

Great Northern Railway Co.

Purchasing Department

St. Paul, Minn., November 15th, 1907

Howard James
Director of Purchases

T. B. Hechner
Purchasing Agent

Mr. L. W. Hill,
President,
Building.

Dear Sir:-

Answering yours of the 11th, in regard to matters concerned with the Jehn O'Brien Lumber Co.

It has been customary for the ice to close down the operation of the mill in December, and ordinarily it has not been possible to open it until in March. This year it is going to be absolutely necessary to close down for the reason that we are not going to have available logs for winter cutting, also to prosecute absolutely necessary repairs.

The mill has been cutting out about 50,000 pieces per month. The approximate amount, therefore, between November 1st and June 1st will be 150,000. At the present time we have at the tie plant untreated 97,875 read ties, 3315 bridge ties, 84620 pieces of switch stock. There is also on hand treated 25,032 ties. The tie plant is treating now in the neighborhood 35,000 to 45,000 pieces a month. During September and October the tie plant shipped 45,212 pieces of all classes of ties, about 21,000 of these went to Armington where we are still shipping triangular ties. The balance went to the Montana, Kalispell, Montana Central and Spokane Divisions. We now have orders out for all rectangular ties after treatment to be shipped to the Montana Central for 1908 renewals, and shall continue shipping directly after treatment, there being plenty of points where this can be done with safety, account no trouble from snow,

Great Northern Railway Line

Purchasing Department,

Howard James,
Director of Purchases.

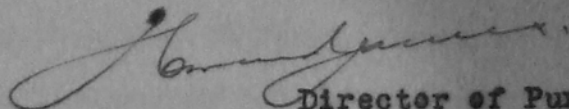
F. B. Mechner,
Purchasing Agent.

L.W.H. -2-

and of course this saves considerable cost in piling and again handling the ties to lead them in the Spring.

As soon as the Whitefish mill started up, all ties cut there have been sent to Semers for treatment and we had proposed to continue this unless it became necessary to make some direct shipments from that point to take care of the Fernie Michael line, ties there not coming out as satisfactorily as we would like.

Yours truly,



Director of Purchases.

HJ-M

Great Northern Railway Line
Purchasing Department.

St. Paul, Minn., October 22nd, 1907

Howard James
Director of Purchases
F. B. Flechner
Purchasing Agent.

Mr. L.W. Hill,
President,
Building.

Dear Sir:-

With the scarcity and consequent increasing high price of ties, the question of the economy of treating some on this end of the road presents itself very strongly to me. We could arrange easily to treat, I think, in the neighborhood of five or six hundred thousand ties at Sandstone with a 2½ gallon treatment of creosote, which would amount to a ten or twelve pound treatment. The cost would be 32¢ a tie for this treatment taken from the cars, treated and loaded back to the cars. I think that we could purchase a considerable quantity of the lower grade woods, such as Birch and Jack Pine, submit them to this treatment and be ahead just this quantity of ties which we could not use untreated, or if thought best, we could send in standard woods, such as Cedar and Tamarack and have them treated. It would appear to me better though that at least this year we should endeavor to purchase a quantity of the low grade woods and have them treated. Hewed Birch ties I think that we will be able to purchase on a basis of about 40¢ peeled f.o.b. the cars at point of shipment. This roughly, therefore, would figure a cost of 72¢ a tie without figuring in any cost of transportation from the originating point of the ties to Sandstone.

Have we your authority to go ahead on this basis?

Yours truly,

HJ-M

Howard James
Director of Purchases.

Great Northern Railway Line

Purchasing Department.

Howard James
Director of Purchases.

P. B. Flechner
Purchasing Agent.

St. Paul, Minn., September 24th, 1907

Mr. L.W. Hill,
President,
Building.

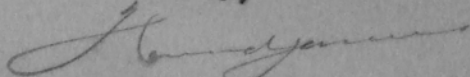
Dear Sir:-

Returning letter of W.W. Broughton and noting your memo on same regarding ties for the Morden Line: I advised you yesterday in regard to this, but further wish to say that we now have record of a shipment of 16,678 ties for this line, this being more than sufficient to carry them beyond the boundary. As for the 53,100 required from the boundary to Morden, beg to state that we have to-day at Brevator a drive of about 30,000 ties, from this we will require 6,000 for Minot and 1200 for Elk River. The balance of the drive will go to Morden.

