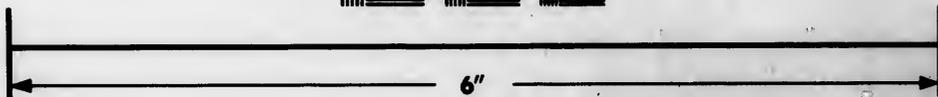
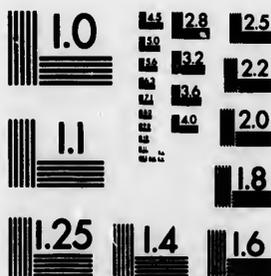


**IMAGE EVALUATION
TEST TARGET (MT-3)**



**Photographic
Sciences
Corporation**

23 WEST MAIN STREET
WEBSTER, N.Y. 14580
(716) 872-4503

**CIHM/ICMH
Microfiche
Series.**

**CIHM/ICMH
Collection de
microfiches.**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1983

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distortion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Includes supplementary material/
Comprend du matériel supplémentaire
- Only edition available/
Seule édition disponible
- Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/
Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

The copy filmed here has been reproduced thanks to the generosity of:

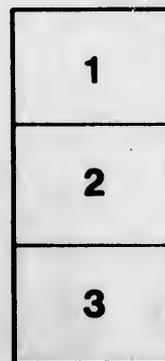
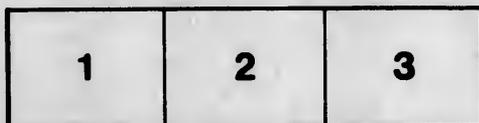
New Brunswick Museum
Saint John

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol \rightarrow (meaning "CONTINUED"), or the symbol ∇ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

New Brunswick Museum
Saint John

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

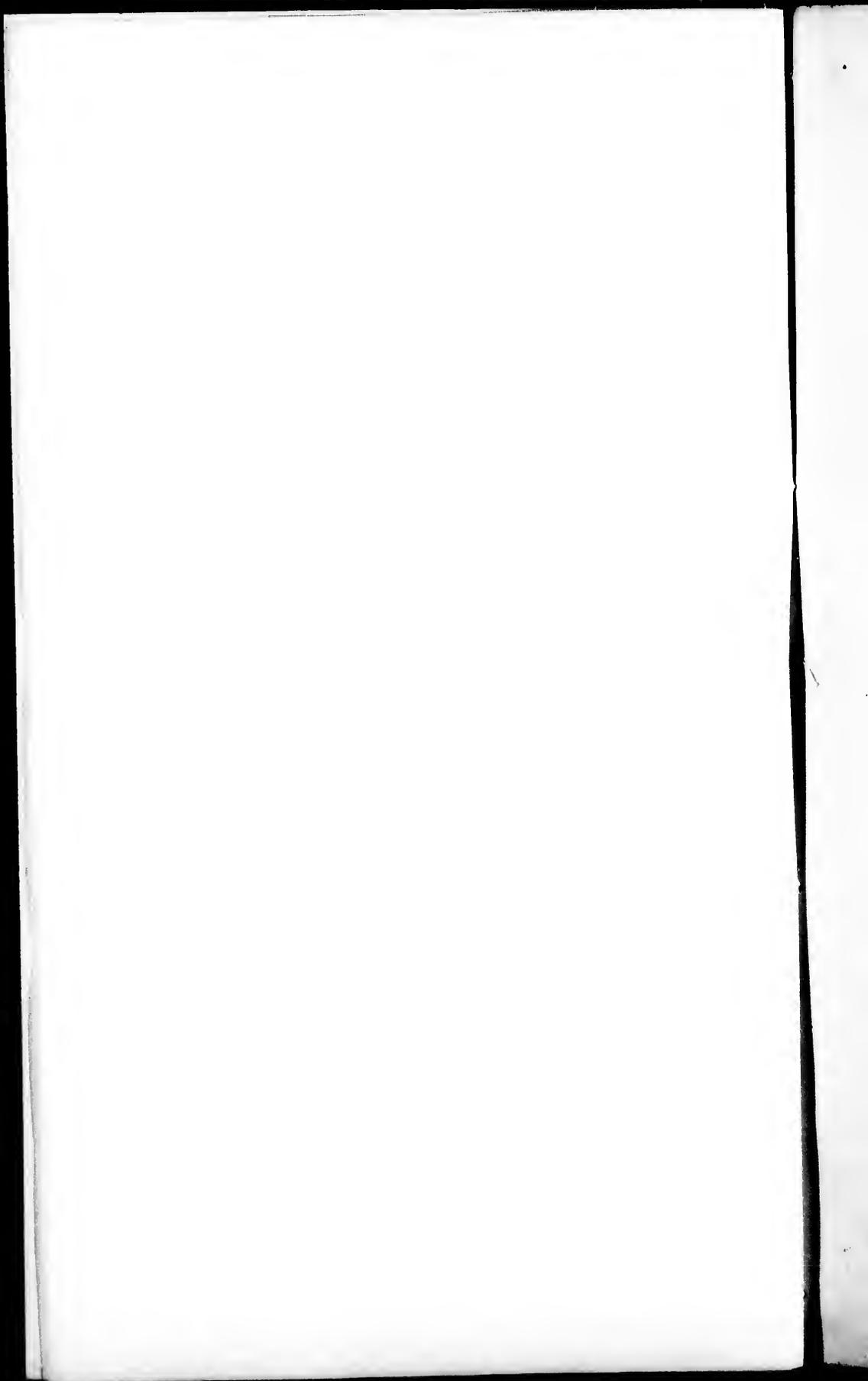
Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole \rightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

