

Se .

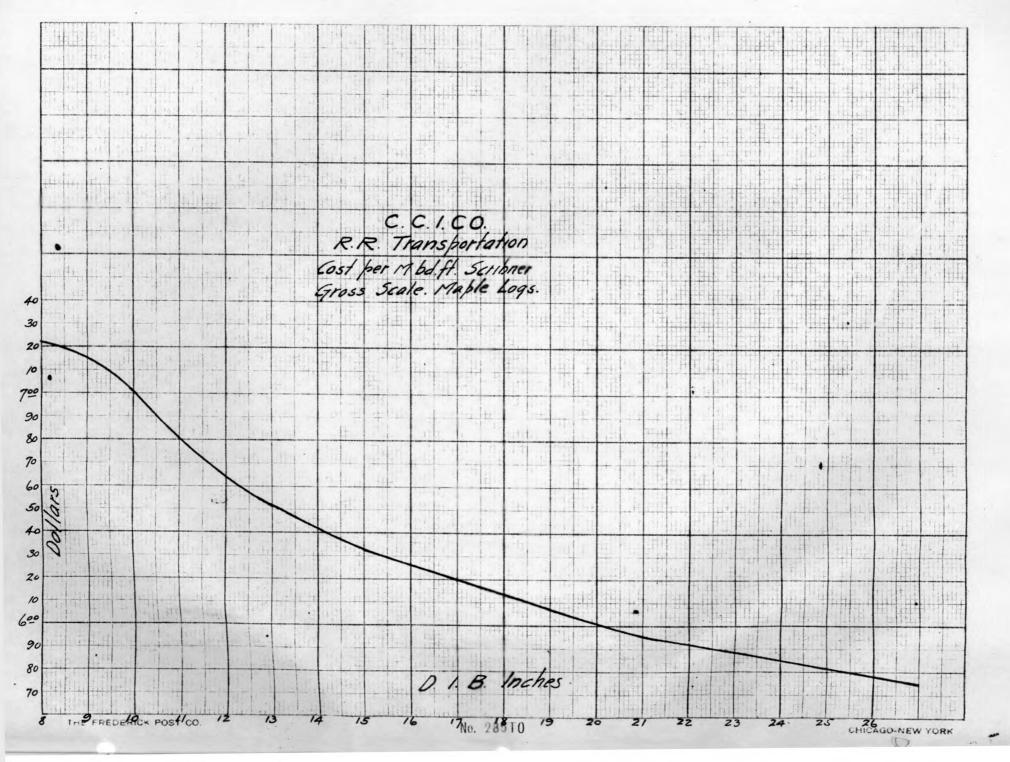
TABLE 10.

Cost of railroad transportation from

the woods to the mill. (Munising.)

	Logs		Tree	e s
D. I. B.	Board feet capacity of a carload weighing 60000 lbs. M gross scale	Cost of transpor- tation per M gross scale	D. B. H.	Cost of transporta- tion per M gross scale
8	4.48	7.21	8	7.28
9	4.55	7.15	9	7.27
10	4.70	7.02	10	7.26
11.	5.00	6.79	11 .	7.24
12	5.20	6.65	12	7.20
13	5.40	6.52	13	7.14
14	5.60	6.40	14	7.04
15	5.74	6.34	15	6.92
16	5.83	6.26	16	6.80
17	6.00	6.20	17	6.70
18	6.15	6.14	18	6.62
19	6.30	6.06	19	6.56
20	6.45	5.99	20	6.50
21	6.50	5.97	21	6.45
22	6.60	5.93	22	6.40
22			23	6.36
			24	6.33
Log run	5.20	6.65	Log run	6.65

	rai	[]road												\$16.65
														A
(Operating	; and c	lep	.ec18	ttion	and	ar	na	int	ter	121	106	3	
	of	railro	ad	equi	pmen	t.								5.93
]	Freight,	Dixon	to	Muni	sing									12.00



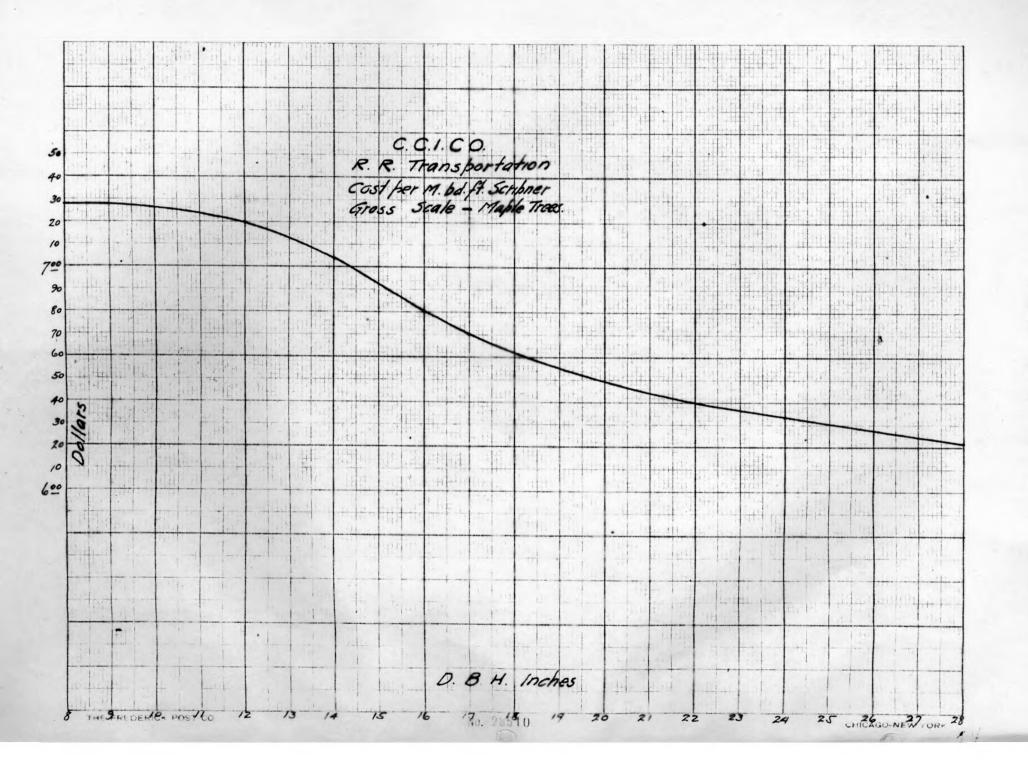
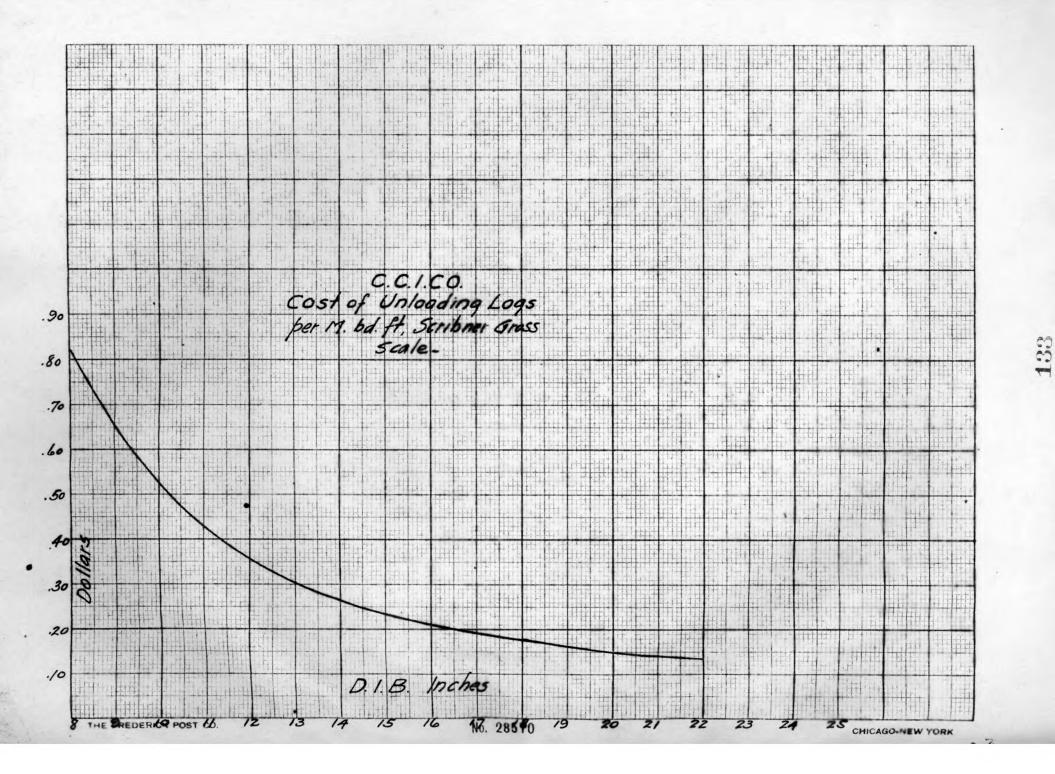


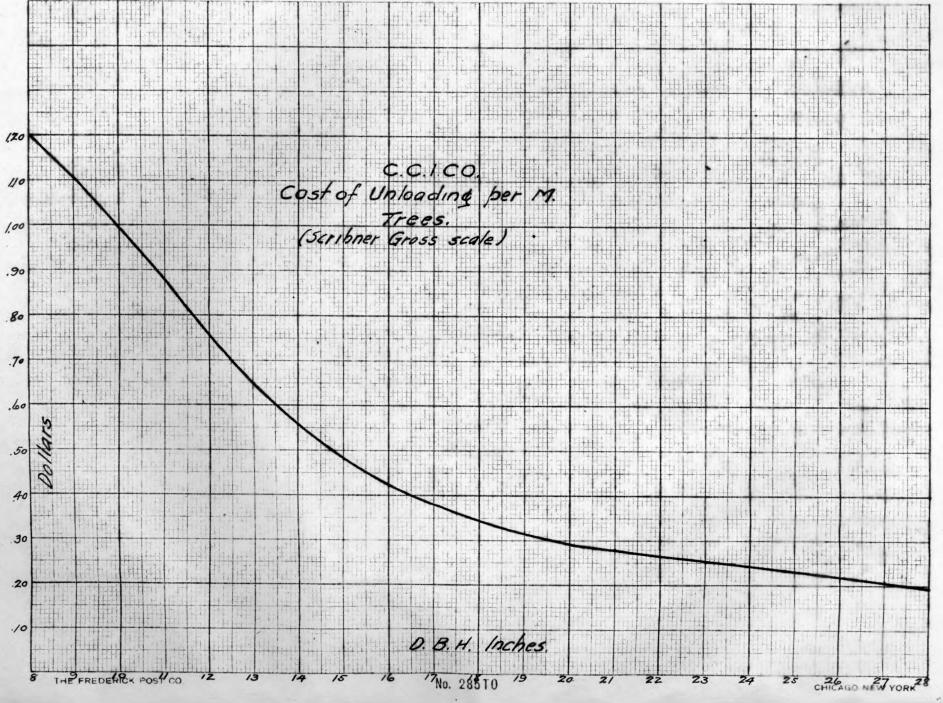
TABLE 11.

Logs		Tre	
	Cost		Cost
D. I. B.	\$ per M	D. B. H.	\$ per M
	gross		gross
	scale		scale
8	.82	8	1.20
9	.68	9	1.12
10	.54	10	1.00
11	.42	11	.88
10	.36	12	.76
13	.29	13	.65
14	:26	14	.56
15	.23	15	•48
16	.20	16	.42
17	.19	17	•38
18	.17	18	•35
19	.16	19	.32
20	.15	20	.29
21	.14	21.	.28
22	•14	22	.26
		23	.25
		24	.24
		25	.22
		28	.20
		30	.18
g run	•36	Log run	•36

Cost of unloading timber at the mill.

Cost of unloading logs into the mill pond is high because logs are tailed down for a distance of 100 feet, and this requires about twice as much working time as unloading proper.





134

T.

Project L-260-2.

PRELIMINARY REPORT ON THE LAKE STATES LOGGING AND MILLING STUDIES CLEVELAND-CLIFFS IRON COMPANY

By R. D. GARVER, FORESTER RAY MILLER, Asst. Engineer in Forest Products Section of Industrial Investigations.

The following lumber production data which pertain particularly to milling are submitted by the Forest Products Laboratory as a companion report to the information on logging sent to the cooperator by the Lake States Experiment Station on February 20, 1926.

The field work was done during September, 1925, in cooperation with the Lake States Experiment Station and the Cleveland-Cliffs Iron Company at its sawmill located at Munising, Michigan.

The information in the report is arranged in the following order:

> Part I - Log Data Part II - Tree Data Part III - Final Results Part IV - Miscellaneous

All figures unless otherwise specified will be on a lumber tally basis.

Part I - Log Data

The following is a table which gives the basis for the study and certain general information about each species.

	:	-	s for				% ::		Grades					
Species	:-		udy 	:-:-			Defect: Gross:		Green	Chain	Ba			
	:	:	Lumber	•:G	ross :	Net :	Scale:	:	:		:		:	:
	:1	No.of:	Tally	:*	Scale:	Scale:	Basis:	:	:		:		:	:
	:1	Logs :	M.b.m	•	:	:		F.A.S.:	Sel. :	No.1C	:	No.2C	:	No.3C :
Hard	:	:		:	:	:	:	:	:		:		:	:
Maple	:	721:	80	:	13.8:	19.4:	4.7:	8.7:	7.2:	31.1	:	18.2	:	34.8:
	:	:		:	:	:		:	:		:		:	:
Yellow	. :	:		:	:	:	:	:	:		:		:	:
Birch	:	75:	9	:	14.0:	21.9:	6.5:	12.7:	5.9:	26.3	:	18.0	:	37.1:
	:	:		:	:	:	:	:	:		:		:	:
Average	:	:		:	:	:	:	:	:		:		:	:
for	:	:		:	:	:		:	:		:		:	:
Hardwood	:	:		:	13.8:	19.5:	4.9:	9.1:	7.1:	30.7	:	18.2	:	34.9:
	:	:		:	- 1	:	:1	Merch :	No.3 :	No. 4	:		:	:
Hemlock	:	266:	35	:	31.0:	35.0:	4.3:	58.4:	33.4:	8.2	:		:	:
	:	:		:	:	:	:	:	:		:		:	:

Table I.

*Based on Scribner Scale

Birch and hemlock are not carried into the computations which follow because the data are insufficient to form a basis for conclusions. Operators pretty generally agree that there is no difference in cost of production between birch and hard maple.

Cable II.

Table II

Log Data - Hard Maple

		in ¹	Pur Cont2	1	Production	Station CostS
Diam-		:		ion d	of Logs	Lumber Overrun
eter Inside			:Per Cent of		-	
					Lumber : Gross	. Net
					Tally : Scale	
110100			67.0			· board
		4Z77 1	: 73,2	:	15.10	15.05
7	7	: 194	: 73.2		-2 :	: 14.21
7 8 9	40	: 1325	: 5.5	•	1.718:0 23.	0: 24.5
9	65	: 2837	: 9.0			
10 :	72	: 4083	: 10.0		5.1 20.	
100.00	64	2: 4549	: 8.9			
		: 7810				the second se
13	75	2: 8110	: 10.4		10.2 : 17.	
14	69	: 8166	: 9.6		10.3 : 16.	
15 :	67	: 9574		:	12.0 : 15.	
16 :	73	: 12137				
17 :	39	: 7456				1: 17.7
18 :	26		: 3.6		7.120:8 8.	
19 :	13	: 3097	: 1.8		3.9 : 4.	5: 16.2
20 :	10	: 2421	: 1.4	:	3.0 : .	6: 15.5
21 :	5	: 1263			ot of lefaw:	
22 :	2 4	: 1058	:n (an .60%)		ars whl.3enting	:
	10				s inside of the ba	
rotal :	721				ah govers all mill	
					oharges, expludin	
					M.65 is a fixed	
Ave.	ahu	urite and St	1.51 a variab	18 pl	: 13.	8: 19.4

The average log contains about 111 feet of lumber or 9 logs per thousand. Average number of logs per M (Scribner Scale) equals 10-3/4.

