east; raining.
	Lake Etchemin ..	377 416 418 429	728·3	57	14	57½		Wind south-east; raining.
11 A.M.	Lake Etchemin ..	377 416 418 429	728·3	57	14	57½		Wind south-east; raining.

Record of Barometric Observations.—Continued:

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 1, 11 A.M.	† On Burnt Land ..	411 413 414	728·0	59	15	57½		Wind south-east; raining.
	12 Lake Etchemin ..	377 416 418 429	728·2	58	14½	58½		Wind south-east; raining.
	† On stream, La Famine, one mile further on.	411 413 414	727·3	58	14½	57		Wind south-east; raining.
2 P.M.	Lake Etchemin ..	377 416 418 429	728·1	58½	14½	59½		Wind south-east; cloudy.
	† On march, half a mile further on.	411 413 414	724·0	61	16	56½		Wind south-east; raining.
3 P.M.	Lake Etchemin ..	377 416 418 429	728·0	59	15	59½		Wind south-east; raining.
	† Reed Lake	411 413 414	724·9	56½	13½	55½		Wind south-east; raining.
Sept. 2, 9 A.M.	Lake Etchemin ..	377 416 418 429	727·7	56½	13½	56½		Wind east; hazy.
	† Reed Lake	411 413 414	725·1	55½	13	55		Wind east; hazy.
10 A.M.	Lake Etchemin ..	377 416 418 429	727·7	56½	13½	57		Wind south-east; dull.
	* Ridge between Penobscot waters.	456 457 458	718·0	56½	13½	5½		Wind south; fine.
	† Three-quarters of a mile south-west from last station.	411 413 414	725·0	58	14½	55½		
11 A.M.	Lake Etchemin ..	377 416 418 429	727·6	57½	14½	58		Wind south-east; hazy.
	† La Famine Brook	411 413 414	728·6	59	15	57		Heavy.
12	Lake Etchemin ..	377 416 418 429	727·6	58	44½	59		Wind north-west; calm.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 2, 12	* Ridge between Penobscot waters and southern sources of the St. John.	456 457 448	706.4	58	14½	55		Wind north-west; calm.
	† On Burnt Land ..	411 413 414	726.6	60	15½	58½		Wind north-west; calm.
	¼ P.M. Lake Etchemin ..	377 416 418 429	727.2	62	16½	63		Wind west.
	* Lake of the St. John, south lake.	456 457 458	721.9	62½	17	61		Wind west.
	† Brook Famine, flowing north-west.	411 413 414	729.7	61	16	61		Wind west.
	Sept. 3, 9 A.M.	Lake Etchemin ..	377 416 418 429	727.2	60	15½	60½		Wind north-west.
	* Lake of the St. John, south lake, same as last night.	456 457 458	722.4	59	15		25½	Heavy.
	† Small stream Famine waters, same as last night.	411 413 414	730.3	59	15	59½		Heavy.
12	Lake Etchemin ..	377 416 418 429	727.7	68	20	69		Wind west.
	* Small brook of the St. John, east of south lake.	456 457 458	720.2	68	20	69		Wind west.
	† Same stream of the Famine 2 miles higher up.	411 413 414	728.6	71½	22	70½		Clearing off.
2 P.M.	Lake Etchemin ..	377 416 418 429	727.5	73	22½	74		Wind north-west; clear.
	* Ridge east of south lake, dividing the St. John and Penobscot waters.	456 457 458	713.9	68	20	67		
	† Rising ground 1 mile south-east of last station.	411 413 414	722.4	69	20½	69		
3 P.M.	Lake Etchemin ..	377 416 418 429	727.4	74½	23½	76		Wind north-west; clear.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 3, 3 P.M.	† Division of the St. John and La Famine waters.	411 413 414	721·9	67	19½	66		Wind north-west; clear.
	5 P.M. Lake Etchemin ..	377 416 418 429	727·1	73½	23	75		Wind west; clear.
	† Stream flowing east St. John's waters.	411 413 414	724·0	68	20	67½		Wind west; clear.
Sept. 4, 4 P.M.	Lake Etchemin ..	377 416 418 429	723·9	56½	13½	57½		Wind east.
	† Source of stream	411 413 414	719·7	58½	14½	56		Wind east.
Sept. 5, 10 A.M.	Lake Etchemin ..	377 416 418 429	728·5	61½	16½	63		
	† Rising ground ..	411 413 414	720·6	56½	13½	54½		
11 A.M.	Lake Etchemin ..	377 416 418 429	728·7	64	17½	65		Wind south-east; clear.
	† Small brook of St. John.	411 413 414	722·8	59	15	57		Wind north-east; clear.
12	Lake Etchemin ..	377 416 418 429	728·9	65½	18½	66½		Wind east; clear.
	* Top of ridge, same as noon of Sept. 2nd.	456 457 458	706·6	50	10	51		
	† On top of rising ground.	411 413 414	721·1	58	14½	57½		
1 P.M.	Lake Etchemin ..	377 416 418 429	728·9	67	19½	67		Wind east; clear.
	* Same place as 10 A.M. on Sept. 2nd.	456 457 458	719·1	54	12½	54		
	† At south-east turn on a small stream running south.	411 413 414	722·3	59½	15½	60		

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 5, 2 P.M.	Lake Etchemin ..	377 416 418 429	729·1	67½	19½	67½		Wind east; cloudy.
	* Ridge dividing St. John and Penobscot waters.	456 457 458	722·2	60	15½	56		
	† Quarter of a mile further on.	411 413 414	722·1	59	15	59½		
3 P.M.	Lake Etchemin ..	377 415 418 429	729·2	65½	18½	66		Wind north-east; cloudy.
	† Half a mile further on.	411 413 414	724·5	61	16	61		
4 P.M.	Lake Etchemin ..	377 416 418 429	729·4	65½	18½	66½		Wind north-east; calm and clearer.
	* Ridge quarter of a mile west of small branch of Penobscot.	456 457 458	724·5	61½	16½	57		
	† Quarter of a mile further on.	411 413 414	723·7	61	16	60		
5 P.M.	Lake Etchemin ..	377 416 418 429	729·7	66	19	66½		Wind east; clear.
	† On large brook running west.	411 413 414	726·5	60½	15½	60			Wind north-east; fine.
Sept. 6, 8 A.M.	Lake Etchemin ..	377 416 418 429	733·4	56½	13½	57		Wind south-east; clear frost.
	† Three quarters of a mile up stream.	411 413 414	728·9	49½	9½	51			Wind north-east; fine.
9 A.M.	Lake Etchemin ..	377 416 418 429	733·6	61	16	61		Wind south-east; clear.
	† Half a mile further up.	411 413 414	729·0	56	13½	55		
10 A.M.	Lake Etchemin ..	377 416 418 429	733·8	64½	18	66		Wind south-east; clear.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 6, 10 A.M.	† Half a mile further up.	411	728·3	63	17½	65		
		413						
		414						
11 A.M.	Lake Etchemin ..	377	734·0	68½	20½	69		Wind south-east; clear.
		416						
		418 429						
† Same place as 11 A.M. of yesterday.		411	728·0	69	20½	69		
		413						
		414						
1 P.M.	Lake Etchemin ..	377	734·2	74½	23½	75		Wind south-east; clear.
		416						
		418 429						
† Camp		411	730·3	70½	21½	71		
		413						
		414						
2 P.M.	Lake Etchemin ..	377	734·1	75	24	76		Wind south-east; clear.
		416						
		418 429						
† Camp same place		411	730·2	71½	22	73		
		413						
		414						
Sept. 7, 8 A.M.	Lake Etchemin ..	377	734·3	55	12½	56		Wind south-west; clear frost.
		416						
		418 429						
† At the discharge of lake.		411	732·4	57½	14½	59		Wind north-east; fine.
		413						
		414						
9 A.M.	Lake Etchemin ..	377	734·6	62½	17	63		Wind south-west; clear.
		416						
		418 429						
† On Caribou Plain, half way between two lakes.		411	732·4	64½	18	64		Fine.
		413						
		414						
10 A.M.	Lake Etchemin ..	377	734·9	69	20½	71		Wind west; clear,
		416						
		418 429						
Ridge between Pe- nobscot waters.		456	717·9	68	20	64		
		457						
		458						
Ridge between Pe- nobscot and Met- jarmette.		456	716·9	65½	18½	64		
		457						
		458						
† On rising ground, three quarters of a mile on the march.		411	728·5	68½	20½	68½		
		413						
		414						