ails
du
odifier
une
mage

rrate
to

pelure,
n à



INTERCOLONIAL RAILWAY TRIBUTARY FORESTS.

REPORT.

EDWARD JACK.

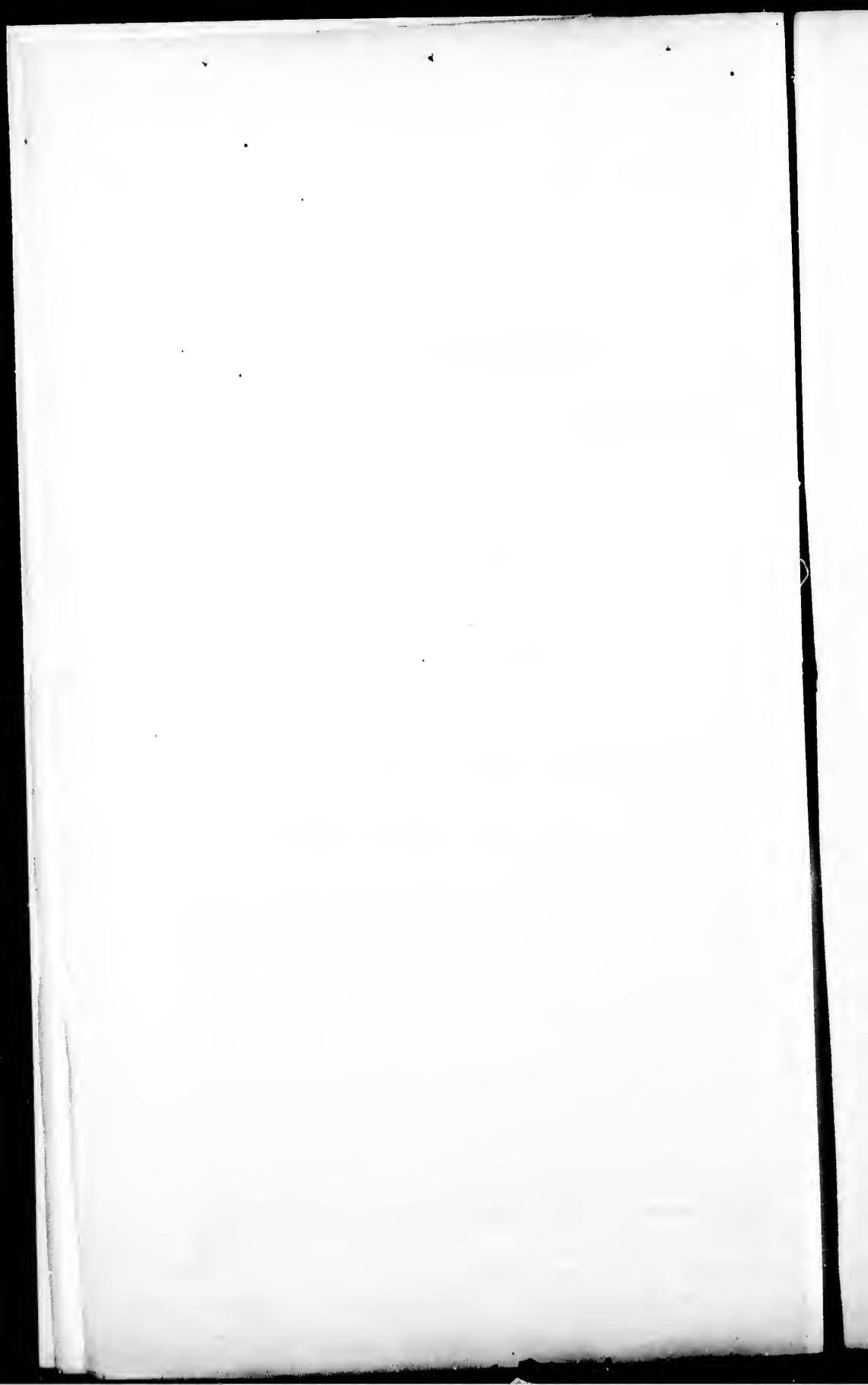
To the Mayor, Aldermen and Comynalty of the City of Moncton:

On my arrival at the City of Moncton, with a view to examining the facilities offered there for an increase of trade by means of the Intercolonial Railway and its sea terminus there.

