

Reforestry, \$454.39. Cost of reforestring 20 acres in section 14-46-19.

Barrman, \$100.00. This item in 1904 was included in "salaries."

Cherry Orchard Maintenance, \$85.47. The cost of maintaining the Cherry Orchard during the year.

Furniture and Fixtures, \$83.46. Proportion of General Office, and is due to purchase of necessary desks and equipment for increased force.

Audit, \$150.00. Expense of Haskins & Sells' 1904 audit.

Adding Machine, \$75.08. Properly belongs to the item of Furniture and Fixtures and is a proportion of the one machine in the General Office.

Taxes, \$1131.73. There is an actual saving in 1905 taxes as mentioned elsewhere, but in order to get our accounts in good shape and write off an item of delinquent taxes, so called, our accounts for this year have to bear the burden of \$792.09. In addition to this, we have paid during the fiscal year, \$208.17 for 1904 taxes which were carelessly omitted from the payments last year. On one description, Mr. C. R. Brown had a valid tax title and we settled the matter, receiving a Quit Claim Deed, paying therefor, \$47.20. We collected during the year from various persons, \$72.57 which had been previously charged to "Taxes." In addition to this, there is \$322.02 to be added on account of contractors returning the lands to us; from this amount must be deducted \$165.18, account of saving in this year's tax payment.

THE MUNISING COMPANY

Land Department

STATEMENT OF EXPENDITURES FOR THE YEAR 1905.

EXPENDITURES		1904	1905
Bark Sale Commissions		\$ 366.89 ✓	\$ 325.17
Land Sale Commissions		168.00 ✓	
OPERATING LAND DEPARTMENT		4503.81	7133.31
	1904	1905	
Salaries	\$2449.15	2163.59	
Vault Equipment	105.26		
Township plats	1.00	36.38	
Telephone & Telegraph	52.85	91.45	
Wright's Examinations	36.74		
Traveling	377.17	354.82	
Office Yard	3.48	23.99	
Land Looking	158.50 ✓	931.79	
Sta. and Printing	248.97	372.48	
Abstracts & Rec.	8.00	2.06	
Legal	35.39	44.30	
Cleaning Furnace Site	56.18 ✓	58.87	
Livery	16.40	11.80	
Industries	6.25 ✓		
Sidewalks	5.00 ✓		
Freight & Express	24.80	16.04	
Advertising	40.34 ✓	9.56	
Postage	68.39	73.41	
Fuel & Light	50.82	104.20	
Surveying	4.00	11.20	
Engineering	203.22	442.51	
Stable Expense	133.24	87.77	
Water & Ice	7.03	7.78	
Sol. Salary & Expense	131.02	165.02	
Papers & Periodicals	10.61	4.40	
Draying	1.00	.64	
Janitor	22.14	36.07	
Furnitures & Fixtures	7.02	90.48	
Typewriter Repairs	12.37	17.83	
Photographs	4.50		
Munising Clerk	133.33	399.97	
Agents House	52.49	40.02	
Office Repairs	18.30	26.01	
Tools	.80	.19	
Hauling Coal	.52		
Directors Trip	15.44		
Commissions	.91		
Donations	1.20	11.60	
Forestry		302.44	
General Welfare		154.77	
Petty Office Expense		1.92	
Munising Office		4.90	
Addis Lake Preserve		9.08	
Reforestry Sec. 14-46-19		454.39	
Maintaining Cherry Farm		85.47	
P. O. Box Rent		2.13	
Barnman		100.06	
Special Attorney		38.09	
Audit 1904		150.00	
Blue Print Room		14.42	
Library		3.00	
Agents House		21.72	
Locking Trespass		22.61	
Adding Machine		75.08	
Sign "No Trespassing"		2.95	
Accountants Meeting		3.15	
Maps		.66	
Insurance		3.00	
Taxes		47.24 ✓	
1904 Actual Taxes Assessed		10708.50	
Miscellaneous Credits to taxed		2033.31	
Total Taxes charged Treasurer		8675.19 ✓	
1905 Actual taxes assessed		10543.32	
Delinquent taxes uncollectable		792.09	
Paid during year for previous years		208.17	
Tax titles redeemed		47.20	
Total		11590.78	
1905 Credit collections	72.57		
Charge to contracts	1711.29		
Total		1783.86	
Total Taxes charged Treasurer			9806.92
Total Expenditures		13713.89 ✓	17285.40

*Ex. of different  
offices*

LANDS  
of  
THE MUNISING COMPANY  
NOVEMBER 30, 1905.

R. 22 W.		R. 21 W.			R. 20 W.			R. 19 W.			R. 18 W.			R. 17 W.		TOTAL	
Sec	Fee	Sec	Fee	Min	Sec	Fee	Min	Sec	Fee	Sec	Fee	Min	Sec	Fee	Fee	Min	
								20	187.80								
								21	640								
								22	80								
								23	565.05								
								24	40.50								
								25	256.73								
								26	640								
								27	160								
								28	640								
								29	92.55								
								33	639.60								
								34	162.60								
								35	640								
								36	126.93								
									4871.26						4871.26		
					13	160		1	4.54	10	160		19	294.27			
					14	320		2	512.44	11	640		30	295.68			
					23	560		3	601.95	12	480		31	148			
					24	480		4	186.24	13	320						
					25	440	120	10	501.24	14	160						
					26	640		11	401.23	19	48.19						
					27	320		12	126.64	20	522.95						
					33	160		13	170.37	22	320						
					34	600		14	72.71	23	280	40					
					35	560		18	185.85	24	640						
					36	320		19	483.43	25	640						
								20	27.54	26	640						
								25	3.53	27	640						
								29	415.62	28	320						
								30	505.20	30	306.38						
								31	620.35	31	296.15						
								32	637.46	33	320						
								33	320	34	600						
								36	240.06	35	320						
										36	480						
						4560.00	120		6018.40		8133.67	40		737.95	19448.02	160.00	
8	400	12	320		1	319.20		1	495.23	1	638.04						
12	80	14	200		3	474.72		4	557.93	2	639.27						
14	640	18	614.54		4	314.41		5	634.64	3	478.03						
18	391.99	20	240	240	10	480		6	615.88	4	20.05						
20	520	22	440	160	11	320		7	160	5	160						
22	640	24	560		12	320		8	458.33	6	202.76						
24	640	26	40	600	13	640		9	640	8	240						
26	600	28	40	400	14	640		10	320	10	640						
28	520	30	306.83	309.16	15	160		14	480	11	320						
30	233.39	32	600		18	586		15	640	12	160						
32	520	34	640		22	640		17	616.55	14	480						
34	440	36	80	420	23	480		18	648.94	15	640						
36	640				24	640		19	645.81	17	480						
					25	640		20	640	18	120						
					26	640		21	640	19	627.98						
					27	640		22	640	20	480						
					32	160		23	553.24	29	320						
					33	320		24	480	30	630.33						
					34	640		25	640	31	155.28						
					35	640		26	640								
					36	460		27	640								
								28	640								
								29	640								
								30	640.88								
								31	634.32								
								32	640								
								33	640								
								34	640								
								35	640								
								36	600								
	6265.38		4081.37	2129.16		10154.32			17501.80		7431.74				45434.62	2129.16	
2	437.90	2	639.84		1	639.66		1	160.79								
4	520.12	4	601.58		2	642.06		2	642.60								
6	268.19	6	624.08		3	640.74		3	323.14								
8	440	12	280		4	639.42		4	323.86								
10	280				5	319.27											
					6	355.24											
					8	80											
					10	640											
	1946.21		2145.50			3957.39			1450.39						9499.49		
															79253.39	2289.16	

COMPARATIVE TAX STATEMENT

of

T H E M U N I S I N G C O M P A N Y

TOWNSHIP	ACREAGE		VALUATION		AMOUNT OF TAX		VALUE PER ACRE		TAX PER ACRE	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
Grand Island		7350.62		26850.00		917.75		3.65		.125
Au Train	39890.74	32540.12	158160.00	123975.00	4781.74	4012.59	3.96	3.81	.119	.124
Limestone	280.00	280.00	1190.00	1260.00	43.18	57.41	4.25	4.50	.154	.205
Munising	25307.51	25259.09	83160.00	85370.00	2753.97	2498.04	3.28	3.37	.109	.098
Onota	8131.70	8209.80	51500.00	47980.00	915.47	944.36	6.32	5.84	.103	.114
Rock River	7988.80	8023.48	47160.00	46750.00	2036.72	2009.92	5.90	5.82	.252	.250
Munising Village			11660.00	10325.00	177.42	103.25				
	81598.75	81663.11	352830.00	342510.00	10708.50	10543.32				

Acreage in Munising Village is not given because it appears in acreage in Munising Township.

As to Munising Village and Munising Township the Valuation is made by each Municipality which collects its own taxes. and they should be added together to get the total amount of taxes in Munising Township.

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THE MUNISING COMPANY

CONDITION OF FARM LAND CONTRACT

*Acres*

NAME	DESCRIPTION	CONTRACT NUMBER	PURCHASE PRICE	AMOUNT PAID	ACRES CHOPPED	ACRES CULT'D	CDS WOOD CUT DURING 1905	IMPROVEMENT
Peter Punstinen	W 1/4 of SW 1/4 of Sec. 26-46-21	1	480.00	400.00	70	30	573.50	House and Barn
Lewis J. Lavoy	SE 1/4 of NE 1/4 of " 26-46-21	2	240.00	240.00	7	5	Deeded Munising Ry. Co.	" "
Matt Kiviniemi	SE 1/4 of SW 1/4 " " 26-46-21	3	240.00	65.00	1	1		House
John Kampainen	W 1/4 of SE 1/4 " " 26-46-21	4-6	480.00	320.00	70	35	244.25	House and Barn
Paavo Kajanen	E 1/4 of SW 1/4 " " 26-46-21	5	480.00	360.00	65	12	543.00	" "
J. E. Johnson	SE 1/4 of SE 1/4 " " 26-46-21	7	240.00	160.00	28	10	710.15	Two Houses & one Barn
Isaac Isaacson	SW 1/4 of NE 1/4 " " 26-46-21	8	240.00	240.00	8		Deeded Mun. Ry. Co.	
John Heikkla	NE 1/4 of SW 1/4 " " 26-46-21	9	240.00	50.00				Deserted
August Wanska	SE 1/4 of NW 1/4 " " 36-46-21	10	240.00	160.00	28	12	194.50	House and Barn
Oscar Hill	SW 1/4 of NW 1/4 " " 26-46-21	11	240.00	160.00	20	3	538.25	Deserted
Thomas Heikkila	SE 1/4 of SW 1/4 " " 26-46-21	12	240.00	40.00				"
Gustaf Koski	NW 1/4 of NW 1/4 " " 26-46-21	13	240.00	160.00	28	9	564.50	House and Barn
Matti Maki	SE 1/4 of NE 1/4 " " 26-46-21	14	240.00	160.00	25	13	378.99	" "
John Kaukkari	SW 1/4 of NW 1/4 " " 26-46-21	15	240.00	160.00	34	10	316.50	" "
Jacob Ruspakka	W 1/4 of NE 1/4 " " 30-46-21	16	480.00	240.00	45	30	443.25	" "
Kalle Kauppenen	SW 1/4 of SE 1/4 " " 26-46-21	17	240.00	40.00				Deserted
Jacob Maki	NE 1/4 of SW 1/4 " " 36-46-21	18	240.00	140.00	25	10	170.25	House and Barn
Jno. Saminen	SE 1/4 of NW 1/4 " " 26-46-21	19	240.00	40.00				Deserted
Oscar Robertson	NE 1/4 of NE 1/4 " " 30-46-21	20	240.00	120.00	15	8	257.00	House and Barn
John Anttila	SE 1/4 of NW 1/4 " " 30-46-21	21	240.00	123.51	20	8	596.75	" "
Victor Lampinen	SE 1/4 of NW 1/4 " " 26-46-21	22	240.00	140.00	30	12	272.25	" "
John E. Erickson	NW 1/4 of SE 1/4 " " 20-46-21	23	240.00	40.00	3	2	15.75	" "
Thomas Hallstrom	SW 1/4 of NW 1/4 " " 30-46-21	24	240.00	120.00	32	14	243.75	" "
John Kuja	W 1/4 of SW 1/4 " " 26-46-21	25-51	480.00	160.00	15	7	86.00	" "
John Aho Nor. of Ry.	W 1/4 of NW 1/4 " " 36-46-21	26	360.00	222.30	56	10	76.25	" "
Peter Maki	NW 1/4 of NW 1/4 " " 20-46-21	27	240.00	40.00				Deserted
Matti Tervo	SW 1/4 of NE 1/4 " " 26-46-21	28	240.00	140.00	20	8	473.25	House and Barn
Oscar Nyman	NW 1/4 of NW 1/4 " " 30-46-21	29	240.00	120.00	20	10	199.62	" "
John Samanen	NE 1/4 of NW 1/4 " " 26-46-21	30	240.00	120.00	13	12	516.00	" "
Antti Jestila	NE 1/4 of SE 1/4 " " 20-46-21	31	240.00	40.00				Deserted
John Hill	SE 1/4 of SW 1/4 " " 36-46-21	32	240.00	80.00	17	8	46.50	House and Barn
Matti Lieppa	SE 1/4 of NW 1/4 " " 20-46-21	33	240.00	40.00	2	2		Two Houses and 1 Barn
Jacob Kaukkari	NE 1/4 of NW 1/4 " " 26-46-21	34	240.00	40.00	2			Deserted
Henry Luokanen	SE 1/4 of NE 1/4 " " 30-46-21	35	240.00	40.00	16			"
Chas Mattson	SW 1/4 of SE 1/4 " " 20-46-21	36	240.00	80.00	8	5	30.50	House and Barn
John Lahti	NW 1/4 of NW 1/4 " " 26-46-21	37	240.00	60.00	12	8	78.25	" "
Alexander Peterson	NW 1/4 of SE 1/4 " " 36-46-21	40	240.00	120.00	20	3	353.00	" "
Evert Heinonen	NE 1/4 of NW 1/4 " " 30-46-21	41	240.00	120.00	12	4	195.75	" "
John Nykanen	NE 1/4 of SE 1/4 " " 26-46-21	42	240.00	120.00	18	8	492.50	" "
Ludwig Ihamahe	SE 1/4 of SE 1/4 " " 26-46-21	43	240.00	100.00	18	4	416.00	" "
John Luoma	SW 1/4 of SW 1/4 " " 22-46-21	44	240.00	40.00	2 1/2		183.75	" "
Herman Maky	NE 1/4 of SE 1/4 " " 36-46-21	46	240.00	120.00	30	12	567.25	" "
William Maky	SE 1/4 of SE 1/4 " " 36-46-21	47	240.00	80.00	18	4	558.25	" "
John Aho	NE 1/4 of NW 1/4 " " 36-46-21	48	240.00	110.00	22	4	736.00	" "
John F. Maki	SW 1/4 of NE 1/4 " " 36-46-21	49	240.00	100.00	22	2	601.00	" " Not occupied
Isaac Hill	SE 1/4 of NE 1/4 " " 36-46-21	50	240.00	120.00	20	7	570.75	" "
Frank Ross	SW 1/4 of NW 1/4 " " 20-46-21	52	240.00	80.00	1	1	30.50	" "
			12600.00	5970.81	900.50	339.00	12443.26	