Data in the above table shows that about twice as much time is required to saw one thousand feet of lumber from 0-inch logs as compared to 20-inch logs, and surther that it costs \$5.92 more per M to produce lumber from the small logs.

The delly output of the mill when outting logs averaging eight inches in dismeter is about one-half what it would be if outting logs averaging twenty inches in diameter.

Table III.

Time and Cost of Sawing Logs of Different Sizes

	:	Time in1	:	Per Cent ²		Production	:	
	:	Minutes to	:	Normal	:	Per 10 Hour	:	Milling Cost ³
Diameter	:	Saw 1 M Feet	:	Production	:	Shift for One	:	Per M.b.m.
DISHECCI	:	b.m. (Pond		Mill Run	:	Headsaw M.b.m.	:	Lumber Tally
Inside	:	Run of Logs)		MILLI HOH	;	neadsaw mebeme	:	number rarry
8	:		:		:	F 1 + 1 + 1	:	
8	:	46.0	:	62.7	:	13.0	:	\$ 16.79
9	:	42.7	:	67.6	:	14.1	:	15.91
10	:	39.4	:	73.2	:	15.2	:	15.05
11	:	36.2	:	79.7	:	16.6	:	14.21
12	:	33.3	:	86.6	:	18.0	:	13.44
13	:	30.8	:	. 93.7	:	19.5	:	12.77
14	:	28.7	:	100.5	:	20.9	:	12.22
15	:	27.0	:	106.9	:	22.2	:	11.77
16	:	25.8	:	111.9	:	23.3	:	11.45
17	:	24.8	:	116.2	:	24.2	:	11.19
18	:	24.2	:	119.2	:	24.8	:	11.03
19	:	23.8	:	121.2	:	25.2	:	10.93
20	:	23.6	:	122.2	:	25.4	:	10.87
	:		:		:		:	
verage	:	28.85	:	100.0	:	20.8	:	12.26
	:		:		:		:	

Hard Maple

Headsaw basis exclusive of effect of resaw.
Normal production (or 100%) occurs when sawing logs averaging about 14 inches inside of the bark.
Average cost per M - \$12.26 which covers all mill, yard, and loading and selling charges, excluding planing mill; of this amount \$4.65 is a fixed charge and \$7.61 a variable charge.

To be of value for comparative purposes output had to be figured on the basis of the headsaw alone. Resaws are operated with varying degrees of efficiency and often according to the kind of lumber being cut, and therefore do not yield a consistent ouput. On the average a resaw increases the output from 20 to 35 per cent. For computing time and costs in this case the headsaw time was increased to the extent necessary for it to do the work accomplished at the resaw.

Data in the above table shows that about twice as much time is required to saw one thousand feet of lumber from 8-inch logs as compared to 20-inch logs, and further that it costs \$5.92 more per M to produce lumber from the small logs.

The daily output of the mill when cutting logs averaging eight inches in diameter is about one-half what it would be if cutting logs averaging twenty inches in diameter.

Table IV

Lumber Grades and Value by Diameter Classes

	Logs	-	Hard	Maple
--	------	---	------	-------

Diam- eter of Logs		Ga		mber on Per Cent	:	: • • Value per M							
OI LOSS	:	FAS :	Selects	:	No.l:	No. 2 :	No. 3	:	Green*	:		Dry*	
	:	:		:	:	:		:		:			
8	:	:	.3	:	7.6:	19.6:	72.5	:\$	23.33	:	\$	22.16	
9	:	:	3.0	:	11.5:	20.7:	64.8	:	26.50	:		25.18	
10	:	.8:	4.8	:	15.5:	21.6:	57.3	:	29.71	:		28.22	
11	:	2.5:	5.7	:	19.6:	22.2:	50.0	:	32.99	:		31.34	
12	:	4.1:	6.7	:	23.5:	22.3:	43.4	:	36.11	:		34.30	
13	:	5.7:	7.6	:	27.2:	22.0:	37.5	:	39.02	:		37.07	
14	:	7.5:	8.1	:	30.8:	20.6:	33.0	:	41.58	:		39.50	
15	:	9.0:	8.5	:	34.0:	19.0:	29.5	:	43.82	:		41.63	
16	:	10.6:	9.0	:	37.0:	16.7:	26.7	:	45.93	:		43.63	
17	:	12.2:	9.3		39.6:	14.5:	24.4	:	47.78	:		45.39	
18	:	13.6:	9.5	:	41.5:	12.9:	22.5	:	49.28	:		46.82	
19	:	14.7:	9.8				21.0		50.34	:		47.82	
20		15.8:			42.8:				51.31	:		48.74	
		:		:	:			:		:			
erage	:		7.2	:	31.1:	18.2:	. 34.8	:	41.66	:		39.58	
	:	:		:	:			:		:			

*Values based on the	follow	ing prices	f.o.b.	
shipping point:	FAS	80.00	Sel.	70.00
	No.1C	57.00	No. 20	33.00
		No.3C	17.00	

These same prices will be used in computing values in subsequent tables.

A 5% reduction is made from the green chain value to allow for loss due to degrade, etc., during drying.

The important points to notice in this table are the increase in the amount of lumber which falls into the higher grades as the diameter of the log increases and the resultant effect on the mill run value of the lumber. Lumber sawed from 8-inch logs is worth less than half as much as lumber cut from 20-inch logs.

Table V

Effect of position of log in tree on the value and grades of lumber produced-

Hard Maple

Wind of	:	(fra	des of	Lumber -	Value Per M - Dollars						
Kind of Log	:	FAS	:	Sel. :	No. 1C	:	No.2C :	No.3C:	Green	:	Dry	
	:		:	:		:	:	:		:		
Mill Run	:	8.7	:	7.2:	31.1	:	18.2:	34.8:	41.66	:	39.58	
	:		:	:		:	:	:		:		
Butt	:	11.5	:	8.4:	33.8	:	16.3:	30.0:	44.83	:	42.59	
	:		:	:		:	:	:		:		
Top	:	4.8	:	5.7:	28.0	:	20.6:	40.9:	37.54	:	35.66	
	:		:	:		:	:	:		:		
	:		:	:		:	:	:		:		
	:		:	:		:	:			:		

The above table shows that in lumber value, top logs are worth \$6.93 per M.b.m. less than butt logs and \$3.92 less than the mill run average. Data of this character would have a very practical application if a company were buying logs.

Part II - Tree Data

Table VI

Overrun, time and cost of milling for trees of different diameters (adjusted to exclude these logs sent to the chemical plant) -Hard Maple

	:		:		:		:	
Diam-	:	Overrun	:	Time in minutes	:	Per cent normal	:	Cost per
eter	:	gross	:	to saw 1 M feet	:	production**	:	M.b.m.
Breast	:	scale	:	b.m.*	:		:	
high	:		:		:		:	
inches	:		:		:		:	Dollars
	:		:		:		:	
12	:	22.0	:	43.2	:	66.8	:	16.04
13	:	21.3	:	40.2	:	71.8	:	15.25
14	:	20.5	:	38.1	:	75.7	:	14.70
15	:	19.8	:	35.7	:	80.8	:	14.07
16	:	19.0	:	33.1	:	87.2	:	13.38
17	:	18.3	:	32.4	:	89.0	:	13.20
18	:	17.4	:	30.7	:	94.0	:	12.75
19	:	16.5	:	29.6	:	97.4	:	12.46
20	:	15.6	:	- 28.4	:	101.5	:	12.14
21	:	14.5	:	27.9	:	103.4	:	12.01
22	:	13.5	:	26.8	:	107.6	:	11.72
23	:	12.2	:	26.2	:	110.0	:	11.56
24	:	10.9	:	25.7	:	112.2	:	11.43
25	:	9.5	:	25.2	:	114.5	:	11.30
	:		:		:		:	
verage	:	13.8	:	28.8	:		:	12.26
	:		:		:		:	

*On basis of headsaw time.

**Normal production occurs when sawing trees about 19.5

inches in diameter.

Table VII

Overrun, time and cost of milling for trees of different diameters (assuming that all logs 8 inches and greater in diameter were taken to the sawmill - in actual practice certain of these logs were taken to chemical plant)-Hard Maple

			2						
verage	:	13.8	:	28.8	:		:	12.26	
	:		:		:		:		
25	:	11.0		26.5	:	108.9	:	11.65	
24	:	12.2	:	26.9	:	107.2	:	11.75	
23	:	13.3	:	27.4	:	105.3	:	11.88	
22	:	14.3	:	- 28.0	:	103.0	:	12.04	
21	:	15.3	:	28.7		99.8	:	12.28	
20	:	16.3	:	29.5	:	97.8	:	12.44	
19	:	17.1	:	30.3	:	95.2	:	12.65	
18	:	17.8	:	31.7	:	91.0	:	13.01	
17	:	18.5	:	33.3	:	86.6	:	13.43	
16	:	19.2	:	35.0	:	82.4	:	13.88	
15	•	19.8		36.8	:	78.4	:	14.36	
14	•	20.3	:	38.5	:	74.9	:	14.80	
13	:	20.9	:	40.9	:	70.5	:	15.43	
12	:	21.4	:	42.8	:	67.4	:	15.94	
10	:	07.4	:	10.0	:		:		
Inches	:		:		:		:	Dollars	
high	:				:		:		
Breast	:	scale	:	b.m.	:		•		•
eter	•	gross	•	to saw 1 M feet	:	production	•	M b.m.	
Diam-		Overrun	•	Time in minutes		Per cent normal	•	Cost per	

Table VIII

Grades and Value of Lumber from Trees of Different Diameters . Adjusted to Exclude Chemical Logs

Hard	Mani	A
TTEAT OF	mapr	

	:										:						
	:							ber -			:						
D.H.H.	:			Per Cer	nt Gr	·een	Cha	ain Bas	si	S	:		Val	ue	pei	• M	
Inches	:	FAS	:	Selects	No.	10	: 1	No. 20	:	No. 3C	:		Green	:		Dry	
	:		:				:		:		:			:			
12	:	.2	:	3.3	: 1	2.1	:	19.8	:	64.6	:	\$	26.89	:	\$	25.55	
13	:	1.0	:	4.4	. 1	.6.4	:	20.6	:	57.6	:	-	29.82	:		28.33	
14	:	2.2	:	4.9	: 1	.9.3	:	20.7	:	52.9	:		32.02	:		30.42	
15	:	3.4	:	5.2	: 2	2.2	:	20.7	:	48.5	:		34.09	:		32.39	
16	:	4.7	:	5.8	2	4.7	:	20.2	:	44.6	:		36.15	:		34.34	
17	:	5.8	:	6.5	: 2	6.6	:	19.8	:	41.3	:		37.90	:		36.01	
18	:	6.8	:	6.9	2	.8.5	:	19.2	:	38.6	:		39.41	:		37.41	
19	:	7.5	:	7.3	: 2	50.8	:	19.0	:	35.4	:		40.96	:		38.91	
20	:	8.5	:	7.9	: 2	32.1	:	18.5			:		42.34	:		40.22	
21	:	9.3	:	8.2		3.1		18.0					43.33	:		41.66	
22	:	9.9	:	8.4	: 2	\$4.3	:	17.7	:	29.7	:		44.24	:		42.03	
23	:	10.7	:	8.6	: 2	35.3	:	17.3	:	28.1	:		45.19	:		42.93	
24	:	11.4	:	8.9	: 2	6.2	:	16.7	:				46.05			43.75	
25		12.0				7.4		15.9					46.84			44.50	
	:		:				:		:		:			:			

Value of lumber based on prices shown in Table IV.

Table IX

Grades and value of lumber from trees of different diameters (assuming all logs 8 inches and greater in diameter were taken to sawmill) - Hard Maple

Diam-	:			Grades	of lumber	- per cent		:	Value			
eter	:			gr	een chain	basis		:	De	ollar	s	
Breast	:-							-:				
high	:	FAS	:	Sel. :	No. 1C :	No. 2C : No.	30	:	Green	:	Dry	
Inches	:		:	:	:	:		:		:		
	:		:	:	:	:		:		:		
12	:	.2	:	3.3:	13.2:	20.1:	63.2	:	27.38	:	26.01	
13	:	.9	:	4.1:	15.1:	20.1:	59.8	:	28.98	:	27.53	
14	:	1.9	:	4.4:	18.6:	20.8:	54.3	:	31.30	:	29.74	
15	:	3.1	:	4.6:	21.3:	20.6:	50.4	:	33.22	:	31.56	
16	:	4.3	:	5.1:	23.6:	20.2:	46.8	:	35.09	:	33.34	
17	:	5.1	:	5.6:	25.2:	19.9:	44.2	:	36.45	:	34.63	
18	:	5.8	:	6.1:	26.8:	19.5:	41.8	:	37.74	:	35.85	
19	:	6.8	:	6.6:	29.1:	19.4:	38.1	:	39.52	:	37.54	
20	:	7.5	:	7.1:	30.4:	19.0:	36.0	:	40.69	:	38.66	
21	:	8.1	:	7.2:	31.5:	18.6:	34.6	:	41.49	:	39.42	
22	:	8.6	:	7.4:	32.7:	18.2:	33.1	:	42.35	:	40.23	
23	:			7.6:	33.6:		31.8	:	43.15	:	40.99	
24	:			7.8:	34.4:	17.4:	30.5		43.83	:	41.64	
25	:	10.4		8.0:	35.2:	16.8:	29.6		44.58	:	42.35	
	:		:	:	:	:		:		:		
	:		:	:		*		:		:		

Part III - Final Results

Table X

Lumber production cost, value and profit or loss from logs of different diameters -Hard Maple

Diam-	:			lumber	:		Pe:	r M b.m.		
eter of log	:	J	al1	.у	-:	Production	:	Dry lum-	:	Profit or
Inches	:				:	cost*	:	ber	:	loss
	:	Logging	:	Milling	:		:	value	:	
		Dollars		Dollars	:	Dollars	:	Dollars	:	Dollars
8	:	17.40	:	16.79	:	34.19	:	22.16	:	-12.03
. 9	:	15.91	:	15.91	:	31.82	:	25.18	:	- 6.64
10	:	14.55	:	15.05	:	29.60	:	28.22	:	- 1.38
11	:	13.22	:	14.21	:	27.43	:	31.34	:	+.3.91
12	:	12.31	:	13.44	:	25.75	:	34.30	:	8.55
13	:	11.56	:	12.77	:	24.33	:	37.07	:	12.74
14	:	11.05	:	12.22	:	23.27	:	39.50	:	16.23
15	:	10.74	:	11.77	:	22.51	:	41.63	:	19.08
16	:	10.60	:	11.45	:	22.05	:	43.63	:	21.58
17	:	10.64	:	11.19	:	21.83	:	45.39	:	23.56
18	:	10.82	:	11.03	:	21.85	:	46.82	:	24.97
19	:	11.06	:	10.93	:	21.99	:	47.82	:	25.83
20	:	11.49	:	10.87	:	22.36	:	48.74	:	26.38
	:		:		:		:		:	
	:		:		:		:		:	
lverage	:	12.89	:	12.26	:	25.15	:	39.58	:	14.43
	:		:		:		:		:	
	:		:		:		:		:	

*Excluding stumpage

Data in this table indicates that, excluding stumpage, it is unprofitable to saw logs less than 11 inches in diameter inside the bark, providing such logs have to stand the same production costs per M b.m. as the larger logs.