I called on the Harbour Master and proceeded in company with him to examine the wharves of the town. Neglecting the two Coal Docks, we began at Sumner's wharf, which is 150 x 50 feet; thence we followed down to the others, whose dimensions were as follows: Dunlap's, 65 x 150 feet; Harris', (chiefly occupied by buildings,) 65 x 200 feet, coming finally to the wharf which constitutes the sea terminus of the Intercolonial Railway at Moncton, which, like all of the others, is built of round logs and which is of the dimensions of 110 x 120 feet; the Harbour Master informed me that but one vessel could lie at one time at this wharf; by the same authority I was also informed that at high water there are 36 feet in the Petitecodiac opposite Moncton, and that the present wharves cannot be extended with safety further into the stream.

The whole available water front of Moncton, from the upper end of Sumner's wharf to the lower side of the Intercolonial Railway wharf, is but little more than 1500 feet, and the buildings in the town come close down to this, the Main Street of Moncton being but a few hundred feet distant from the abrupt bank or shore of the Petitecodiac.

As any large increase of trade over the Intercolonial to Moncton must consist chiefly in that of the products of the forest, which are always bulky and consequently demand much space for their piling or storing, it will be readily seen how utterly inadequate the present terminal facilities of the Intercolonial at Moncton are for the development of even a moderately increased trade over the Road in articles of wood intended for export by sea from that place.



In order to give some little idea of what increase in trade to Moncton could be expected over the Intercolonial from the timber lands of New Brunswick, when proper facilities are offered for the handling and shipping of wood products at that city, a hasty trip was made by me over the Intercolonial Railway and connections as far north as Campbellton. The acquired information, added to what was already possessed by me, is briefly given below. To do justice to this important subject the labour of some years would be required.

On leaving Moncton I went to Richibucto, and although this river and its tributaries have been greatly injured by forest fires, and although most of the larger sized spruce logs have been cut for deal, when Moncton has improved harbour facilities a considerable trade may yet be worked up between the places in hemlock boards and small lumber.

Richibucto is a point from which it would appear that considerable shipments of spruce pulp could be expected.

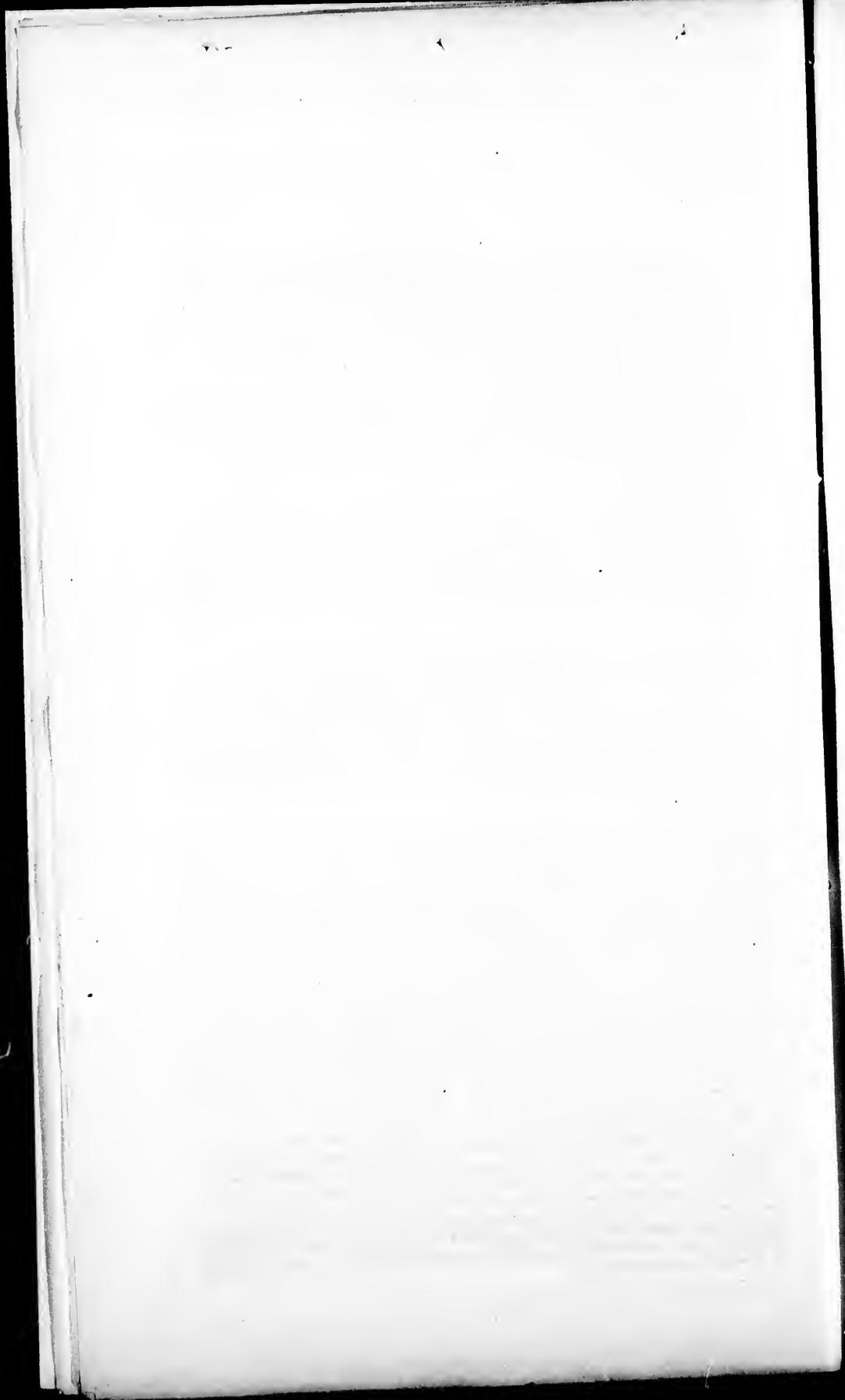
Mr. F. Schilde, formerly Superintendent of the Chatham Sulphite Fibre Company's works, a German pulp maker resident in America for the last four years, was employed by some parties in Richibucto in September last to estimate the cost of erecting a chemical pulp mill there which would be capable of producing 25 tons of pulp per day. This he placed at \$200,000, and he further estimated that pulp could be made there for \$29 per ton as against \$37.25, which he gave as the average cost of the production of this article in the United States.