MUNISING RAILWAY COMPANY

Land Department

STATEMENT OF RECEIPTS FOR YEAR 1904 & 1905

	1904	1905
Interest	\$ 722.74	\$ 382.00
Sales of Lots <i>to what credited</i>	4383.41	2473.00
Miscellaneous Receipts	93.60	53.00
House Rents		15.00
Sales of Hay		25.00
Discount		4.20
Total Receipts	\$ 5199.75	2952.20

MUNISING RAILWAY COMPANY

Land Department

STATEMENT OF EXPENDITURES FOR YEAR 1904 AND 1905

	1904	1905	1904	1905
Townsite Improvement			\$379.49	49.78
Park Improvement			898.65	65.91
OPERATING LAND DEPARTMENT			1187.34	911.11
Traveling	\$160.95	71.51		
Sta. & Printing	46.58	63.63		
Legal	136.01	3.78		
Miscellaneous Expense	1.48			
Salaries	502.77			
Postage	6.00			
Livery	5.91	2.00		
Fuel & Light	15.11	9.78		
Telephone & Telegraph	13.06	11.77		
Advertising	48.33	2.20		
Papers and Periodicals	1.44			
Engineering	41.24	20.75		
Sidewalks	169.41	276.19		
Land Looking	5.94			
Repairs Office	.45			
Abs. and Recording	30.76	3.11		
Freight and Express	1.90	.37		
Munising Office		1.77		
Munising Clerk		399.99		
Furniture & Fixtures		16.75		
Wright's Examinations		18.90		
P.O. Box Rent		.66		
Tools		.50		
Village Improvement		.95		
Surveying		6.50		
Taxes "Actual Taxes Paid"		2202.72	4763.60	
Miscellaneous Charges to Taxes		1093.21		
Total Taxes Charged treasurer				3295.93
Total Expenditures			\$ 7229.08	4322.73

LANDS  
of  
THE MUNISING RAILWAY COMPANY  
NOVEMBER 30TH. 1905

RANGE 23 W.				RANGE 19 W.				TOTAL		
Sec	Fee	Sur	Min	Sec	Fee	Sur	Min	Fee	Sur	Min
T.47 N				34	13.60			13.60		
T.46 N				2	108.77					
				3	13.24					
					122.01			122.01		
T.45 N	7	35.00						35.00		
								170.61		



COMPARATIVE TAX STATEMENT

of

MUNISING RAILWAY COMPANY

TOWNSHIP	ACREAGE		VALUATION		AMOUNT OF TAX		VALUE PER A.		TAX PER A.	
	1904	1905	1904	1905	1904	1905	1904	1905	1904	1905
Skandia	35.00	35.00	140.00	150.00	8.33	9.93	4.00	4.28	.238	.284
Munising			108740.00	83669.00	3119.27	2192.69				
Munising Vil.			99075.00	92970.00	1465.30	929.70				
	35.00	35.00	207955.00	176789.00	4592.90	3132.32				

As to Munising Township and Munising Village.  
this is the Town Plat and is mostly village lots.

The valuation is made by each Municipality, so  
this tax appears twice and each Municipality  
collects its own taxes, so they may be added  
together to get total amount of taxes in the  
Village.







COMPARATIVE TAX STATEMENT

of

B A Y M I L L S L A N D & L U M B E R C O M P A N Y

NOVEMBER 30TH, 1905.

TOWNSHIP	ACREAGE	VALUATION	AMOUNT OF TAX	VALUE PER ACRE	TAX PER ACRE
Bruce	120	720.00	12.61	6.00	.105
Trout Lake	1293.05	4025.00	65.01	3.11	.050
Superior	12245.65	58735.00	1174.79	4.80	.096
Bay Mills	362.95	5000.00	74.11	13.77	.204
Dafter	440.00	2430.00	82.81	5.50	.188
Kinross	366.56	1080.00	34.45	2.95	.094
Sault Ste Marie	2185.95	11440.00	180.71	5.23	.082
Germfask	1790.01	2825.00	114.53	1.58	.064
Manistique	2037.13	5361.00	244.39	2.63	.120
Doyle	751.35	930.00	42.36	1.24	.056
Seney	9728.87	14693.00	502.43	1.51	.052
Hiawtha	4468.63	4840.00	234.92	1.08	.052
Harrison	1815.01	1490.00	36.54	.82	.020
Hendricks	3753.58	7140.00	329.87	1.90	.088
Mc Millan	21264.02	57140.00	1361.40	2.69	.064
Columbus	2693.26	6961.00	371.33	2.58	.138
Garden	40	25.00	.35	.62	.010
Munising	695.10	1800.00	47.05	2.60	.068
Burt	18391.54	67810.00	2178.28	3.69	.118
	84442.66	254445.00	7087.94		

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COMPARATIVE TAX STATEMENT

of

JACKSON IRON COMPANY

NOVEMBER 30TH, 1905.

TOWNSHIP	ACREAGE	VALUATION	AMOUNT OF TAX	VALUE PER ACRE	TAX PER ACRE
Onota	520.00	1400.00	27.71	2.69	.053
Rock River	7364.82	28160.00	1210.94	3.82	.164 —
Nahma	240.00	570.00	7.32	2.37	.031
Sac Bay	2486.90	6055.00	123.89	2.60	.050
Fairbanks	3331.19	13635.00	303.89	5.00	.091
Garden	152.43	1650.00	21.85	10.86	.144 —
Negaunee	686.00	1800.00	62.83	2.62	.091
Republic	126.20	600.00	11.78	4.76	.092
Negaunee City		18735.00	334.06		
	14907.54	72605.00	2104.23		

Acreege in Negaunee city is not given  
because it is composed partly of city  
lots.

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LAND DEPARTMENT REPORT FOR THE FISCAL YEAR ENDING

APRIL 30TH., 1906.

-JACKSON IRON COMPANY-

The Land Department has under its care and supervision the outlying lands of this Company, also the collection of rents and supervision of its houses and leased lots and parcels of ground in the City of Negaunee.

LAND TENANTS:-

All of the leased lots and parcels of ground are covered with verbal agreements only and there is nothing of record to show the sizes of any of the lots or parcels under rental or any conditions that may have been verbally understood at the time of leasing the land. We have found at least fifteen parcels of land upon which people have been living, or have fenced and using as garden spots, and for which they have never paid any rental. Many of these cases were unknown to the old Jackson Iron Company's Management, and we have been told by the persons occupying these parcels that they had permission and were not expected to pay on account of past services rendered. In one case the person claims to own the surface, saying that it was given to him on account of an accident which happened to one of his family.

I would strongly advise the issuing of leases to every occupant of whatsoever nature. Too many complications can arise in a mere verbal understanding, and after a number of years, the occupant is very much inclined to enlarge upon his rights on the premises. We have, without exception, every occupant now under a verbal lease and are collecting rents from all.

RENTED HOUSES:-

The old Company houses were in very poor condition, no repairs having been made upon them for a number of years and in consequence they were very badly run down. These are now being put in fair tenantable condition and will be repaired and made serviceable for a number of years without any further large outlay.

APPROXIMATE INCOME, 1906.

There are 150 Lot Leases with an approximate rental of \$ 1000.00 and 70 parcels of ground leased for garden spots, etc., at an approximate annual rental of \$ 1600.00.



RENTALS IN ARREARS:-

At the time of the old management a certain leniency was shown to tenants in cases where they had been old employees and had become disabled through accident, sickness or old age, in paying up their ground rents. These rents were charged up on the books yearly and at the discretion of the Agent was closed off when it was expedient to do so. In this way a large amount of uncollectable items were allowed to accrue, which items are now up for adjustment. In such matters, the Land Office should have definite instructions regarding reduction of rents and collections from parties of this kind. It would be much better to show a less or nominal sum and have it collected, with a report yearly on each worthy case, both in cases that might occur during the current year or where assistance or charity had been bestowed in the past. Ofttimes people are able, after a few years of struggle, to renew their once prosperous living, in which case the Company should be entitled to just compensation from such tenants.

We expect to round-up all these loose ends during the present fiscal year, and be in a position to report a much better condition of affairs this year.

JACKSON IRON COMPANY

Land Department

STATEMENT OF RECEIPTS FOR YEAR ENDING APRIL 30, 1906.

Lot Rents	1222.98
House Rents	650.50
Miscellaneous Lot Rents	1559.13
Miscellaneous Receipts	39.63
Interest	141.35
House Sales	36.60
Farm Land Sales	667.50
Sales of Lots	1285.88
<b>Total Receipts</b>	<b>\$ 5603.57</b>

STATEMENT OF EXPENDITURES FOR YEAR ENDING APRIL 30, 1906.

OPERATING LAND DEPARTMENT	709.84
Papers & Periodicals	6.00
Telephone & Telegraph	16.71
Stationery & Printing	58.26
Freight & Express	3.40
Solicitor's & Legal Expense	1.50
Engineering	8.00
Draying	.25
Fuel & Light	42.55
Paying Taxes	3.42
Repairs rented houses	42.10
Abstracts & Recording	347.25
Repairing Fences	49.97
Photographs	5.00
Collector	125.43
Taxes paid 1905 & Charged Treas.	2104.27
<b>Total Expenditures</b>	<b>\$ 2814.11</b>