The average profit per M b.m. is \$14.43. To obtain the net profit the cost of stumpage must be deducted from this figure.

Table XI

Lumber production cost, value and profit or loss from trees of different diameters (assuming that all logs 8 inches and larger are taken to sawmill) -Hard maple

Diam- eter	:	-	r M	lumber	:			Per M b. m	•		
Breast	;		++9			Production	:	Dry lum-	:	Profit or	
	-	Logging	:	Milling		cost*		ber		loss	
Inches								value			
-	ī	Dollars	:	Dollars	:	Dollars	:	· Dollars	:	Dollars	
	;		:		:		:		:		
12	:	16.89	:	15.94	:	32.83	:	26.01	:	- 6.82	
13	:	15.90	:	15.43	:	31.33	:	.27.53	:	- 3.80	
14	:	14.90	:	14.80	:	29.70	:	29.74	:	+ .04	
15	:	14.14	:	14.36	:	28.50	:	31.56	:	3.06	
16	:	13.32	:	13.38	:	27.20	:	33.34	:	6.14	
17	:	12.70	:	13.43	:	26.13	:	34.63	:	8.50	
18	:	12.26	:	13.01	:	25.27	:	35.85	:	10.58	
19	:	11.90	:	12.65	:	. 24.55	:	37.54	:	12.99	
20	:	11.60	:	12.44	:	24.04	:	38.66	:	14.62	
21	:	11.38	:	12.28	:	23.66	:	39.42	:	15.76	
22	:	11.22	:	12.04	:	23.26	:	40.23	:	16.97	
23	:	11.10	:	11.88	:	22.98	:	40.99	:	18.01	
24	:	11.05	:	11.75	:	22.80	:	41.64	:	18.84	
25	:	11.01	:	11.65	:	22.66	:	42.35	:	19.69	
	:		:		:		:		:		

*Excluding stumpage

According to the above table, excluding the cost of stumpage, trees 14 inches and less diameter breast high do not pay their way; if stumpage is charged, the diameter limit must be raised to about 16 inches.

Table XII

Production Cost, Value for Lumber and Chemical Wood, and Profit or Loss from Trees of Different Diameters Per M feet B.M.³ (Lumber Tally) - Hard Maple

	: .	Cost of	Log	gging		: Mill-: ²			Value	P	er M :			:	Profit or
	:1		:		:	ing :				• :	Chemical:		Total	:	Loss
D.B.H.	: 01	hemical	:	Saw	:	Cost :	Cost*	:	Lumber	3	Logs :			:	
		Logs	:	Logs	:			:	Tally_		Log Scale:			1_	
						D	0		1 1	L	a		r		S
12	:\$	8.92	:\$	16.79	:	16.04:	41.75	:	. 25.42	:	7.03 :		32.45	:	- 9.30
13	:	7.96	:	15.82	:	15.25:	39.03	:	28.33	:	6.67 :		35.00	:	- 4.03
14	:	7.36	:	14.86	:	14.70:	36.92	:	30.42	:	6.60 :		37.02	:	+ .10
15	:	6.86	:	14.14	:	14.07:	35.07	:	32.39	:	6.48 :	: :	38.87	:	3.80
16	:	6.30	:	13.34	:	13.38:	33.02	:	34.34	:	6.33 :		40.67	:	7.65
17	:	5.96	:	12.72	:	13.20:	31.88	:	36.01	:	6.31 :	4	42.32	:	10.44
18	:	5.71	:	12.34	:	12.75:	30.80	:	37.41	:	6.30 :	4	43.71	:	12.91
19	:	5.50	:	11.95	:	12.46:	29.91	:	38.91	:	6.28 :	4	45.19	:	15.28
20	:	5.30	:	11.65	:	12.14:	29.09	:	40.22	:	6.27 :	4	46.49	:	17.30
21	:	5.34	:	11.45	:	12.01:	28.80	:	41.16	:	6.47 :	1	47.63	:	18.83
22	:	5.32	:	11.30	:	11.72:	28.34	:	42.03	:	6.58 :	4	48.61	:	20.17
23	1	5.39	:	11.22	:	11.56:	28.17	:	42.93	:	6.80 :	4	49.73	:	21.56
24	:	5.49	:	11.18	:	11.43:	28.10	:	43.75	:	7.01 :		50.76	:	22.66
25	:	5.60	:	11.22	:	11.30:	28.12	:	44.50	:	7.22 :		51.72	:	23.60
C	:		:		:	:		:		:	:			:	
	:		:		:	:		:		:	:			:	
	:		:		:	:		:		:	:			:	

1 Unloading charges excluded from these figures.

²Chemical wood valued at \$1.25 per M Feet log scale above. production cost.

³Production costs seem high because they include both chemical and saw logs and the unit is based on the volume of logs, woods run, from which enough could be selected to produce on M feet b.m. of lumber. Since about 1/3 of the logs were sent to chemical plant it always required more than one thousand feet of logs, from which enough logs could be selected to produce one thousand feet of lumber. In other words one would have to look through about 1340 feet of logs in order to find enough of the required quality to produce 1000 feet of lumber.

*Excludes stumpage.

Table XIII

Production Cost, Chemical and Saw Logs, Value of Lumber and Chemical Wood, and Profit and Loss for Trees of Different Diameters Per M for Scribner Log Scale (Gross Scale) - Hard Maple

Di am-	:				Cost	:	Mill-	:	Produc	:	Value	-	Dollars	:	:	Profit
eter Breast High		Chemic	aļ		Saws Logs		ing Cost		tion Cost	:	Dry Lumber	:	Chemical Logs		QTotal : Value :	or Loss
	:			:		:		:		:		:		:	:	
	:	D	0	:	1	:1		a:	r	s:		:		:	Doll	Lars
	:			:		:		:		:		:		:	:	
12	:	7.0	1	:	13.20	:	12.61	:	32.8	2:	19.98	:	5.53	:	25.51:	- 7.31
13	:	6.3	5	:	12.62	:	12.17	:	31.1	4 :	22.61	:	5.32	:	27.93:	- 3.21
14	:	5.8	6	:	11.85	:	11.72	:	29.4	3 :	24.26	:	5.26	:	29.52:	+: .09
15	:	5.4	8	:	11.29	:	11.24	:	. 28.0	1:	25.87	:	5.18	:	31.05:	3.04
16	:	5.0	5	:	10.70	:	10.73	:	26.4	8 :	27.54	:	5.08	:	32.62:	6.14
17	:	4.7	6	:	10.17	:	10.55	:	25.4	8 :	28.78	:	5.04	:	33.82:	8.34
18	:	4.5	4	:	9.82	:	10.14	:	24.5	0:	29.76	:	5.01	:	34.77:	10.27
19	:	4.3	6	:	9.47	:	9.87	:	23.7	0:	30.83	:	4.98	:	35.81:	12.11
20	:	4.1	8	:	9.19	:	9.57	:	22.9	4 :	31.72	:	4.95	:	36.67:	13.73
21	:	4.1	4	:	8.88	:	9.32	:	22.3	4 :	31.93	:	5.02	:	36.95:	14.61
22	:	4.0	8	:	8.67	:	8.99	:	21.7	4 :	32.23	:	5.05	:	37.28:	15.54
23	:	4.0	6	:	8.45	:	8.70	:	21.2	1 :	32.33	:	5.12	:	37.45:	16.24
24	:	4.0	6	:	8.26	: .	8.45	:	20.7	7 :	32.34		5.18	:	37.52:	16.75
25	:	4.0	7	:	8.14	:	8.21	:	20.4	2:	32.32	:	5.24	:	37.56:	17.14
	:			:		:		:								

*Excludes Stumpage.

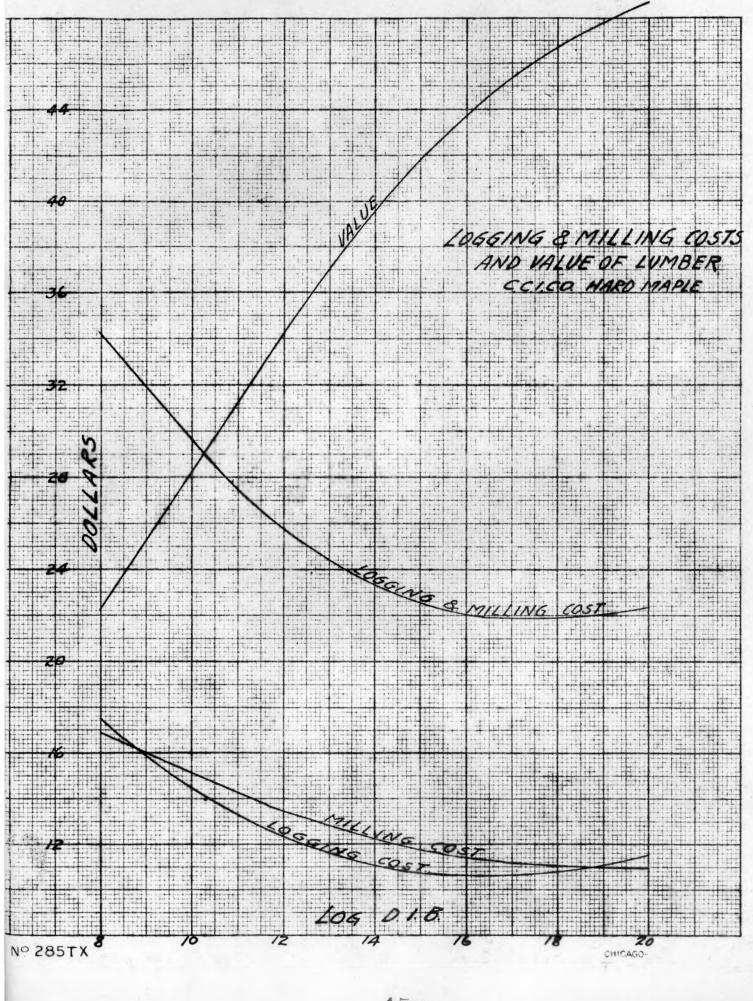
**Underlying columns cover cost of logging one thousand feet of logs, woods run, about onethird of which are classed according to the woods data as chemical logs and the rest saw logs. The milling cost applies only to those logs classed as saw logs.

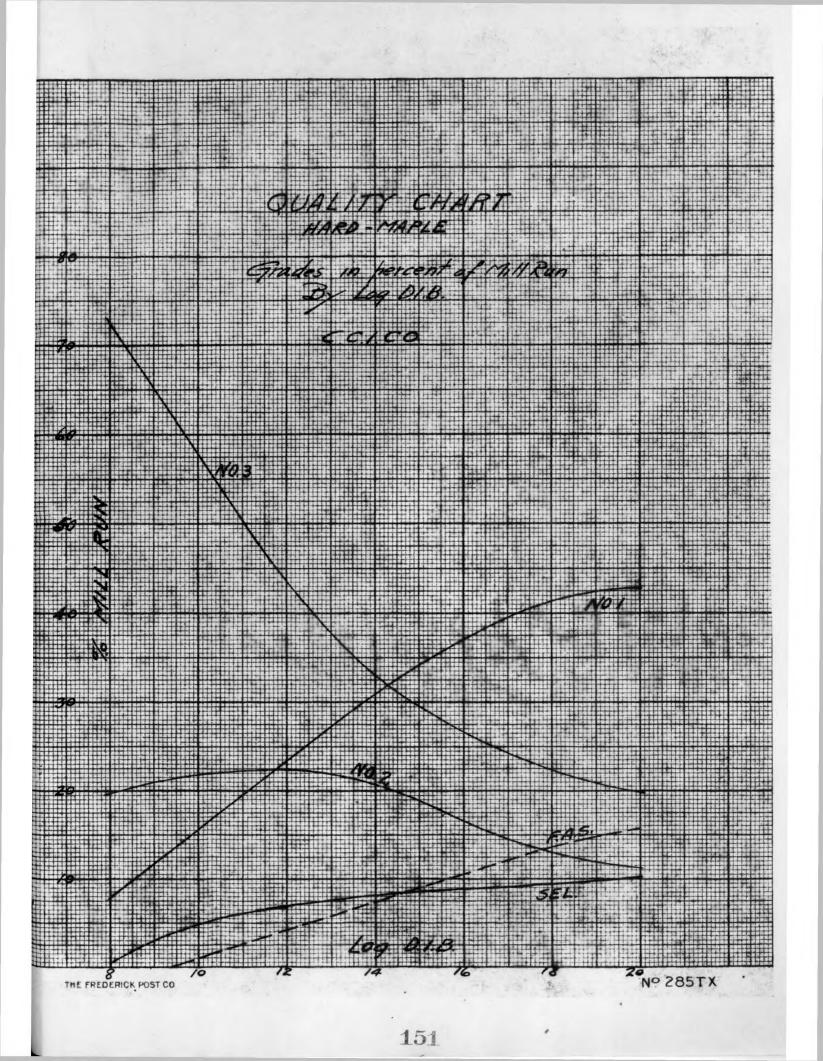
Miscellaneous

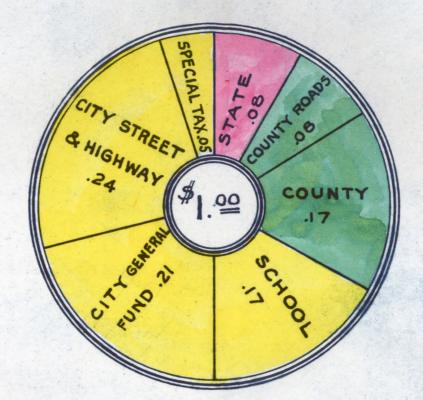
1. The average lost time in the mill amounts to 8.67 per cent, or 52 minutes, per 10 hour shift. 57.5 per cent of this time, or 30 minutes, is used in changing saws, and 43.5 per cent, or 22 minutes, in making general repairs.

2. 62 per cent of the volume of the logs is sawed into lumber while 38 per cent goes into slabs, edgings, trimmings, and sawdust.

3. 4.4 per cent of the 38 per cent representing edgings, trimmings, etc., was salbaged in the form of squares.