A specimen of chemical pulp made by Mr. Schilde was sent by me to Bertram & Co., of London, Great Britain, who valued it at £8 sterling per ton. There is abundance of small spruce on the neighbouring rivers, whose products can be brought to Richibucto by water or Kent Northern Railway to supply such mill for an indefinite period of time.

After leaving Richibucto I went to Bathurst, between which place and Campbellton there is a Crown land territory of about 1000 square miles of timber country, which is intersected by about fourteen drivable brooks and streams which cross the Intercolonial Railway near their mouths about at right angles to the line of that road; some of these streams are thirty miles long.

This territory of one thousand square miles is nearly all green; the growth of timber on it consists largely of hardwoods, among which are also to be found white spruce, cedar, fir and some considerable sapling pine, not of large size. The waters of these streams are remarkably pure and spruce lumber can be driven down them to the Intercolonial as cheaply as wood of the same size can be delivered at the wharf at Richibucto. These fourteen streams will stand in the same relation to the trade of the Intercolonial as the same number of branch railways when once proper harbour facilities are provided at Moncton for the proper handling and export of woods. The timber on them should when possible be manufactured at some point on them as near the line of the railway as possible for two reasons; first, it would probably cost as much to drive boom raft and tow this wood to mills on the Bay of Chaleur as ought to be sufficient to take it to Moncton by rail; and secondly, by sawing at the line of the Railway the wood could be seasoned there before shipment, and thus its weight would be decreased and no waste or superfluous wood need to be carried. The deal logs have been very largely cut from these streams and it is to the smaller class of spruce and pine logs, as well as hardwood timber to which I refer, for which the market of the United States is the best and Moncton the nearest port of shipment.

The quantity of small and large spruce on the one thousand square miles referred to is large. Much time would be required to approximate it. The Government sealer at Bathurst estimated that the three small rivers at Bathurst, namely, the Little and Middle Rivers and Tatagouche, would each yield two million feet of spruce and pine per year for a number of years by cutting logs as low as six inches at the top. Mr. John W. Patterson, Crown Land Surveyor, who had been two weeks exploring Benjamin River this season, informed me that they estimated that there are fifty million feet of spruce and a greater quantity of cedar on it. The estimated quantity on these four rivers will give some idea of what may be expected from the whole tract.



With the exception of that of the manufacture of cedar the business of the saw mills on the Bay of Chaleur has been almost exclusively confined to that of spruce deals for the English market; this requires logs of a large size and the trees which would not fill these demands have been looked upon as a waste product; but when we consider the immense demands which are being made on eastern forests for wood for the manufacture of pulp and paper, it is very evident that in the near future matters will be reversed, and small spruce will command ready sale for that use to be made into pulp for exportation to Europa.