We fully expect to be loading by Saturday at Floodwood, we also expect some 6000 ties from river at Cohasset latter part of the week and with these ties and what we are loading in a small way at other points, it now seems probable that within the next few weeks we will fill the order.

As I stated to you in my letter of September 23rd, the requisitions for ties for other work on the road still remain very heavy - all seem to be preference.

Yours truly,



Director of Purchases.

Great Northern Railway Line

Purchasing Department.

396A

[Handwritten initials]

Howard James
Director of Purchases

F. B. Mechner
Purchasing Agent

St. Paul, Minn., June 19th, 1907

Mr. L.W. Hill,
President,
Building.

Dear Sir:-

I have your memo of the 15th enclosing letter from Mr. McGuigan, also the statement showing additional requirements. I do not know of any ties which we have been able to purchase, without some unusual condition surrounded the purchase, which we have not secured irrespective of the requirements of the Company. I have secured practically enough I believe, to take care of the original requirements and also the new construction which was figured on, although not all of this last account has been covered. We will endeavor to do our best to secure the additional amount, which I understand you approve the purchase of.

Yours truly,

[Handwritten signature of Howard James]

Director of Purchases.

HJ-M

T I E S I T U A T I O N
E A S T E R N D I S T R I C T , J U L Y 1 S T , 1 9 0 7 .

Division	Required	Furnished	Due	Over	Add'n Req'ts.
Supr. & Mis.	203,100	208,245		5,145	25,000
Terminals	76,350	81,790		5,440	10,000
Fergus	105,834	114,020		8,186	25,000
Willmar	99,367	104,457		5,090	20,000
W. & S.F.	67,156	68,195		1,039	15,000
Breck.	94,928	93,739	1,189		20,000
Northern	90,513	82,634	7,879		20,000
Dakota	91,275	80,787	10,488		30,000
Minot	100,641	91,749	8,892		30,000
Montana	156,889	105,822	51,067		30,000
Kalispell	37,163	27,699	9,464		10,000
Spokane	170,209	134,262	35,947		30,000
Cascade	92,303	54,779	37,524		20,000
M. C. Ry.	199,912	82,184	117,728		30,000
S. F. & N.	57,712	55,051	2,661		- -
	<u>1,643,352</u>	<u>1,385,413</u>	<u>282,839</u>	<u>24,900</u>	<u>315,000</u>

A V A I L A B L E S U P P L Y .

(Providing the driving stage of water in the river will permit delivery of the ties.)

From Hibbing	Approximately	75,000)	
" Cohasset	"	40,000)	From River
" Floodwood	"	150,000)	
" Brevator	"	100,000)	
" Duluth	"	40,000	" Lake Superior
" Nickerson and Vicinity	"	30,000	" Right of Way
" Cass Lake to Fosston	"	10,000	" "
" Shevlin	"	<u>13,000</u>	" Mallard Branch
		458,000	

This does not include ties ordered for new work.

Great Northern Railway Line

Purchasing Department.

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Howard James
Director of Purchases
F. B. Wechner
Purchasing Agent

St. Paul, Minn., December 3rd, 1906.

Mr. L. W. Hill,
Vice President,
New York, N.Y.

Dear Sir:-

It has recently been brought to my attention that the Butte & Boulder Milling Co., at Basin, Mont., had a large quantity of timber contiguous to Bernice, on the Montana Central, and that they were going to build a flume from this timber to Bernice. With this in mind I took the matter up with them to endeavor to ascertain if they had in mind to get out ties, and today am in receipt of reply from them that they have not as yet taken out any material but have an abundance of timber of suitable size for railroad ties and mining timber. Most of the timber, however, is lodge pole pine, but there are considerable quantities of fir. They quote prices as follows:

Fir - - - #1, 50¢
" - - - #2, 45¢

Lodge Pole Pine #1, 45¢
" " " #2, 40¢

There specification is on basis of #1, 7 x 8 - 8, and #2, 7 x 7 - 8.

You will appreciate that the lodge pole pine would be of little value to us without being treated, and we have never purchased any of the Montana pine east of the Rockies or the Montana fir, as I had

Great Northern Railway Line

Purchasing Department.

Howard James
Director of Purchases

T. B. Hechner
Purchasing Agent

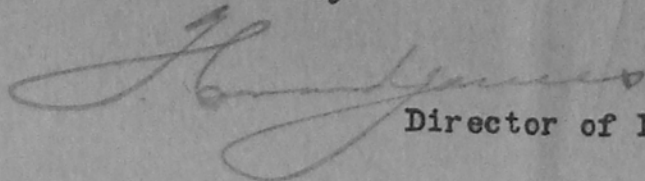
Mr. L. W. H. -2-

instructions from the President not to do so.