COMPARATIVE TAX STATEMENT

of

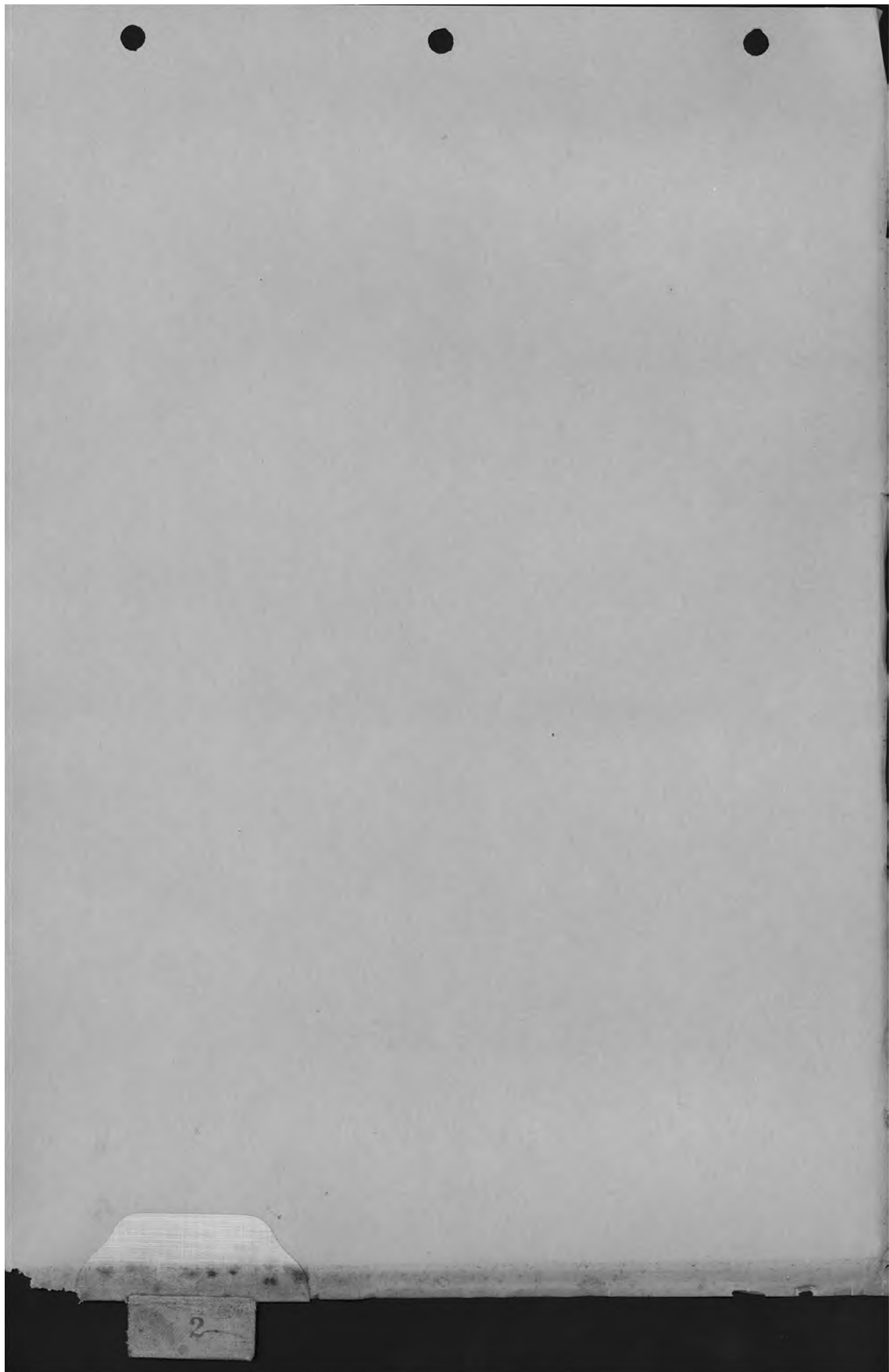
JACKSON IRON COMPANY

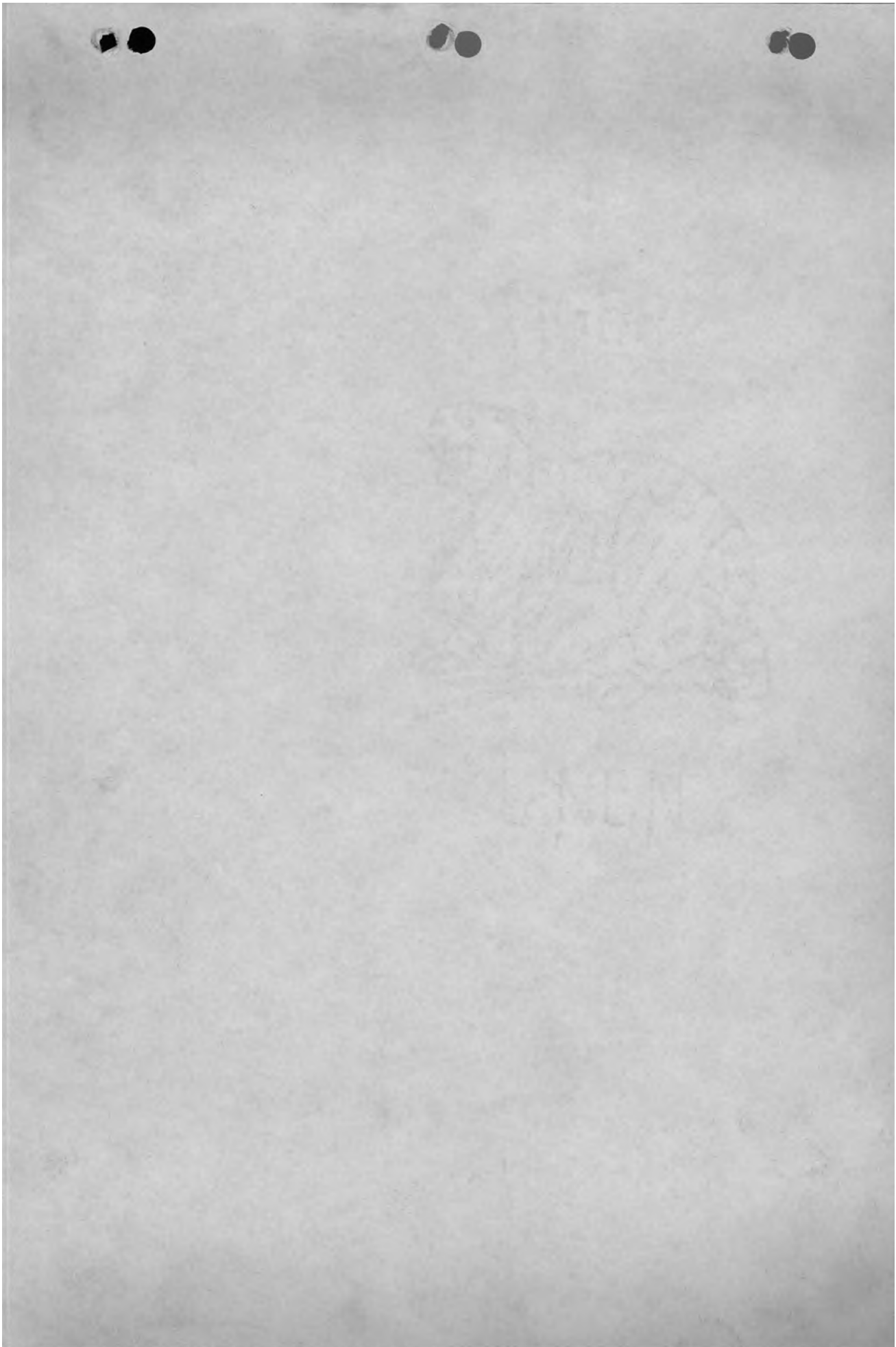
NOVEMBER 30TH, 1905

TOWNSHIP	ACREAGE	VALUATION	AMOUNT OF TAX	VALUE PER ACRE	TAX PER ACRE
Onota	520.00	1400.00	27.71	2.69	.053
Rock River	7364.82	28160.00	1210.94	3.82	.164
Nahma	240.00	570.00	7.32	2.37	.031
Sac Bay	2486.90	6055.00	123.89	2.60	.050
Fairbanks	3331.19	13635.00	303.89	5.00	.091
Garden	152.43	1650.00	21.85	10.86	.144
Negaunee	686.00	1800.00	62.83	2.62	.091
Republic	126.20	600.00	11.78	4.76	.093
Negaunee City		18735.00	334.06		
	14907.54	72605.00	2104.23		

Acreage in Negaunee city is not given  
because it is composed partly of city  
lots.







ANNUAL REPORT  
OF  
STEAMER PONTIAC  
1905

S T E A M E R P O N T I A C .

GENERAL OPERATIONS.

The Steamer PONTIAC left Cleveland on first trip of Season 1905 on April 11th, and arrived at Cleveland ready to go into winter quarters on December 10th, having therefore been in commission 243 days.

The PONTIAC was engaged during the entire season in transporting iron ore from Marquette to Lake Erie ports. Altogether 24 round trips were made. On 7 upbound trips coal cargoes were taken for delivery at Marquette. The total distance traveled during the season was 30,610 miles, carrying 105,087 gross tons of freight.

The average rate of freight received on all cargoes carried during the season was \$.6429 per gross ton as compared with \$.6667 in Season 1904. The average cost to carry per gross ton of freight was \$.4533 as against \$.5402 per ton in preceding year. The decreased cost per ton of \$.0869 in 1905 is largely due to the longer season which enabled Steamer to carry 30,668 gross tons more freight, thereby allowing a more favorable distribution of fixed charges.

The average net earnings per ton of freight carried are \$.1896 in 1905 and \$.1265 in 1904.

LGM THB  
2-7-06



S T E A M E R P O N T I A C .

GENERAL REPAIRS.

The General Repairs on the Steamer PONTIAC for the Season 1905 were of the usual character, no items of particular importance entering into them.

Simply as a matter of record it may be mentioned that the hot water heater through which feed water passes to the boilers was fitted with brass tubes. The tubes leaked badly during the Season 1904 and it became necessary to replace them. Accordingly these tubes were replaced with 50 copper tubes, which it is expected will give more lasting results. The cost of renewing the tubes and the repairs connected therewith was \$131.40.

The Extraordinary Repairs to be placed on this Steamer before going to sea 1906 will probably aggregate in the neighborhood of \$2000.00.

The icebox on this boat has had but very little done to it since the boat came out. It has therefore become very much decayed and dilapidated and will be entirely torn out and renewed. The cost of this repair will probably be in the neighborhood of \$275.00.

The wooden mainmast is dangerously decayed and will be removed. It will be replaced with a steel pole spar erected aft of the smokestack, at a probable cost of \$75.00.

Floor ceiling and bilge ceiling in lower hold will require considerable renewing; probably at a cost of \$500.00.

The port, starboard and forward sides of forward cabin have been found to be in a very bad condition from dry rot, same extending from 6 inches to 2 feet up from the deck. Consequently this house will have to have new studding, new siding and much new decking. This work will cost in the neighborhood of \$300.00.

S T E A M E R P O N T I A C.

GENERAL REPAIRS - 2.

In connection with the above work on the forward house some plumbing will have to be renewed at the same time; a new bathtub and connections will be installed; these items, together with the restoring of inside cabinet work that will be misplaced by reason of the repairs to the house, will cost in the neighborhood of \$100.00.

The forward side of the after house was found to be affected much in the same way all across the entire front, and extending a short way down the port and starboard sides. Some new studding will be put in and the entire front covered with new siding, and the entire house refastened. This work will cost probably \$275.00. Both this and the forward house was found to be in a dangerous condition.

JHS THB  
2-7-06

STEAMER PONTIAC.

ACCIDENTS.

ABOVE PIPE ISLAND, APRIL 12, 1905, TRIP 1:

On the first trip of the season to Marquette the Steamer let go anchor above Pipe Island in the Soo River at about 5:30 P.M. this date. At about 6:40 the wind increased and the Steamer was found to be dragging her anchor. She then went alongside the Steamer KENSINGTON. The anchor chain was then hove in, and it was found that the large shackle connecting the chain with the anchor had broken directly in the middle, causing the loss of the patent anchor. This accident necessitated the purchase of a new anchor at a cost of \$185.57. This is not a claim against the Steamer's underwriters and consequently becomes chargeable to Owners Proportion of Loss.

ABOVE IROQUOIS, APRIL 15, 1905, TRIP 1:

On the same trip as above while the Steamer was proceeding to Marquette, and had left the Soo, reaching a point about 2 miles above Iroquois in Lake Superior. Anchor was let go at 1:30 P.M. well clear of the ice. About 6:20 the Steamer began to drag, and on heaving up the chain it was found that the shackle connecting the chain with the anchor had parted. This was the old fashioned Trotman Anchor. This left the Steamer without an anchor and a stern anchor was borrowed from the ANGELINE and the Steamer proceeded on her way. The anchor was replaced at a cost of \$154.19. Same is not a claim against the underwriters of the STEAMER and consequently is chargeable to Owners Proportion of Loss.

MARQUETTE, MAY 23, 1905, TRIP 4:

The Steamer was loading at the Presque Isle Dock at Marquette. While shifting the vessel one of the stays of the main mast caught on a loading spout, breaking the top off of main mast just above the rigging, decreasing the length of

STEAMER PONTIAC.

ACCIDENTS - 2.

the spar about 22 feet. This will be replaced with a single gas pipe pole erected aft to carry lights. The captain in his report considers it the fault of the vessel that this damage was done.

CLEVELAND, AUGUST 4, 1905, TRIP 12:

The Steamer PONTIAC was proceeding from the Valley Dock to the Irishtown Dock, being towed stern first with two tugs of the Great Lakes Towing Co. In passing down they met the Steamer MESABA going up in tow of a Great Lakes Towing Co. tug. In passing both boats were on the bank as the channel is narrow, and in working past the MESABA made a slight dent in the side gangway of the PONTIAC. The damage was not great and will be repaired when minor repairs are made.

The charge of the tug company for this service would have been \$28.00. An adjustment was made between the Captain and Captain Broderick representing the Great Lakes Towing Co., by which they would cancel their bill against the PONTIAC in settlement of the damage.

PRESQUE ISLE, AUGUST 14, 1905, TRIP 14:

While loading ore at the Presque Isle Dock David Ottason, a deckhand, accidentally fell into the hold. He was left at the Marine Hospital while the vessel made a trip, and then returned to the boat apparently all right. He was paid for the time he was in the hospital and signed a release to the boat. The release is probably not good as he is but 17 years of age, however, it is not probable that anything further will ever be heard of the matter.

GROSSE ISLE CHANNEL, SEPTEMBER 21, 1905, TRIP 19:

The Steamer was bound from the port of Cleveland to Marquette. Just below the turn on the Grosse Isle Ranges,

STEAMER PONTIAC.

ACCIDENTS - 3.

the Steamer COFFINBURY having in tow the CHECOTAH and NELSON BLOOM were met coming down. Passing signals were exchanged, and the PONTIAC passed the steamer and the first part of the tow safely, but her stern came in contact with the last barge, the NELSON BLOOM, doing some damage to her port quarter; 3 side planks were bruised at the after end, and one hood-end corner post crushed and partly carried away; the cabin was shaken and partly dislocated, and a stairway pulled away from the curved bulkhead casing. Settlement was made with the owners of the NELSON BLOOM for \$50.00, which together with the survey and other expenses attached thereto, amounts to \$85.75, which becomes a claim on the underwriters of the PONTIAC.

CLEVELAND, NOVEMBER 20, 1905, TRIP 23:

The PONTIAC was laying at the Nypane Dock, made fast. The Steamer POWELL STACKHOUSE in coming up the river swung her stern over and struck the PONTIAC, damaging the starboard boat crane, breaking the angle iron brace in two places; also breaking cast iron socket. At the request of the captain of the STACKHOUSE the Macbeth Iron Co. made repairs and sent the bill direct to the managers of the STACKHOUSE.

S T E A M E R P O N T I A C.

	1 9 0 4		1 9 0 5	
	DAYS	PER CENT	DAYS	PER CENT
Time in port,	77½	42.2	110½	45.5
Time sailing,	98¾	54.0	110	45.3
Time lost by bad weather, fog and low water,	4½	2.3	*19	7.8
Time lost waiting at Soo Canal and River,	2¾	1.5	3½	1.4
Time lost by accidents,	---	-----	---	-----
	183	100.0	243	100.0
Number of trips made,	21		24	
Number of cargoes carried,	21		31	

PERCENTAGES OF TIME IN COMMISSION IN PORT.

Season 1901.....39.7  
 Season 1902.....39.1  
 Season 1903.....46.3  
 Season 1904.....42.2  
 Season 1905.....45.5

\* This includes 12 days time delayed by heavy ice on Lake Superior, first trip of Season 1905.

LGM THB  
2-8-06

S T E A M E R P O N T I A C .

OPERATING ACCOUNT.

<u>RECEIPTS.</u>	GROSS TONS	AMOUNT	PER GROSS TON FREIGHT CARRIED
24 cargoes iron ore from Marquette,	85632	\$59942.40	\$.7000
7 cargoes coal to Marquette, (21789 net tons @ 35 cents)	19455	7626.35	.3920
<u>31</u>	<u>105087</u>	<u>\$67568.75</u>	<u>\$.6429</u>
<u>DISBURSEMENTS.</u>			
Extraordinary and General Repairs,	\$ 897.12		
Ship Keeping and Winter Dockage,	65.00		
Fitting Out,	877.83		
Wages and Captain's Salary,	10778.55		
Captain's Expense Account,	45.52		
Tug Services,	830.59		
Handling Cargoes,	17389.20		
Taxes,	655.54		
Marine Insurance,	3915.00		
Freight List Insurance,	47.86		
Mates Supplies,	359.65		
Provisions,	2060.80		
Stewards Supplies,	210.05		
Passenger Cabin Equipment,	42.69		
Fuel,	7647.00		
Engineer's Lubricants,	160.51		
Engineer's Supplies,	177.00		
Boiler Repairs,	24.53		
Machinery Repairs,	81.78		
Auxiliary Machinery Repairs,	9.36		
General Expenses (Telegrams, Dues L. C. A., &c)	153.92		
Laying Up,	1207.32	47636.82	.4533
Net earnings,		\$19931.93	\$.1896
Less amt. charged to Owners Propn. of Loss,		339.76	
Making total net gain for season 1905,		\$19592.17	

NOTE: The cost per ton to operate after eliminating Extraordinary and General Repairs Account is \$.4448 in 1905 and \$.5263 in 1904.

LGM THB  
2-20-06

S T E A M E R P O N T I A C.

STATEMENT SHOWING ITEMS CHARGED TO OWNERS' PROPORTION OF LOSS  
DURING SEASON 1905.

ANCHOR LOST IN SOO RIVER, APRIL 12, 1905:

The PONTIAC lost her Trotman anchor (iron stock anchor) in the Soo River in the accident of April 12th. As the amount was not large enough to be recoverable under the Steamer's insurance policies it was charged to Owners Proportion of Loss. The item included a new anchor weighing 2857 lbs. and shackle weighing 94½ lbs., \$154.19

ANCHOR LOST IN SOO RIVER, APRIL 15, 1905:

On April 15th the PONTIAC lost her stockless anchor in the Soo River. Same was replaced with a new anchor weighing 3050 lbs. and shackle weighing 85 lbs. The amount not being recoverable under the insurance policies it was charged to Owners Proportion of Loss. 185.57

T O T A L, \$339.76

LGM THB  
2-8-06



S T E A M E R P O N T I A C .

COMPARISONS.

	1 9 0 4	1 9 0 5
Days in commission,	183	243
Number of miles traveled,	28413	30610
Number of trips made,	21	24
Number cargoes freight carried,	21	31
Gross tons freight carried,	74419	105087
Average rate freight per gross ton,	\$.6667	\$.6429
Average cost to carry per gross ton freight,	.5402	.4533
Net earnings per ton freight carried,	\$.1265	\$.1896
Cost per ton to operate after eliminating Exta. & Gen. Reprs.	\$.5263	\$.4448
Gross Receipts,	\$49612.25	\$67568.75
Gross Expenditures,	40198.13	47636.82
Net Earnings,	\$ 9414.12	\$19931.93
Percentage of operations to earnings,	81.0	70.5
Gross earnings per mile traveled,	\$1.7461	\$2.2074
Operating expenses per mile traveled,	1.4148	1.5562
Net earnings per mile traveled,	\$.3313	\$.6512
Gross earnings per day,	\$271.10	\$278.06
Operating expenses per day,	219.66	196.04
Net earnings per day,	\$ 51.44	\$ 82.02
Expenses per day excluding cargo handling costs,	\$142.26	\$124.47
Expenses per day exclud. cargo Handl. costs & Extra. & Gen. Rprs	\$136.64	\$120.78
Cost provisions per man per day(excluding extra meals),	\$.422	\$.394
Average lbs. coal consumed per hour steamed,	2335	2438
Average lbs. coal consumed per mile steamed,	195	210
Average cost coal consumed per mile steamed,	\$.2338	\$.2171
Average cost oil consumed per hour steamed,	\$.0529	\$.0609
Average cost oil consumed per mile steamed,	\$.00440	\$.00524
Average wages paid per day while in commission,	\$38.24	\$38.09
Average ore cargo from Lake Superior,	3544	3568
Average days per trip going up light to Marquette,	8 $\frac{1}{2}$	7 $\frac{1}{2}$
Average days per trip going up light to head Lake Superior,	8 $\frac{1}{2}$	-----
Average number miles per hour - light,	12.87	12.65
Average number miles per hour - loaded,	11.23	11.09
General average number miles per hour,	12.00	11.23
Average draft water on ore cargoes from Lake Superior,	(18'2" Ford	(18'4" Ford
Average mean draft water on ore cargoes from Lake Superior,	18'8" Aft	18'10" Aft
	18'5"	18'7"

LGM THB  
2-8-06

STEAMER PONTIAC

COMPARISON OF ITEMS OF DISBURSEMENT.