The possibilities of this are shown by Mr. Schilde's report referred to above, more especially when we also consider, that according to the report of the State Assessors of Maine for 1894, there are now in operation in that State forty-nine pulp and paper manufacturing, many of which have large out-puts, and in which spruce wood is being made use of nearly altogether. White spruce is the predominant variety of this tree, which occurs on the one thousand square miles where it is found on the shores of streams and in depressions in the hard wood ridges, is better adapted to the manufacture of pulp than the black spruce. The water in the fourteen streams above referred to is of the purest character, as there are no morasses or bogs in this country. We have here good wood, good water and ready railway transportation, three indispensable requisites for the successful carrying on of the pulp business.

As regards the almost unlimited supply of hardwood growing in this district, it may be remarked that when cut into short lengths and treated properly it can readily be driven to the line of the Intercolonial, as the streams by which this country is intersected are rapid and have good banks.

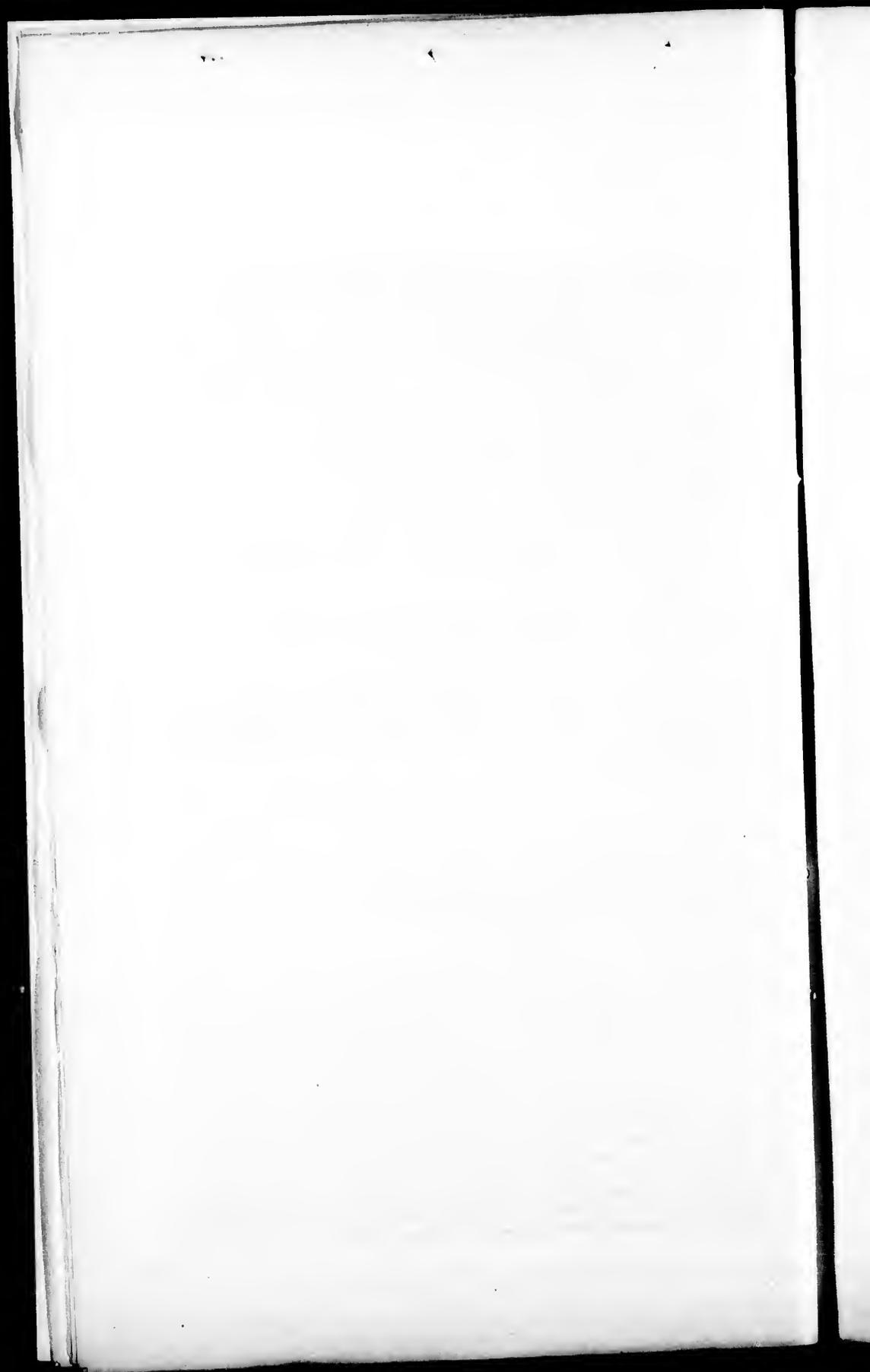
Three thousand cords of hard and soft wood are being annually manufactured into sugar barrels at Moncton, the staves being of hard, the bottom and top of soft woods. More than twenty thousand cords of hard wood, similar to that which is made use of as above, which is eight feet long and not less than ten inches at the top, can be got in this country for many years.