The prices they quote are the same that I have advice the Chicago, Milwaukee & St. Paul Ry. are paying the Big Black Foot Milling Co. and others for ties through Montana.

All facts as above I give you for your decision, as I would not feel warranted in either purchasing the timber or in paying such prices.

Yours truly



Director of Purchases.

March 27, 1906.

Mr. L. W. Hill:

Referring to the matter of tie requirements:

According to the attached statement we require for renewals	1,245,852 ties
For Improvements, in the way of passing, industry and yard tracks, and relaying	500,000
For double track and new main lines	104,900
For construction of new lines	<u>1,418,000</u>
A total of	3,268,752 ties
From Mr. Plechner's memorandum attached, it will be seen that we now have on hand	520,892 ties
He expects to receive under tie contracts already made	1,185,000
He expects to receive from other sources, as noted	<u>1,112,000</u>
A total of	<u>2,817,892</u>
A shortage of	450,860 ties.
This would leave no stock for emergencies, and I think it is fair to add to this shortage	<u>149,140</u>
Making the actual shortage at the present time	600,000 ties =====

The requirements for renewals are the original requirements of the Operating Department. If cut thirty per cent as originally intended, it would reduce the requirements by 374,000 ties, leaving a shortage of 226,000 ties.

You will notice from Mr. Ewleth's memorandum to Mr. Plechner that a party named J. H. Stone, on the S. F. & N. Ry., has

offered to sell 200,000 ties at \$8.25 per M. feet, equivalent to 30.8 cents per tie. I have suggested to Mr. Flechner that he ascertain if Stone will furnish 300,000 ties at a price of \$8.00 per M. feet, which would be equivalent to 29.9 cents per tie. Even if he took a contract to furnish 300,000 ties it is improbable that Stone would be able to cut that number, but it would reduce the price on what he did cut.

Mr. Flechner feels assured that he will receive the full 1,185,000 ties that have been contracted for, as in his statement he has included only the minimum number of ties to be furnished under each contract. He also thinks that he will receive the full 1,112,000 ties that he expects to get from other sources, but it will be noted that this includes 652,000 ties from the John O'Brien Lumber Company.

It is a question how many the Lumber Company will furnish if the present requirements as to size, etc., are adhered to. If O'Brien is allowed to cut 10x10 or 14x14 cants, he can furnish a great many more ties than if we insist upon his sawing ties from 16x16 cants. Unfortunately, trees do not grow so as to furnish many cants of the latter size.

Mr. Flechner did not consider it advisable to accept Mr. Stone's proposition, thinking that he could purchase ties from the O'Brien Lumber Co. at a lesser figure than he could from Stone. There are two sides to this question and one side should be taken into consideration by you before you carry out the plan suggested, of buying out John O'Brien and turning the

mill into a tie mill. If O'Brien cuts ties, he can't cut and ship lumber. Three cents a tie on 200,000 ties is only \$6,000.00, and it would not take very many cars of lumber for the freight to amount to \$6,000.00, to say nothing about the profit we might receive for selling lumber. I think it is clearly to our interest to buy ties at a higher price from outside mills that will not ship lumber over our line, than to turn the O'Brien plant into a tie mill and curtail their lumber shipments.

In conclusion, my recommendations would be that a contract be made with Stone for as many ties as he can cut; that the requirements of the Operating Department be arbitrarily cut at least $33\frac{1}{3}$ per cent. at present, it being understood that later on if we can succeed in purchasing enough ties to fill the original requirements, the additional ties will be furnished as obtained.

This, of course, does not take into consideration our abandoning any of the construction work that has been listed upon the tie statement.

R. I. FARRINGTON.

GREAT NORTHERN RAILWAY LINE

TIES REQUIRED FOR 1906.