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 7, 11 A.M.	Lake Etchemin ..	377 416 418 429	734.8	68½	23½	75½		Wind south; clear.
	† Three quarters of a mile further on.	411 413 414							724.0	70	21	70
12	Lake Etchemin ..	377 416 418 429	734.8	77½	25½	77½		Wind south-east; clear.
	† Two miles and a quarter from lakes.	411 413 414							726.2	71	21½	71
2 P.M.	Lake Etchemin ..	377 416 418 429	734.8	79½	26½	80½		Wind south-south-east; clear.
	† On side of lake, same place as Sept. 11, 6 A.M.	411 413 414							728.0	75	24	76
4 P.M.	Lake Etchemin ..	377 416 418 429	734.7	79½	26½	81½		Wind south-east.
	† Small lake	411 413 414							727.7	71½	22	71
5 P.M.	Lake Etchemin ..	377 416 418 429	734.4	77	25	80		Wind south-east.
	† Half a mile further on.	411 413 414							726.6	70½	21½	68½
Sept. 8, 9 A.M.	Lake Etchemin ..	377 416 418 422	733.7	64½	18	66½		Wind south-east.
	† Rising ground ..	411 413 414							723.8	64½	18	63½
11 A.M.	Lake Etchemin ..	377 416 418 429	734.0	74½	23½	76½		Wind south-east; cloudy.
	† Rising ground ..	411 413 414							720.8	70	21	69½
1 P.M.	Lake Etchemin ..	377 416 418 429	733.5	77	25	79		Wind south-east.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 8, 1 P.M.	† Small brook ..	411 413 414	718.9	71½	22	72½		Wind south-east.
3 P.M.	Lake Etchemin ..	377 416 418 429	732.9	78	25½	79½		Wind west.
	† Two miles further on.	411 413 414	716.6	72½	22½	71½		Wind west.
4 P.M.	Lake Etchemin ..	377 416 418 429	733.0	79	26	80		Wind west.
	North branch of the Metjarmette.	411 413 414 456 457 458	716.7	66	19	65½		Wind west.
Sept. 9, 8 A.M.	Lake Etchemin ..	377 416 418 429	733.3	57	14	58		Wind east; clear.
	Same as last evening.	411 413 414 456 457 458	716.9	58½	14½	61½		Wind east; clear.
4 P.M.	Lake Etchemin ..	377 416 418 429	734.6	80	26½	82½		Wind south-east; calm and clear.
	Same as last evening.	456 457 458	718.9	70½	21½	71		Wind south-east; calm and clear.
	† Lake, source of the south-western branch of the St. John.	411 413 414	726.0	72	22½	75½		Wind south-east; calm and clear.
Sept. 10, 8 A.M.	Lake Etchemin ..	377 416 418 429	733.9	60	15½	61		Wind south.
	North branch of the Metjarmette.	411 413 414 456 457 458	718.5	59	15	60½		Wind north-west.
12	Lake Etchemin ..	377 416 418 429	734.3	77	25	78½		Wind south.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 10, 12	† Returning to Lake Etchemin.	411 413 414 456 457 458	722·8	79	26	74		Wind north-west.
	4 P.M. Lake Etchemin ..	377 416 418 429	733·2	81	27½	82½		Wind south-west.
	† On branch of La Famine River.	456 457 458	726·0	79	26	75		Wind south-west.
Sept. 11, 8 A.M.	Lake Etchemin ..	377 416 418 429	730·2	60	15½	59½		Wind south.
	† Small lake, same place as the 7th of Sept., 2 P.M.	411 413 414 456 457 458	723·3	63	17½	62½		Wind south-west.
3 P.M.	Lake Etchemin ..	377 416 418 429	730·0	70½	21½	71½		Wind north-west.
	† Between a lake of the St. John and a lake of La Famine, same as Sept. 7th, 9 A.M.	411 413 414 456 457 458	727·1	75	24	73½		Wind north-west.
Sept. 12, 10 A.M.	Lake Etchemin ..	377 416 418 429	722·4	56½	13½	57½		Wind east; cloudy.
	† On march	411 413 414 456 457 458	728·4	55½	13	54½		Wind south-west.
11 A.M.	Lake Etchemin ..	377 416 418 429	732·4	58	14½	58½		Wind east; cloudy.
	† On march	411 413 414 456 457 458	726·3	59	15	56		Wind south-west.
12	Lake Etchemin ..	377 416 418 429	732·4	61½	16½	62		Wind east.

Record of Barometric Observations.— *Continued.*

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 12, 12	† Small stream ..	411 413 414 456 457 458	730.7	59	15	56½		Wind south-west.
	Lake Etchemin ..	377 416 418 429	732.2	61½	16½	62		Wind east; cloudy.
1 P.M.	† Cedar swamp ..	411 413 414 456 457 458	732.0	59½	15½	57		Wind south-west; fine.
	Lake Etchemin ..	377 416 418 429	732.2	65½	18½	67		Wind north.
2 P.M.	† Small stream ..	411 413 414 456 457 458	732.1	60	15½	61		Wind south-west.
4 P.M.	Lake Etchemin ..	377 416 418 429	732.0	65½	18½	67		Wind north-west.
	† Small stream ..	411 413 414 456 457 458	734.6	62	16½	60		Wind south-west.
Sept. 13, 9 A.M.	Lake Etchemin ..	377 416 418 429	732.4	54½	12½	55		Wind west.
	† Same as Sept. 3rd, 9 A.M.	411 413 414 456 457 458	735.2	50	10	51		Wind north-west.
11 A.M.	Lake Etchemin ..	377 416 418 419	732.8	65	18½	66		Wind west.
	† On march	411 413 414 456 457 458	733.8	66½	19½	63½		Wind north-west.

Record of Barometric Observations.—*Continued.*

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 13, 1 P.M.	Lake Etchemin ..	377 416 418 429	732·4	67	19½	68½		Wind west.
	† Branch of La Famine.	411 413 414 456 457 458	735·7	70	21	66½		Wind north-west.
4 P.M.	Lake Etchemin ..	377 416 418 429	732·3	70½	21½	73		Wind west.
	† Burnt land	411 413 414 456 457 458	733·5	66	19	64		Wind north-west.
5 P.M.	Lake Etchemin ..	377 416 418 429	732·1	67½	19½	69½		Wind west.
	† Branch of La Famine.	411 413 414 456 457 458	733·4	65	18½	61		Wind north-west.
Sept. 14, 8 A.M.	Lake Etchemin ..	377 416 418 429	732·6	45½	7½	46		Wind west.
	Same as last evening	411 413 414 456 457 458	735·3	54	12½	52		Wind north-west.
10 A.M.	Lake Etchemin ..	377 416 418 429	733·6	60½	15½	61½		Wind west.
	† Three quarters of a mile from last place.	411 413 414 456 457 458	736·0	68½	20½	64½		Wind north-west.
11 A.M.	Lake Etchemin ..	377 416 416 429	733·8	64	17½	65		Wind west.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 14, 11 A.M.	† Small lake of La Famine.	411 413 414 456 457 458	734.7	69	20½	62½		Wind north-west.
	12 Lake Etchemin ..	377 416 418 429	734.1	65½	18½	67		Wind north-west.
	† Rising ground ..	411 413 414 456 457 458	732.2	64½	18	59½		Wind north-west.
3 P.M.	Lake Etchemin ..	377 416 418 429	734.3	69	20½	72		Wind north-west.
	† Small lake	411 413 414 456 457 458	734.9	66	19	63½		Wind north-west.
Sept. 15, 8 A.M.	Lake Etchemin ..	377 416 418 429	738.1	46	7½	46½		Wind east; fine.
	† Same lake as last evening.	411 413 414 456 457 458	738.5	52½	11¼	41½		Wind north-east.
11 A.M.	Lake Etchemin ..	377 416 418 429	739.4	65	18½	65		
	† Same as noon of August 30th.	411 413 414 456 457 458	739.9	62½	17	61½		

Comparison of Barometers at Lake Etchemin, September 15th.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.			
71	20 $\frac{1}{2}$	377	738·80	738·82	2,955·27 ÷ 4 = 738·79.		
	21 $\frac{1}{2}$	416	738·45	738·43			
	20 $\frac{1}{2}$	418	738·80	738·82			
	21	429	739·10	739·10			
	21 $\frac{1}{2}$	411	739·00	738·98			
	21 $\frac{1}{2}$	413	739·00	738·98			
	21 $\frac{1}{2}$	414	739·20	739·15			
	21 $\frac{1}{2}$	456	738·60	738·55			
	21 $\frac{1}{2}$	457	739·40	739·35			
	21 $\frac{1}{2}$	458	739·30	739·22			
						4,434·23 ÷ 6 = 739·04.	