In this district there are very large quantities of cedar, a great part of which goes north over the Intercolonial Railway, and then over the railroads of the United States.

Were there proper terminal facilities at Moncton, very much of this wood, in the shape of shingles and sleepers, would find its way to the United States via that port, and freights which are now paid to the American railways would go to the schooners of the Bay of Fundy. Very considerable quantities of shingles have been carried this season to St. John by the Intercolonial for shipment thence to the United States ports, and it is but reasonable to suppose that were the land carriage reduced by making a good port of Moncton, much more would go by vessel to the United States.

In the above remarks, the Nepisiguit River, which also crosses the Intercolonial, has not been considered. It may be here, however, stated briefly that it and its branches drain more than twelve hundred square miles of wilderness land. Much of this has been injured by forest fires, but there is yet a great quantity of small spruce, as well as much scattering deal logs on this territory. There is also a considerable extent of small sized white pine on its branches, as also much cedar. A great deal of this lumber will have to find a market in the United States, and the nearest port on the Atlantic for the export of this is Moncton, and to which much of it will go when proper rail and terminal facilities are offered.

The South-West Miramichi is a river which proper harbor facilities at Moncton would make one of the most important feeders to the trade of the Intercolonial. Its importance as such has been greatly increased by the removal on the part of the United States of the duties on timber, and woods which were of but little value previous to this, are now become most important factors in the creation of new sources of freight for our railways. This is especially true of hemlock and cedar, both of which occur abundantly on the South-West Miramichi, and for the export of both of which by water Moncton is the most convenient port, and the Intercolonial Railway the vehicle for transportation.



Some idea of the importance of the South-West Miramichi may be had from the fact that forty per cent. of the revenue derived by the Government of the Province from the stumpage of spruce and pine logs comes from those cut on the Crown lands which are situated on this river and its tributaries.

The Canada Eastern Railway, which connects with the Intercolonial at Chatham Junction, seventy-two miles from Moncton, follows the South-West for about sixty miles. At various distances from this on either side of the river, and in different places in this, are some of the best hemlock districts in New Brunswick, and hemlock logs cut there can be delivered in great quantities close to the line of this railway at a point a little under one hundred miles from Moncton for from \$2.50 to \$2.75 per thousand feet, board measure.

According to my own information, and the best which can be obtained from others, there are more than 200 million feet B. M. of hemlock on the S. W. Miramichi and its branches between Chatham Junction and Boiestown where the Canada Eastern leaves this river; much of this hemlock has been cut down for the bark and left in the woods. This remains good for five years.

There is also much cedar on the branches of the South West Miramichi. One of these which discharges its waters into that river at Boiestown and which has been carefully explored by me, has now, in my judgment, fifty million feet B. M. of cedar on it. The stream referred to is the Taxis.

From eight to ten million feet of hemlock per year can be delivered at the line of the Canada Eastern at or near Blackville, and there is no reason why a large quantity of cedar shingles should not be manufactured on that line at a point not more than one hundred miles from Moncton.