	1904	1905	+ OR -	REMARKS
Extraordinary & General Repairs	\$1,037.85	\$ 897.12	-\$ 130.73	The labor cost for scraping rust and painting in 1904, exceeded 1905 by \$212.43
Ship Keeping and Winter Dockage	143.55	65.00	- 78.55	A longer time at dock during Winter 1904 - 5
Fitting Out	1,375.13	877.83	- 397.29	Engineers Dept. was fitted out for season 1905 while laying up in Fall 1904, but no fitting out work was done for 1904 while laying up in 1903.
Wages & Captains Salary	8,544.64	10,778.55	+ 2,233.91	Rate of wages was the same for both years, but season 1905 was 60 days longer than 1904
Captains Expense Account	63.59	45.52	- 18.07	
Tug Services	431.35	830.59	+ 398.74	Steamer carried 10 more cargoes in 1905 than in 1904
Handling Cargoes	14,165.11	17,389.20	+ 3,224.09	Rate for unloading ore advanced 1¢ per ton in 1905, and Steamer carried 11213 tons more ore in 1905
Taxes	535.15	655.54	+ 120.39	Rate of taxes \$2.69 in 1905 and \$2.26 in 1904
Marine Insurance	3,373.45	3,915.00	+ 541.55	The valuation of Steamer was the same both years, but the lessened premium in 1904 is due to rebate received account lay-up returns for short season
Freight List Insurance	81.33	47.86	- 33.37	
Wages Supplies	291.32	359.65	+ 68.33	
Provisions	1,663.40	2,060.80	- 136.08	Based on decreased cost of \$.028 per man per day
Stewards Supplies	234.70	210.05	- 14.65	
Passengers Cabin Equipment	41.54	42.69	+ 1.15	
Fuel	6,693.18	7,647.00	+ 549.80	Based on increased consumption of 15 lbs. per mile. Carried 7 cargoes coal in 1905 and no coal in 1904
Engineers Lubricants	125.08	160.51	+ 35.71	Based on increased cost of \$.00084 per mile run
Engineers Supplies	172.92	177.00	- 2.92	
Boiler Repairs	11.08	24.53	+ 13.45	
Machinery Repairs	48.59	81.78	+ 33.19	
Auxiliary Machinery Repairs	17.44	9.36	- 8.08	
General Expenses	335.37	153.22	- 211.45	In 1904 both Master and Chief Engineer received prizes of \$100.00 each
Laying Up	894.97	1,207.22	- 312.25	A greater expenditure necessary on machinery and boilers while laying up in 1905

LGM-ACS  
2/17/06

ANNUAL REPORT  
OF  
STEAMER FRONTENAC  
1905.

*Frontenac*

S T E A M E R F R O N T E N A C .

GENERAL OPERATIONS.

The Steamer FRONTENAC sailed from the port of Cleveland on first trip of season 1905 on April 10th, and finished discharging last cargo at Cleveland December 6th, having therefore been in commission 240 days.

This Steamer was engaged during the entire season transporting cargoes of iron ore from Marquette, Mich. to Lake Erie ports. On six upbound trips coal cargoes were taken for delivery at Marquette. The total freight carried during the season aggregated 90556 gross tons, Steamer traveling 28,686 miles.

The average rate of freight received on all cargoes carried during the season was \$.6467 per gross ton, as compared with \$.6197 in previous year. The average cost to carry per gross ton of freight was \$.4445 in 1905 and \$.4714 in 1904. The average net earnings per gross ton, therefore, are \$.2022 as against \$.1483 in preceding year.

LGM THB  
2-9\*06

S T E A M E R F R O N T E N A C .

GENERAL REPAIRS.

The repairs on Steamer FRONTENAC during season 1905 were of the usual character.

In order to keep down the accumulation of rust it was necessary to chip and scrape and paint in various parts of the Steamer. The labor and material used in this work cost in the neighborhood of \$400.00.

The bulwarks and railing on both sides of Steamer had become badly decayed. These were accordingly removed and replaced with modern iron stanchions and sockets, strung with two wire life lines on each side. The cost of this improvement was \$145.02.

In addition to the usual run of repairs necessary before going into commission another season, there will need to be some repairs on the boilers - 3 patches on expansion ring of starboard boiler and two patches on expansion ring of port boiler. 27 tubes are rusted out of ends of both boilers and leaking; these will have to have new ends welded on and replaced. The work on the boilers will probably cost about \$400.00.

All of the vessels of the old style construction in the hold will receive damage from time to time in the operation of modern unloading machinery. Such damages have been sustained in the way of hatch coamings, stringers, stanchions, etc., that will cost in the neighborhood of \$200.00 to repair.

Some repair will have to be made to floor and bilge ceiling in this Steamer - Probably at a cost of \$400.00.

LGM JHS THB  
2-9-06

STEAMER FRONTENAC.

ACCIDENTS.

SOO RIVER, APRIL 18, 1906, TRIP 1:

The Steamer was bound to Lake Superior port on the first trip of the season and had encountered considerable ice in the Soo River. After leaving the Soo, she was considerably delayed in White Fish Bay on account of being obliged to lay to at different times on account of the heavy ice and the vessels ahead of her. At about 8:30 P.M. this date the FRONTENAC was stopped at a point nearly opposite Parisian Island, it being impossible to proceed on account of the fleet of vessels ahead. At this time the wind, which had heretofore been from the northwest, shifted to the southward. At 10:00 P.M. the field of ice off to the southwest began to move and shut in on the FRONTENAC. It was impossible to move the vessel or do anything to avoid the floe of ice which came down on her port side with terrible force, breaking a large number of frames, and breaking and indenting plates on the port side, breaking some frames and indenting plates on the starboard side. The movement of the ice continued for about five minutes, when the floe appeared to fetch up against solid ice on the other side of the pathway which had been broken by the vessels.

The vessel was found to be leaking as a result of this contact with the ice, and it being impossible to turn around at the place of the accident, she proceeded up the bay some five miles where a channel had been broken, and there turned around and started back to the Soo. On the return trip some heavy cakes of ice were encountered, and in places the propeller wheel came into violent contact with large blocks of ice, doing damage to the high pressure piston and crosshead.

STEAMER FRONTENAC.

ACCIDENTS - 2.

The damage sustained by the hull consisted of broken frames and indented plates on both port and starboard sides of the vessel. She arrived at the Soo April 20th where temporary repairs were made. Owing to the severe condition of the ice in the lower end of Lake Superior, after the temporary repairs were made, the Steamer remained at the Soo until noon of April 26th, when she proceeded on to Marquette, loaded a cargo of iron ore, and returned to Lake Erie port.

An examination of the damage sustained showed that the starboard side above the tank top and abreast Nos. 5, 6 and 7 hatches was crushed inboard several inches, 18 frames and 16 reverse bars bent and fractured, 3 plates corrugated, 2 shell plates cracked, and 1 set web frame angles broken. On the port side 6 frames and 4 reverse bars were fractured. In the engine room it was found that owing to the propeller striking ice or some other heavy obstruction, the H.P. piston rod of main engines had been driven forcibly into the crosshead, thereby expanding the neck of the crosshead and bursting the forged ring shrunk thereon, also bending the collar.

The total repairs growing out of the disaster amounted to \$2846.00, which becomes a claim on the underwriters of the vessel. The loss to the vessel consisted of lost time at the Soo and repairs at Lake Erie port.

SAULT STE. MARIE, APRIL 21, 1905, TRIP 1:

As the Steamer FRONTENAC was lying moored to the dock at the Soo April 21st below the old lock, the Steamer EDWARD HINES of the Hines Lumber Co., in passing, came in contact with the stern of the FRONTENAC, breaking one of the stanchions that support the poop deck. The master of the HINES paid Capt. Anderson \$5.00 in settlement. Repair was made at a cost of \$2.75.

STEAMER FRONTENAC.

ACCIDENTS - 3.

CLEVELAND, MAY 21, 1905, TRIP 2:

The FRONTENAC was in the C. & P. Slip. She had been at the fast plant and all the hatches had been cleaned except No. 1. At about 12:00 o'clock the captain ordered some of the end hatches port side amidships taken off to show light into the hold where repairs were being made of the damages sustained in the ice. The captain remained about the vessel until 4:00 P.M. Before leaving he instructed Watchman Harry Welch, who was on watch, to put the hatches on as soon as the first man came aboard. About 4:30 Seaman F. R. Hoerster, of 17 Fingal Street, Pittsburgh, came aboard and the Watchman Harry Welch and the Fireman, Napoleon Grew, were quarreling and started to fight. In the mix-up the Fireman was knocked into the hatch, falling on the ore. He was carried on deck, an ambulance sent for, and taken to the hospital. He returned to the vessel about 7:30 in the evening, after having his wound dressed, saying he did not care to stay in the hospital, and made the next trip up on the boat.

Messrs. Hoyt, Dustin & Kelley advise under date of May 26th that absolutely no responsibility attaches to the boat or the company on account of the injury sustained by the fireman.

CLEVELAND, MAY 29, 1905, TRIP 3:

While unloading at the Nypano Ore Dock the clam shells did some damage to the bulb iron fore and aft on port side between Hatches Nos. 4 and 5. The damage, which was very slight was repaired by the N.Y.P. & O. Dock Co. at their own cost.



STEAMER FRONTENAC.

ACCIDENTS - 4.

CLEVELAND, JUNE 5, 1905, TRIP 4:

While unloading at the C & P Dock the clam shells did some slight damage to coal bunker on port side No.7 Hatch, same being stove in, and bulb iron stringer forward side of hatch bent downward. The damage was immediately repaired at the cost of the C & P Dock Co.

AMHERSTBURG RANGES, AUGUST 18, 1905, TRIP 12:

The FRONTENAC was bound down to Lake Erie port with a cargo of iron ore. When about a quarter of a mile below Bois Blanc Island, and directly on line with the Amherstburg Ranges, while going slow, the Steamer dragged slightly on seemingly soft bottom. The vessel was drawing at the time about 18.11 while water at the station was shown as 19.06. Three dredges had been working at this point for six weeks or more, one being there at the time, and it may be that a lump had been left or had formed. Examination of the water bottom afterwards showed no indentation.

THUNDER BAY, NOVEMBER 13, 1905, TRIP 22:

The Steamer was bound from Ashtabula to Marquette. She encountered heavy weather all the way up, and was finally forced to seek shelter in Thunder Bay from the northwest gale. The Steamer let go anchor off White Fish Point, near Alpena, in 7 fathoms of water. The vessel had been straining on her anchor all day, the wind blowing first to port and then to starboard, the vessel being like an empty barrel, and fetched up very hard now and then on the chain. At about 10:30 the chain parted and the starboard anchor and 20 fathoms of chain was lost.

The next morning at 7:00 o'clock the wind was still blowing very hard. The Steamer hove up the port anchor and went in search of the buoy of the missing anchor and chain, which was found about 11:00 A.M. The port anchor was then let

STEAMER FRONTENAC.

ACCIDENTS - 5.

go to the windward of the buoy; a grappling hook had been made but it was impossible to use it as the wind was still blowing hard and the boat could not be held still. At 12:30 the wind veered to the southwest, and the vessel was backed and the port anchor dragged near the buoy, and both the missing anchor and chain were picked up at the first attempt and gotten on board.

This is probably the first case where an anchor and chain were lost and both recovered, and as a matter of record commendatory mention is made of this action on the part of Capt. Anderson.

CLEVELAND, DECEMBER 4, 1906, TRIP 23:

The Steamer was lying at the N Y P & O Dock. She had just shifted from the clams to Brown Rigs Nos.8 and 9, and was made fast at 7:00 A.M. The Steamer CENTURION in passing by in tow of the Tug Kennedy, struck the FRONTENAC on the starboard side, breaking two frames, one butt strap, four rivets, one scupper pipe, and eye bolt that supports one gangway lug. The repair, which is a small matter, will be made at the cost of the Steamer CENTURION.

CLEVELAND, DECEMBER 8, 1906, LAYING UP:

The FRONTENAC was lying tied up at the NYP&O Dock. The Steamer VICTORY in passing swung her stern over and struck the FRONTENAC abreast of the deck house, breaking a scupper pipe and one frame. Although the captain of the VICTORY was advised of the damage he declined to come on board to see it, but said he would report the damage to his office. A statement of the case in full was made by Henry A. Murphy, 1st Mate, J. B. Hart, Chief Engineer Oliver Anderson, Wheelsman, T. G. Black, 2nd Mate, and Thomas Salberg, Watchman, all testifying to same. The cost of the repair amounted to \$32.43, claim for which was sent to Messrs. Pickands, Mather & Co., owners of the VICTORY, for adjustment.

S T E A M E R F R O N T E N A C .

	1 9 0 4		1 9 0 5	
	DAYS	PER CENT	DAYS	PER CENT
Time in port,	71½	42.1	97¼	40.5
Time sailing,	89	52.3	111	46.2
Time lost by bad weather, fog and low water,	7½	4.4	*22¼	9.3
Time lost waiting at Soo Canal and River,	2	1.2	2½	1.1
Time lost by accidents,	---	-----	7	2.9
Total time in commission,	170	100.0	240	100.0
Number of trips made	18		23	
Number of cargoes carried,	21		29	

PERCENTAGES OF TIME IN COMMISSION IN PORT.

Season 1901.....37.2

Season 1902.....41.7

Season 1903.....44.0

Season 1904.....42.1

Season 1905.....40.5

\* This includes 12½ days time delayed by heavy ice on Lake Superior and Soo River first trip season 1905.

LGM THB  
2-9-06

S T E A M E R F R O N T E N A C .

OPERATING ACCOUNT.

<u>RECEIPTS.</u>	GROSS TONS	AMOUNT	PER GROSS TON FREIGHT CARRIED
23 cargoes iron ore from Marquette	74900	\$52430.00	\$.7000
6 cargoes coal to Marquette (17535 net tons @ 35 cents)	15656	6137.19	.3920
<u>29</u>	<u>90556</u>	<u>\$58567.19</u>	<u>\$.6467</u>
<u>DISBURSEMENTS.</u>			
Extraordinary and General Repairs,	\$ 1440.53		
Ship Keeping and Winter Dockage,	65.00		
Fitting Out,	669.97		
Wages and Captain's Salary,	9886.77		
Captain's Expense Account,	55.84		
Tug Services,	478.94		
Handling Cargoes,	15065.22		
Taxes,	541.39		
Marine Insurance,	3361.51		
Freight List Insurance,	40.41		
Mates Supplies,	282.56		
Provisions,	1624.31		
Steward's Supplies,	189.29		
Passenger Cabin Equipment,	6.50		
Fuel,	5245.36		
Engineer's Lubricants,	68.92		
Engineer's Supplies,	102.87		
Boiler Repairs,	66.87		
Machinery Repairs,	14.12		
Auxiliary Machinery Repairs,	40.12		
General Expenses (Telegrams, Dues L.C.A., &c.)	173.52		
Laying Up,	829.98	40250.00	.4445
Net earnings,		\$18317.19	\$.2022
Less amt. charged to Owners Propn. of Loss,		510.14	
Making total net gain for season 1905,		\$17807.05	

NOTE: The cost per ton to operate after eliminating Extraordinary and General Repairs Account is \$.4286 in 1905 and \$.4539 in 1904.