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 26, 2 P.M.	Lake Etchemin ..	416 418 429	717·9	61	16	60 $\frac{1}{2}$		Wind south-west.
	Lake Archer, 15 feet above water.	456 457 458	715·8	60 $\frac{1}{2}$	15 $\frac{1}{2}$	59 $\frac{1}{2}$		Wind south-west.
4 P.M.	Lake Etchemin ..	416 418 429	716·6	59 $\frac{1}{2}$	15 $\frac{1}{2}$	60		Wind south; cloudy.
	One mile and a half north of Lake Ar- cher.	456 457 458	703·3	62	16 $\frac{1}{2}$	57 $\frac{1}{2}$		Wind south; cloudy.
Sept. 27, 8 A.M.	Lake Etchemin ..	416 418 429	724·7	48	9	49		Wind west; cloudy.
	On small stream, Etchemin waters.	456 457 458	722·7	47	8 $\frac{1}{2}$	46 $\frac{1}{2}$		
10 A.M.	Lake Etchemin ..	416 418 429	725·7	48 $\frac{1}{2}$	9 $\frac{1}{2}$	49		Wind west; cloudy.
	Top of hill	456 457 458	708·4	44 $\frac{1}{2}$	7	43 $\frac{1}{2}$		
12	Lake Etchemin ..	416 418 429	726·1	51 $\frac{1}{2}$	10 $\frac{1}{2}$	51 $\frac{1}{2}$		Wind west.
	Etchemin River ..	456 457 458	724·1	51	10 $\frac{1}{2}$	49		Wind west.
2 P.M.	Lake Etchemin ..	416 418 429	726·7	53 $\frac{1}{2}$	12	53 $\frac{1}{2}$		Wind west; cloudy.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 27, 2 P.M.	Top of hill	456 457 458	712·4	50	10	48½		Wind north-west.
	Lake Etchemin ..	416 418 429	726·8	54½	12½	54½		Wind west.
3 P.M.	Small stream	456 457 458	712·2	52¾	11½	50		
	Lake Etchemin ..	416 418 429	727·0	54¾	12½	55		Wind west.
4 P.M.	One mile further on	456 457 458	710·0	51	10½	47½		
	Lake Etchemin ..	416 418 429	727·0	52	11	52		Wind west.
5 P.M.	Small stream, St. John's waters.	456 457 458	716·8	48½	9¼	48		
	Lake Etchemin ..	416 418 429	725·5	44	6¾	44		Wind north-east.
Sept. 29, 11 A.M.	Quarter of a mile north-west from last station.	456 457 458	714·9	43½	6¼	41½		Wind north-east.
	Lake Etchemin ..	416 418 429	725·8	44¾	7	44½		Wind north-east.
2 P.M.	Small stream ..	456 457 458	719·3	44¾	7	44		Wind north-east.
	Lake Etchemin ..	416 418 429	725·9	44	6¾	44		Wind north-east.
3 P.M.	Hardwood ridge ..	456 457 458	712·4	43¾	6½	41		Wind north-east.
	Lake Etchemin ..	416 418 429	726·1	43½	6½	44		Wind north-east.
4 P.M.	Top of Hardwood Hill.	456 457 458	705·4	43½	6½	39		Wind north-west.
	Lake Etchemin ..	416 418 429	726·1	43½	6¾	43¾		Wind north-east.
5 P.M.	Small brook	456 457 458	705·1	40¼	4½	38		

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Sept. 30, 8 A.M.	Lake Etchemin ..	416 418 429	725·2	38½	3½	38½		Wind east.
	Same as last night ..	456 457 458	702·3	35	1½	32½		
9 A.M.	Lake Etchemin ..	416 418 429	724·8	39	4	38½		Wind east.
	Top of ridge	456 457 458	688·1	34½	1½	32½		Wind north-west.
3 P.M.	Lake Etchemin ..	416 418 429	723·9	36½	2½	36½		Wind east; snowing.
	Top of ridge, dividing the St. John's waters from those of the Du Sud.	456 457 458	690·1	35½	2	32½		Wind east.
Oct. 1, 12	Lake Etchemin ..	416 418 429	726·7	41½	5½	41		
	On top of same ridge.	456 457 458	697·1	35½	2	33		
Oct. 2, 10 A.M.	River Ouelle, 46 feet above high tide at its mouth in the St. Lawrence.	377 411 414	772·6	52	11	45½		Wind north-east; fair.
	Lake Etchemin ..	416 418 429	737·1	40½	4½	40½		Wind east.
	On same ridge ..	456 457 458	705·5	42	5½	38½		Wind east.
11 A.M.	Lake Etchemin ..	416 418 429	737·3	43½	6½	44½		Wind east.
	Same place on ridge	456 457 458	705·4	40½	4½	39		Wind east.
12	Lake Etchemin ..	416 418 429	737·5	44½	7	44½		Wind east.
	Small stream, Du Sud.	456 457 458	733·2	44½	7	43½		Wind east.
2 P.M.	Lake Etchemin ..	416 418 429	737·4	47	3½	47		Wind east.
	Top of ridge	456 457 458	715·9	44	6½	43		

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Oct. 2, 3 P.M.	Lake Etchemin ..	416 418 429	737·6	46½	8	46½		Wind east.
	Spur of ridge ..	456 457 458	732·8	46½	8	44		
4 P.M.	Lake Etchemin ..	416 418 429	737·3	46½	8	46½		Wind east.
	Small stream of the St. John.	456 457 458	738·5	46½	8	42		
Oct. 3, 9 A.M.	Lake Etchemin ..	416 418 429	736·8	39½	4½	40		Wind east.
	On small hill ..	456 457 458	733·9	39	4	34		
11 A.M.	Lake Etchemin ..	416 418 429	736·9	44	6½	44		Wind east.
	In a swamp ..	456 457 458	729·9	43½	6½	41		
12	River Ouelle ..	377 411 414	772·2	53½	12	53½		Wind north-east; clear.
	Lake Etchemin ..	416 418 429	736·9	46	7½	45½		
	Small stream of Du Sud.	456 457 458	729·6	44½	7	46		
2 P.M.	Lake Etchemin ..	416 418 429	734·8	47	8½	48		Wind east.
	Small brook ..	456 457 458	734·0	51	10½	47		
3 P.M.	Lake Etchemin ..	416 418 429	734·8	46½	8	47½		Wind east.
	On a gentle rise ..	456 457 458	728·9	50	10	45		
4 P.M.	River Ouelle ..	377 411 414	769·7	52	11	51½		Wind north-east.
	Lake Etchemin ..	416 418 429	734·4	50½	8½	47		