SUB-DIVISIONS	MAIN TRK. NUMBER	SIDE TRK. NUMBER	TOTAL NUMBER	TIES ALLOWED ON BASIS OF 1% REDUCTIONS.
St. Paul To Coon Ck.	17070	21945	39015	20010
Mpls. Jet To Mound.	13100	7289	20389	14372
Hatchinson Branch.	7299	789	8088	5662
Terminals Division	37469	30023	67492	46544
Willmar Division	16519	2446	18965	13276
Willmar To Gar'son	5074	1581	6655	4659
Garretson To S. City	11773	3338	15109	10576
Garretson To Y'kton	6924	852	7776	5303
S. City To O'Neill	1435	1208	15559	10891
W. & S. P. Ry.	38123	8775	44898	31439
Willmar To Breck.	22190	4013	26143	18300
Browns Valley Br.	4305	583	5448	3813
Aberdeen Branch	10304	794	11158	7811
Ellendale Line	4783	568	5331	3732
Breck. To Larimore	19549	3425	22974	16082
Portland To Aneta	23688	1982	25848	17354
Tintah Branch	3197	393	3490	2422
Benson & Watertown	5187	331	5518	3882
Watertown To Maron	2983	364	3347	2343
Breckenridge Div.	98724	12303	109027	78319
Coon Ck. To Melrose	17812	5605	23417	16392
Melrose To B'ville	15247	3211	18458	12921
Pelican R'pds Line	3612	196	3908	2685
Osseo Line	14440	1032	15472	10839
St. Cloud & Willmar	12481	2290	14781	10333
Hinckley Line	11276	1947	13223	9256
Elk River & Milaca	7717	299	8018	5611
Eagle Bend Branch	37203	3227	40430	28301
FERGUS FALLS DIV.	119788	17797	137585	96909
St. Vincent Line	24256	5098	29354	20548
Fosston Line	28028	2800	28628	20040
Halstad Branch	14502	1050	15552	10898
St. Hilaire Line	3911	825	4736	3315
NORTHERN DIVISION	68697	9573	78270	54769
EASTERN DISTRICT	339851	78917	455237	318666
Duluth To Coon Ck.	39045	17468	56513	39559
Brookston To O. Lake	65892	12853	78445	54912
Swan Riv. To Virginia	20888	4683	25349	17744
And Mine Spurs.				
LAKE DISTRICT	126323	33984	160307	112215
Weche Line	31524	4842	36376	25463
Pembina Mtn Branch	2228	229	2597	1797
Carman To Devils Lk.	17395	4487	21882	15817
Langdon Branch	8810	808	9118	6383
Lakota Branch				
DAKOTA DIVISION	59577	10366	69943	48960
Devils Lake To Minot	44433	7133	51618	36131
Minot To Williston	36377	4459	40836	28585
St. John Branch	10214	381	10595	7417
Bottineau Branch	4361	240	4601	3221
MINOT DIVISION	95435	12213	107648	75354

SUB-DIVISION	MAIN TRK: NUMBER	SIDE TRK: NUMBER	TOTAL NUMBER	TIES ALLOWED ON PAS- SIS OF 70% REDUCTIONS.
Williston To Wolf Pt.	12580	1923	14503	10152
Wolf Point To Bowdoin	17395	2552	19947	13963
Bowdoin To Pac.Jct.	27977	1891	29868	20907
Pacific Jct. To C.Bank	11223	2478	13701	9591
MONTANA DIVISION	69175	8844	78019	54613
Pacific Jc.To G.Falls	28849	1084	29933	20253
Great Falls To Helena	32829	6248	39077	27354
Helena To Butte	35500	11142	46642	32649
Sand Coulees&Neihart Br	27967	9704	37671	26370
Sweet Grass Line	8190		8190	5733
MONTANA CENTRAL RY.	133335	28178	161513	113059
CENTRAL DISTRICT	357522	59601	417123	291986
Cut Bank To Col.Falls	21558	1813	23371	16360
Columbia Falls To Troy	6560	839	7399	5179
Rexford To Fernie				
Sedan Branch	3829	325	4154	2908
KALISPELL DIVISION	31947	2977	34924	24447
Troy To Spokane	20789	3576	24365	17055
Spokane To Wilson Ck.	9370	2305	11675	8173
Wilson Ck To Leavenwth:	20924	2645	23569	16498
SPOKANE DIVISION	51083	8526	59609	41726
Leavwth To Seattle	29609	5077	34686	24280
Everett To Liverpool	15403	1498	16901	11831
Skagit Branch	4979	953	5932	4152
CASCADE DIVISION	49991	7528	57519	40333
WESTERN DISTRICT	133021	19984	152052	106436
Spokane To Northport	43113	2598	45711	31998
Northport To Nelson&R.	12138	3284	15422	10795
SPO.FALLS & NOR.RY.	55251	5882	61133	42793

S U M M A R Y

EASTERN DISTRICT	339851	78917	455237	313666
LAKE DISTRICT	126323	33984	160307	112215
CENTRAL DISTRICT	357522	59601	417123	291986
WESTERN DISTRICT	133021	19984	152052	106436
SPO.FALLS & NOR.	55251	5882	61133	42793

GREAT NOR.RY. LINE : 1011988 : 198368 : 1245852 : 872096

G R E A T N O R T H E R N R A I L W A Y L I N E .