STEAMER FRONTENAC.

STATEMENT SHOWING ITEMS CHARGED TO OWNERS PROPORTION OF LOSS  
DURING SEASON 1905.

DAMAGE IN ICE ON LAKE SUPERIOR, APRIL 18, 1905:

Deductible Average,	\$463.03
Add under remittance,	.03
" bill Hoyt, Dustin & Kelley for attorneys fees,	10.00
" bill Salvage Assn., London, for services Capt. F. D. Root making examination,	10.00
Add bill Thompson Towing & Wrecking Assn., Soo, for temporary repairs,	54.64
	<u>\$537.70</u>
Less wages of captain and watchman,	\$52.50
Less telegrams,	4.82
Balance charged to Operating Account,	57.32
	<u>\$480.38</u>

DAMAGE BY ORE SPOUTS AT PRESQUE ISLE MAY 17, 1905:

While loading at L.S. & I. Ry. Dock two ore spouts dropped on fender capping, breaking the same. New capping was put on at a cost of, 6.91

ACCIDENT TO NAPOLEON GREW FALLING IN HOLD, MAY 21, 1905:

In an altercation with Harry Welch, on this date, at Cleveland, Napoleon Grew fell through open hatchway and was slightly injured. The bill from Messrs. Hoyt, Dustin & Kelley, attorneys, investigating this case, etc., amounts to, 7.55

COLLISION WITH TUG R. T. RAY, THUNDER BAY, NOVEMBER 13, 1905:

While FRONTENAC was sheltered near Alpena, November 13, 1905, the Tug R. T. Ray, came alongside for the purpose of taking telegram ashore to send to home office. The heavy seaway caused some damage to tug, repairing which cost, 15.30

Total amount charged to Owners Proportion of Loss, \$510.14

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2-9-06

STEAMER FRONTENAC.

COMPARISONS.

	1 9 0 4	1 9 0 5
Days in commission,	170	240
Number of miles traveled,	23068	28686
Number of trips made,	18	23
Number cargoes freight carried,	21	29
Gross tons freight carried,	66919	90556
Average rate freight per gross ton,	\$.6197	\$.6467
Average cost to carry per gross ton freight,	.4714	.4445
Net earnings per ton freight carried,	\$.1483	\$.2022
Cost per ton to operate after eliminating Extra. & Gen. Reprs.	\$.4539	\$.4286
Gross Receipts,	\$41468.36	\$58567.19
Gross Expenditures,	31547.60	40250.00
Net Earnings,	\$ 9920.76	\$18317.19
Percentage of operations to earnings,	76.1	68.7
Gross earnings per mile traveled,	\$1.7977	\$2.0416
Operating expenses per mile traveled,	1.3676	1.4031
Net earnings per mile traveled,	\$.4301	\$.6385
Gross earnings per day,	\$243.93	\$244.03
Operating expenses per day,	<b>185.57</b>	167.71
Net earnings per day,	\$ 58.36	\$ 76.32
Expenses per day excluding cargo handling costs,	\$119.09	\$104.93
Expenses per day exclud. cargo hdlg. costs & Ex. & Gen. Reprs.	\$112.17	\$ 98.94
Cost provisions per day per day, (excluding extra meals)	.362	.334
Average lbs. coal consumed per hour steamed,	1620	1672
Average lbs. coal consumed per mile steamed,	150	155
Average cost coal consumed per mile steamed,	\$.1805	\$.1828
Average cost oil consumed per hour steamed,	\$.0265	\$.0259
Average cost oil consumed per mile steamed,	\$.00246	\$.00240
Average wages paid per day while in commission,	\$35.05	\$35.23
Average ore cargo from Lake Superior,	3281	3256
Average days per trip going up light to Marquette,	8 $\frac{1}{2}$	8 $\frac{1}{2}$
Average days per trip going up light to head Lake Superior,	--	--
Average number of miles per hour - light,	11.58	11.49
Average number of miles per hour - loaded,	10.29	10.31
General average number miles per hour,	10.80	10.77
Average draft water on ore cargoes from Lake Superior,	(18'2" Ford	(18'1" Ford
	(18'5" Aft	(18'6" Aft
Average mean draft water on ore cargoes from Lake Superior,	18'4"	18'4"

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2-9-06

STEAMER FRONTENAC.

COMPARISON OF ITEMS OF ----- DISBURSEMENTS.

	1904	1905	+ OR -	REMARKS
Extraordinary & General Repairs	\$1,175.86	\$1,440.53	+\$ 264.67	In 1905 considerable repair to floor ceiling and stanchions in cargo hold, costing \$213.05
Ship Keeping and Winter Dockage	145.05	65.00	- 80.05	A longer time at dock during Winter 1903-4.
Fitting Out	450.14	669.97	+ 219.83	A larger expenditure necessary for supplies while fitting out in 1905.
Wages and Captain's Salary	7,497.60	9,886.77	+ 2,389.17	Rate of wages was same for both years. Season 1905 was 70 days longer than 1904.
Captain's expense account	25.55	55.84	+ 30.29	
Tug Services	500.88	478.94	- 21.94	
Handling Cargoes	11,302.26	15,065.22	+ 3,762.96	Rate for unloading ore increased 1¢ per ton in 1905. Steamer carried 15,846 tons more ore than in 1904.
Taxes	439.10	541.39	+ 102.29	Rate of taxes \$2.69 in 1905 and \$2.26 in 1904.
Marine Insurance	2,760.39	3,361.51	+ 601.12	Valuation of Steamer was same for both years. The material lessened premiums for 1904 is due to lay-up returns on account short season.
Freight List Insurance	63.98	40.41	- 23.57	
Mates Supplies	292.65	282.56	- 10.09	
Provisions	1,264.76	1,624.31	- 128.21	Based on decreased cost \$ .028 per man per day.
Stewards Supplies	96.23	189.29	+ 93.06	
Passenger Cabin Equipment	16.28	6.50	- 9.78	
Fuel	4,163.69	5,245.36	+ 170.40	Based on increased consumption of 5 lbs. per mile. Carried 3 cargoes more coal than in season 1904.
Engineers Lubricants	56.69	68.92	- 1.72	Based on decreased cost of \$ .00006 per mile run.
Engineers Supplies	49.80	102.87	+ 53.07	
Boiler Repairs	36.09	66.87	+ 30.78	
Machinery Repairs	29.99	14.12	- 15.87	
Auxiliary Machinery Repairs		40.12	+ 40.12	
General Expenses	213.29	173.52	- 39.77	
Laying Up	967.32	829.98	- 137.34	Engineers Dept. did fitting out work while laying up in both years, but more time was required in 1904.

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2/16/06

ANNUAL REPORT  
OF  
STEAMER CADILLAC  
1905.

*Cadillac*



S T E A M E R C A D I L L A C .

GENERAL OPERATIONS.

The Steamer CADILLAC sailed from the port of Cleveland on first trip of season 1905 on April 15th, and finished discharging last cargo at Cleveland on December 2nd, having therefore been in commission 231 days.

This Steamer made 25 round trips for the season, traveling 30,032 miles, and carrying 64,049 gross tons of freight. The CADILLAC was engaged during the entire season carrying cargoes of iron ore from Marquette to Lake Erie ports, going up light each time, with the exception of four trips when coal cargoes were taken for delivery at Marquette.

The average rate of freight received on all cargoes carried during the season was \$.6673 per gross ton as compared with \$.6345 in preceding year. The average cost of operating per gross ton of freight carried was \$.5132 in 1905 and \$.5270 in 1904. The average net earnings per gross ton, therefore, are \$.1541 in 1905 as against \$.1075 in previous year.

LGM THB  
2-14-06

S T E A M E R C A D I L L A C .

GENERAL REPAIRS.

There were no important repairs on Steamer CADILLAC during season 1905.

Some cracks developed in the boiler during the season, so that it was necessary to put on two butterfly patches on the center furnace protection plates and studs. It was also necessary to plug and calk cracks in various places. The cost of doing this work, together with some new tubes placed in boiler, was \$273.96.

A new 20 foot metallic life boat was purchased to replace the old wooden boat on port side which had become worn out, at a cost of \$120.00.

Some new floor and bilge ceiling was put in at different places at a cost of \$113.48.

In the neighborhood of \$150.00 was expended during the year in chipping, scraping and painting in cargo hold.

There will be the usual run of repairs on this Steamer before she goes to sea another season.

In a general way it may be said that the floor and bilge ceiling in main hold will have to be repaired, which work will cost in the neighborhood of \$300.00.

The only other large item that is now known of will be repairs to the boilers. The center furnace has become useless and will have to be replaced with a new Morrison Suspended Furnace. Then there will have to be some repairs to the fronthead, throat sheet of combustion chamber, wrapper sheet of combustion chamber, lower part of backhead of combustion chamber, and a new patch on forward side of furnace to replace the one now there; also some minor repairs; the cost of this work will be in the neighborhood of \$1600 or \$1800.

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2-14-06  
JHS LGM JHB

S T E A M E R C A D I L L A C.

ACCIDENTS.

WHITE FISH BAY, APRIL 21, 1905, TRIP 1:

While the Steamer was lying in White Fish Bay, abreast of Parisian Island, stuck in the ice, at about 11:00 A.M. April 21st, the northwest wind pushed the ice and the Steamer P.G.WALKER into the CADILLAC. The WALKER worked her engines ahead and the CADILLAC worked her engines back. Many boats were fast in the ice in all shapes and when the ice began to move it took the boats with it. The Steamer WALKER was pushed astern and down onto the CADILLAC. On June 26th the Gilchrist Transportation Co. advised the WALKER had been damaged on the port quarter by coming in contact with the CADILLAC, saying repair had been made at a cost of \$124.55. We disclaimed any responsibility since which time we have heard nothing further in the matter.

CLEVELAND, JUNE 23, 1905, TRIP 8:

About the time the Steamer CADILLAC was leaving the port of Cleveland, the Second Engineer had one of his fingers caught in the air pump while tightening up a bolt, injuring the finger considerably, taking it off about  $\frac{3}{4}$  of an inch from the end of the finger. The Second Engineer signed a release absolving the boat from any responsibility.

S T E A M E R   C A D I L L A C .

	1 9 0 4		1 9 0 5	
	DAYS	PER CENT	DAYS	PER CENT
Time in port,	54½	31.3	89½	38.7
Time sailing,	102	58.6	125½	54.2
Time lost by bad weather, fog and low water,	14½	8.3	*13¼	5.7
Time lost waiting at Soo Canal and River,	1½	.9	1¾	.8
Time lost by accidents,	1½	.9	1¼	.6
Total time in commission,	174	100.0	231	100.0
Number of trips made,		20		25
Number of cargoes carried,		22		29

PERCENTAGES OF TIME IN COMMISSION IN PORT.

Season 1901.....38.6  
 Season 1902.....36.3  
 Season 1903.....38.7  
 Season 1904.....31.3  
 Season 1905.....38.7

\* This includes 4½ days time delayed by heavy ice on Lake Superior first trip of Season 1905.

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 2-14-06

S T E A M E R   C A D I L L A C .

OPERATING ACCOUNT.

<u>RECEIPTS.</u>	GROSS TONS	AMOUNT	PER GROSS TON FREIGHT CARRIED
25 cargoes iron ore from Marquette,	57257	\$40079.90	\$.7000
4 cargoes coal to Marquette, (7607 net tons @ 35 cents)	6792	2662.58	.3920
<u>29</u>	<u>64049</u>	<u>\$42742.48</u>	<u>\$.6673</u>
<u>DISBURSEMENTS.</u>			
Extraordinary and General Repairs,	\$ 1261.91		
Ship Keeping and Winter Dockage,	59.00		
Fitting Out,	806.02		
Wages and Captain's Salary,	8199.27		
Captain's Expense Account,	59.89		
Tug Services,	105.76		
Handling Cargoes,	11451.40		
Taxes,	381.58		
Marine Insurance,	2484.82		
Freight List Insurance,	29.94		
Mates Supplies,	291.51		
Provisions,	1257.65		
Steward's Supplies,	99.58		
Fuel,	4908.82		
Engineer's Lubricants,	112.27		
Engineer's Supplies,	146.63		
Boiler Repairs,	167.76		
Machinery Repairs,	65.77		
Auxiliary Machinery Repairs,	4.00		
General Expenses (Telegrams, Dues L. C. A., etc)	249.48		
Laying Up,	730.90	32873.96	.5132
Net earnings,		\$ 9868.52	\$.1541
Add amount received from Insurance Co. in excess of insurance claim,		5.67	
Making total net gain for season 1905,		<u>9874.19</u>	

NOTE: The cost per ton to operate after eliminating Extraordinary and General Repairs Account is \$.4935 in 1905 and \$.4913 in 1904.

S T E A M E R   C A D I L L A C .

COMPARISONS.

	1 9 0 4	1 9 0 5
Days in commission,	174	231
Number of miles traveled,	24674	30032
Number of trips made,	20	25
Number cargoes freight carried,	22	29
Gross tons freight carried,	48118	64049
Average rate freight per gross ton,	\$.6345	\$.6673
Average cost to carry per gross ton freight,	.5270	.5132
Net earnings per ton freight carried,	\$.1075	\$.1541
Cost per ton to operate after eliminating Extra. & Gen. Reprs.	\$.4913	\$.4935
Gross Receipts,	\$30528.90	\$42742.48
Gross Expenditures,	25355.09	32873.96
Net earnings,	\$ 5173.81	\$ 9868.52
Percentage of operations to earnings,	83.0	76.9
Gross earnings per mile traveled,	\$1.2373	\$1.4232
Operating expenses per mile traveled,	1.0276	1.0946
Net earnings per mile traveled,	\$.2097	\$.3286
Gross earnings per day,	\$175.45	\$185.03
Operating expenses per day,	145.72	142.31
Net earnings per day,	\$ 29.73	\$ 42.72
Expenses per day excluding cargo handling costs,	\$96.79	\$92.74
Expenses per day exclud. cargo hdlg. costs and Ex. & Gen. Rprs.	\$86.95	\$87.27
Cost provisions per man per day (excluding extra meals)	\$.296	\$.327
Average lbs. coal consumed per hour steamed,	1119	1333
Average lbs. coal consumed per mile steamed,	111	133
Average cost coal consumed per mile steamed,	\$.1336	\$.1614
Average cost oil consumed per hour steamed,	\$.0283	\$.0373
Average cost oil consumed per mile steamed,	\$.00280	\$.00373
Average wages paid per day while in commission,	\$30.52	\$30.23
Average ore cargo from Lake Superior,	2240	2290
Average days per trip going up light to Marquette,	7½	8½
Average number miles per hour - light,	10.80	10.70
Average number miles per hour - loaded,	9.58	9.52
General average number miles per hour,	10.09	9.98
Average draft water on ore cargoes from Lake Superior,	(15'10" Ford	(16'1" Ford
Average mean draft water on ore cargoes from Lake Superior,	(16' 6" Aft	(16'10" Aft
	16'2"	16'6"

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2-14-06

STEAMER CADILLAC.