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Oct. 4, S A.M.	River Ouelle ..	377 411 414	767·5	45½	7½	45½		Wind east.
	Lake Etchemin ..	416 418 429	730·6	36	2½	36		Wind east.
	Small stream of Du Sud.	456 457 458	726·5	34	1	34½		
9 A.M.	Lake Etchemin ..	416 418 429	731·1	37½	3	37½		Wind east.
	Top of a hill	456 457 458	721·6	38½	3½	36½		Wind east.
10 A.M.	Lake Etchemin ..	416 418 429	731·8	41½	4½	39½		Wind east.
	Same ridge	456 457 458	714·5	41	4	38		Wind east.
12	Lake Etchemin ..	416 418 429	731·3	44½	5½	42		Wind east.
	Small brook of St. John.	456 457 458	724·3	49	7½	43		Wind east.
2 P.M.	Lake Etchemin ..	416 418 429	731·4	46½	8	46½		Wind east.
	On march	456 457 458	722·7	46½	8	43		Wind east.
4 P.M.	River Ouelle ..	377 411 414	766·3	48	9	48		Wind north-east.
	Lake Etchemin ..	416 418 429	731·1	45½	7½	45		Wind east.
	Small lake of the St. John.	456 457 458	723·6	48¾	9½	44		
Oct. 5, S A.M.	River Ouelle ..	377 411 414	768·5	47¾	8½	47¾		Wind north-east; clear.
	Lake Etchemin ..	416 418 429	731·4	34	1	34½		Wind east.
	Quarter of a mile north of the lake.	456 457 458	721·9	35¾	2	33½		Wind north-east.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Oct. 5, 9 A.M.	Lake Etchemin ..	416 418 429	731·7	37½	3	37½		Wind east.
	Top of ridge	456 457 458	721·8	35	1½	35		Wind east.
10 A.M.	Lake Etchemin ..	416 418 429	731·8	39½	4½	39		Wind east.
	Small stream	456 457 458	729·3	43	6	39½		Wind east.
12	Lake Etchemin ..	416 418 429	732·3	44½	7	44½		Wind east.
	Top of ridge	456 457 458	730·1	46	7½	42½		Wind east.
1 P.M.	Lake Etchemin ..	416 418 429	732·1	48	9	48½		Wind east.
	Small stream	456 457 458	731·6	44½	7	44		Wind east.
2 P.M.	Lake Etchemin ..	416 418 429	732·2	48½	9½	48½		Wind north-east.
	Top of ridge	456 457 458	724·9	50½	10½	46		Wind east.
3 P.M.	Lake Etchemin ..	416 418 429	731·9	48½	9½	49		Wind north-east.
	On march	457 458 459	724·3	48	9	46		Wind north-east.
4 P.M.	Lake Etchemin ..	416 418 429	732·0	49½	9½	49½		Wind east.
	Small lake of the St. John.	456 457 458	728·9	47½	8½	46½		Wind east.
Oct. 6, 9 A.M.	Lake Etchemin ..	416 418 429	731·7	41	5	41		Wind east; fine.
	Same lake as last night.	456 457 458	729·0	42	5½	44½		Wind north-east; fair.
10 A.M.	River Ouelle	377 411 414	767·7	48	9	49		Wind east; fine.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.						
				F.	C.	F.	C.							
1841 Oct. 6, 10 A.M.	Lake Etchemin ..	416 411 429	731.9	43½	6½	43½		Wind east; fair.						
	On table land ..	456 457 458							726.9	48	9	43		Wind east; fair.
11 A.M.	Lake Etchemin ..	416 418 429	732.0	46½	8	45½		Wind east; fine.						
	Same table land ..	456 457 458							728.5	50	10	45		Wind east.
12	Lake Etchemin ..	416 418 429	731.9	49½	9½	49½		Wind east; fine.						
	On gentle rise ..	456 457 458							721.7	52	11	47½		Wind east.
1 P.M.	Lake Etchemin ..	416 418 429	732.2	52	11	51½		Wind east; fine.						
	Small stream of the St. John.	456 457 458							726.7	51	10½	49½		Wind east.
3 P.M.	Lake Etchemin ..	416 418 429	731.7	51	10½	51		Wind north-east; fine.						
	Spruce swamp ..	456 457 458							728.5	51	10½	47		Wind north-east.
4 P.M.	River Ouelle ..	377 411 414	766.0	50½	10½	50½		Wind north-east.						
	Lake Etchemin ..	416 418 429							731.6	52	11	53		Wind north-east.
	Lake, St. John's waters.	456 457 458													729.0	50	10	44½		Wind east.
Oct. 7, 8 A.M.	River Ouelle ..	377 411 414	764.9	54	12½	48½		Wind east.						
	Lake Etchemin ..	416 418 429							729.2	31	— ½	31		Wind west.
	Lake same as last night.	456 457 458													726.5	39	4	38		Wind north-east.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Oct. 7, 9 A.M.	Lake Etchemin ..	416 418 429	730·2	44½	7	44		Wind west.
	Half a mile north of same lake, on hill.	456 457 458	725·1	51	8½	40		Wind north-east.
10 A.M.	River Ouelle ..	377 411 414	764·6	51	10½	49½		Wind east.
	Spruce swamp ..	456 457 458	723·9	45½	7½	43½		
12	River Ouelle ..	377 411 414	764·1	51	10½	50½		Wind north-east.
	Swamp	456 457 458	729·1	54	12¼	51		Wind east.
3 P.M.	Lake Etchemin ..	416 418 429	727·6	56½	13¾	57		Wind east.
	Small stream of the St. John, flow- ing through a swamp.	456 457 458	725·1	57	14	50		Wind east.
4 P.M.	River Ouelle ..	377 411 414	761·8	47½	8¾	47		Wind north-east.
	Swamp	456 457 458	723·1	52½	11½	47½		Wind north-east.
Oct. 8, 8 A.M.	River Ouelle ..	377 411 414	762·0	46½	8	48½		Wind north-east.
	Lake Etchemin ..	416 418 429	726·9	37½	3	37		Wind east.
	Gentle rise. .. .	456 457 458	719·1	35½	2	35		Wind south-east.
12	River Ouelle ..	377 411 414	761·2	49	9½	49		Wind south-west
	Small stream flow- ing into Black River.	456 457 458	729·6	43	6	42		Wind east.
2 P.M.	River Ouelle ..	377 411 414	760·4	49½	9¾	49¾		Wind south.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Oct. 8, 2 P.M. 4 P.M.	Spruce swamp ..	456 457 458	728·1	50	10	44		Wind south-east.
	River Ouelle ..	377 411 414	760·0	48½	9½	49½		Wind south-west.
	Lake Etchemin ..	416 418 429	726·3	44	6½	43½		Wind south-east; rain.
	Spruce swamp ..	456 457 458	726·2	44½	7	42		
Oct. 9, 9 A.M. 10 A.M.	River Ouelle ..	377 411 414	759·5	52½	11½	54		Wind east; rain.
	Swamp	456 457 458	727·3	46½	8	40½		Wind east; rain.
	River Ouelle ..	377 411 414	759·4	52	11	56½		Wind east; cloudy.
3 P.M.	Lake Etchemin ..	416 418 429	724·9	42	5½	42		Wind south-east; cloudy.
	Branch of the Black River.	456 457 458	729·5	45	7½	40½		Wind east; cloudy.
	River Ouelle ..	377 411 414	758·3	48½	9	48½		Wind east; rainy.
Oct. 10, 8 A.M. 4 P.M.	Lake Etchemin ..	416 418 429	724·2	42	5½	42		Wind south-east.
	Swamp	456 457 458	730·1	47½	8½	43½		Wind south-east.
	River Ouelle ..	377 411 414	760·7	51	10½	51		Wind south-west; rain.
	Lake Etchemin ..	416 418 429	726·5	39	4	40		Wind west; cloudy.
4 P.M.	Source of the River Ouelle.	456 457 458	734·1	41	5	40		Wind west; cloudy.
	River Ouelle ..	377 411 414	761·7	50½	10½	49½		Wind north-east; rain.

Record of Barometric Observations.—Continued.

Date and Time.	Station.	Bar.	Height.	Th. A.		Th. D.		Remarks.
				F.	C.	F.	C.	
1841 Oct. 10, 4 P.M.	Lake Etchemin ..	416	727·6	54½	7½	45½		Wind west; rain.
		418						
		429						
Oct. 11, 8 A.M.	River Ouëlle ..	377	762·5	48½	9½	47½		Wind west.
		411						
		414						
	Lake Etchemin ..	416	728·6	34½	1½	35		
		418						
		429						
	High tide, St. Roc.	456	764·0	43	6	42		
		457						
		458						

Comparison of Barometers at Quebec, October 20th.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.	
44	7½	377	748·55	748·53	2,245·46 ÷ 3 = 748·49.
	7½	411	748·60	748·58	
	7½	414	748·40	748·35	
	7½	416	748·40	748·35	2,245·95 ÷ 3 = 748·65.
	7½	418	748·75	748·70	
	7½	429	748·95	748·90	
	7	456	747·95	747·95	2,246·00 ÷ 3 = 748·66.
	7	457	749·05	749·05	
	7	458	749·00	749·00	

Comparison of Barometers at Quebec, October 18th.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.	
44	8½	377	766·65	766·60	2,300·13 ÷ 3 = 766·71.
	8½	411	766·85	766·83	
	8	414	766·70	766·70	
	7½	416	766·60	766·62	2,300·31 ÷ 3 = 766·77.
	7½	418	766·90	766·92	
	8½	429	766·85	766·77	
	7½	456	766·00	766·05	2,300·52 ÷ 3 = 766·84.
	7½	457	767·20	767·25	
	7½	458	767·20	767·22	

Comparison of Barometers at Quebec, October 19th.