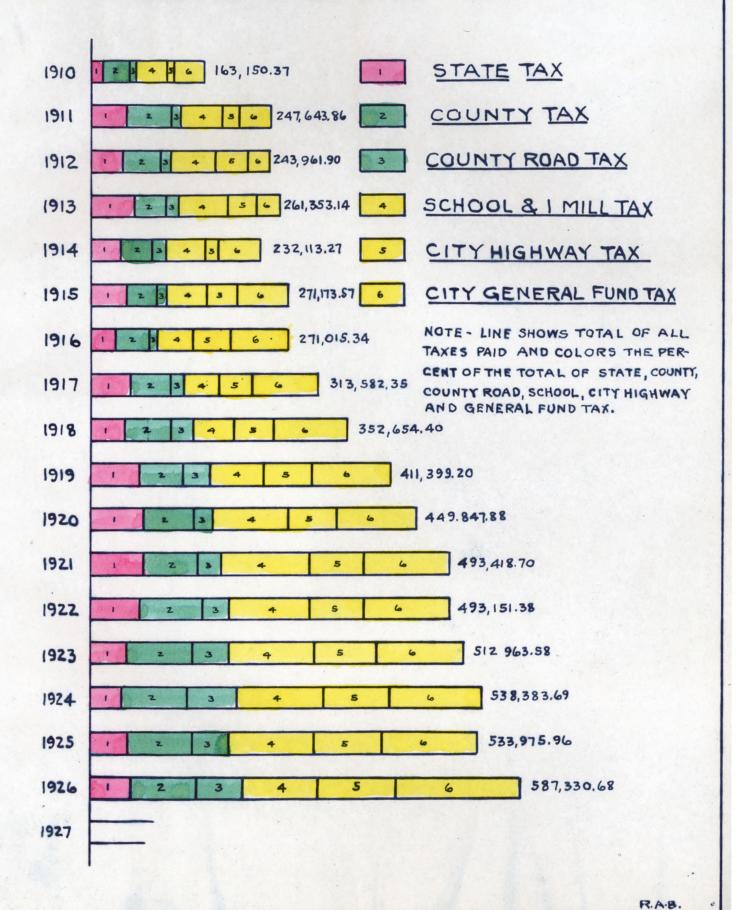


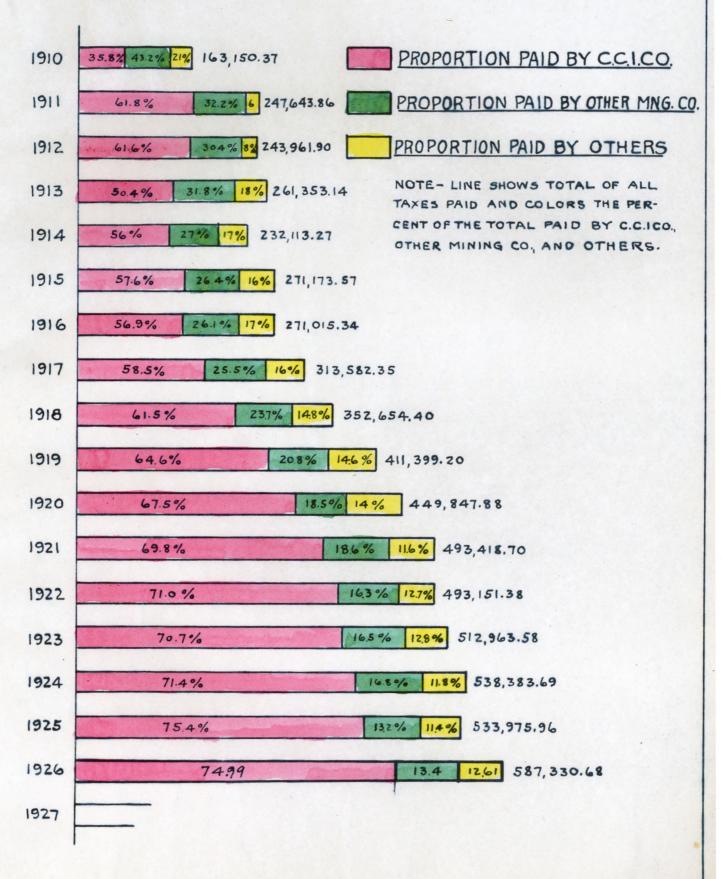


NEGAUNEE TAXES 1926

	AMT PER	PO. TO
STATE	0.257	.08
COUNTY ROADS	0.262	.08
COUNTY	0.540	17
CITY GENERAL FUND	0.652	.21
CITY STREET & HIGHWAY	0.762	.24
SCHOOL	0.540	.17
SPECIAL TAX	0.162	.05
TOTAL	3.175	1.00

(14)





RA.B.

(15)

	ASSESS	ED	Т	AX	E	S RAIS	ED	. :	SHOWIN	G	P	ROPORT	10	N FOR	EA	СН	FUN	D			
YEAR	VALUATI	NO	STATE	TA	K	COUNTY	TAX		COUNTY ROAL	DTA	AX	SCHOOL	TAX	CITY HIG	HWA	YCI	TYAN	NER	AL	TOTAL	
	AMOUNT	%		_	_			-	AMOUNT	-	_	AMOUNT			NT 9	A	MOUI	T	%	AMOUN	т
1910	6,231,860	32	18991	21	12	37936	32 2	3	9133 0	29	6	46231	86 Z	15 579	65 0	9	35 27 8	24	22	163150	
1911	19,431,380	100	48521	85	20	61931	56 Z	5	13 237 2	9	5	59431	38 Z	25013	34 1	0	39508	44	16	247643	86
1912	18,468,890	95	40740	60	17	47489	821	9	14 880 1	15	6	63468	89 Z	41873	02 1	7	35 509	42	15	243961	90
1913	19,191,930	99	60374	43	23	44 523	45 1	17	14 890 7	19	6	69 191	93 2	39 000	00 1	5	33 377	2 54	13	261353	14
1914	16,528,080	85	31981	31	14	44 532	23 1	9	14048	20	6	56528	08 2	25000	00 1	1	6002	3 63	26	232113	27
1915	15,921,560	82	48866	42	18	43037	521	6	13838 4	13	5	55921	562	40000	00 1	5	69 509	64	25	271 173	57
1916	15,716,170	81	32,524	90	12	45354	98 1	17	20669	79	8	55716	יק צי	40000	00 1	S	76749	So	28	271015	34
1917	16,292,330	84	44,363	67	14	53 640	821	7	17 953 9	73	6	66292	33 2	45000	00 1.	5	8630	1 60	27	313552	35
1918	17,948,290	92	44.407	86	13	56502	551	6	19835	69	6	67948	29 1	60000	00 1	7	10396	10 0	29	352654	40
1919	18,945,540	97	70.218				161	4	36872 0	55	9	78945	54 1	60000	00 1.	5	10612	5 59	26	411399	20
1920	19,032,159	98	69.371	97	15	62263	21 1	4	37 547 9	35	8	114032	16 Z	60 000	00 1	4	10663	2 59	24	449847	188
1921	20,626,781	106	71,175	65	14	70660	041	4	59936	19	12	115626	78 2	70000	00 1	4	10601	9 24	22	493418	170
1922	20,771,217	107	62,253	27	13	77254	161	6	61473 2	27	13	105771	222	70000	001	4	11639	9 46	24	493151	38
192.5	21,094,292	108	57830	80	11	97943	70 1	19	63 175 3	4	12	105994	33 2	70000	00 1	4	118019) 41	23	512963	58
1924	21,138,706	109	47876	16	9	83212	30 1	6	63155 5	54	12	116138	702	90000	00 1	7	13800	0 99	24	538383	5 69
1925	20,408,573	105	54603	53	10	84590	731	6	51313 0	00	10	115462	67 2	90000	001	7	13800	6 03	25	533975	5 96
1926	18,499,659	.95	47562	-	_			_	48,455 9	0	09	120,499	65 2	100,000	00 1	7	17100	1 86	29	587,330	68
1929			C. Marine									12250					1.				
1928											12.1	a she a									
1920	1. 1.10 2 2 2 4 1																				
1930																					

Remarks: The year 1911 was the first year values were placed by Michigan State Tax Commission.

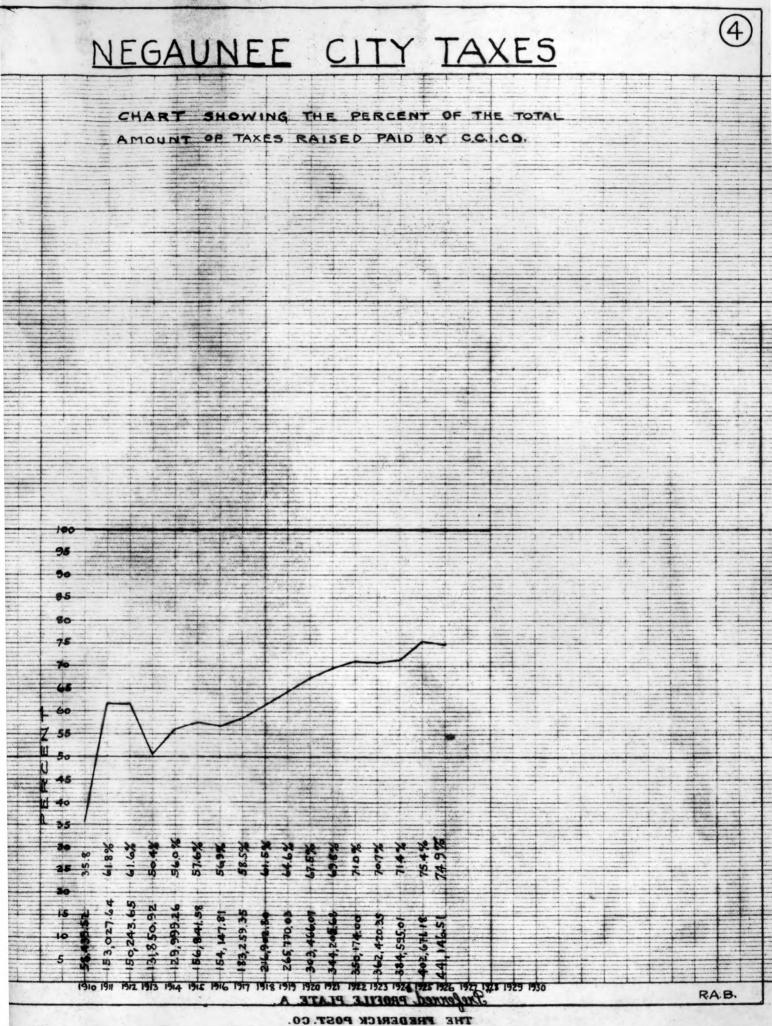
٠.

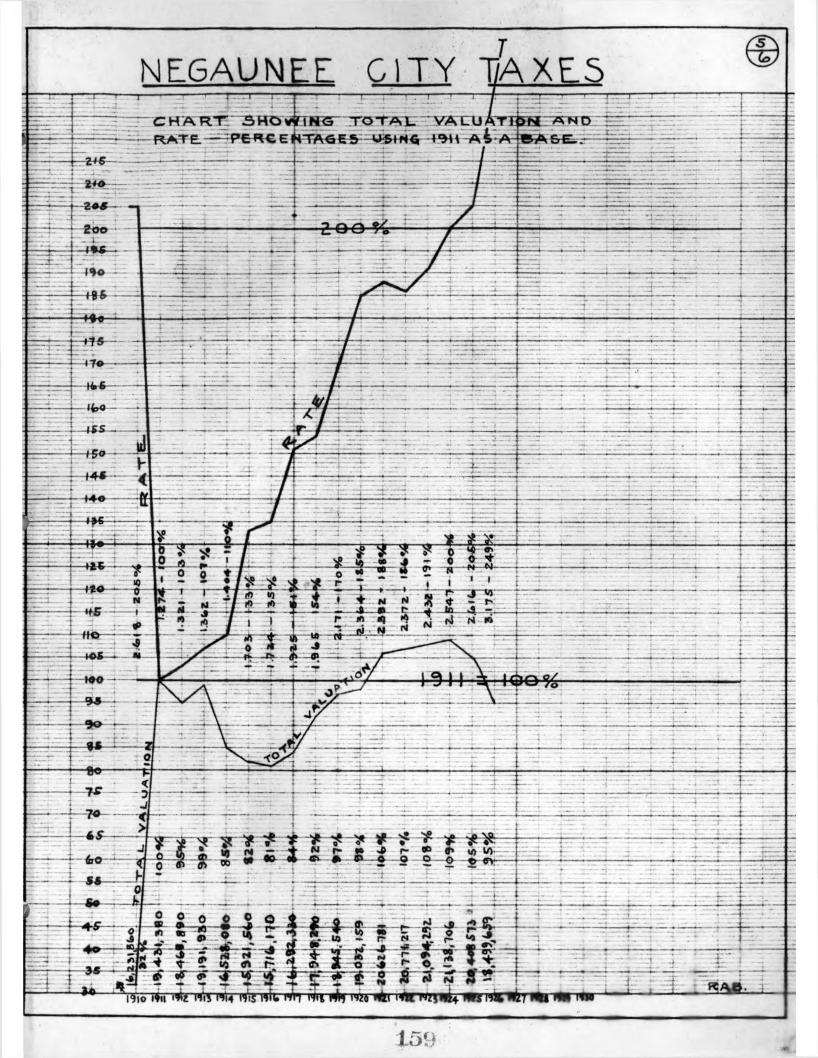
		RAT	ES PER	\$100.	DO AND	PERC	ENT, U	SING 1	911 AS	AB	ASIS.		71.2. 2	
YEAR	STATE	TAX	COUNTY	TAX	COUNTY	ROAD TAX	SCHOOL &	I MILL TAX	CITY HIG	HWAYTAX	CITYGENE	RAL TAX	TOTA	IL
	RATE	%	RATE	%	RATE	%	RATE	%	RATE	%	RATE	%	RATE	%
1910	.3050	122	.6090	191	.1460	214	.7420	242	.2500	195	.5660	279	2.618	205
1911	.2497	100	.3187	100	.0682	100	.3060	100	.1284	100	.2030	100	1.274	100
1912	.2206	88	.2570	81	.0806	118	.3437	112	.2267	דרו	.1924	95	1.321	103
1913	.3145	126	.2320	73	.0776	114	.3605	118	.2032	158	.1742	86	1.362	107
1914	.1935	רד	.2695	85	.0850	124	.3420	112	.1510	. 117	.3630	179	1.404	110
1915	.3068	123	.2703	85	.0869	127	.3510	115	.2510	195	A370	215	1703	133
1916	.2070	83	.2885	90	.1315	192	.3545	116	.2545	198	4880	240	1.724	135
1917	.2722	109	.3292	103	.1102	161	.4070	.133	.2764	215	.5300	261	1.925	151
1918	.2474	99	.3148	99	.1105	161	.3786	124	.3343	260	5794	285	1.965	154
1919	.3705	148	.3125	98	.1946	284	.4167	136	.3167	247	.5600	276	2.171	170
1920	.3645	146	-3271	103	.1973	289	.6000	196	.3152	245	.5599	276	2.364	185
1921	.3450	138	.3426	107	.2906	425	.5606	183	.3394	264	.5138	253	2,392	188
1922	. 2997	120	.3719	116	.2960	434	.5093	166	.3371	262	.5580	275	2.372	186
1923	.2741	109	.4643	145	.2995	439	.5030	164	.3318	258	.5593	276	2.432	191
1924	.2265	91	.3937	124	.2990	439	.5495	179	4258	331	.6525	321	2,547	200
1925	.2675	107	.4145	130	.2515	368	.5655	185	4410	344	.6760	333	2.616	205
1926	.2571	103	. 5396	169	.2620	.384	.6514	213	.5406	420	.9243	455	3,175	249
1927	•			104 2 M	C. C. A. A.					-				
1928					1									1
1929		1. 1.5 -												
1930										× 1				