COMPARISON OF ITEMS OF DISBURSEMENTS.

	1904	1905	+ OR -	REMARKS
Extraordinary & General Repairs	\$1,712.77	\$1,261.91	- \$ 450.86	In 1904 hatches equipped with new fasteners costing \$373.50, and new set Tarpaulins for 11 hatches \$223.55.
Ship Keeping & Winter Dockage	30.00	59.00	+ 29.00	
Fitting Out	454.09	806.02	+ 351.93	A larger purchase of supplies necessary in all departments, and more time required for fitting out in 1905.
Wages & Captain's salary	6,551.13	8,199.27	+ 1,648.14	Rate of wages was same for both years. Season 1905 was 57 days longer than 1904.
Captains Expense Account	39.16	59.89	+ 20.73	
Tug Services	340.83	105.76	- 235.07	In 1904 ore cargoes were discharged at Cleveland nearly every trip, 6 cargoes being unloaded at Wheeling Dock.
Handling Cargoes	8,512.75	11,451.40	+ 2,938.65	Rate for unloading ore increased 1¢ per ton in 1905, and steamer carried 12,457 tons more ore than in 1904.
Taxes	321.09	381.58	+ 60.49	Rate of taxes increased from \$2.26 in 1904 to \$2.69 in 1905.
Marine Insurance	2,132.39	2,484.82	+ 352.43	The valuation of Steamer was same for both years. The lessened premium in 1904 is due to rebate received account lay-up returns for short season.
Freight List Insurance	50.00	29.94	- 20.06	
Mates Supplies	109.46	291.51	+ 182.05	Season 1905 was 57 days longer than 1904.
Provisions	866.22	1,257.65	+ 116.56	Based on increased cost of \$ .031 per man per day.
Stewards Supplies	75.11	99.58	+ 24.47	
Passenger Cabin Equipment	1.75		+ 1.75	
Fuel	3,298.32	4,908.82	+ 792.00	Based on increased consumption of 22 lbs. per mile run. Carried 2 more cargoes coal than in season 1904.
Engineers Lubricants	69.22	112.27	+ 27.92	Based on increased cost of \$ .00093 per mile run.
Engineers Supplies	55.92	146.63	+ 90.71	
Boiler Repairs	20.46	167.76	+ 147.30	In 1905 necessary to patch and calk cracks in boiler during running season.
Machinery Repairs	1.75	65.77	+ 64.02	
Auxiliary Machinery Repairs	14.83	4.00	- 10.83	
General Expenses	151.88	249.48	+ 97.60	In 1905 Chief Engineer Kalb received first prize for most economical fuel consumption in 1904.
Laying Up	545.96	730.90	+ 184.94	More time and more supplies than preceding year.

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2/16/06

ANNUAL REPORT  
OF  
STEAMER CHOCTAW  
1905.

*Choctaw*



S T E A M E R C H O C T A W.

GENERAL OPERATIONS.

The Steamer CHOCTAW sailed from the port of Ashtabula on first trip of season 1905 on April 10th, and arrived at Cleveland, ready to go into winter quarters, on December 12th, having therefore been in commission 246 days.

This Steamer was engaged in the transportation of iron ore from Lake Superior to Lake Erie ports, and of the cargoes carried, 24 were loaded at Marquette and 1 at Ashland. The upbound trips were made traveling light, with the exception of seven times, when coal cargoes were taken for delivery at Marquette and Ashland. The CHOCTAW therefore made 25 round trips for the season, carrying 32 loads, or 90980 gross tons of freight.

The average rate of freight received on all cargoes carried during the season was \$.6596 per gross ton as compared with \$.6558 in previous year.

The average expenses per gross ton of freight carried was \$.4497 in 1905 and \$.5110 in 1904, or a decreased cost of \$.0613 per ton. The less cost in 1905 is due to the increased length of season which enabled steamer to carry 32,947 gross tons more freight than in season 1904. This increased freight therefore gives a more favorable distribution of fixed charges in cost per ton.

The average net earnings per ton of freight carried are \$.2099 in 1905 and \$.1448 in 1904.

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2-14-06

S T E A M E R   C H O C T A W .

GENERAL REPAIRS.

During winter 1904-5 it was necessary to chip, scrape and paint wherever rust had developed in cargo hold. This work cost in the neighborhood of \$250.00.

To renew the floor and bilge ceiling where it was worn and broken in various places in cargo hold, it was necessary to put in 2 inch and 3 inch oak on top of hemlock timber. This renewal cost \$332.40.

The lower part of back sheet of combustion chamber port boiler was badly corroded and cracked at the staybolt holes. This part of boiler was cut out to a depth of 28 inches from the bottom, the full width of the combustion chamber, and then fitted with a new plate and all screw staybolts in way of new plate were renewed 1/8 inch larger than the old staybolts. It was necessary in doing this work to cut a new handhole in backhead of boiler to which a new cover was fitted in the usual way. The contract for doing this work was \$326.55.

New patent flue blowers made by the Power Specialty Co., Detroit, have been installed on the CHOCTAW. - There are four of these, two in each boiler. The price of the flue blowers was \$50.00 each. The cost of cutting holes in boilers for installation, with the necessary fittings, therefore, makes the total cost of flue blowers installed \$392.23.

Outside of the usual run of repairs there are two principal items that will have to be given attention before the opening of navigation another season.

The wood hatch covers on this boat have apparently not been renewed since the Steamer came out. While there have been much repairs on them from time to time they are now in a condition there they must be renewed. The cost of the

S T E A M E R   C H O C T A W .

GENERAL REPAIRS - 2.

new hatch covers will be about \$50.00 each, or a total cost for the 7 hatches of about \$350.00.

The boilers of this Steamer have given trouble for several years. They have been nursed along from year to year with such repairs as would bring them through the season, but it has now become necessary that some important repairs be made. On the starboard boiler lower part of throat sheet under combustion chamber to be renewed; lower part wrapper sheet to be renewed; lower part of backhead of combustion chamber to be renewed, and some patches on starboard furnace. Port boiler, lower part of fronthead to be renewed, 2 new Adamson Furnaces to be installed, lower part throat sheet combustion chamber to be replaced with new; lower part of wrapper sheet to be replaced with new. The above work will necessitate the taking out of the frontheads, which will have to be replaced and re-riveted. This work will cost in the neighborhood of \$3000.00.

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2-14-06

S T E A M E R C H O C T A W .

ACCIDENTS.

WHITE FISH BAY, APR. 17, LAKE SUPERIOR, APR. 22, 1905, TRIP 1:

The Steamer CHOCTAW participated in the troubles experienced by most vessels on their first trips in encounters with ice on Lake Superior. This Steamer had left Ashtabula on the 10th day of April bound for Marquette. She had proceeded in the regular manner until about 10:55 the morning of April 17th, when she was about four miles west of Point Iroquois in White Fish Bay, and was proceeding under double check in the channel in the ice which had been cut by the fleet ahead of her. A field of ice which had been broken loose by the Steamer REMS passing to the windward of the CHOCTAW, drifted down into the open track and the CHOCTAW struck it with her bow, cracking and damaging several frames and plates. It was necessary to proceed, which she did with every care possible, working her way slowly along the track in the ice made by the vessels ahead until she caught up with them. Her bow was then put in the ice to hold her and she lay at this point until about 9:40 P.M., when the wind having shifted to the southwest, a large ice floe suddenly began to move and closed up the track made by the vessels. This ice came down with terrific force, catching the CHOCTAW between the solid field of ice on her starboard side and the moving field on her port side, doing damage to plates and frames on both sides of the vessel.

The Steamer lay in the ice until about 3:45 P.M. of April 19th, when the ice having moved sufficiently to release the fleet, and an examination having shown that it was probably safe to continue, the Steamer proceeded on her voyage to Marquette. Besides the damage done to the hull at this time, the wheel also was slightly damaged, and the H.P. connecting rod bent. Temporary repairs were made at Marquette.

STEAMER CHOCTAW.

ACCIDENTS - 2.

The Steamer started on her return trip, and was about four miles east of Marquette at about ten o'clock the night of April 22nd, running along at full speed, when ice was sighted directly ahead. Signal was given to the engineer to stop and reverse the engine to clear an iceberg on the port bow, and in doing so the Steamer struck another and smaller one on her starboard bow, cracking a plate and several frames. The vessel proceeded to Lake Erie, where an examination was made of the damage sustained on this trip. It was found that three starboard bow plates and four port bow plates between the 13 and 16 foot marks were badly stove in, and the frames and reverse frames in the way of these plates broken and distorted; also one bulb angle stringer fractured, one breast hook buckled, and one panting beam and bracket plate crushed. One bucket on the propeller had a corner broken off, and the H P connecting rod was bent 7/8" out of alignment. The cost of the repairs amounted to \$1638.43 besides the loss of time making same. The repairs were made at Cleveland, taking five days time. The claim was that of Particular Average and was taken up by the underwriters of the Steamer.

CLEVELAND, O., MAY 22, 1905, TRIP 3:

The Steamer was coming out of the river bed, light, without a tug, when she struck a sand scow lying on the east side of the main river just outside of Tucker's Dock. The damage to the scow consisted of 22 feet of bulwark broken, 3 stanchions pulled out, and 1 broken. The damage was repaired by ourselves at a cost of \$11.92.

CLEVELAND, O., JULY 5, 1905, TRIP 8:

While the CHOCTAW was discharging her cargo of ore at the Cleveland Furnace Co. dock, the hoister running the clam hoist ran the carriage too far astern, so that the apron

S T E A M E R C H O C T A W.

ACCIDENTS - 3.

of the hoisting machine came against the smokestack of the CHOCTAW with such force as to shove it out of plumb 14 inches, breaking whistle pipe and exhaust pipe, damaging jacket umbrella, and denting the stack in several places. The cost of this repair was \$65.74 and was borne in full by the management of the dock.

CLEVELAND, O., JULY 6, 1905, TRIP 9:

While the Steamer was being towed out of Cleveland harbor by the Tug Kennedy, on going around collision bend, the tug's stern by having a short line bumped the CHOCTAW on the port bow with sufficient force to start two rivets and to dent plating slightly at No.3 strake. The damage was so slight that it was not repaired and no claim was sent to the Great Lakes Towing Co.

CLEVELAND, O., JULY 26, 1905, TRIP 11:

The Steamer was being unloaded at the C & P Dock, Cleveland. The engineer in operating the clam shells bent and did some damage to the auxiliary steam pipe and fire line. In making the repairs it was found that some of the piping was badly decayed and defective, and that certain of the covering would have to be renewed. The total cost was \$72.49. It was decided that if the dock company would pay one-third of this amount, \$24.16, that it would be an equitable division. This was agreed to. The balance of the cost of the repair was charged to the boat.

ERIE, PA., SEPTEMBER 2, 1905, TRIP 16:

The Steamer was backing out of the E. & P. Slip, Erie, and around the bow of the Steamer JOHN OWEN, which was made fast to the east side of the slip waiting to be unloaded. The wind, which was blowing fresh at the time, caused the walestrake

S T E A M E R C H O C T A W .

ACCIDENTS - 4.

on the bow of the CHOCTAW to rub against the wale and bulwarks on the starboard side of the OWEN. No damage was done to the CHOCTAW by the impact. On examination the following damage was found to have been done the OWEN: One bulwark plate, starboard side, abreast No.5 Hatch, shoved inboard, the oak rail sprung and the rail angles bent. The cost of repairing the OWEN amounted to \$60.76, which amount becomes a claim on the underwriters of the CHOCTAW.

PRESQUE ISLE DOCK, SEPTEMBER 5, 1905, TRIP 16:

At about 12:35 P.M. while the CHOCTAW was lying on the south side of the dock at Presque Isle, the Steamer FRANCES WIDLAR came up to the dock, and in doing so struck the CHOCTAW on the starboard side with sufficient force to dent in one plate, break one frame and bend several others abreast of the forward timber head between loaded line and deck. Repairs were made at a cost of \$173.86 which amount will be taken over by the owners of the Steamer FRANCES WIDLAR.

AMERICAN SOO LOCK, OCTOBER 20, 1905, TRIP 21:

The Steamer was bound up for Marquette. She had arrived at the dock below the small lock at Sault Ste.Marie. The wind was blowing a gale, and the stern of the CHOCTAW lapped over to the dock so as to cause the wheel to strike the pier with sufficient force to break two buckets - about six inches off the corner of one and about ten inches off the corner of the other. The broken blades were taken off and replaced with two extra ones carried on board. These in turn will be replaced with new ones which will cost about \$150.00. This cost will not be sufficient to make a claim on the underwriters of the CHOCTAW.

S T E A M E R C H O C T A W .

ACCIDENTS - 5.

TOLEDO, DECEMBER 11, 1905, TRIP 25:

The Steamer while unloading her iron ore cargo at the Hocking Valley Dock, Toledo, sustained slight damages to the coamings of several of the hatches. These will be straightened up when general repairs are made, but the cost will be so slight that no claim will be made on the dock company.



S T E A M E R   C H O C T A W .

	1 9 0 4		1 9 0 5	
	DAYS	PER CENT	DAYS	PER CENT
Time in port,	54½	30.8	100¾	40.9
Time sailing,	99	55.9	117¾	47.9
Time lost by bad weather, fog and low water,	6	3.4	*18¾	7.7
Time lost waiting at Soo Canal and River,	1½	.9	3½	1.3
Time lost by accidents,	16	9.0	5½	2.2
Total time in commission,	177	100.0	246	100.0
Number of trips made,		18		25
Number of cargoes carried,		20		32

P E R C E N T A G E S   O F   T I M E   I N   C O M M I S S I O N   I N   P O R T .

Season 1901.....40.9  
 Season 1902.....38.8  
 Season 1903.....42.3  
 Season 1904.....30.8  
 Season 1905.....40.9

\* This includes 9 days time delayed by heavy ice on Lake Superior first trip Season 1905.

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S T E A M E R   C H O C T A W .

O P E R A T I N G   A C C O U N T .

<u>RECEIPTS</u>	GROSS TONS	AMOUNT	PER GROSS TON FREIGHT CARRIED
24 cargoes iron ore from Marquette,	72706	\$50894.20	\$.7000
1 cargo iron ore from Ashland,	2992	2244.00	.7500
6 cargoes coal to Marquette: (12136 net tons @ 35 cents) ( 2528 net tons @ 70 cents)	13093	6017.19	.4595
1 cargo coal to Ashland: (2452 net tons @ 35 cents)	2189	858.25	.3920
<u>32</u>	<u>90980</u>	<u>\$60013.64</u>	<u>\$.6596</u>
<u>DISBURSEMENTS.</u>			
Extraordinary and General Repairs,	\$ 1754.63		
Ship Keeping and Winter Dockage,	65.92		
Fitting Out,	523.97		
Wages and Captain's Salary,	9592.89		
Captain's Expense Account,	55.94		
Tug Service,	348.67		
Handling Cargoes,	15253.40		
Taxes,	463.12		
Marine Insurance,	3072.39		
Freight List Insurance,	57.11		
Mates Supplies,	504.22		
Provisions,	1873.96		
Steward's Supplies,	156.61		
Fuel,	5454.67		
Engineer's Lubricants,	109.07		
Engineer's Supplies,	170.69		
Boiler Repairs,	139.29		
Machinery Repairs,	109.68		
Auxiliary Machinery Repairs,	8.01		
General Expenses (Telegrams, Dues L. C. A., &c.)	164.18		
Laying Up,	1037.00	40915.42	.4497
Net earnings,		\$19098.22	\$.2099
Less amount charged to Owners Propn. of Loss,		141.41	
Making total net gain for Season 1905,		<u>\$18956.81</u>	

NOTE: The cost per ton to operate after eliminating Extraordinary and General Repairs Account was \$.4304 in 1905 and \$.4916 in 1904.