Th. D. F.	Th. A. C.	Bar.	Height.	Corrected for Temp.	
42½	6¼	377	753·95	753·93	2,261·51 ÷ 3 = 753·84.
	6½	411	753·85	753·83	
	6½	414	753·80	753·75	
	6¼	416	753·60	753·58	2,261·88 ÷ 3 = 753·89.
	6	418	754·05	754·05	
	6½	429	754·10	754·05	
	6¼	456	753·20	753·18	2,261·19 ÷ 3 = 753·73.
	6½	457	754·20	754·18	
	6¼	458	753·85	753·83	

The mean of seventy-nine observations computed to Quebec, gives the height of the observatory at Lake Etchemin 1,231 feet above the observatory at Quebec.

The mean of thirty observations selected from the above, makes it 1228 feet, to which twenty-five feet (the height of the observatory at Quebec above high tide) is to be added, and the sum, 1,253 feet, is the height of the observatory at Lake Etchemin* above high tide at Quebec.

By a mean of eleven observations, the monument on the Kennebec road is 784 feet above the observatory at Lake Etchemin, to which add 1,253 feet for the height of Lake Etchemin, $784 + 1,253 = 2,037$ feet above high tide, Quebec.

The same place computed to Quebec by a mean of seven observations, gives 2,007 feet above the observatory at Quebec, to which is to be added twenty-five feet, and the sum is 2,032 feet, not differing materially from the other.

* The surface of the water in Lake Etchemin, is five feet below the observatory.

Abstract of Heights as deduced from Barometric Observations at the Principal Stations along the lines of Survey.

Date and Time.	Station.	Height.	
1841 June 3, 8 A. M.	St. Anselme	484	ft. above Queen's Wharf Quebec.
	Queen's Wharf	12	ft. above high tide Quebec.
12	St. Anselme	496	ft. above high tide, Quebec.
	Frampton Hill	1,097	ft. above Queen's Wharf, Quebec.
4 P. M.	Queen's Wharf	12	ft. above high tide, Quebec.
	Frampton Hill	1,109	ft. above high tide, Quebec.
	Bridge on L'Eau Chaude	893	ft. above Queen's Wharf, Quebec.
	Queen's Wharf	12	ft. above high tide, Quebec.
	Bridge on L'Eau Chaude	905	ft. above high tide, Quebec.
June 5, 8 A. M.	Ridge five miles north of Lake Etchemin	134	ft. above Lake Etchemin.
	Lake Etchemin	1,253	ft. above high tide, Quebec.
	Ridge five miles north of Lake Etchemin	1,387	ft. above high tide, Quebec.
June 22, 8 A. M.	Port St. Francis	11	
		25	
2 P. M.	St. Zephyra	36	ft. above high tide, Quebec.
		107	
4 P. M.	Wendover	25	ft. above high tide, Quebec.
		132	
		170	
		26	
		195	ft. above high tide, Quebec.
June 23, 8 A. M.	Wickham	363	
		25	
10, A. M.	Durham	388	ft. above high tide, Quebec.
		584	
2 P. M.	Melbourne	25	ft. above high tide, Quebec.
		609	
		356	
		25	
		381	ft. above high tide, Quebec.
June 24, 2 P. M.	Sherbrooke	531	ft. above high tide, Quebec.
June 26, 4 P. M.	Compton	835	ft. above high tide, Quebec.
June 27, to June 30, inclusive.	Stanstead	1,025	ft. above high tide, Quebec.
June 29, 2 P. M.	Lake Memphramagog	379	ft. below Stanstead.
		1,025	
		646	ft. above high tide, Quebec.

Abstract of Barometric Heights.—Continued.

Date and Time.	Station.	Height.	
1841 July 1, 8 A. M.	Fourche R. Coaticook	1,005	ft. above high tide, Quebec.
2 P. M.	Bassford	987	ft. above high tide, Quebec.
July 3, 2 P. M. to July 4, 8 A. M.	Junction of Lecch Stream with Connecticut River, ten feet above water.	941 10 931	ft. above high tide, Quebec.
July 6, 8 A. M.	Lake Connecticut	1,780	ft. above high tide, Quebec.
July 7, 8 A. M.	Connecticut River between first and second lakes	1,875	ft. above high tide, Quebec.
July 8, 8 A. M.	First Lake Connecticut	2,124	ft. above high tide, Quebec.
12	Ridge dividing the Connecticut and Margalloway waters	2,904	ft. above high tide, Quebec.
4 P. M.	Ridge dividing the Connecticut and St. Francis waters	2,581	ft. above high tide, Quebec.
July 9, 8 A. M.	Sources of the St. Francis	1,762	ft. above high tide, Quebec.
4 P. M.	Swamp—Valley of St. Francis	1,572	ft. above high tide, Quebec.
July 10, 12 & 2 P. M.	Ben D'Urbain	2,527	ft. above high tide, Quebec.
July 11, 10 A. M.	Top of ridge	2,600	ft. above high tide, Quebec.
2 P. M.	Swamp	2,246	ft. above high tide, Quebec.
4 P. M.	Top of ridge	2,753	ft. above high tide, Quebec.
July 12, 8 A. M.	Gipp's Peak, 300 ft. below top	2,760 300 3,060	ft. above high tide, Quebec.
10 A. M.	Small river foot of Gipp's Peak	1,915	ft. above high tide, Quebec.
12	Top of ridge	2,505	ft. above high tide, Quebec.
4 P. M.	Arnold's River	1,924	ft. above high tide, Quebec.
July 13, 10 A. M.	Mount Gosford	3,665	ft. above high tide, Quebec.
12	Top of ridge	2,617	ft. above high tide, Quebec.
5 P. M.	Mountain, six miles south of Lake Macanamac	2,633	ft. above high tide, Quebec.
July 14, 8 A. M.	Camp	2,124	ft. above high tide, Quebec.
10 A. M.	Ridge	2,040	ft. above high tide, Quebec.
12	Two miles north-east of last place	2,285	ft. above high tide, Quebec.
2 P. M.	Ridge	1,560	ft. above high tide, Quebec.
3 P. M.	Highest point	1,790	ft. above high tide, Quebec.
4 P. M.	Bottom of hill	1,465	ft. above high tide, Quebec.
July 15, 8 A. M.	On ridge	2,384	ft. above high tide, Quebec.
10 A. M.	Swamp	1,263	ft. above high tide, Quebec.

Abstract of Barometric Heights.—Continued.

Date and Time.	Station.	Height.	
1841 July 16, 4 P. M.	Lake Macanamac	1,319	ft. above high tide, Quebec.
"	Lake Macanamac, calculated to Quebec	1,321	ft. above high tide, Quebec.
July 17, 8 A. M.	Top of mountain	2,588	ft. above high tide, Quebec.
10 A. M.	Summit of ridge	2,851	ft. above high tide, Quebec.
12	Foot of ridge	1,919	ft. above high tide, Quebec.
2½ P. M.	Summit of ridge	2,673	ft. above high tide, Quebec.
4 P. M.	Small rivulet	1,818	ft. above high tide, Quebec.
4½ P. M.	Highest point of hill . .	2,025	ft. above high tide, Quebec.
July 18, 10 A. M.	Top of ridge	2,302	ft. above high tide, Quebec.
12	Small stream	1,934	ft. above high tide, Quebec.
2 P. M.	On ridge	1,936	ft. above high tide, Quebec.
4 P. M.	On ridge	2,113	ft. above high tide, Quebec.
July 19, 8 A. M.	Small lake	1,560	ft. above high tide, Quebec.
10 A. M.	On ridge	1,967	ft. above high tide, Quebec.
12	Cedar swamp	1,823	ft. above high tide, Quebec.
2 P. M.	Small brook flowing into Chau- dière	1,605	ft. above high tide, Quebec.
4 P. M.	Ridge	2,303	ft. above high tide, Quebec.
5½ P. M.	Ridge	2,644	ft. above high tide, Quebec.
July 20, 10 A. M.	Source Du Loup	1,942	ft. above high tide, Quebec.
12	Source Du Loup	1,795	ft. above high tide, Quebec.
2 P. M.	Ridge	2,419	ft. above high tide, Quebec.
4 P. M.	Depression in ridge . . .	2,053	ft. above high tide, Quebec.
July 21, 10 A. M.	On ridge	2,421	ft. above high tide, Quebec.
12	Small brook	1,751	ft. above high tide, Quebec.
2 P. M.	Lake Emilie, Du Loup waters .	1,641	ft. above high tide, Quebec.
7 P. M.	Sandy hill	3,113	ft. above high tide, Quebec.
July 22, 8 A. M.	Sandy stream	1,727	ft. above high tide, Quebec.
10 A. M.	Sandy bay settlement, Hilton's	1,637	ft. above high tide, Quebec.
July 23, 4 P. M.	Intersection of Kennebec road and Metjarmette river . .	826	ft. above high tide, Quebec.
July 24, 8 A. M.	Bridge at St. Henri, 15 feet above water	243	ft. above high tide, Quebec.
Aug. 6, 4 P. M.	St. Joseph's	463	ft. above high tide, Quebec.
Aug. 10, 10 A. M.	Monument on Kennebec road (mean of eleven observations computed to Lake Etchemin	784 1,253	ft. above observatory at Lake Etchemin.
		2,037	ft. above high tide, Quebec.