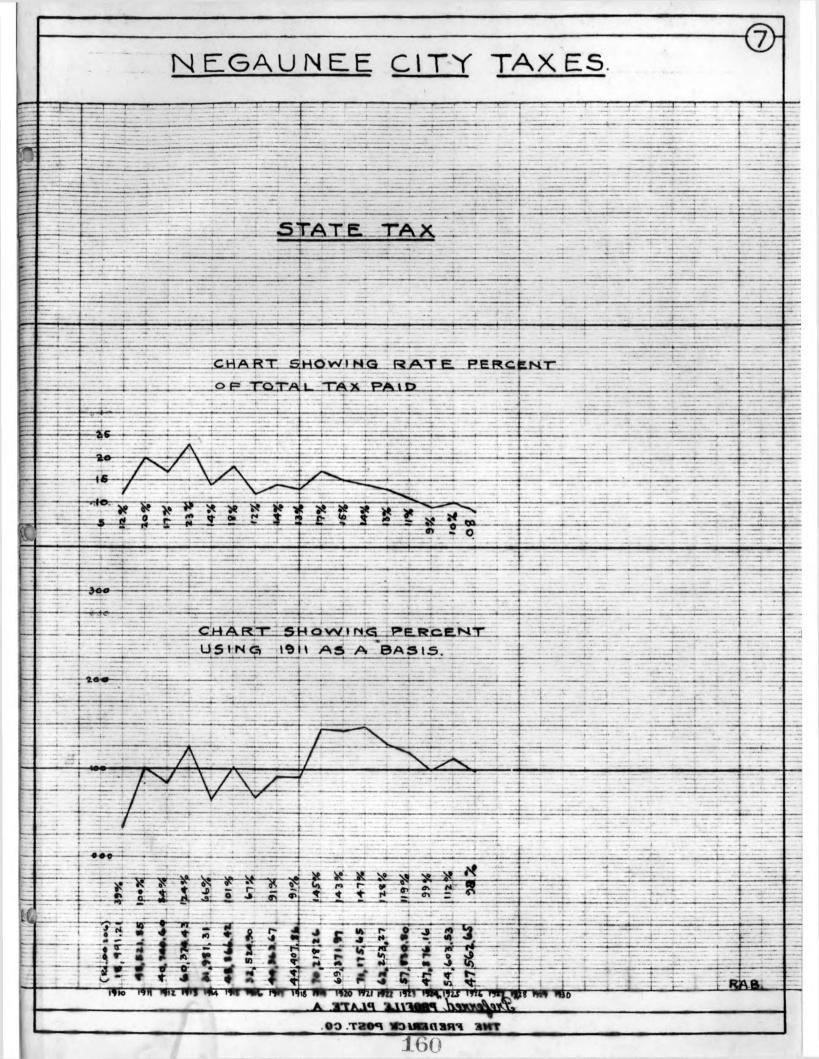
M

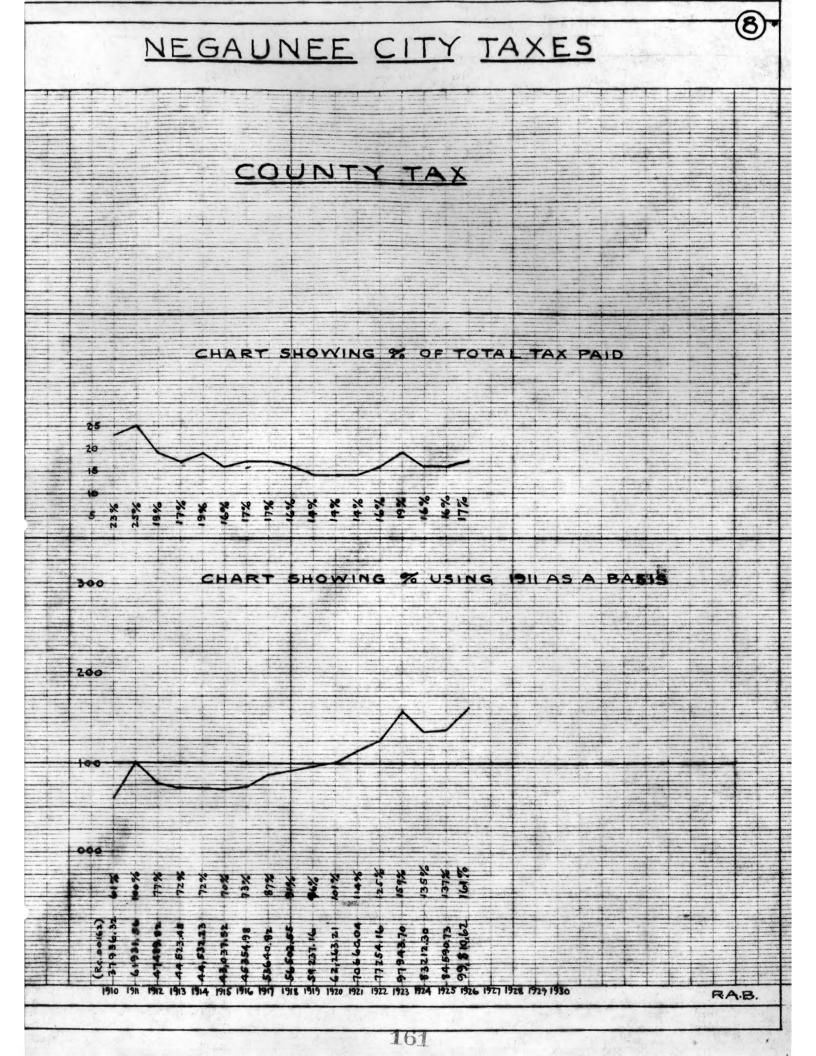
1	AMOUN	IT A	ND PROF	20 F	TION PA	AID	BY TH	EC	CLE	VELAND C	LI	RES IRON	C	OM	PANY
YEAR	THE COLO	3.	NEGAUNEE P	INE	ATHENS MI	NE	TOTAL MIN	ED	EPT	LAND DEP	· ۳	TOTAL C.C	2.1.0	.0.	% PAID
	AMOUNT	F	AMOUN	T	AMOUNT		AMOUNT		%	AMOUN	т	AMOUN	T	%	1911 BASIS
1910	22 677	11	32082	84	at .		54759	95	33.6	3679	57	58439	SZ	35.8	38%
1911	63371	96	75504	03	7612	88	150 488	87	60.8	2538	77	153027	64	61.8	100%
1912	65419	59	75344	67	7703	91	148468	17	60.8	1775	48	150 243	65	61.6	98%
1913	50287	77	67993		10 649	89	128930	92	49.3	2920	00	131 850	92	50.4	86%
1914	49122	01	67891		9227	00	126240	21	54.4	3759	05	129999	26	56.0	85%
1915	58772	14	78968	_	13 353	20	151093	59	55.7	5747	99	156841	58	57.6	102%
1916	58028	49	76953	76	13532	15	148 514	40	54.8	5633	41	154 147	81	56.9	101%
1917	64520	46	98003	94	the second s	32	177798	72	567	5460	63	183259	35	58.5	120%
1918	74177	06	119425	-	15456	19	209058	51	59.3	7844	29	216902	80	61.5	142%
1919	86018	78	149 583	-	23761	64	259364	27	63.1	6405	76	265 770	03	64.6	174%
1920	93512	90	162621		38 802	96	294937	40	65.5	8528	67	303466	07	67.5	198%
1921	91708	18	169627	32	69284	09	330619	59	67.0	13 586	09	344205	68	69.8	225%
1922	89227	06	168 379		82206	82	339813	80	67.0	10360	20	350174	00	71.0	229%
1923	94275	98	178234	31	79320	10	351830	39	68.6	10589	96	362420	35	70.7	237%
1924	100738	24	182329	-	90 587	69	373654	93	69.4	10940	08	384 595	01	71.4	251%
1925	120 407	97	182488	73	90291	62	3931 88	32	73.6	9482	86	402 671	12	754	263%
1926	127808	65	197766	-		-	429942	34	72.5	11204	17	441146	51		288%
1927										1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			1.2		
1928							1			and the second			1 3	1.1	
1929			and a set of the		and the second second		1								1. 1. 1. 1. 1.
1930			1, 2, 1,								120		1	1.2.3	

