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Augusta: WILLIAM T. JOHNSON, PRINTER TO THE STATE.

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OF THE

COMMISSIONER

APPOINTED TO SUPERINTEND THE SURVEY OF THE

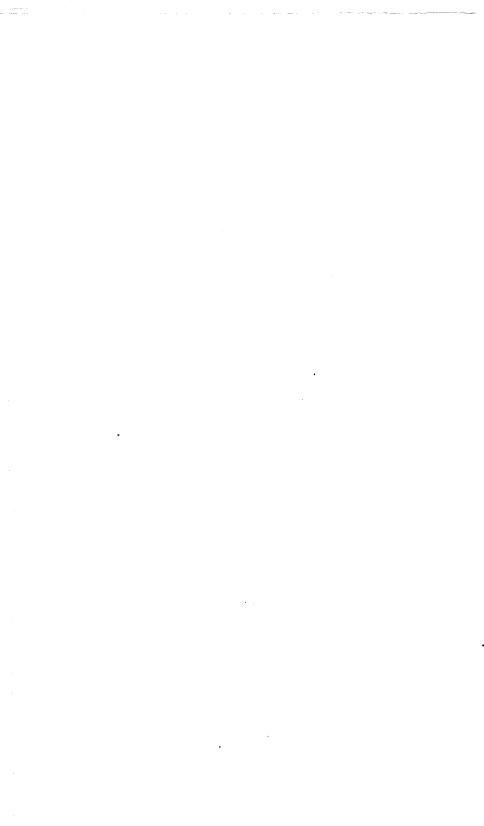
NORTH AMERICAN RAILWAY,

FROM BANGOR TO THE EAST LINE OF THE STATE.

Published agreeably to Resolve of March 22, 1836.

Augusta: WILLIAM T. JOHNSON, PRINTER TO THE STATE.

1351.



REPORT.

To His Excellency, JOHN HUBBARD, Governor of Maine:

SIR:—Having received an appointment from you in September last, to act as commissioner on the survey of the "European and North American railway" from Bangor to the east line of the state, ordered by the legislature at its last session, I immediately gave my attention to the matter, and have endeavored to carry out your instructions, received from time to time, as far as possible, and herewith present a summary report of our operations, leaving it for Mr. Morton, the chief engineer, to give you a particular and detailed report of our explorations and surveys.

I met Mr. Morton at Bangor, September 10th. He had been in the city and vicinity some days, and had been busily engaged in exploring the country from that point to Milford, which lies in a northeasterly direction from, and some twelve miles above, Bangor. From the previous knowledge which I had of the topography of the country, I was satisfied that we could not leave the Penobscot river south of Milford or Greatworks stream, as a range of hills more or less abrupt, skirts the whole length of its banks from its mouth to that point.

In consulting the various individuals who seemed to be interested in the survey, we found almost as many opinions in relation to the various routes as individuals; some were in favor of leaving the river at Milford, some at Passadumkeag, twenty miles above, and others at Lincoln, still twenty miles further up the river, and some fifty miles above Bangor.

NORTH AMERICAN RAILWAY.

Under the resolve of the legislature, as well as your instructions, we were directed "to survey the most *direct* route practicable from Bangor to the east line of the state, in the direction of the city of St. John." As much as we might have desired to gratify the enterprising citizens living up the Penobscot river, by extending our surveys in that direction, it would have been manifestly a violation of the intent and meaning of the resolves of the legislature, to have extended our surveys one rod further north of Bangor than was actually necessary. In view of these facts there was no other alternative than to commence the survey at the first feasible point above Bangor.

After a careful examination of the country, we decided to commence the survey at Milford, which lies on the east side of the Penobscot river, and opposite of Oldtown. A railroad is now built and in successful operation from Bangor to that point. Also a thorough survey and estimates of the river route, were made by the Bangor and Orono railroad company in 1849, from Bangor to Milford. It, was therefore deemed unnecessary to make a re-survey of that part of the route.

The tract of country lying between the Penobscot and St. Croix, through which we decided to make the survey, is known as the "Lottery lands," which were sold by Massachusetts in 1786, and subsequently known as the "Bingham purchase." The state owning no lands in this section, but little was known of the topography of the country, and but few individuals could be found who were acquainted with the general features of the country; consequently it was deemed advisable to make a reconnoissance of the country before a continuous survey with instruments was commenced.

Accordingly, on the 11th of September, R. T. Bailey, an experienced engineer, with four men (possessing the most information of the country of any that could be procured) were dispatched from Milford, to explore the country from that point to the St. Croix, in the direction of Calais.

Mr. Morton repaired to Calais to examine the country on that

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end of the route and to meet Mr. Bailey as he should arrive at that point, and to determine at what point the survey should terminate on the British line.

Mr. Bailey and party made their reconnoissance in the short space of five days, and reported that a very favorable route could be found nearly direct from Milford to Calais.

As it was desirable to complete the survey before short days and cold weather should commence, it was deemed advisable to put on *two* surveying parties to commence simultaneously on each end of the route.

Accordingly, on the 17th of September, two parties commenced the survey, consisting of fifteen men each, (exclusive of Mr. Bailey, who had charge of both parties as chief engineer in the field,) to wit: one explorer, one transitman, one levelman, one rodman, two chainmen, four axemen, three packmen, one cook and one commissary, for each party. Other transient help was employed from time to time, as the service required.

The two parties met and joined their lines near the head waters of the Machias river, on the 4th of December. On the 5th they packed their baggage and returned to Calais and Bangor respectively, where they arrived on the 8th of December.

A portion of the citizens of Calais being anxious that a reconnoissance should be made of a route in the direction of Wesley, an engineer and four men sent with instruments to examine some difficult points in that direction, who were engaged about one week, and report that route to be feasible. Examination was also made by the engineers of a more northern route, which was found to be practicable.