Abstract of Barometric Heights.—Continued.

Date and Time.	Station.	Height.	
1841 Aug. 10, 10 A. M.	Same place. (mean of seven observations computed to Quebec)	2,007 25	ft. above observatory at Quebec.
		2,032	feet above high tide at Quebec.
Aug. 12, 12 & 2 P. M.	Bald mountain	1,587 2,037	feet above monument.
		3,624	feet above high tide at Quebec.
Aug. 16, 10 A. M.	On ridge two miles north-east of monument	2,551	feet above high tide at Quebec.
4 P. M.	Camp on side of ridge, three miles from monument	2,347	feet above high tide at Quebec.
Aug. 17, 8 A. M.	Same as last evening	2,332	
		2) 4,679	
		2,339	feet above high tide at Quebec.
10 A. M.	On lake, Du Loup water, seven feet above	2,116	feet above high tide at Quebec.
11 A. M.	Top of ridge, one mile north-east of lake	2,333	feet above high tide at Quebec.
12 A. M.	Small brook	2,103	feet above high tide at Quebec.
3 A. M.	Small brook	1,926	feet above high tide at Quebec.
Aug. 18, 8 A. M.	Small brook	1,910	
		2) 3,836	
		1,918	feet above high tide at Quebec.
10 A. M.	One mile north-east of camp	2,025	feet above high tide at Quebec.
11 A. M.	One mile and a half north-east of camp	2,280	feet above high tide at Quebec.
2 P. M.	Top of ridge	2,188	feet above high tide at Quebec.
3 P. M.	Top of ridge	2,446	feet above high tide at Quebec.
4 P. M.	Lake flowing into Portage R, six feet above water	1,955	feet above high tide at Quebec.
Aug. 19, 8 A. M.	Same place	1,912	
		2) 3,867	
		1,933	feet above high tide at Quebec.
10 A. M.	Ridge between the two lakes of Portage River	2,223	feet above high tide at Quebec.
11 A. M.	New Portage Road	1,662	feet above high tide at Quebec.
2 P. M.	Portage Lake	1,604	feet above high tide at Quebec.
Aug. 24, 10 A. M.	Portage between lakes	1,690	feet above high tide at Quebec.
	Penobscot Lake	1,586	feet above high tide at Quebec.
2 P. M.	Top of small hill	1,964	feet above high tide at Quebec.
Aug. 25, 8 A. M.	Top of small hill	1,847	feet above high tide at Quebec.

Abstract of Barometric Heights.—Continued.

Date and Time.	Station.	Height.	
1841			
Aug. 25, 10 A. M.	Small brook, Metjarmette	1,568	feet above high tide, Quebec.
12	Swamp	1,608	feet above high tide, Quebec.
2 P. M.	Dividing Land	1,855	feet above high tide, Quebec.
Aug. 26, 10 A. M.	Between Penobscot and Metjarmette waters	2,104	feet above high tide, Quebec.
Aug. 27, 4 P. M.	Between Penobscot and Metjarmette waters	2,046	feet above high tide, Quebec.
Aug. 28, 10 A. M.	Small lake of Penobscot	1,856	feet above high tide, Quebec.
2 P. M.	Small stream of Penobscot	1,520	feet above high tide, Quebec.
4 P. M.	Ridge dividing Penobscot waters, 300 feet below top	1,753 300	
		2,053	feet above high tide, Quebec.
Aug. 29, 10 A. M.	Ridge between two branches of the Penobscot	1,718	feet above high tide, Quebec.
12	Small brook Penobscot	1,556	feet above high tide, Quebec.
Aug. 30, 1 P. M.	Two miles and a quarter south-east of Lake Etchemin	1,389	feet above high tide, Quebec.
3 P. M.	Three miles and a half south of Lake Etchemin	1,305	feet above high tide, Quebec.
4 P. M.	Four miles S. of Lake Etchemin	1,330	feet above high tide, Quebec.
Aug. 31, 9 A. M.	Small hill in swamp	1,415	feet above high tide, Quebec.
10 A. M.	Swamp heading branch of Penobscot	1,368	feet above high tide, Quebec.
	Branch of La Famine	1,271	feet above high tide, Quebec.
11 A. M.	Caribou Plain, three-quarters of a mile from the stream	1,293	feet above high tide, Quebec.
12	Caribou Plain	1,307	feet above high tide, Quebec.
2 P. M.	Half a mile south-east of last place	1,331	feet above high tide, Quebec.
4 P. M.	Small brook of Penobscot	1,494	feet above high tide, Quebec.
	One mile further on	1,341	feet above high tide, Quebec.
Sept. 1, 8 A. M.	Camp	1,369	feet above high tide, Quebec.
9 A. M.	Half a mile south-east	1,403	feet above high tide, Quebec.
10 A. M.	Small stream La Famine	1,349	feet above high tide, Quebec.
11 A. M.	Burnt Land	1,270	feet above high tide, Quebec.
12	Stream of La Famine	1,287	feet above high tide, Quebec.
2 P. M.	Half a mile further on	1,416	feet above high tide, Quebec.
3 P. M.	Reed Lake	1,363 1,351	
		2)2,714	feet above high tide, Quebec.
		1,357	

Abstract of Barometric Heights.—Continued.

Date and Time.	Station.	Height.	
1841 Sept. 2, 10 A. M.	Ridge between Penobscot waters	1,624	feet above high tide, Quebec.
	Three-quarters of a mile south-west from lake	1,360	feet above high tide, Quebec.
11 A. M.	Brook of La Famine	1,218	feet above high tide, Quebec.
12	Ridge between Penobscot waters and southern sources of the St. John	2,071	feet above high tide, Quebec.
	Burnt Land	1,297	feet above high tide, Quebec.
4 P. M.	Lake of the St. John, South Lake	1,459	feet above high tide, Quebec.
	Brook of La Famine	1,155	feet above high tide, Quebec.
Sept. 3, 9 A. M.	Branch of La Famine	1,371	feet above high tide, Quebec.
12	Small brook of the St. John, east of South Lake	1,547	feet above high tide, Quebec.
	Same brook of La Famine, two miles higher up	1,228	feet above high tide, Quebec.
2 P. M.	Ridge east of South Lake, dividing St. John and Penobscot waters	1,775	feet above high tide, Quebec.
	One mile south-east of last place	1,443	feet above high tide, Quebec.
3 P. M.	Division of St. John and La Famine waters	1,448	feet above high tide, Quebec.
5 P. M.	Small stream, St. John waters	1,359	feet above high tide, Quebec.
Sept. 4, 4 P. M.	Source of same stream	1,419	feet above high tide, Quebec.
Sept. 5, 10 A. M.	Rising ground	1,541	feet above high tide, Quebec.
11 A. M.	Small brook of the St. John . .	1,466	feet above high tide, Quebec.
12	Ridge, same as noon of Sept. 2	2,053	feet above high tide, Quebec.
	Rising ground	1,532	feet above high tide, Quebec.
1 P. M.	Same as 10 A. M., Sept. 2	1,594	feet above high tide, Quebec.
	Small stream flowing south . . .	1,487	feet above high tide, Quebec.
2 P. M.	Ridge	1,497	feet above high tide, Quebec.
	Quarter of a mile south of small stream	1,499	feet above high tide, Quebec.
3 P. M.	Half a mile further on	1,422	feet above high tide, Quebec.
4 P. M.	Ridge, quarter of a mile west of small branch of Penobscot . . .	1,430	feet above high tide, Quebec.
	Quarter of a mile further on . . .	1,459	feet above high tide, Quebec.
5 P. M.	Large brook flowing west	1,360	feet above high tide, Quebec.
Sept. 7, 8 A. M.	Small lake	1,333	feet above high tide, Quebec.
9 A. M.	Caribou Plain	1,342	feet above high tide, Quebec.
10 A. M.	Ridge between Penobscot waters	1,912	feet above high tide, Quebec.