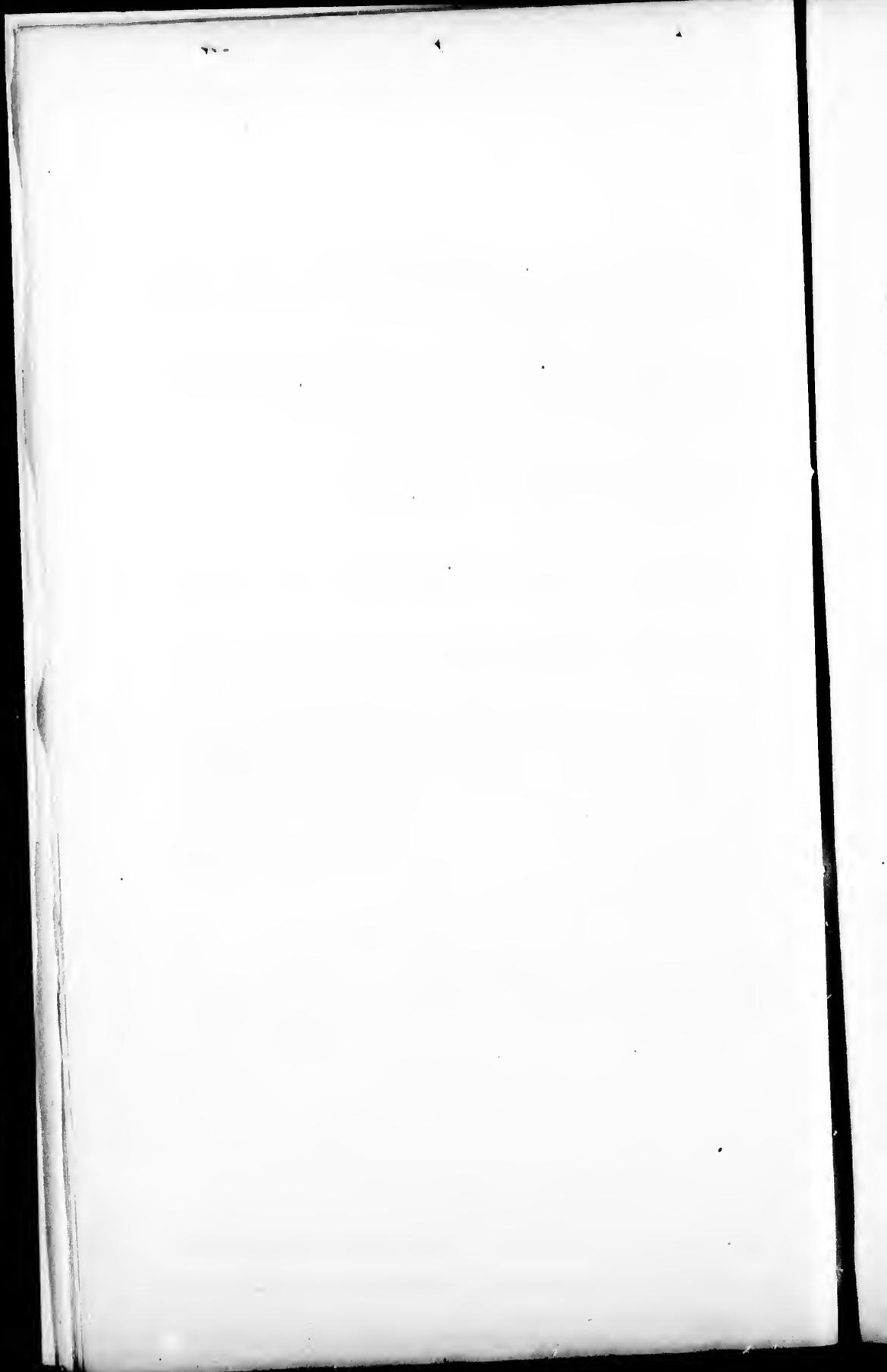
After having given the subject the most careful consideration from my own experience as a woodsman, as well as from information given to me by well known explorers, I have arrived at the conclusion that were proper facilities offered at Moncton for the export of boards and other lumber from that port by means of improved harbor or dock accommodation, that lumber operations along the line of the Intercolonial Railway would be greatly stimulated, and woods which are not now being much exported from the Province, and of which there are very great quantities which can be readily and cheaply brought to the line of the road, could be made to form a very important article of traffic for the Intercolonial Railway between Campbellton and Moncton, and the trade between those two points be very greatly increased.

The woods referred to are small spruce, unfit for the English market, hemlock, small and coarse white pine, as well as hard woods of different kinds.

I annex to this report some information of importance regarding matters therein referred to, and which may aid others in following up the very important question of the relation of the timber lands between Moncton and Campbellton to the traffic on the Intercolonial between these points, as well as to the traffic by the same routes to American ports from the Restigouche and its branches.

EDWARD JACK.

November, 1895.



MR. F. W. SUMNER'S STATEMENT.

Mr. F. W. Sumner, M. P. P., one of the chief business men of Moncton, and one who has a great deal to do with the export of lumber from that place to the United States, says the difference in freights between Moncton and St. John is about ten per cent. in favor of the latter port, but that proper harbor facilities at Moncton would equalize them. If vessels could load afloat at Moncton it would add a quarter more to the period of their existence, as well as save the necessity of frequent caulking and repairing. Moncton as a port of shipment is open a month earlier in the spring and continues open four or five weeks later in the autumn than any of the Gulf ports. That freights at the present time (October) are fifty cents per thousand on laths to New York from Moncton, while they are seventy to eighty cents from Gulf ports. These twenty cents should be earned by the Intercolonial. The rates of insurance are less from Moncton, and the returns for the cargo had much earlier.

As regards hemlock lumber, he also states that five million feet of hemlock boards, B. M., can be got for many years between Moncton and Chatham Junction. He has this year bought a large tract of timber land near the Intercolonial Railway, the lumber from which was formerly carried to market by water. That he intends placing a rotary on that railway to manufacture for the markets of the United States. He further stated that parties had agreed to peel for him five thousand cords of hemlock bark at points not further than fifty-seven miles from Moncton, and that the Millers will probably get from six to seven thousand cords in the same locality, these quantities taken together being equivalent to ten to eleven million feet of saw logs, and that if there were proper facilities at Moncton for piling and shipping, and favorable rates given by the I. C. R., these logs would go in boards to Moncton for shipment, as St. John is too distant and freights from Chatham are too high to warrant shipment.