You will perceive that the survey of one route over the whole distance, from the Penobscot to the St. Croix river, was completed in the short space of forty-two working days. The weather was favorable, not the space of a *whole day* being lost by foul weather, during the progress of the survey.

The survey was made in the most thorough and accurate manner—every foot of the ground having been passed over with the transit, level and chain-a path being cut sufficient for that purpose.

The whole distance surveyed is about seventy-seven miles--nearly the entire space being a thick unbroken forest. It was a work of no small magnitude and expense for the engineers and explorers to seek out and communicate to each party from time to time, the best routes, and direct the survey over the most feasible ground.

Having passed over the whole route personally a number of times, I am fully satisfied that a more favorable location for a rail-way cannot be found in New England.

The right of way will no doubt be given to the company free of expense. Immense quantities of cedar may be found all along the track for sills, and granite and other material for bridging.

A portion of the pine timber along the line has been taken off by lumbermen, and run down the Union, Machias, Narraguagus and Scoodic rivers, and their tributaries. But a large amount still remains. All other kinds of timber stand in their primeval state. An almost inexhaustible quantity of hackmatack, so valuable and necessary to our great ship-building interest, may be found along the line, and contiguous to it. This desirable species of lumber, suitable for knees and other ship timber, is becoming scarce and difficult to be procured of sufficient dimensions for our large class of vessels. The opening of this road will furnish vast quantities at cheap rates for the enterprising ship-builder. There are also, upon the numerous hardwood ridges contiguous to the line, inexhaustible quantities of other species of timber used in the construction of vessels. Masts and spars also abound in endless variety.

The great quantities of hemlock, so valuable for tanning and lumber, will be no small item of income to this road.

If a road is constructed over the route surveyed, a very few years would intervene before a thriving population would settle along the line—a considerable portion of the country along the line and contiguous to it, being susceptible of cultivation. But, aside from agricultural parsuits, the immense water-power intersected by the line would call into being, in a very few years, a large number of towns and villages. By examination of the maps of the state, it will be observed that the road will cross the head waters of quite a number of rivers of considerable importance, which are fed by large lakes, the waters of which are dammed back and now used only for the temporary purpose of driving logs. These large bodies of water may be reserved and used for propelling machinery of any dimensions during the whole season.

In a few years our *pine* lumber will become exhausted, and the spruce and hemlock must take its place. This species of lumber (especially hemlock) is very much injured by being put in water. A railway would furnish cheap means of transportation for lumber without its sustaining this depreciation in value. The material for the manufacture of short lumber along the line, such as clapboards, shingles, &c., is almost inexhaustible. The income arising from transporting supplies and manufactures of the lumberman, would be an item of no inconsiderable importance.

I have barely hinted at such local advantages as suggested themselves to my mind while passing over the line. But these, as important as they are to our State, appear trifling compared with the magnitude of the enterprise viewed as a great international thoroughfare, destined to connect the two continents.

If the enterprise, in all its extent, shall be carried out, (and we have every reason to believe it will, at no distant day,) the comparatively trifling amount expended by the State in making this survey, will be a thousand times refunded, to her citizens, in being taken from comparative obscurity and placed upon this great highway of nations.

The benefits resulting to our State in a commercial point of view by being connected by this rapid means of communication with the whole Union on the one hand, and the British provinces, Great Britain and Europe on the other, cannot fail when properly understood and appreciated by our people, to excite the greatest exertions to secure its completion.

NORTH AMERICAN RAILWAY.

EXPENDITURES.

The whole amount expended in making the surveys and for office work of engineers, making up estimates and writing report for publication, and including my own compensation for services, is

\$5,358 58

5,078 58

\$280 00

Amount received from the State, at different times, and for baggage sold, is

Leaving a balance unprovided for, of

The expenditure of so large an amount may appear exhorbitant to an individual unacquainted with the character of the country and the thorough nature of the explorations and surveys made; but from the best information I have been able to procure from individuals experienced in such matters, a very large and unusual amount of labor has been done, compared with the means at our disposal. I doubt not, that when the report of the distinguished engineer in charge of the enterprise, shall be published and laid before you and the public, that its valuable information will fully justify the expenditure and induce the legislature to appropriate the small balance unprovided for. The expenditure above the appropriation, was indispensable to complete the report; without which our whole labor would have been lost to the public.

The expenses of boarding the men, including expense of transporting supplies, was fifty-eight cents per day.

Pay of	chief engineer in the field pe	er day, 🗧	₿5	00
"	assistants " with transit,	"	3	00
"	levelers,	"	2	50
"	rodmen,	"	1	25
"	chainmen, axemen, packmen	and cooks, per day,	, 1	00

I have procured vouchers in every instance where it was possible to do so, and made a statement of the same, numerically arranged, which are herewith submitted, marked A.

The file of vouchers marked B, were received from Mr. Morton on settlement with the engineer department; a statement of which, numerically arranged, accompany—amounting to \$2,045 67.

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The file of papers marked C, are the side receipts received from Mr. Morton and R. T. Bailey (chief engineer in the field,) for cash advanced to them at different times for the use of the engineer department.

The field tents remain unsold, as I could not find a market for anything like their value, and may be found in the land office at Bangor.

In conclusion, I am free to say, that too much credit cannot well be awarded to Mr. A. C. Morton, chief engineer, and his assistants, for their untiring energy and perseverance to advance and complete the survey in the shortest possible time, and for their co-operation and assistance in my department of labor.

And I would also take this opportunity of expressing my entire satisfaction with the faithful manner in which all the men employed, performed their part in the arduous labors of the survey.

I am, sir,

very truly,

your ob't servant, AMOS PICKARD.