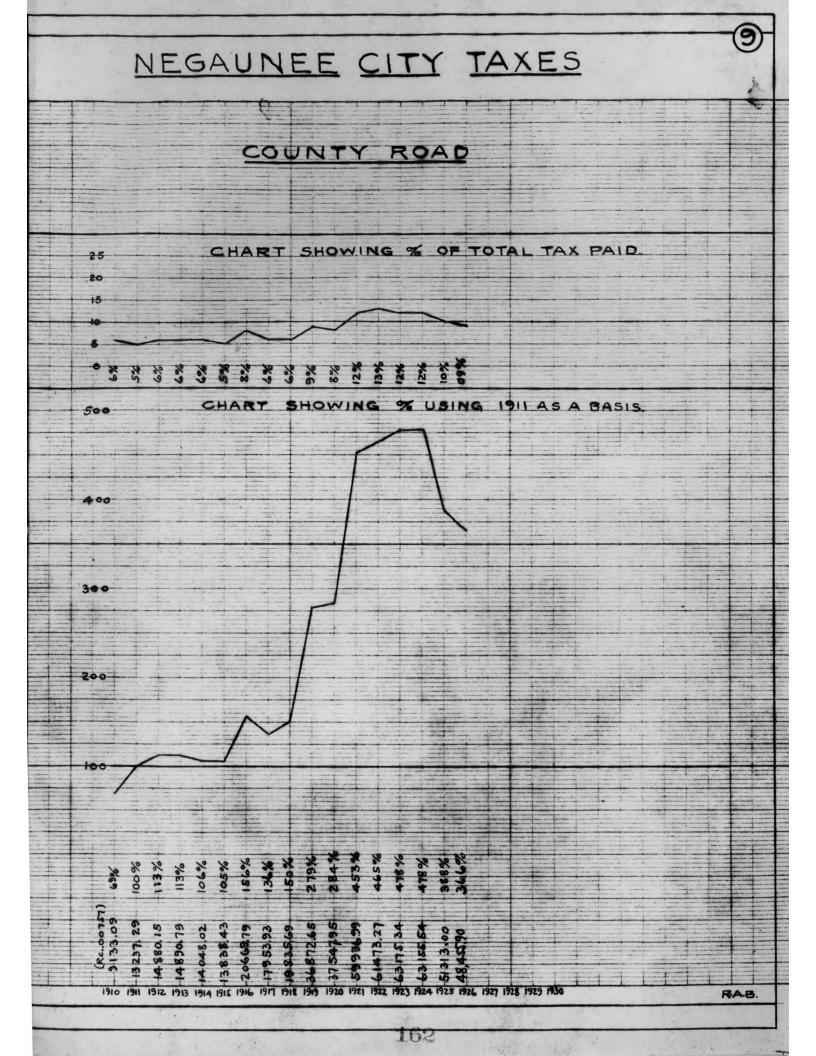
6

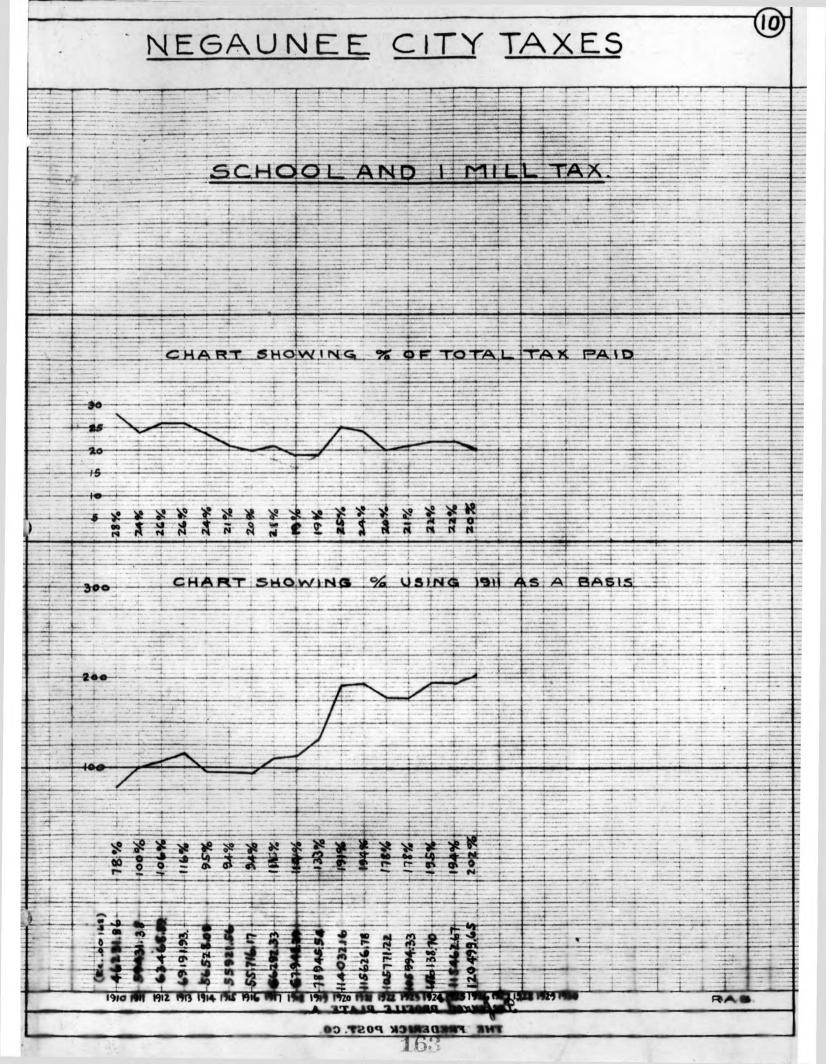


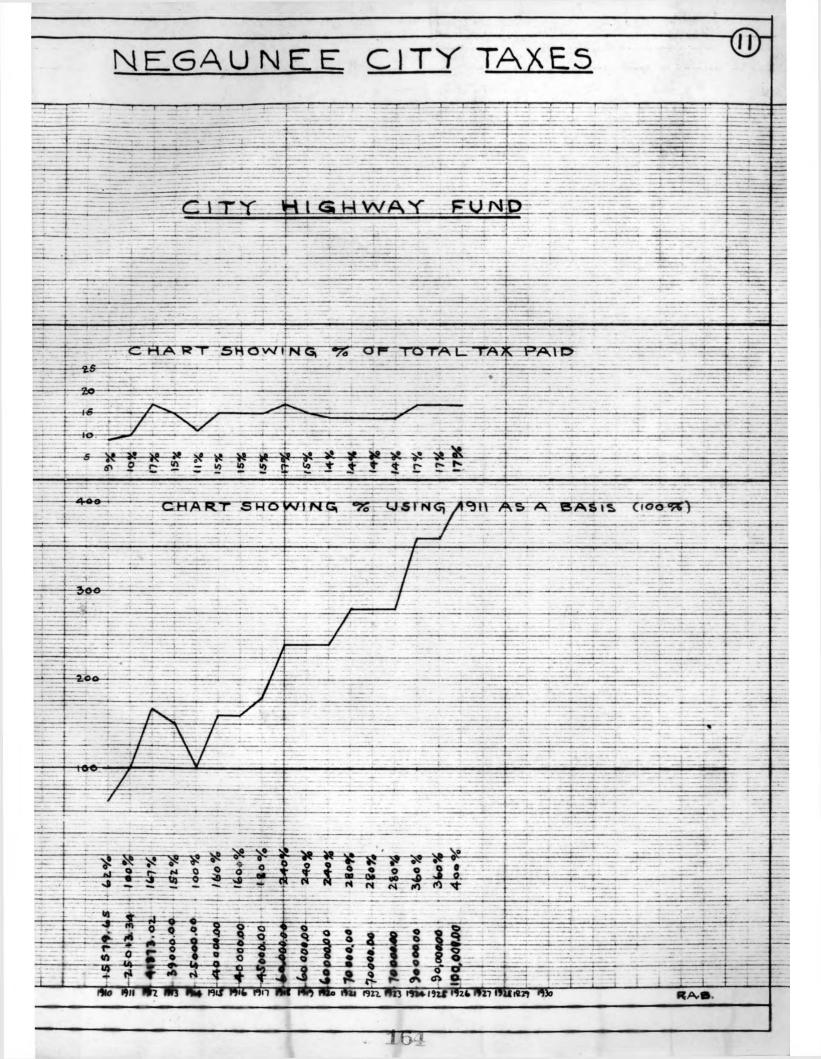


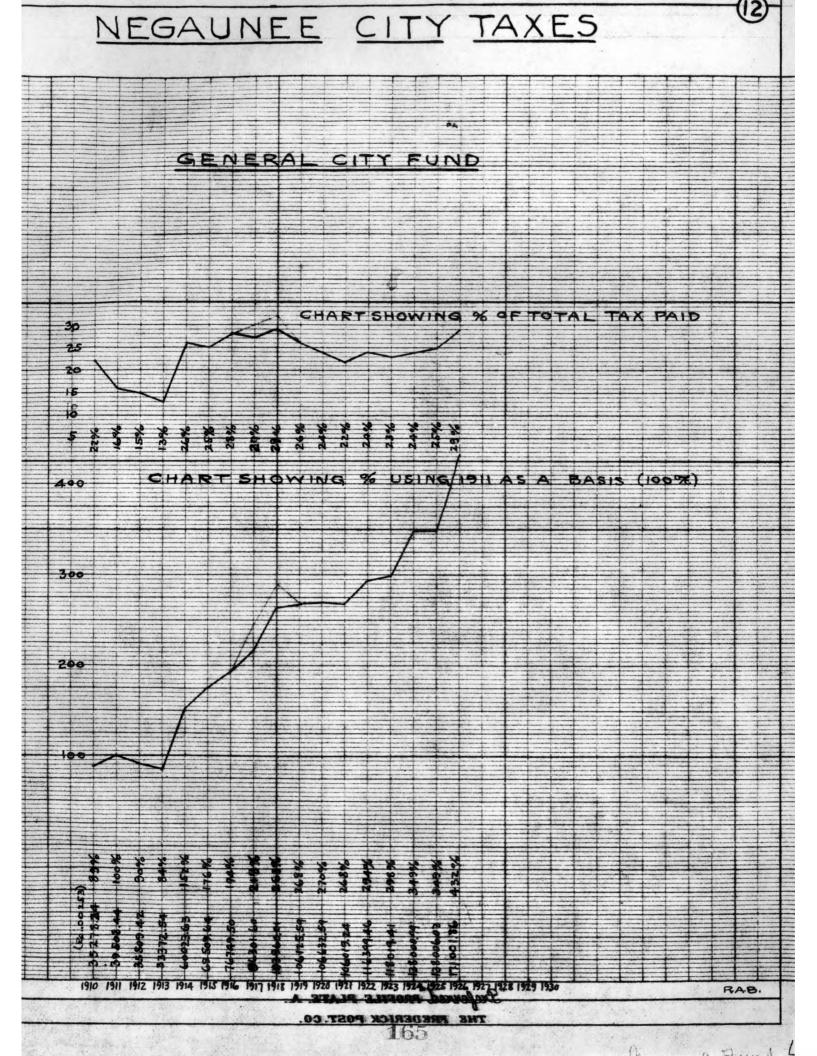


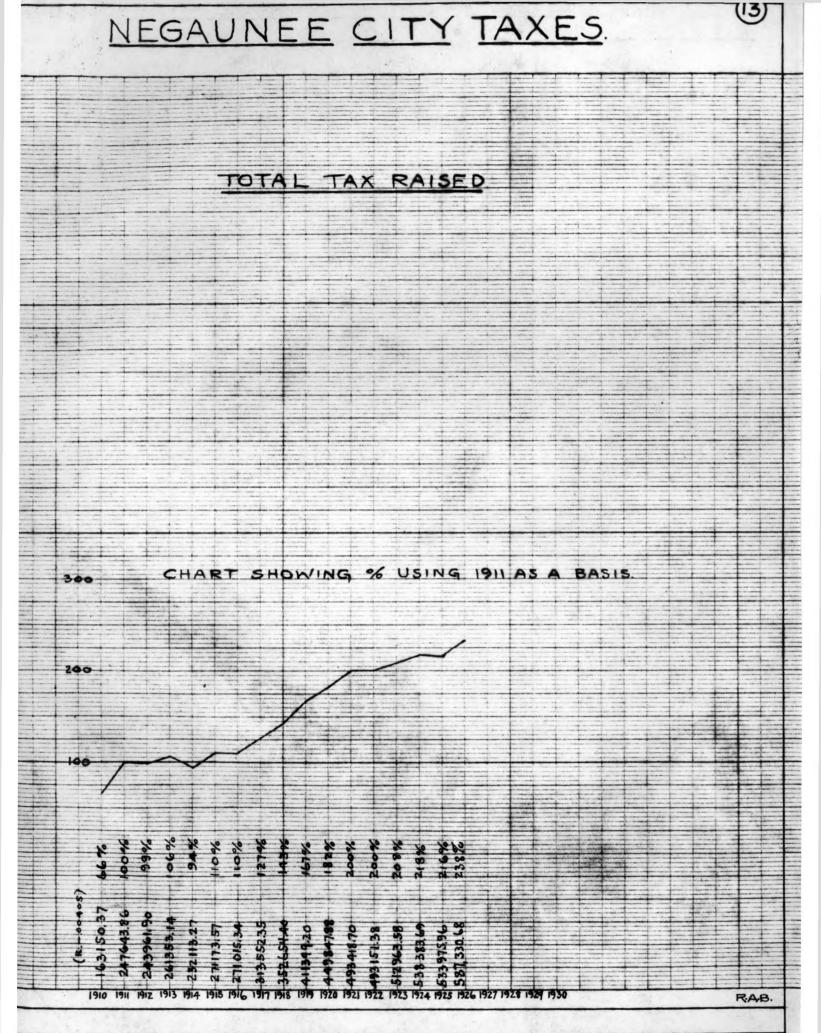


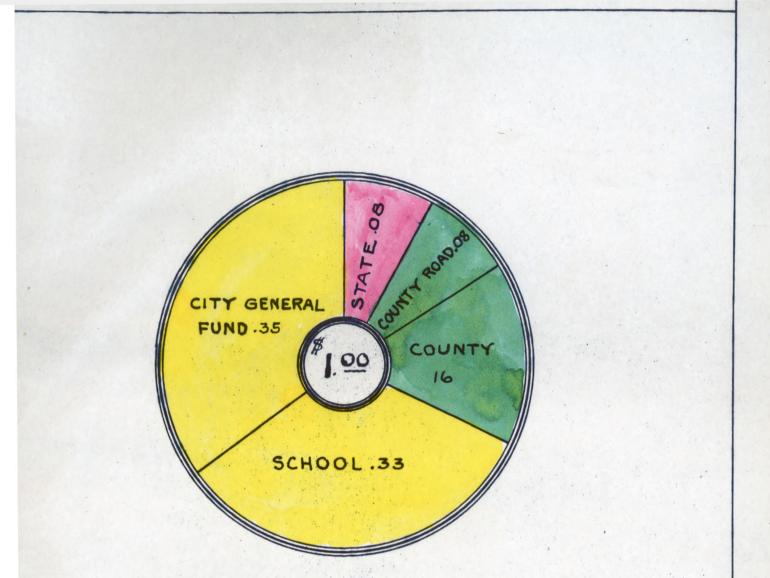












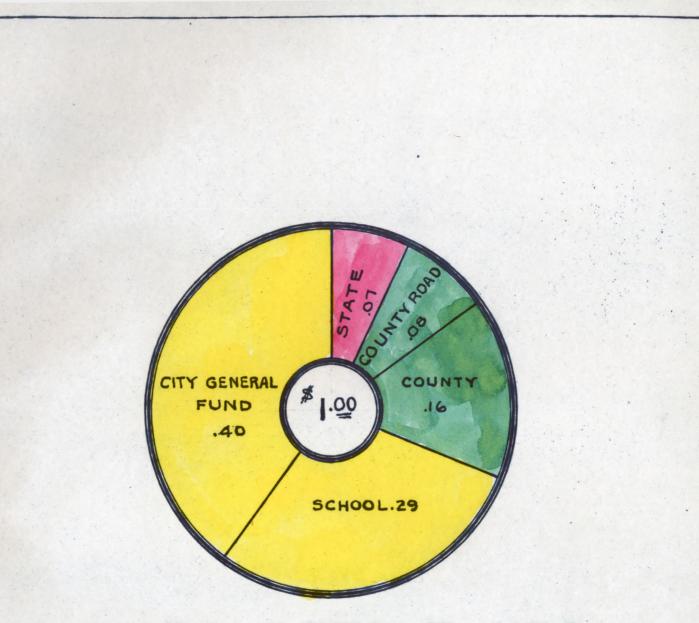
ISHPEMING TAXES 1926

	AMT PER	SPAID TO
STATE	0.257	.08
COUNTY ROAD	0.262	.08
COUNTY	0.539	.16
SCHOOL	1.083	.33
CITY GENERAL FUND	1.131	.35
TOTAL	3.272	1.00

ISHPEMING CITY TAXES

		1	1
YEAR		TOTAL TAXES PAID	PROPORTION PAID BY CCICO. & OTHERS
1910	4 151 4	227,960.64	
1911	1 4 5 6	278,040.45	3 7
1912	4 5 6	244,995.59	8 7
1913	23 4 5 6	263,774.56	8 7
1914	12 4 1516	247, 412.97	8 7 3
1915	2 3 4 5 6	265,415,91	817
1916	123456	262,432.84	8 7
1917	1 2 3 4 5 6	283,091.12	8 7
1918	1 2 3 4 5 6	304,739.08	8 7
1919	1 2 3 4 5 6	378,112.50	8 1 7
1920	1 12 3 4 5 6	448,434.56	8 7
1921	1 2 3 4 5 6	451,348.37	8 1 7
1922	12 3 4 5 6	434,907.76	8 7
1923	1 2 3 4 5 6	437.387.88	8 1 7
1924	1 2 3 4 5 6	459,567.63	8 7
1925	4 5 6	458,391.77	8 1 7
1926	1 2 3 4 5 6	465,950.60	8 7
1927			
1928			
1929			
1930		12.1	
	Citiza de la companya		

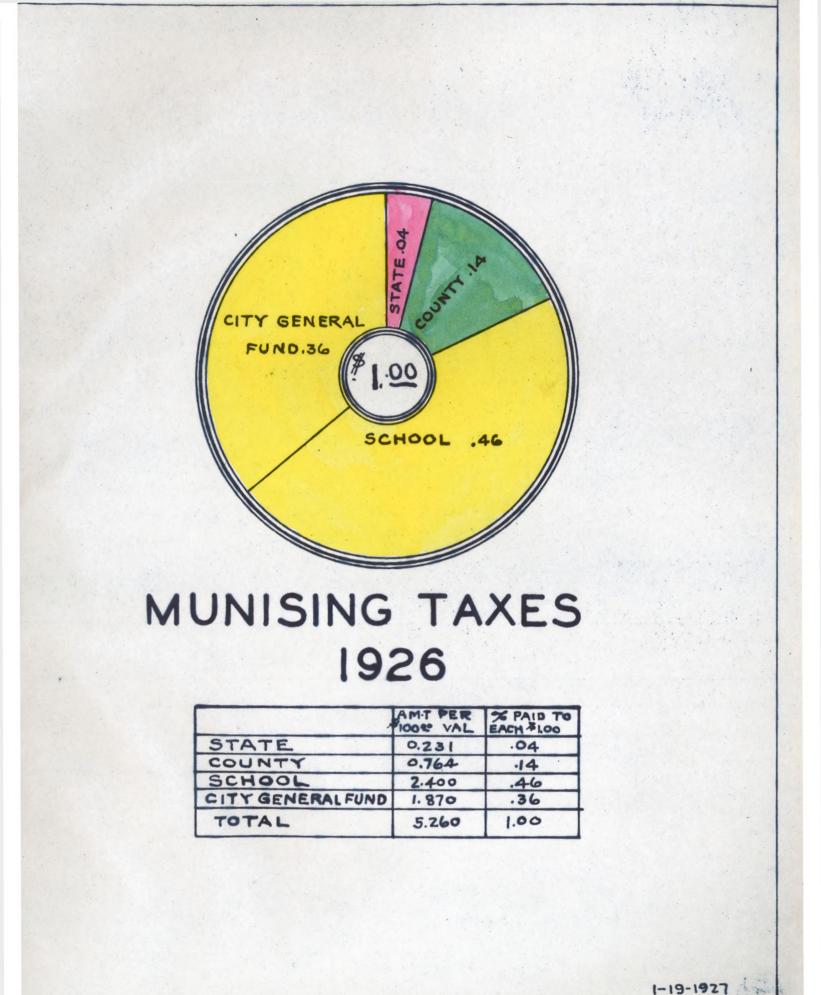
STATE COUNTY COUNTY ROADS 4 SCHOOL S CITY HIGHWAY COLTY GENERAL FUND 2 PAID BY CCICO. B PAID BY OTHERS SCALE I'= \$200,000 - 2-8-1927 - RAB.