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S T E A M E R   C H O C T A W .

STATEMENT SHOWING ITEMS CHARGED TO OWNERS PROPORTION OF LOSS  
DURING SEASON 1905.

COLLISION WITH SAND SCOW AT CLEVELAND, MAY 22, 1905:

While coming out of Old River Bed on this date without a tug the CHOCTAW collided with a sand scow owned by Mr. John Stanton, laying on east side main river. About 22 feet of bulwarks were broken and 3 stanchions pulled out of place. The cost of repairing the damage to scow was,       \$ 11.92

ACCIDENT IN ICE, APRIL 17, 1905:

Deductible Average,	\$389.98
Less amt. allowed by Ins. Co. for wages master, Chief Eng., &c.	\$171.20
Less amt. allowed by Ins. Co. for telegrams,	5.25
Less amt. allowed by Ins. Co. for discount,	6.12
	182.57
	207.41

BREAKING BUCKETS ON PROPELLOR WHEEL, OCTOBER 20, 1905:

During heavy gale on this date the CHOCTAW'S stern lapped over the dock at Soo Canal. The force of the wind caused the wheel to strike the pier with such force as to break two blades on wheel. New blades were ordered at a cost of,       \$143.13  
Less credit received for old propellor blades as scrap iron,       11.31

131.82

T O T A L,       \$351.15

STRANDING ON MANITOU ISLAND, SEPTEMBER 7, 1904:

CREDITS:

20% rebate received from Great Lakes Towing Co. on account wrecking service,	\$374.00
Bill of Upson-Walton Co. for new awning (Bill rendered but goods not purchased),	20.30
Telegrams and telephones,	34.36
Bill for meals furnished men,	40.00
Amount allowed for tug service in excess of bill paid (20% rebate to us),	4.13
Commission on Disbursements,	101.75
Interest on Disbursements,	132.54
	\$707.08

DEBITS:

Less deductible average,	\$389.91
Less sundry items in general adjustment,	74.43
Less amount not allowed for watchman's wages,	18.00
Less amount not allowed in bill of Upson-Walton Co. (value old junk),	15.00
	497.34
	209.74

Balance charged to Owners Proportion of Loss,       \$141.41

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S T E A M E R   C H O C T A W .

C O M P A R I S O N S .

	1 9 0 4	1 9 0 5
Days in commission,	177	246
Number of miles traveled,	25901	30411
Number of trips made,	18	25
Number cargoes freight carried,	20	32
Gross tons freight carried,	58033	90980
Average rate freight per gross ton,	\$.6558.	\$.6596
Average cost to carry per gross ton freight,	.5110	.4497
Net earnings per ton freight carried,	\$.1448	\$.2099
Cost per ton to operate after eliminating Ex. & Gen. Rprs.	\$.4916	\$.4304
Gross Receipts,	\$38058.79	\$60013.64
Gross Expenditures,	29654.66	40915.42
Net Earnings,	\$ 8404.13	\$19098.22
Percentage of operations to earnings,	77.8	68.2
Gross earnings per mile traveled,	\$1.4694	\$1.9734
Operating expenses per mile traveled,	1.1449	1.3454
Net earnings per mile traveled,	\$.3245	\$.6280
Gross earnings per day,	\$215.02	\$243.96
Operating expenses per day,	167.54	166.32
Net earnings per day,	\$ 47.48	\$ 77.64
Expenses per day excluding cargo handling costs,	\$110.04	\$104.32
Expenses per day exclud. cargo hdlg. costs and Ex. & Gen. Rprs.	\$103.70	\$97.18
Cost provisions per day per day (excluding extra meals)	\$.438	\$.413
Average lbs. coal consumed per hour steamed,	1461	1607
Average lbs. coal consumed per mile steamed,	134	149
Average cost coal consumed per mile steamed,	\$.1637	\$.1794
Average cost oil consumed per hour steamed,	\$.0388	\$.0386
Average cost oil consumed per mile steamed,	\$.00357	\$.00358
Average wages paid per day while in commission,	\$34.05	\$33.19
Average ore cargo from Lake Superior,	2974	3028
Average days per trip going up light to Marquette,	8	7½
Average days per trip going up light to head Lake Superior,	8½	-----
Average number miles per hour - light,	11.88	11.87
Average number miles per hour - loaded	10.22	10.23
General average number miles per hour,	10.89	10.77
Average draft water on ore cargoes from Lake Superior,	(17'8" Ford 18'4" Aft	(17'11" Ford 18'6" Aft
Average mean draft water on ore cargoes from Lake Superior,	18'	18'2"

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STEAMER CHOCTAW.

COMPARISON OF ITEMS OF DISBURSEMENT.

	1904	1905	+ OR -	REMARKS
Extraordinary & General Repairs	\$1,122.46	\$1,754.63	+\$ 632.17	In 1905 installed Patent Flue Blowers at a cost of \$392.23
Ship Keeping & Winter Dockage	129.76	65.92	- 63.84	On account shipmasters strike in Spring 1904, steamer layed a longertime at winter dock.
Fitting out	969.98	523.97	- 446.01	Less time required for fitting out in 1905, and less expenditure for repairs.
Wages & Captains Salary	6,937.83	9,592.89	+ 2,655.06	Season 1905 was 69 days longer than 1904. Rate of wages remained the same both years.
Captains Expense Account	45.62	55.94	+ 10.32	
Tug Services	161.45	348.67	+ 187.22	Steamer made 7 trips more in 1905 than in 1904.
Handling Cargoes	10,177.40	15,253.40	+ 5,076.00	Carried 22,164 tons more iron ore in 1905. The rate for unloading increased 1¢ per ton in 1905.
Taxes	403.42	463.12	+ 59.70	Rate of taxes increased from \$2.26 in 1904 to \$2.69 in 1905.
Marine Insurance	2,431.66	3,072.39	+ 640.73	Valuation of steamer was the same for both years. The material decreased premium in 1904 is due to rebate received account lay-up returns for short season.
Freight List Insurance	62.15	57.11	- 5.04	
Mates Supplies	193.68	504.22	+ 310.54	In 1905 the purchase of rope exceeded 1904 by \$227.24.
Provisions	1,309.03	1,873.96	- 111.15	Based on decreased cost of \$.025 per man per day.
Stewards Supplies	133.12	156.61	+ 23.49	
Fuel	4,319.31	5,454.67	+ 547.20	Based on increased consumption of 15 lbs. per mile run. Carried 5 cargoes more coal than in season 1904.
Engineers Lubricants	92.37	109.07	+ .30	Based on increased cost of \$.00001 per mile run.
Engineers Supplies	94.59	170.69	+ 76.10	
Boiler Repairs	38.16	139.29	+ 101.13	
Machinery Repairs	57.63	109.68	+ 52.05	
Auxiliary Machinery Repairs	20.19	8.01	- 12.18	
General Expenses	178.19	164.18	- 14.01	
Laying up	776.66	1,037.00	+ 260.34	A longer time laying up in 1905 and a larger expenditure necessary for repairs.

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ANNUAL REPORT  
OF  
STEAMER ANDASTE  
1905.

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S T E A M E R   A N D A S T E .

GENERAL OPERATIONS.

The Steamer ANDASTE sailed from the port of Ashtabula on first trip of Season 1905 on April 10th, and finished discharging last cargo at Cleveland, December 16th, having therefore been in commission 250 days. On account of the heavy ice encountered on Lake Superior and Soo River, first trip, the ANDASTE was delayed 10½ days.

This Steamer traveled a total distance of 28,610 miles, carrying 83,056 gross tons of freight. Altogether 23 round trips were made for the season, Steamer traveling up light every time with the exception of six trips, when coal cargoes were taken for delivery at upper lake ports.

The average rate of freight received on all cargoes carried during the season was \$ .6566 per gross ton as against \$ .6603 in preceding year.

The average cost per gross ton of freight carried was \$ .4816 in 1905 and \$ .5327 in 1904, or a decreased cost of \$ .0511 per ton in 1905.

The ANDASTE was in commission 79 days longer in season 1905 as compared with 1904, which enabled Steamer to carry 26,496 tons more freight. This increase in freight, therefore, makes a more favorable distribution of operating cost per ton in 1905.

The average net earnings per gross ton of freight carried are \$ .1750 in 1905 and \$ .1276 in previous year.

S T E A M E R   A N D A S T E .

GENERAL REPAIRS.

The General Repairs on this Steamer were about \$1200.00 larger in 1905 than the previous year. Among the principal items the following may be mentioned.

The original floor ceiling in the ANDASTE consisted of 1" hemlock sheeting with 3" oak planking under the hatchways and 2" oak planking outside the hatchways. The ceiling under the hatches was found to be in a badly worn and splintered condition. In renewing this ceiling the "Z" frames on tank top were found to be badly bent. These were straightened up and an extra support to give strength to the frames of 2 x 6 pine timbers were placed on same. This 2 x 6 pine was covered with 1" hemlock sheeting, and then laid with 3" oak on the outside of hatchways where the ore buckets had broken through the planking. This repair cost \$496.00.

The following four items of repair aggregate a cost of \$76.77:

Bulwarks forward of fueling hatch removed and replaced with new rail;  
Coal bunker hatch in 6 sections was renewed;  
Cornice around pilot house broken by repeated contact with fueling buckets repaired;  
Promenade deck in various places had become decayed, and was renewed where necessary.

The old deck in crank room had done service since the Steamer came out. This deck was badly decayed and renewal became absolutely necessary. This work cost \$113.40.

The Local Inspector at Buffalo directed important changes in the boat davits. The old ones were taken down, sent to the blacksmith's shop, heated and bent and braces put on. New iron plates were provided for each davit extending out 3 feet from cabin roof and attached thereto, this being done in order to swing the boats clear of the sides of ship which could not be done before. Knees had to be riveted to boiler house where the boat sockets rested. This work cost \$253.00.



S T E A M E R   A N D A S T E .

GENERAL REPAIRS - 2.

The boilers on this boat have had to be nursed along for the past four or five years. Repairs were made during the winter in which attention was given to the inner expansion rings starboard furnace at the place where the bridge wall casting rests. The old butterfly patch at this point had to be cut out and replaced with new, carried to a point 6" inches higher on each side than before, which work cost \$126.03.

The lower part of back sheet of combustion chamber port boiler was badly corroded and cracked at the staybolt holes. Same was cut out to a depth of 28 inches from the bottom all the way across the combustion chamber, and a new plate fitted in, it being necessary to renew all staybolts in the way of this plate. This work cost \$349.08.

During the early part of November when the ANDASTE was at Buffalo, the Inspector of that district came aboard and made further examination of the boilers. It was found that all the lower part of combustion chamber in port boiler was badly deteriorated, and the backheads in bad shape. The starboard boiler also showed similar conditions. Numerous patches needed to be gone over, and the Inspector refused to allow the boat to go out until such repairs were made, and then her steam was cut down to 135 lbs. This work cost \$300.00.

A new set of Wilford tarpaulins were put on the boat at a cost of \$197.15

In addition to the general run of work necessary to be done before the Steamer will be fit for operation the coming season, will be the renewal of the hatch covers. These covers evidently have not been renewed since the boat came out and are now in such shape that they will have to be renewed. They will cost about \$50.00 per cover or probably \$350.00 for the seven hatches.

S T E A M E R   A N D   A S T E .

GENERAL REPAIRS - 3.

That portion of the bilge ceiling which was repaired the preceding season will have to have attention again in a number of places; also considerable repair to the bilge ceiling, and new covers for manholes. This will cost from \$250.00 to \$300.00.

In the inspection of the boilers above referred to the Inspector advised that in his opinion these boilers should no longer be used. Mr. Hynd after making examination of the boilers reports as follows:

"Examination of boilers shows furnaces in very bad condition. All the expansion rings are badly cracked and have already been patched, the patches on many of them extending above the gratebars and the cracks now extending further than these patches.

In the combustion chambers the throat sheets, back sheets and wrapper sheets are badly corroded and pitted and the backhead badly pitted at turn of the flange on the inside, and considerable deterioration by corrosion on the outside of the head flange; also lower part of frontheads checked on inside at turn of flange.

To put these boilers in good condition would require the renewal of furnaces, lower part of combustion chambers, lower part of front and backheads, and the tubes. The local inspector at Buffalo having also taken exception to the shells of the boilers being somewhat pitted, it would be necessary to renew the defective parts of the shells or fit re-inforcing pieces over them.

To make such extensive repairs to the boilers in the proper manner, would require that they be removed from the vessel and taken to boiler shop in any case, and after full consideration it was decided that it would be better to renew the boilers entirely.

In considering whether it would be advisable to make any change in the boilers when they were being renewed the following points were considered: That with two boilers of same dimensions as before, the same saddles, breeching and stack, all boiler fittings and pipings replaced as before, while if the dimensions of the boilers were changed all of such parts would require to be renewed, and to use one boiler with forced draft would also require that the bunker bulkheads should be moved forward to give proper width of firehold, and a new firehold floor built, and also some changes on the deck above.

The additional cost of renewing the boilers on this plan over replacing them of the original dimensions was estimated at at least \$3000.00, and as the original plant had been a fairly economical one it was finally decided to replace the boilers as before."

Accordingly new boilers will be installed by the American Ship Building Co. at \$12,600.00.

S T E A M E R   A N D   A S T E .

ACCIDENTS.

IN LAKE SUPERIOR, APRIL 28, 1905, TRIP 1:

The Steamer had left the port of Marquette the weather being a little hazy. When about half an hour out those navigating the vessel could see only about a mile off. The captain and the mate were both on the pilot house keeping a sharp lookout. Suddenly a bank of fog rolled up in the path of the vessel and after a little time a field of ice showed up. The engines were stopped and backed and the vessel checked to slow speed, when suddenly she struck an iceberg which was projecting up about four feet above the water. The steamer sustained a severe crushing blow on both the port and starboard sides, cracking 7 plates on the port bow, buckling two plates on the starboard bow, cracking 9 frames on the port bow, and 2 frames on the starboard bow. Temporary repairs were made to the vessel at Sault Ste. Marie and the Steamer proceeded on to Buffalo, where, after discharging her cargo, repairs were made. The total amount of the claim made on the underwriters of the vessel on account of this accident was \$3784.14.