JACOB LEIGHTON'S STATEMENT RESPECTING PART OF THE EAST SIDE OF THE LOWER SOUTH-WEST MIRAMICHI.

Mr. Leighton, who formerly lived at the mouth of the Cain's River, and has lumbered on it and its vicinity, now resides at Blackville, on the line of the Canada Eastern. He states as follows: "From Blackville to the mouth of the Cain's River, by the river, is called six miles, by the railway five miles. The Canada Eastern is about three-quarters of a mile distant in a direct line from the mouth of the Cain's River.

"The Canada Eastern follows close to the South West Miramichi for three miles above Blackville station.

"On the east side of the South West Miramichi for eight or nine miles down stream from Cain's River there is a large green country. This belt is probably four or five miles wide. It is ridge land, and is covered by hard and soft woods. No hard wood has been cut but for square timber. The hardwoods are chiefly of birch; the soft woods are hemlock, small spruce and small white and red pine. The character of the hemlock timber is better than that on the other side of the river; the greater part of the hemlock has been peeled. Thousands of cords of yellow and white birch for stove stuff could be delivered for years on the line of the Canada Eastern Railway below Cain's River, down to and below Blackville for \$2.50 per cord; there would also be plenty of spruce for heading.

By building blocks the mouth of Cain's River can be made to hold from four to five million feet B. M. lumber.

In high water the main south west Miramichi backs half a mile up this stream; there is a boom there now where logs are rafted. Logs coming down the Cain's River can be rafted and delivered alongside of the Railway not far from Blackville, as well as at it.

n
t
P
C
P
P

No hemlock as yet has been cut on Cain's River on the stream further than twelve miles from the mouth or a little more. The bark from this was hauled about eight miles to the Canada Eastern Railway.

There is plenty of hemlock on Sabbies River, Salmon Brook, Black Brook, Myshrall Brook, Six Mile Brook and other Brooks.

The hemlock on these streams has never been cut among and logs can be very cheaply driven down Cain's River. Spruce and pine cut down to six inches at the top can be delivered at the mouth of the Cain's River for \$4.00 per thousand feet B. M.

The chief part of Sabbies River is green. Salmon Brook is generally green, as is the greater part of Black Brook, and although a great portion of the timber on Myshrall Brook is burned there is yet much green forest on it.

For two miles up the south west Miranichi from Blackville the water on the south bank is deep and rafts can be run down there from Cain's River and be held there all summer; these when wanted can be dropped down, even at the lowest water, to the cove at Doctor's Island at Blackville, which will hold half a million feet B. M.

About four or five million feet of lumber per year, to be manufactured into deal logs, comes out of Cain's River.

Eight million feet of hemlock per year can be delivered for many years at Blackville at from \$2.50 to \$2.75 per thousand feet B. M., and three million feet B. M. of hardwood logs per year at from \$5.50 to \$6.00 per thousand feet.

Mr. Alexander Wright, who does a large milling business on the Albert Railway at Salisbury, says:

"Could vessels be loaded afloat at Moncton he would ship all of his English deals there." And he further says: "Could such be done a great trade could be got up over the Intercolonial Railway to that port, and which could not be obtained otherwise."

Could vessels be loaded afloat at Moncton, the rates of freight from Moncton and St. John to American ports would be the same.

There are about thirty million feet B. M. of deals loaded at the head of the Bay of Fundy. The cost of lirage of these is from forty-five to fifty cents per thousand. Were the proper harbor facilities offered for the shipment of these at Moncton, a great percentage of this quantity would reach the ocean terminus at Moncton by the Intercolonial.

EXTRACT OF A LETTER FROM MR. KILGOUR SHIVES,
DATED NOVEMBER 26TH, 1895.

In this letter Mr. Shives, who is a leading lumberman of Campbellton, says:

"In regard to the quantity of shingles, boards, floor boards, boxes, etc., that could be sent from Campbellton to the United States providing that good shipping facilities were given at Moncton, would say that if vessels would carry shingles, etc., from Moncton to the United States at same freight as from St. John to U. S., there would be a large quantity of shingles go forward next season, as this trade is well established, and large quantities now go forward to U. S. ports. The I. C. R. gives an export rate from here to Saint John, and they are carried from St. John to United States ports by schooners. In re, the amount of trade in boards, floor boards, boxes, etc., it would be difficult to give an answer, as up to the present time nothing has been done in this line; but if the I. C. R. will give a favourable rate, and allow the shippers to put on a good load, same as many of the railroads in the U. S. allow, I have no doubt this trade will start up at once, and a great quantity of lumber could be manufactured out of logs that now cannot be sawn at a profit at present. In answer to your question: How many feet of pine boards could be got at Campbellton, provided mills were arranged so that everything could be sawn, would say that if there was a trade opened up for rough boards that about five million a year could be had.

EDWARD JACK.

Fredericton, November, 1895.