MARQUETTE TAXES 1926

	AMT PER	% Paid to each #100
STATE	0.2.58	.07
COUNTY ROAD	0.265	.08
COUNTY	0.540	.16
SCHOOL	1.025	.29
CITY GENERAL FUND	1,400	.40
TOTAL	3.490	1,00

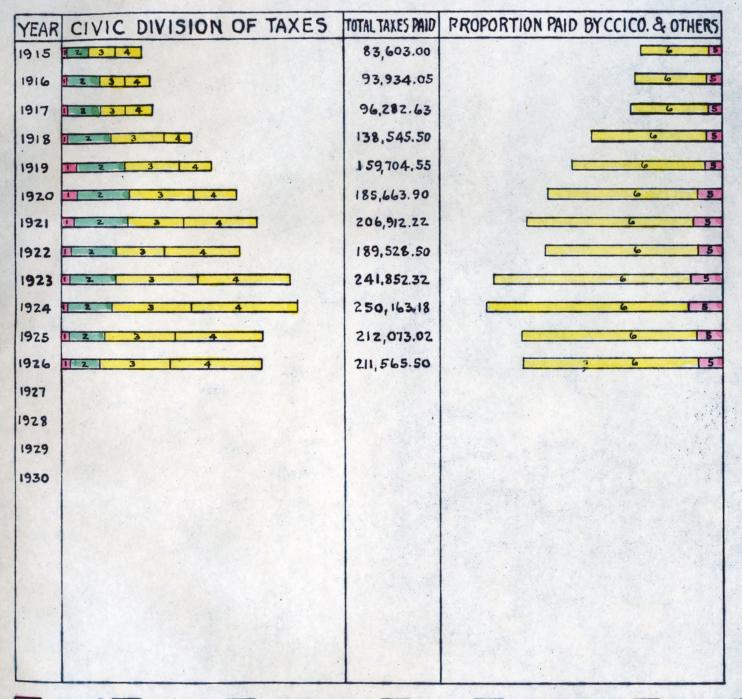
1-19-1927 RAB



170

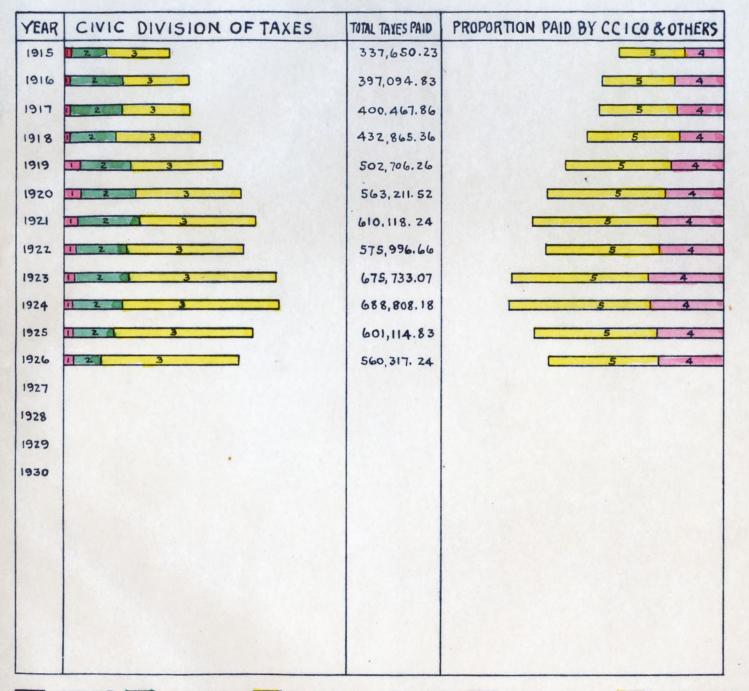
RA.B.

MUNISING CITY TAXES



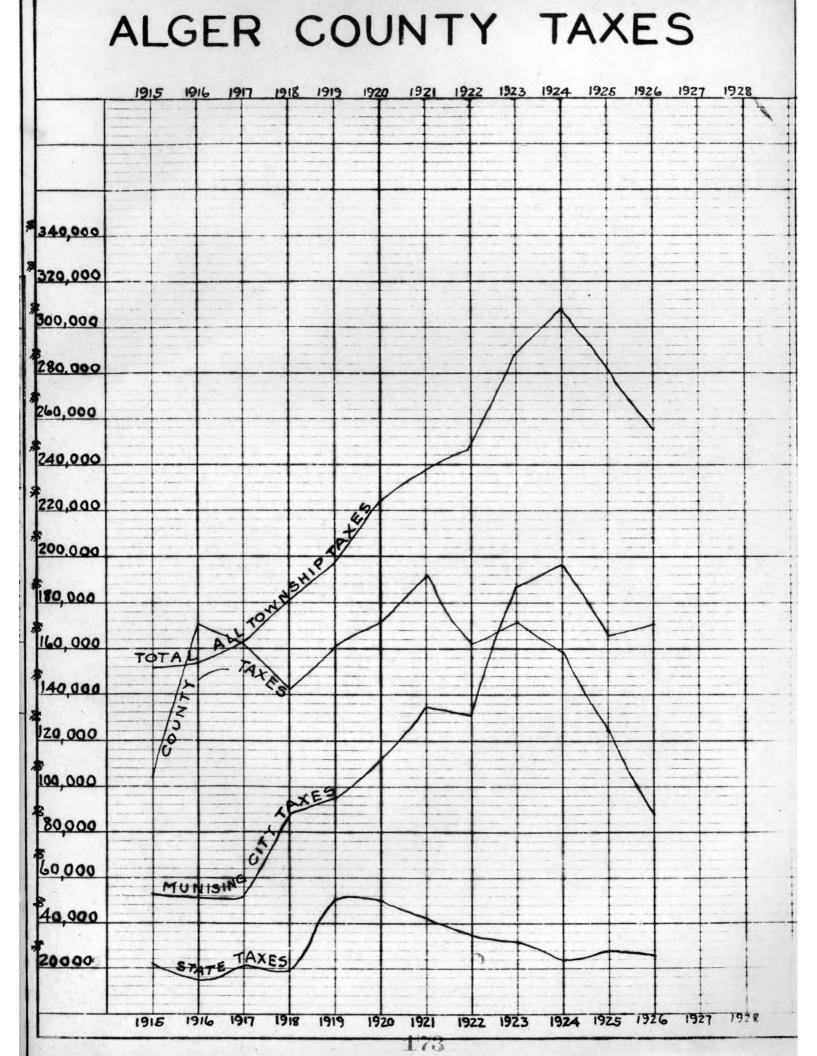
STATE COUNTY 3 CITY GEN FUND 4 SCHOOL 5 PAID BY CCICO. 5 PAID BY OTHERS SCALE 1"="100,000 2-8-1927- RAB.

ALGER COUNTY TAXES



12

STATE COUNTY 3 TOWNSHIPS& CITIES A PAID BY CCICO. 5 PAID BY OTHERS SCALE I" - 300,000 2-8-1927 - RAB.



REPORT OF MR. A. J. ERICKSON FOR YEAR 1926.

Following is my annual report for the year 1926:

THE CLEVELAND-CLIFFS IRON COMPANY

SALES OF LAND AND TIMBER - \$21,168.00.

The following statement shows the sales in the various districts during the

year:

District	<u>Number</u> of Sales	Acreage	Total Am't. of Sales	<u>Timber</u> Value	<u>Land</u> Value	Avg. Price per Acre, Land Only
Rumely-Chatham	2	73.77	680.00	67.38	612.62	8.30
Yalmer	2	520.00	3,400.00	2,440.00	960.00	1.85
Fayette	2	133.90	1,000.00	123.00	877.00	6.55
Brimley	1	40.00	350.00		350.00	8.75
Trenary	ı	160.00	2,700.00	2,200.00	500.00	3.12
Negaunee	5	200.00	1,610.00	630.00	980.00	4.90
Miscellaneous	15	776.52	11,428.00	8,592.46	2,835.54	_3.65
TOTAL	28	1,904.19	21,168.00	14,052.84	7,115.16	3.74

No particular improvement was noticeable in the demand for agricultural lands. Twelve sales were made comprising 467.29 acres as compared with seven sales in 1925 in which we are reasonably sure the land was intended for agricultural purposes. However, only two or three were really new settlers, the balance being land acquired by existing farmers either for pasture purposes or to increase their acreage. A number of the farms in our various agricultural districts are being abandoned each year. The agricultural situation does not seem to improve very quickly and it is a question how long it will be before it will have any material effect on the cut-over land situation. We do not believe a reduction of price on our agricultural cut-overs will help sales as the demand is lacking.

The market for cedar products, principally poles and posts, balsam and hemlock continue disappointing with the result that there was very little demand for lands carrying timber of this character.

The principal sales covering land and timber which were purchased primarily for the timber were as follows: 240 acres to Louis Kercher in 45-24 for a price of \$2,000.00; this covered some very lightly timbered lands in the vicinity of Firmin Spur. 200 acres to Thomas Commors in 44-23 for \$5,500.00. 360 acres to Fred Lewke in Section 11-47-23 for \$2,800.00; this was some land that was partly cut over by the Lumbering Department in the Fredeen District, 160 acres to Wallace H. Masters in Sections 2, 3 and 10-44-21 for \$2,700.00. All of these lands carried principally softwood timber mixed with some hardwood and were lands that could not be operated to advantage by the Company.

TIMBER SALES

Timber sales amounted to \$7.675.00 covering the timber on 326.53 acres as follows: The timber on the NW1 of NW1 of Section 17-46-21 for \$625.00; this timber was located in a deep ravine bordering the Slapneck River and was left by the Lumbering Department in its operations because of the prohibitive cost of getting it out. 92 acres of timber in Sections 25 and 36-46-20 to Railo and Raatikainen for \$3,000.00; these people purchased three adjoining forties of timber from Wallace H. Masters and our sale represents timber which could not be operated by us to advantage. Timber on the NE4 of NE4 of Section 36-46-23 to Mattson and Ranta, \$450.00; this description was partly cut over by the Lumbering Department years ago and the remaining timber was principally hemlock and pulpwood. The timber on three forties in Section 1-45-22 to Wisconsin Land & Lumber Company for \$3,500.00; this comprised two small isolated groups of timber principally hardwood which are tributary to the Soo Line Railway and which were left at the time the lands in this Section were operated by the Lumbering Department several years ago. Timber on the SW1 of NW2 of Section 30-47-23 to August Gutzman for \$100.00; this covered the remaining timber suitable only for fuel. In all of these sales of timber we secured top notch stumpage prices considering the location and the character of the timber.

SALE TO FORD MOTOR COMPANY

On October 13th, 1926, negotiations were completed and contracts entered into with the Ford Motor Company for the purchase of 55,887.54 acres in the L'Anse District, which includes 1,607.69 acres owned by William G. Mather personally. This sale was not taken into our 1926 business as title will not be passed until 1927. 175

GROUP 1 LANDS - HAMMERMILL PAPER COMPANY

In February 1926, through Charles G. Bush of Detroit, Michigan, we started negotiations with the Hammermill Paper Company of Erie, Peunsylvania, relative to the sale of 63,580.38 acres in our so-called Group 1 in Luce County. This acreage was increased later to include 12,628.39 acres in Towns 46-12 and 13 and 10,766.86 acres in 48, 49 and 50-8, 48 and 49-9 making a total of 86,975.63 acres. The price quoted them is \$1,500,000.00. They have made a complete cruise of all of these lands but further negotiations have been held up temporarily because of the absence of some of the officers of the Hammermill Company and also awaiting the return of Charles G. Bush from the West. The latest advice we have is that this matter will be further considered by the Hammermill people early in 1927.

In case the negotiations with the Hammermill Company are not consummated the William Bonifas Lumber Company have asked to consider these lands.

RANGE 22 LANDS

During the past year we offered these lands to the Wisconsin Land & Lumber Company, I. Stephenson Company, Trustees, Ira Carley Lumber Company, Collins Bros. Lumber Company and the Sawyer-Goodman Company. Only the Wisconsin Land & Lumber Company cruised a portion of the lands and finally dropped negotiations. The others were not interested at this time in considering them.

It would be preferable to sell these lands as a group but if this cannot be accomplished I believe that they can be disposed of in smaller groups to small jobbers who are operating in that district. These lands are nearly all well located either to the Soo Line or Whitefish Branch of the North Western.

RANGES 23 AND 24 LANDS

In Towns 44 and 45, Ranges 23 and 24, we have approximately 20,632 acres tributary to the Northwestern or spurs that might be built leading from the main line. These lands carry a mixed stand of timber running largely to pulpwood, cedar, hemlock, tamarack, etc., but as a whole are not very heavily timbered. We have endeavored during the past year to dispose of them in large groups and offered them to the I. Stephenson Company, Trustees, Patten Timber Company and Sawyer-Stoll Timber Company.

The two last mentioned had their cruisers look over portions of these lands but sales did not materialize. The William Bonifas Lumber Company have agreed to cruise them in the spring as soon as conditions for land looking are favorable. We also quoted a prices to a number of individuals and small jobbers on small groups but were successful only in making two sales to Thomas Connors, one of 200 acres and another of 40 acres.

This district is very active each year through the operations of a large number of small jobbers and with an improved demand for hemlock and cedar, we should be successful in disposing of the greater portion of these holdings within the next few years.

LAKE AND RIVER FRONTAGE

Reports indicate considerable activity in lake frontage property in various parts of the Peninsula during the year. The demand for this kind of property should increase each year and in value accordingly. Because of the press of other matters we were unable to make much progress on the survey of our property of this character but it is hoped that this can be completed in 1927 and a definite policy outlined with reference thereto.

OUTDOOR LIFE EXPOSITION

Last May I attended the Outdoor Life Exposition at the Coliseum in Chicago. This is conducted each year by an association of resort owners in Michigan, Wisconsin and Minnesota and various Development Bureaus in these states. It is principally an advertising proposition for tourist traffic and through personal contact with those planning their summer vacations serves a very definite purpose and is of great value in attracting this summer trade.

The Upper Peninsula Development Bureau had one of the most attractive and outstanding booths of the Exposition and created a great deal of favorable comment. A tremendous amount of advertising literature was given out and undoubtedly was very instrumental in increasing the tourist travel in the Peninsula during the past year. Over two hundred thousand people attended the show and these were naturally interested in outdoor life so that it is only fair to assume that personal contact advertising of this kind is more effective than that in the usual magazine and newspaper.

Very effective displays were also conducted by the railroads traversing these states and also a great number of dealers in outdoor equipment, such as motor boats, tents, motor tourists' outfits, sports apparel and equipment.

We figured that an exposition of this kind would be a good place to get a line on the demand for lake and river frontage for summer cottage sites and hunting and fishing preserves, etc., and this was the principal reason for attending this show. It was evident from the activity of the real estate men in securing information on such property and the interest and inquiry of the individuals that there is considerable demand for property of this kind and will in a few years be more apparent in the Upper Peninsula.

LOT SALES - \$9.603.78.

This item represents the sale of six lots in the Burt & Ely Addition, Marquette, for \$600.00 and the balance covers lots in Munising. Eight lots were sold to the Standard Oil Company at Munising for a consideration of \$6,000.00, to be used as a site for a filling station; four lots to H. L. Dunklee for a greenhouse site. Two lots on which there was an outstanding contract were surrendered and then deeded for a consideration of \$843.78 to the City of Munising to be used for street purposes. Only three sales, comprising six lots, for residence purposes were made; the demand for residence lots in Munising during the past year was very light.

NEW LEASES

New leases issued during the year comprised 15 for camping purposes, 3 residence, 4 garden and 13 miscellaneous, the total annual rental of which amounts to \$278.00. In the case of several of these leases; the lessee is required to assume the taxes in addition to the rental; the taxes on such property for 1926 included in these leases amounted to \$1,436.37, in which are included the taxes on the lease to AuTrain Township and Munising City hereafter mentioned.

AU TRAIN TOWNSHIP

The Company was petitioned to leave a strip of timber 200 feet wide on each side of the Dixon-AuTrain Road through Sections 18, 19, 30 and 31-46-20 in order to preserve its natural forest beauty. This resulted in a lease being issued to AuTrain Township

covering the lands bordering on the road through these sections comprising 1226.28 acres for a rental of \$1.00 per year and the taxes. The Township is to assume the taxes beginning with the year 1927; the taxes on these lands for 1926 amounted to \$718.71. This tract of timber was operated and only that which would not make merchantable saw logs has been left.

MUNISING CITY

For over twenty-five years this Company has owned practically all the lands and lots comprising the hillsides around Munising and has reserved them to preserve the natural wooded beauty for the benefit of the town. This matter was brought to the attention of the City officials and a lease arranged to cover this property, comprising 168 lots and 296.75 unplatted acres, for a rental of \$1.00 per year, and in addition the City is to assume the taxes beginning with the year 1927; the taxes for 1926 on this property amounted to \$662.51.

Under the terms of both of these leases the timber is reserved to the Company with the right to cut and remove it at any time.

LAND RENTALS

The earnings from leased lots for the year 1926 were \$12,189.78 and represents an increase of \$62.09 over the previous year. The earnings from land leases increased from \$8,300.78 to \$8,457.26 or \$156.48.