IN LAKE HURON, JUNE 18, 1905, TRIP 5:

The Steamer was bound up Lake Huron, being about 12 miles off from Detour, when suddenly her wheel threw one of its buckets, leaving nothing but the studs and nuts on the hub. An extra blade carried on board was put on in place of the lost blade, and a new blade purchased to take the place of the extra blade, the cost of which was \$68.10, which amount becomes chargeable to Owners' Proportion of Loss.

POE LOCK, SAULT STE. MARIE, AUGUST 13, 1905, TRIP 12:

This accident is not of much consequence, but because of its interest a full report is made here.

S T E A M E R   A N D A S T E .

ACCIDENTS - 2.

The Captain's protest reads as follows:

"Nothing unusual occurred until the ANDASTE# arrived in the Poe Lock of the Soo Canal, on August 13, 1905, at 3:45 P.M. The ANDASTE was made fast on the south side of the lock and when the lock was filled and the upper gates opened, a gateman signalled the captain to come ahead, and the captain signalled his engineer to work the engines ahead. The engine was started and this caused hot water and steam from the condenser to leave the condenser exhaust. This exhaust was just about level with the dock line of the lock, and the hot water and steam from the exhaust poured onto the sidewalk along the edge of the lock. There were several people standing in the vicinity, and two of them, one the lock lineman, and another a woman, were scalded by the steam and hot water. We continued working our engine ahead and went out of the lock without further difficulty."

Mr. Joseph Ripley, General Superintendent at the Locks, reported the matter to Col. E. L. B. Davis, as follows:

"I have the honor to report that on Sunday afternoon, August 13, 1905, when Steamer ANDASTE was ready to leave the Poe Lock upbound, the captain signalled by one short blast of the whistle to let go the lines. Lineman Robt. J. McKee was in the act of releasing her stern line when the engineer let the condenser go. The sudden and violent flow of hot water and steam from the condenser knocked Miss Estelle Bailey over onto the grass, scalding her hand and ankle, and scalded McKee's legs so badly that blisters two or three inches in diameter formed between his knees and ankles. Dr. LeBlanc was called and dressed McKee's wounds, after which he was taken home in an exhausted condition.

Lineman Robt. J. McKee is still confined to his house and it will probably be about two weeks before he will be able to resume his duties on the Poe Lock. Mrs. K. A. Bailey under date of August 26, 1905, makes statement relative to injuries sustained by her daughter, and claims \$50.00 in satisfaction therefor.

If the captain of the ANDASTE had waited until the boat's lines were released before signalling to go ahead, Lineman McKee would not have been scalded; or if the engineer had started his engine slowly and kept the live steam out of the condenser water neither McKee or Miss Bailey would have been injured, though their clothes might have been damaged somewhat. The stern of the boat was at the east end of Poe Lock on south side, between the gate engine shelters, and the lock wall was flooded with water from the condenser, and the grass was killed 30 feet from the boat by that part of the overflow water that crossed the lock walls.

Under the circumstances it would seem to me that the owners of the ANDASTE should pay Mrs. Bailey for the injuries sustained by her daughter, and that Lineman McKee should be paid for expenses of medical attendance and medicine. As McKee has not yet recovered his medical expenses can not be determined."

Supervising Engineer Alexander Hynd advises on this question as follows:

"Your favor of September 15th is received with

S T E A M E R   A N D   A S T E .

ACCIDENTS - 3.

enclosed correspondence relating to injuries to Robt. McKee and Estelle Bailey, at Sault Ste. Marie, August 13, 1905, and in reply would say that when an engine with attached air pumps has been standing for a little time, under steam, and the injection valve necessarily closed, and the drain valves on the cylinders necessarily open to keep them clear of water, the water which is in the condenser will generally become somewhat heated, and then when steam is turned into the engine and blown from the drain valves into the condenser, before the engine has moved to cause the inflow of cool injection water the temperature will be raised considerably, so that when the engine does move the water first discharged from the air pump is generally of very high temperature and is sometimes accompanied by uncondensed steam until the engine has made a few strokes and the inflow of condensing water has reduced the temperature to the normal point.

In reply to the second question I would say that live steam is not turned into the condenser except as indicated above as necessary in the operation of the engine."

The correspondence was then sent to Messrs. Hoyt, Dustin & Kelley, who made the following reply:

"Your letter of Sept. 12th enclosing correspondence in connection with the above matter, duly received. It is difficult to give any definite opinion upon the question of liability, without knowing two facts which do not appear among the papers submitted.

1st: Was it necessary or usual on this or other steamers, in starting the engines, to throw out water in the manner in which it was thrown out on this occasion?

2nd: Was the water thus thrown out of the condenser hot in the first instance, or was it heated by the engineer throwing in live steam when he started his engines?

If the throwing out of water was a necessary incident to starting the engines, and the water was already heated in the condenser, and this temperature was also a thing which might have been expected in starting the engines, then I do not see how any possible liability should attach to the boat. I do not think that the mere signalling of the engines to go ahead as soon as the lines were let go would make a case of negligence, because, if the expulsion of hot water was to be expected, the lineman should certainly have looked out for himself and the canal officials should have kept strangers out of danger.

If, on the other hand, the expulsion of hot water was not usual or necessary, but only occasional under such circumstances, or, if the engineer unnecessarily turned live steam into the condenser, and then let it go, knowing that it would throw hot water over such a public place as the locks at the Soo, I am inclined to think there would be a case of liability.

Between these two extremes there are circumstances which might make the company liable as to one of the claimants, and not the other. For instance, McKee, being familiar with the liability of such expulsion of water might be held to a higher degree of care than the stranger. On the other hand, the stranger, if not warned of the danger by the canal officials, and if plainly in sight of those in charge of the steamer, might possibly have a ground for complaint which would not lie in the mouth of a man familiar with such conditions.

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My own idea is that the amount involved is really too small to warrant any contest. This is particularly the case with McKee. As a lineman around the locks at the Soo, he undoubtedly has it in his power both individually and through fellow members of the canal force who will sympathize with him, to cause some embarrassment to your vessels in locking through. It is certainly better to have the good will of the canal officials than their ill will, and I should be inclined to recommend that some kind of an adjustment of McKee's claim be made on the basis of paying his doctor's bills, etc.

I feel more doubt in the case of Miss Bailey, especially as to the injury to her clothing. Even in her case, however, if the matter can be gotten out of the way for a small sum I should be inclined to advise a settlement."

Acting on their advice a settlement was made with Mrs. K. A. Bailey for \$50.00, and with Robt. J. McKee for \$93.00, which items together with the cost of protest, \$15.00, makes a total of \$158.00, which becomes a claim on the Steamer's underwriters under Protection & Indemnity Clause.

SOO CANAL, SEPTEMBER 11, 1905, TRIP 15:

The Steamer bound up was entering the American Canal, intending to take the Poe Lock. The Captain received orders to take the Wetzel Lock, which necessitated the putting of the wheel hard astarboard crossing the channel. A steamer was coming out of the lock at the time, and the current of her wheel caught the ANDASTE throwing her bow around against the sharp end of the "V" shaped pier which divides the new and the old locks. This slight collision caused a small dent on the starboard bow, 15 frames aft from stem and at the bottom of the sixth plate from top, slightly cracking the 15th frame for 2 inches. The cost of repairing this slight damage will be included in the cost of minor hull repairs.

SOO RIVER, SEPTEMBER 14, 1905, TRIP 15:

The Steamer was bound down and on account of fog had laid at anchor at the foot of Sugar Island, off Raines Dock, in the Soo River, September 14th. At about 4:30 in the morning the fog cleared up and the Steamer got under way. While

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endeavoring to turn around to head down the river, and when abreast of Black Buoy No.19, in Middle Neebish Channel, the vessel went aground in apparently soft bottom, some 60 feet from the buoy.

It was found necessary to telephone to the Soo for assistance, and the Tug General was sent, arriving at 8:37. The General pulled on the ANDASTE in an attempt to move her but without success, and at 11:15 A.M. the General went back to the Soo for a lighter. At 2:30 the Tug Schenck arrived with the Lighter Rescue, and shortly afterwards commenced lightering the cargo, taking off in the neighborhood of 100 tons, and then at 5:00 P.M. the Schenck pulled on the ANDASTE, and succeeded in releasing her. The Steamer then proceeded to the Sailors Encampment, dropped anchor, and took on again the lightered cargo, and at 9:20 P.M. got under way again and proceeded on her voyage. An examination of the water-bottom indicated that no damage had been done. The total General Average claim arising from this accident amounted to \$913.86 which amount has been paid by the underwriters of the vessel.

In connection with this case we have the following certificate from F. D. Root, Local Manager at the Soo:

"The captain of your Steamer ANDASTE is in no way at fault for the stranding of his vessel, as we found he was in the staked channel and full 60 feet from the Black Stake supposed to mark the outer edge of the channel, and I claim the stake has either been moved or never was placed in the proper place. When we took the Steamer ANDASTE off the shoal spot there was nothing but sand and no rock, and could not do any damage to Steamer's bottom. Think this shoal was formed by the dredges working above the Dyke as it is a new one to me."

Also the following certificate from Allen Raines, the Light Keeper:

"This is to certify that the Str. ANDASTE ran aground in the staked channel fully 60 feet from the black stake marking the edge of the channel and in the direct course of vessels navigating the Soo River. This shoal must have been recently formed as it is directly in front of my house and always found good water there, and think your Captain in no way to blame for the stranding of the Steamer."

STEAMER ANDASTE.

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CLEVELAND, OCTOBER 2, 1905, TRIP 17:

The Rutland Transit Co. advised us that the Steamer ANDASTE in passing their Steamer H.R.JAMES, at that time tied up at their dock located directly opposite to the entrance to the old river bed, struck their steamer, causing her to swing out from the dock and drop gangplank on which a man was passing with a truck of bolts and nuts. The man was thrown into the river, the kegs and truck following him. The hospital people advised them that the man had three ribs fractured. They lost 2 kegs of nuts. These facts were transmitted to the captain of the ANDASTE, who replied:

"Would say neither myself nor my crew have any knowledge of the accident, and the crew, which comprise all except the second engineer and oiler who were below at the time, will make affidavits that we at no time were nearer to the Rutland Line Steamer JAMES than 20 feet. If such an accident occurred it must have been because the JAMES was not properly fastened to the dock and that she surged away. At any rate the only knowledge I have of the Steamer JAMES is as follows:

On Trip 17, October 2nd, at 3:00 P.M. we arrived at Cleveland and tied up at Custom House Pier awaiting orders. At 5:00 P.M. we got orders to proceed to Ashtabula. We then went into the river bed at the forks of the river and turned around. The Rutland Line Steamer JAMES was lying at their freight dock, and I was cautious in not touching her, and there is no doubt that we did not touch her, for it was daylight and we could plainly see all.

Having no further explanation to make on this matter, I hope I have explained our position clearly to you, and should you desire the affidavits of the crew they will be at your service. I am sorry that you are bothered with matters of this kind when we are not at fault."

We advised Mr. B. C. Tucker under date of October 17th that as our Steamer apparently did not touch the JAMES, the only contention being that she was in the neighborhood at the time and turning around carefully, we thought the prospects of a claim pretty remote, since which time nothing further has been heard about the matter, and we assume nothing further will be heard about it.

ASHTABULA, OCTOBER 3, 1905, TRIP 17:

While the ANDASTE was unloading at Ashtabula Harbor, the clam shell bucket which was working in No. 5 Hatch came



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in contact with stanchion at the after side of hatch, breaking same. The cost of this repair was \$78.60 which the Ashtabula Dock Co. will assume.

BUFFALO, NOVEMBER 2, 1905, TRIP 20:

The Steamer was proceeding up Buffalo Creek with the assistance of a tug, at about 3:45 A.M., when she grounded on a rocky bottom in mid channel, opposite the Bennett Elevator. The tug attempted to pull the Steamer off without success, and she lay on the bottom until 6:10 A.M., when the water having risen she floated off. On examination it was found that on the bottom at the port bow four plates were more or less severely dented, necessitating the renewal of one entire plate, and the removal of two to be furnaced and re-rolled. The vessel will be drydocked during the winter and the repair made. The cost will become a claim on the Steamer's underwriters.

CLEVELAND, NOVEMBER 14, 1905, TRIP 21:

The Steamer was being towed up to the Valley Dock by the Tug Kennedy. The Steamer NEOSHO of the Gilchrist Line met the ANDASTE, and in passing her port quarter swung over and struck the ANDASTE, bending the boat davit support. The cost of the repair was only \$1.00. No claim was made on the NEOSHO.

CLEVELAND, NOVEMBER 15, 1906, TRIP 21:

While unloading at the Valley Dock a swinging ore bucket hit the port end of No. 6 hatch coaming, taking a piece out 3 feet long. The dock company repaired the damage.

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	1 9 0 4		1 9 0 5	
	DAYS	PER CENT	DAYS	PER CENT
Time in port,	57½	33.6	106	42.4
Time sailing,	99	57.9	110¼	44.1
Time lost by bad weather, fog and low water,	12¾	7.5	*16½	6.6
Time lost waiting at Soo Canal and River,	1½	.9	2½	1.0
Time lost by accidents,	¼	.1	14¾	5.9
Total time in commission,	171	100.0	250	100.0
Number of trips made,	18		23	
Number of cargoes carried,	19		29	

PERCENTAGES OF TIME IN COMMISSION IN PORT.

Season 1901.....44.9  
 Season 1902.....36.7  
 Season 1903.....42.4  
 Season 1904.....33.6  
 Season 1905.....42.4

\* This includes 10½ days time delayed by heavy ice on Lake Superior first trip of Season 1905.

LGM THB  
2-16-06

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O P E R A T I N G   A C C O U N T .

<u>RECEIPTS</u>	GROSS TONS	AMOUNT	PER GROSS TON FREIGHT CARRIED
22 cargoes iron ore from Marquette,	66964	\$46874.80	\$.7000
1 cargo iron ore from Escanaba,	2717	1630.20	.6000
5 cargoes coal to Marquette: (12718 net tons @ 35 cents)	11355	4451.13	.3920
1 cargo coal to Escanaba (2263 net tons @ 70 cents)	2020	1584.07	.7842
<u>29</u>	<u>83056</u>	<u>\$54540.20</u>	<u>\$.6566</u>
<u>DISBURSEMENTS.</u>			
Extraordinary and General Repairs,	\$ 2874.94		
Ship Keeping and Winter Dockage,	65.91		
Fitting Out,	357.59		
Wages and Captain's Salary,	9357.11		
Captain's Expense Account,	50.08		
Tug Services,	371.12		
Handling Cargoes,	14126.70		
Taxes,	463.12		
Marine Insurance,	3418.92		
Freight List Insurance,	51.84		
Mates Supplies,	437.53		
Provisions,	1577.24		
Steward's Supplies,	100.01		
Fuel,	5223.97		
Engineer's Lubricants,	84.95		
Engineer's Supplies,	124.74		
Boiler Repairs,	251.69		
Machinery Repairs,	45.27		
Auxiliary Machinery Repairs,	20.78		
General Expenses (Telegrams, Dues L. C. A., &c.)	260.36		
Laying Up,	741.75	40005.62	.4816
Net earnings,		\$14534.58	\$.1750
Less amt. charged to Owners Propn. of Loss,		91.83	
Making total net gain for Season 1905,		\$14442.75	

NOTE: The cost per ton to operate after eliminating Extraordinary and General Repairs Account is \$.4470 in 1905 and \$.5030 in 1904.

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2-16-06