OFFICE OF ENGINEER OF MAINTENANCE OF WAY

STATEMENT SHOWING COMPARATIVE TIE RENEWALS, NOT INCLUDING S.F. & N. RAILWAY.

CROSS TIES

Year	Number in track	Total	R E N E W A L S	
			Per 100000 Ties in Track	Per cent per 100000 compared with 1906
1901	15036614	1394070	9556	157
1902	15237676	1247536	8187	135
1903	15733110	1313472	8348	137
1904	18330006	1233409	6729	111
1905	18894343	1080584	5719	94
1906	19474015	1184719	6084	
			<i>4259 - 70% of 6084</i>	
Switch Timber (Lineal Feet)			<i>6144623 / 7771.</i>	
1901	2515316	201312	8003	92
1902	2593136	325530	12554	144
1903	2771738	380609	13732	158
1904	3696473	210667	8444	97
1905	3999370	184552	4615	53
1906	4144661	361053	8713	

Great Northern Railway Line

Purchasing Department.

Howard James
Director of Purchases

F. B. Heckner
Purchasing Agent

St. Paul, Minn., Feb'y 20th, 1906.

Mr. L. W. Hill,
Vice President,
Building.

Dear Sir:-

Referring to the question about which we were talking yesterday, - namely the tie supply:

We are exerting every endeavor to get ties at this end of the Road, fully appreciating the necessity, and we are endeavoring also to stimulate the getting out of ties along the Kalispell and Spokane Divisions, having had men in there for the last two weeks. If this open weather keeps on, however, I fear very much for our tie supply, although you may rest assured we will do everything possible to get all that are required.

As we talked regarding the Mill at Somers: We have on hand there at present approximately 71,000 "C" ties and 108,000 "A" ties, or a total of 179,000. These are at the present time being treated. The saw-mill is shut down, and as you are probably aware, Mr. O'Brien is down at the Hot Springs in Arkansas, intending to stay there until such time as it will be possible for them to start the Mill, which they intend to do as soon as the ice will permit. Mr. O'Brien told Mr. Slade

Great Northern Railway Line

Purchasing Department

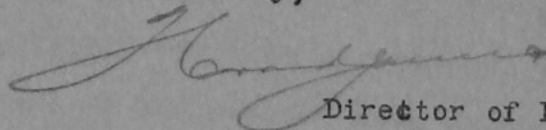
Howard James
Director of Purchases

F. B. Flechner
Purchasing Agent

L.W.H. -2-

when he passed through St. Paul that they would be able to get out about 450,000 ties this season. You will appreciate, however, that the season means from the time they start up until they close down, and, as a consequence, considerable quantity would not be available for this years work. It would very materially assist, of course, if the O'Brien people could get out a very much larger number of ties than this, and I make the particular object of this letter not only to put you in touch with the situation, but that you may, if you think best, take it up with Mr. O'Brien with a view of increasing the output. This, in my opinion, is the only way that it can be accomplished.

Yours truly,



Director of Purchases.

HJ-H

3966

Great Northern Railway Line

Purchasing Department

Howard James, Purchasing Agent
J. B. Wheeler, Asst. Purchasing Agent



St. Paul, Minn., Jan. 11, 1905.

Mr. L. W. Hill,
Vice President,
Building.

Dear Sir:-

I have had four ties which were treated with 6% solution chloride of zinc and left in the vats four hour irrespective of their absorption, tested by Mr. Julian with the following results:

	F I R		S P R U C E		P I N E		T A M A R A C	
	Middle	2' End	Middle	2' End	Middle	2' End	Middle	2' End
Center	.02	.02	.02	.02	.62	.79	.02	.06
1-7/8	.04	.05	.07	.09	1.01	.88	.03	.05
3-3/4	.04	.04	.21	.25	2.99	2.47	.23	.24
5-5/8	.10	.06	.24	.31	3.70	3.42	.60	.34
5-5/8		.44		1.51		3.12		

The results as arrived at by Mr. Julian will show you how very refractory the fir, spruce and tamarac timber is that we are endeavoring to treat, this being largely caused, I believe, by the fact that we are getting so many Heart Ties. You will also note that the pine tie was very evidently saturated.