Abstract of Barometric Heights.—Continued.

Date and Time.	Station.	Height.	
1841 Sept. 7, 10 A. M.	Ridge between Penobscot and Metjarmette	1,944	feet above high tide, Quebec.
	Rising ground	1,500	feet above high tide, Quebec.
11 A. M.	Three quarters of a mile further on	1,680	feet above high tide, Quebec.
12	Two miles and a quarter from lakes	1,572	feet above high tide, Quebec.
2 P. M.	Small lake, same as Sept. 11, S A. M.	1,375	feet above high tide, Quebec.
5 P. M.	Half a mile further on	1,520	feet above high tide, Quebec.
Sept. 8, 9 A. M.	Rising ground	1,635	feet above high tide, Quebec.
11 A. M.	Rising ground	1,758	feet above high tide, Quebec.
1 P. M.	Brook of Metjarmette	1,816	feet above high tide, Quebec.
3 P. M.	Two miles on	1,884	feet above high tide, Quebec.
4 P. M.	North branch of the Metjarmette	1,857	feet above high tide, Quebec.
Sept. 10, 8 A. M.	North branch of the Metjarmette	1,857	feet above high tide, Quebec.
Sept. 9, 4 P. M.	Small lake, source of the southwestern branch of the St. John	1,619	feet above high tide, Quebec.
Sept. 11, 8 A. M.	Small lake, same as Sept. 7, 2 P. M.	1,526	feet above high tide, Quebec.
3 P. M.	Between a lake of the St. John and La Faminc, same as Sept. 7, 9 A. M.	1,379	feet above high tide, Quebec.
Sept. 13, 9 A. M.	Same as Sept. 8, 9 A. M.	1,370	feet above high tide, Quebec.
4 P. M.	Burnt Land	1,194	feet above high tide, Quebec.
Sept. 14, 8 A. M.	Same	1,180	feet above high tide, Quebec.
10 A. M.	Three-quarters of a mile from last station	1,156	feet above high tide, Quebec.
11 A. M.	Small lake of La Faminc	1,233	feet above high tide, Quebec.
12	Rising ground	1,327	feet above high tide, Quebec.
3 P. M.	Small lake	1,241	feet above high tide, Quebec.
Sept. 15, 11 A. M.	Same as Aug. 30, 12	1,228	feet above high tide, Quebec.
Sept. 26, 2 P. M.	Lake Archer, fifteen feet above water	1,318	feet above high tide, Quebec.
4 P. M.	One mile and a half north of Lake Archer	1,780	feet above high tide, Quebec.
Sept. 27, 8 A. M.	Small stream, Etchemin	1,326	feet above high tide, Quebec.
10 A. M.	Top of hill	1,895	feet above high tide, Quebec.
12	River Etchemin	1,327	feet above high tide, Quebec.
2 P. M.	Top of hill	1,786	feet above high tide, Quebec.
3 P. M.	Small stream	1,806	feet above high tide, Quebec.
4 P. M.	One mile further on	1,890	feet above high tide, Quebec.

Abstract of Barometric Heights.—Continued.

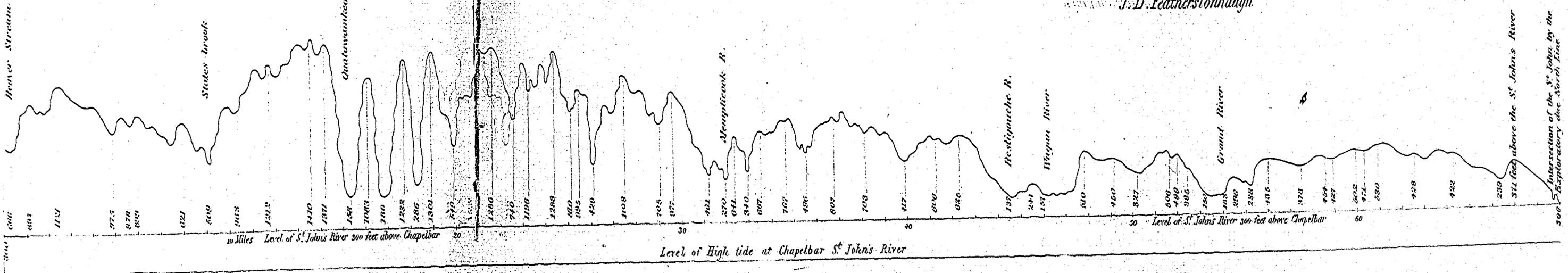
Date and Time.	Station.	Height.	
1841 Sept. 27, 5 P. M.	Small stream, St. John . . .	1,629	feet above high tide, Quebec.
Sept. 29, 4 P. M.	Top of Hard-wood Ridge . . .	2,027	feet above high tide, Quebec.
Sept. 30, 9 A. M.	Top of ridge	2,615	feet above high tide, Quebec.
12	Top of same ridge	2,340	feet above high tide, Quebec.
Oct. 2, 12	Small stream Du Sud	1,346	feet above high tide, Quebec.
2 P. M.	Top of ridge	2,043	feet above high tide, Quebec.
4 P. M.	Small stream, St. John	1,209	feet above high tide, Quebec.
Oct. 3, 11 A. M.	In a swamp	1,507	feet above high tide, Quebec.
12	Small stream, Du Sud	1,519	feet above high tide, Quebec.
3 P. M.	Gentle rise	1,481	feet above high tide, Quebec.
Oct. 4, 10 A. M.	On ridge	1,888	feet above high tide, Quebec.
4 P. M.	Small lake of the St. John	1,543	feet above high tide, Quebec.
Oct. 5, 9 A. M.	Top of ridge	1,607	feet above high tide, Quebec.
10 A. M.	Small stream	1,354	feet above high tide, Quebec.
3 P. M.	On flat	1,434	feet above high tide, Quebec.
4 P. M.	Small lake of the St. John	1,353	feet above high tide, Quebec.
Oct. 6, 10 A. M.	Table land	1,448	feet above high tide, Quebec.
11 A. M.	Same table land	1,391	feet above high tide, Quebec.
12	Gentle rise	1,641	feet above high tide, Quebec.
1 P. M.	Stream of St. John	1,461	feet above high tide, Quebec.
3 P. M.	Spruce Swamp	1,372	feet above high tide, Quebec.
4 P. M.	Small lake of St. John	1,344	feet above high tide, Quebec.
Oct. 7, 9 A. M.	Half a mile north of lake	1,458	ft. above high tide, River Ouelle.
10 A. M.	Spruce Swamp	1,504	ft. above high tide, River Ouelle.
12	Same swamp	1,334	ft. above high tide, River Ouelle.
3 P. M.	Small stream of the St. John	1,348	ft. above high tide, River Ouelle.
4 P. M.	Swamp	1,470	ft. above high tide, River Ouelle.
Oct. 8, 8 A. M.	Gentle rise	1,568	ft. above high tide, River Ouelle.
12	Stream flowing into Black River	1,174	ft. above high tide, River Ouelle.
2 P. M.	Spruce Swamp	1,223	ft. above high tide, River Ouelle.
4 P. M.	Spruce Swamp	1,266	ft. above high tide, River Ouelle.
Oct. 9, 9 A. M.	Swamp	1,203	ft. above high tide, River Ouelle.
10 A. M.	Branch of Black River	1,119	ft. above high tide, River Ouelle.
3 P. M.	Swamp	1,068	ft. above high tide, River Ouelle.
Oct. 10, 8 A. M.	Source of River Ouelle	980	ft. above high tide, River Ouelle.