Yours truly,

Howard James

purchasing Agent.

3866

Memorandum of Renewal Ties required for
Year 1904
Eastern and Lake Districts.

	<u>Main Track</u>	<u>Side Track</u>	<u>Total</u>
Terminals Division,	36,235	21,196	57,431
Willmar Division	18,842	3,874	22,716
W.& S.F.Ry.,	61,214	8,596	69,810
Breckenridge Division,	148,298	16,836	165,134
Fergus Division,	131,622	23,116	154,738
Northern Division,	102,370	10,913	113,283
Dakota Division,	119,780	10,849	130,629
Lake District,	<u>130,505</u>	<u>30,967</u>	<u>161,470</u>
	748,864	126,347	875,211

A. P. Lane 5/12/04

F. 8032

Great Northern Railway Line
Purchasing Department.

Howard James,
Purchasing Agent.

L. B. Beckner,
Asst. Purchasing Agent.

St. Paul, Minn., July 19, 1904.

Mr. L. W. Hill,
Vice President,
BUILDING.

Dear Sir:

On June 1st, by suggestion of the President, we started treating ties at the Somers Tie Plant with a 6% chloride of zinc solution. It is our aim to treat the ties to a point where they show an absorption of $\frac{3}{4}$ # of chloride of zinc to the cubic foot of timber. The increasing of the strength of the solution is not in my opinion giving us the result desired, because the work carried on of the treatment seems to show that we are getting in this amount of chloride of zinc in about $2\frac{1}{2}$ hours instead of getting in same amount of zinc of $4\frac{1}{2}$ % solution in four to five hours. In other words, the increasing of the solution simply admits of our treating faster, but is not impregnating the timber any more thoroughly. Neither does it seem advisable to increase the $\frac{3}{4}$ # of chloride to the cubic foot of timber as this amount is somewhat larger than is the custom in this country.

Supt. Henry reports that with the strong solution, he is obliged to start forcing back the chloride in about $2\frac{1}{2}$ hours, and that with this time he is unable to get up a pressure of more than 70 to 80#; and that he is certain that the timber has not reached nearly the absorption that it would if we were using weaker solution emerging the timber longer, and being able, therefore, to get up a pressure of 100 to 120#.

Great Northern Railway Line.

Purchasing Department.

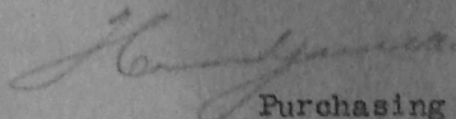
Howard James
Purchasing Agent

J. B. Hochner,
Asst. Purchasing Agent

-2-

The 6% solution worked very much better with the pole ties that it is working with our triangular form of tie. I feel quite convinced that it would be better for us to use a 4½% solution, particularly on the E ties, but do not like to change back in the light of the President's suggestion. I await your advise, and the matter should have as prompt attention as possible.

Yours truly,



Purchasing Agent.

HJ-Y

Great Northern Railway Line

Purchasing Department

Howard James
Purchasing Agent
J. B. Flechner
Asst. Purchasing Agent

St. Paul, Minn., February 23, 1904.

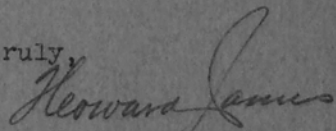
Mr. L. W. Hill,
Assistant President,
Building.

Dear Sir:-

Replying to yours of the 22nd inquiring as to the cost per thousand for treating our ties at Somers, also the original cost of the tie. Our report for 1903 shows that we treated 28,347,863 feet board measure at a cost of \$103,104.49, or \$3.64 per thousand feet. We pay the John O'Brien Lumber Co. for the original tie as follows:

A	TIE	7" x 8" - 8'	37-1/3'	\$6.75 per M	\$.252	10.37
E	" (Triangular)	7" x 12" - 8'	33'	" " "	.22275	10.27
H	"	6" x 8" - 12' SLS	48'	7.25 " "	.348	10.87
K	"	8" x 10" - 12' "	80'	" "	.58	10.27

Yours truly,



Purchasing Agent