SECTION ALONG THE GEODASY DUE NORTH LINE FROM THE ST. JOHN'S RIVER TO THE BEAVER STREAM, DETERMINED BY SPIRIT LEVEL IN 1840.

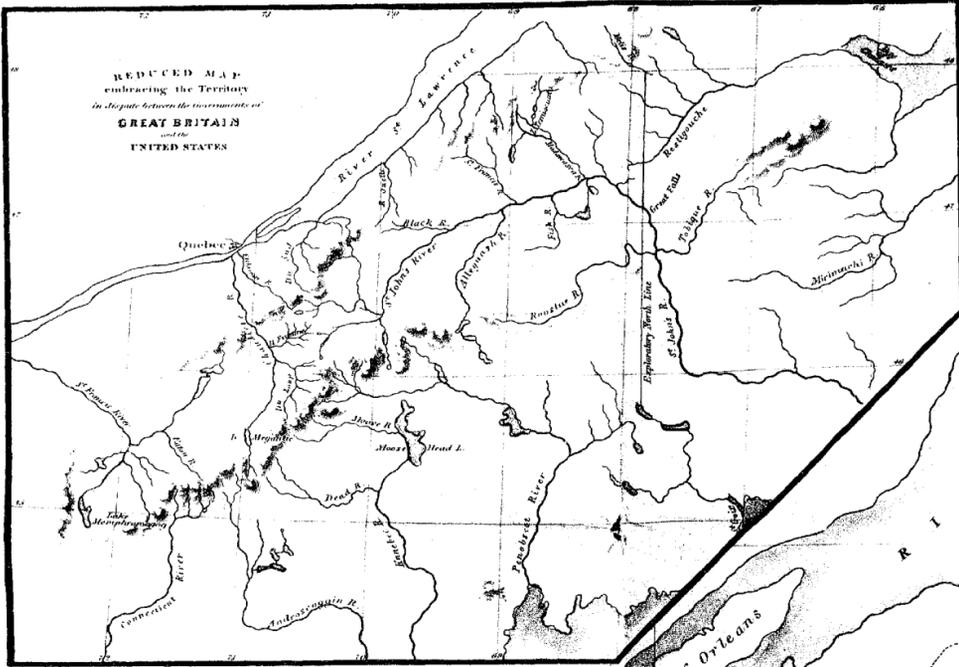
W.E. Debes Broughton

Capt. R.E.

J.D. Featherstonhaugh



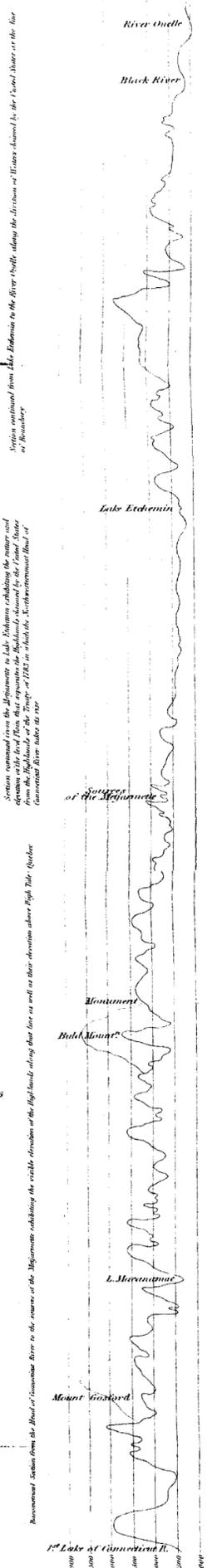
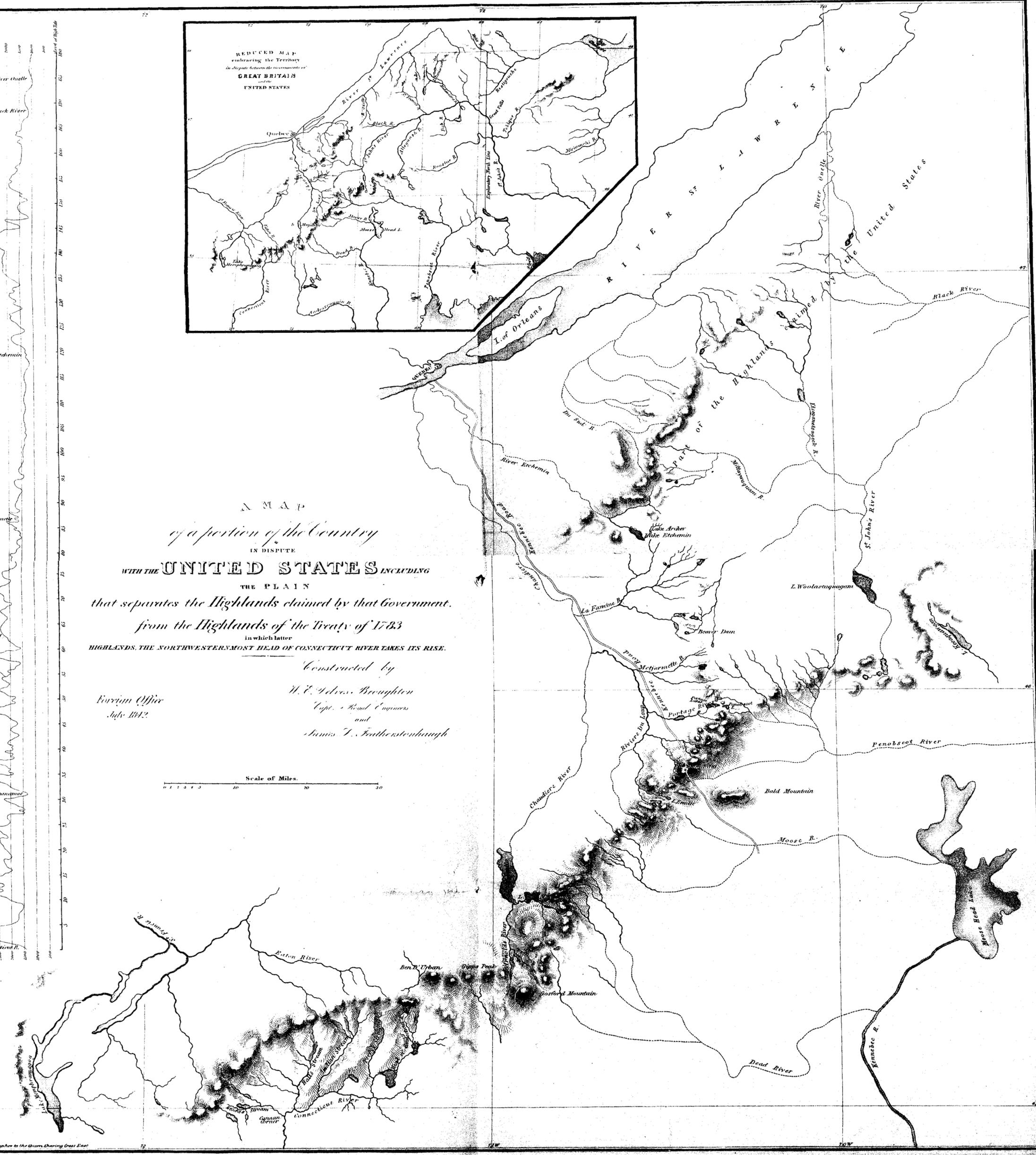
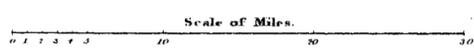
Examined by J. J. Van Dyke, Major, U.S. Army.



A MAP
of a portion of the Country
 IN DISPUTE
WITH THE UNITED STATES INCLUDING
 THE PLAIN
that separates the Highlands claimed by that Government,
from the Highlands of the Treaty of 1763
 in which latter
HIGHLANDS, THE NORTHWESTERN MOST HEAD OF CONNECTICUT RIVER TAKES ITS RISE.

Constructed by
W. C. Folger, Broughton
Capt. Royal Engineers
 and
James T. Featherstonhaugh

Foreign Office
July 1842





NORTH AMERICAN BOUNDARY.

SUPPLEMENTARY REPORTS

RELATING TO

THE BOUNDARY

BETWEEN THE

BRITISH POSSESSIONS IN NORTH AMERICA

AND THE

UNITED STATES OF AMERICA,

UNDER

THE TREATY OF 1783.

*Presented to both Houses of Parliament by Command of Her Majesty,
1842.*

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