ROYALTIES

Receipts under this item amounted to \$2,822.40 and represents the royalties received on rock used by the Advance Industrial Supply Company under its trap rock license.

These amounted to \$607.32 and is comprised of sand permits, \$133.75, gravel sales, \$254.70, and rock used by the Ishpeming and Negaunee Crushing Plants amounting to \$218.87.

RENTED BUILDINGS

House No. 112 was thoroughly overhauled on the outside; new roof, new siding, new windows and the entire exterior painted two coats; this expense amounted to approximately \$540.00. This is one of the old Jackson dwellings and has been in very

poor condition for a number of years and the new siding and paper was absolutely necessary. This expenditure was made only after agreement with the tenant that the rental would be increased from \$5.00 to \$12.00 per month. This expense together with the work at the Beach Inn and the Manufacturers Hotel represent the principal large repair items. We also experienced considerable trouble with a number of our houses due to the extremely wet summer and it became necessary to re-shingle. Six houses were completed last fall and it will be necessary to re-shingle several more in the spring. Very little cleaning and interior decorating was done; most of this was only in cases where there was a change of tenants.

House No. 111 was sold for \$800.00 and the land leased for \$12.00 per year. The purchaser is making payments on this house at the rate of \$25.00 per month in addition to which he is taking care of the taxes and insurance. This building was in such condition and of such a character that it was not deemed advisable to repair. <u>COLLECTIONS</u>

The collections on the various lot and land leases were good and these accounts are in normal condition. More complaint is received each year from the lessees of farm lands within the Ishpeming city limits on account of the high taxes and it will undoubtedly be necessary to gradually put these on a flat rental basis and have the Company assume the taxes. It seems it would be better to have the lands leased and get some rental than to permit them to be idle. The demand for lands for farming and gardening purposes in the vicinity of Negaunee and Ishpeming seems to be decreasing each year and we now have quite a little cleared land idle.

The collections on some of the land sales have been slow with the result that there are a number of contracts which it will be necessary to cancel or have surrendered. However, before this is **done**, every effort will be made to enforce collection and, if necessary and advisable, by Court proceedings.

ALGER COUNTY FARM

We continued our efforts to dispose of the farm but without success. A number of prospects looked over the property but a sale did not materialize. Extra efforts will be put forth in 1927 to sell this property.

SURRENDERED AND CANCELLED CONTRACTS

Four of the land contracts were cancelled or surrendered during the year. Joseph Geroux surrendered his contract covering 5.46 acres at Perkins as he had considerable sickness in the family and could not see his way clear to complete the contract. The contract to Marvin Green covering 78.50 acres in the Fayette District was forfeited because of non-payment; this land was re-sold for \$600.00 cash, representing a substantial increase over the balance due on the old contract. The contract to William Anderson covering forty acres in the Trenary District was foreclosed; he died and as far as we could find left no relatives and it was necessary, therefore, to resort to Court proceedings to make a proper cancellation. Peter Schilling surrendered 30 acres of his 40 acre contract near Munising,- 10 acres being deeded to him in lieu of the payments he has made. Our Conveyance No. 4205 covering a right-ofway to Marquette County was cancelled as this road is not to be built at the present time.

BEACH INN

The Beach Inn continued to enjoy excellent patronage during the year and Mr. Heckathorn keeps the place in very good condition and conducts the hotel in a satisfactory manner. During the year we re-decorated the assembly room, office and dining room and also a number of the guest rooms; Mr. Heckathorn contributed \$100.00 toward this expense. Four rockers and eight chairs in the Assembly Room were replaced by the furniture Company at one-half price, for \$92.40.

MANUFACTURERS HOTEL

Owing to the slack of work at Munising, the patronage at the Manufacturers Hotel was very light during the year and at the present time it is just about breaking even. Mr. Belfry, the lessee, is conducting this place in a very satisfactory manner and is keeping it in a good clean condition and giving excellent satisfaction to his trade.

During the year we installed some radiators in the dining room at a cost of \$399.29. Most of the material, such as radiators and piping used on this job, was taken from New Dalton. This makes a much more satisfactory way of heating the dining room and in accordance with our arrangement with Mr. Belfry, on account of this change, the

rental is increased \$10.00 per month. It was also necessary during the year to repair the plastering in the dining room and re-decorate, and we were ordered by the State Factory Inspector to put in red lights over fire escape and put a railing on the rear stairway.

BELLEVUE AND CLIFFS FARMS

The Bellevue Farm was again leased to Herman Pottala for a rental of \$300.00 per year and in addition to this lease, the double house on the farm was rented the entire year.

Only a portion of the Cliffs Farm was rented as in previous years for a rental of \$35.00 per year.

LOCATION IMPROVEMENTS AND GARBAGE COLLECTION

There was no new improvement work of any kind done at any of our various mining locations. The garbage collection item for the year 1926 amounted to \$84.43 as compared with \$163.65 the previous years.

UNSETTLED MATTERS

The matter of clearing up the so-called "Isaac Rosenwald Title" which affects 9,559.59 acres is still being held in abeyance until we have acquired what lands we need in the Dead River Basin from Mr. Weber. Mr. Berg reports that they are expecting to close up this matter very shortly and as soon as this has been done we will see what Mr. Weber is willing to do to perfect the title to the lands affected by the Rosenwald complication.

BUNKER HILL MINING COMPANY

RENTED BUILDINGS

Four of the dwellings were occupied the entire year and the other one was vacated on September 30th, 1926. The gross earnings amounted to \$514.80. It became necessary during the year to re-shingle houses Nos. 3, 4 and 5 and this represents the principal maintenance expense.

LAND RENTALS

The earnings from land rentals for the year amounted to \$695.75 and represents principally the leases to the Consolidated Fuel & Lumber Company and the Independent Lumber and Coal Company.

COLLECTIONS

All of the rental items with the exception of one house rent account were paid before the end of the year. This house rent item is in better shape than it was a year ago and will gradually be brought to date.

UNSETTLED MATTERS

No decision has been made as yet as to what course we shall pursue with reference to the question of the C. & N. W. right-of-way across the property of this Company. This matter was brought up in connection with the granting by the Railroad Company of the lease to the Negaunee Oil Company for a bulk oil station site and which occupies considerable land outside of that actually used by the Railroad for railroad purposes.

AMERICAN IRON MINING COMPANY

RECEIPTS

The only item of revenue received for the year 1926 is \$49.24 representing interest on several outstanding land contracts.

COLLECTIONS

The payments on the various land contract accounts were met promptly and all of the contracts are up to date.

TIMBER PERMIT

The Piqua Handle & Mfg. Company have completed their operations and released their rights on all the lands except 12 forties in Section 2-47-31. The rights on two of these forties will expire July 1st, 1927, and an extension on the other ten forties for one year to July 1st. 1928, was granted under date of September 23rd, 1926.

LAND SALES

We were not successful during the past year in making any additional sales of lands of this Company. Plats of these holdings were submitted to several applicants looking for locations for camp sites and hunting grounds. These lands are well adapted for this purpose and we believe that it is only a matter of a few years when we will be able to dispose of them.

Respectfully submitted,

af Eickson

THE CLEVELAND - CLIFFS IRON COMPANY

LAND DEPARTMENT

STATEMENT OF LAND AND TIMBER SALES FOR YEAR 1926

PURCHASER	DESCRIPTION		ACREAGE	LAND	TIMBER	TOTAL	REMARKS
Fred Lewke	SEA Se	ection 14-47-23	160.00	\$600.00		\$600.00	The second s
Antti & Andrew Hemmila	NWA of NWA	" 21-48-26	40.00	165.00	\$155.00	320.00	
Kalle Oikari	SWA of NEA	" 20-48-26	40.00	150.00	210.00	360.00	
John A. Semer	Fr'l Wa of NW1	" 26-39-19	55.40	277.00	123.00	400.00	
John L. Minard	Lot 2	" 27-50- 9		10.00		10.00	Quit Claim Deed
Frank Ross, Jr.	NWA Of NWA	" 17-46-21	A BUILT CONTRACT	-0100	625.00	625.00	Timber Only
Fred M. Foster	Fr'l St of SW1	" 32-38-19	78.50	600.00		600.00	
John Laiho & Isaac Walimaa	NET of SET	" 36-46-23	40.00	210.00	490.00	700.00	
Louis Kercher	SW1 of SW1, Sec. 11, E2 of NE1, NE1 of SE1,	00-20-00	40.00	220.00	100.00	100.00	
Louis Kercher	SW1 of SE1, Sec. 15, & Timber Only on NE1		AL VILLEN PLA		a partie and the	Carlot a State of the	
	of NEZ	** 22-45-24	240.00	240.00	1.760.00	2.000.00-	
	NWZ Of SEZ	" 36-46-23	40.00	187.50	232.50	420.00	
John Laiho	SWI of NEL. E2 of NWI. NEL of SWI, and	00-10-20	10.00	107.00	202.00	220.00	
Thomas Connors	NW of SE	" 19-44-23	200.00	400.00	5,100.00	5.500.00-	
	Sw1 of Sw1	" 25-44-24	40.00	100.00	300.00	400.00	
Thomas Connors	Lot 3	" 27-50- 9	23.00	175.00	000.00	175.00	
Oswald A. Littlefield	St of NE1. NE1 of SW1, St of SW1, SE1	" 11-47-23	360.00	360.00	2.440.00	2.800.00	
Fred Lewke	NW + of SW +	" 24-46-30	40.00	200.00	80.00	2,000.00	
Frank Ross	SET of INT	" 27-48-26	40.00	240.00	110.00	350.00	
Theo. M. Kieren		" 18-46-21	33.77	322.62	57.38	380.00	
Sam Hakala & Isaac Laukso	SW1 of SW1	" 29-46-23	00.11	76.60	95.26	171.86	
State of Michigan	Right of Way	" 8-47-22	10.00	225.00	55.00	280.00	
Emil Savonen	SE_4^T of NE_4^T	" 27-48-25	40.00 33.52	635.52	364.48		the second s
Carl J. Flink	Part of SE1 of NW1	" 33-50- 9	00.02	20.00	004.40	1,000.00-	Quit Claim Deed
Harry Young	SW1 of SE1, Sec. 22-48-9, & SW1		10.00		RE OO		Quit Glaim Deed
Evert Anderson	NWZ of SWZ	TT	40.00	205.00	75.00	280.00	
Township of Skandia	Right of Way	6-20-60		10.70	115.22	125.92	
Wallace H. Masters	Whe of NET	0-40-20	The second se	185.33		159.89	old total in 100 dama he cuit along
Wallace H. Masters	WE of NET & SET of NET	00-20-20	80.00		00.00	185.33	2/3 Interest in 120 Acres by Quit Claim)
Antti Tullila	SE1 of NW1	PT	40.00	220.00	80.00	300.00	Deed)
John Cottelits	$\mathbb{N}\mathbb{W}^{1}_{4}$ of $\mathbb{N}\mathbb{W}^{1}_{4}$	TC-++0- C	40.00	350.00		350.00	
Railo & Raatikainen	Cut lands in	"25 &36-46-20			3,000.00	3,000.00	Timber Only
Frank Ross, Jr.	NET of NWT	" 20-46-21	40.00	290.00	10.00	300.00	and the second sec
Mattson & Ranta	NET of NET	" 36-46-23			450.00	450.00	Timber Only
Wisconsin Land & Lumber Co.	NET of NET & W2 of SET	" 1-45-22			3,500.00	3,500.00~	
August Gutzman	SWI of NWI	" 30-47-23	and the second second		100.00	100.00	Timber Only
Wallace H. Masters	SW4 of SW4, Sec. 2, NE1 of NE1, Sec. 10, &					a start and a start and a start and a start and a start	
	Wa to SWN	" 11-44-21	160.00	500.00	2,200.00	2,700.00	MARKEN STATES
TOTAL			1,904.19	7,115.16	21,727.84	28,843.00	

AJE:CN:3. 1/28/27.

)

THE CLEVELAND - CLIFFS IRON COMPANY

LAND DEPARTMENT

STATEMENT OF LAND AND TIMBER SALES FOR YEAR 1926

SHEET NO. 2

			UN	PLATTE	DLANDS				PL.	ATTED	LANDS		MINERAL RIGHTS
	FEE	SUR FACE ONLY	MINERALS ONLY	LEASED MINERALS	MINING OPTION	TIMBER ONLY	LEASED SUR FACE	WATER RIGHTS	FEE	SURFACE ONLY	MINERALS ONLY	TOTAL	RESERVED IN SALES
Total Acreage as per Acreage Statement December 31, 1925 Purchased in 1926 (1) Cancelled Contracts (2)	581,709.13 151.96	73,787.13	3,378.24	2,718.20	53,308.36	17,299.92	432.95	4,793.45	216.99	91.28 1.55	263.72	738,019.37 1.69 151.96	105,495.81 151.96
TOTAL	581,861.09	73,787.27	3,378.24	2,718.20	53,308.36	17,299.92	432.95	4,793.45	216.99	92.83	283.72	738,173.02	105,343.85
Sold in 1926 (3) Surrendered (4)	8,123.24	6,333.86	146.64			2,867.43		4,793.45	1.77			19,105.68 2,867.43	7,791.59
TOTAL	8,123.24	6,333.86	146.64		1	2,867.43		4,793.45	1.77			21,973.11	
Total Acreage as per Acreage Statement December 31, 1926	573,737.85	67,453.41	3,524.88	2,718.20	53,308.36	14,432.49	432.95		215.22	92.83	283.72	716,199.91	113,135.44

Purchase Nos. 2408, 2409, 2411, 2412, 2413, 2546, 2550, 2551, 2577, and 2578.
 Conveyance Nos. 3782, 2627, 2638, and 3503.
 Sales as above and Conveyance Nos. 4304, 4316, 4345, 4313, 4329, 4325, 4341, 4368, 4376, 4378, 4318, 4344, and 4346.
 Conveyance No. 4308 to Consolidated Lumber Co. - 761.67 Acres; Conveyance No. 4309 to Bay de Noquet Lumber Co. - 640 Acres - To Charcoal Iron Co. - 1,105.76 Acres.

AJE:CN:3. 1/28/27.

				UNPLATT	EDLAND	S			PL.	ATTEDL	ANDS		MINERALS RE-
OWN RANGE	FEE	SURFACE	MINERALS	LEASED MINERALS	MINING OPTION	TIMBER ONLY	LEASED SURFACE	WATER RIGHTS	FEE	SURFACE	MINERALS	TOTAL	SERVED IN FAF LAND SALES
45 1 E	40.00		-					1.1.1.1.				40.00	80.00
45 1 W	280.00											280.00	80.00
6 1 17 1	40.00											40.00	80.00
17 1	40.00								1			40.00	123.13.
6 2	2833.61											2833.61	3099.00
7 2	41.18											41.18	250.35
5 3	166.56							2				166.56	
6 3	1341.84											1341.84	1871.47
7 3	600.00											600.00	560.00
6 4								6 K 1 K 1					120.00
7 4	000.00											200.00	222.50 200.00
3 5 5 5	200.00	1										120.00	680.00
6 5	40.00										-	40.00	842.71
7 5	40.00							1.2				40.00	120.00
4. 6	368.30							14 1 L		-		368.30	460.05
5 6	800.00											800.00	1309.99
6 6						2			1				280.00
4 7	120.00					1000						120.00	4153.59
5 7	280.00					1000						280.00 211.26	391.27 640.00
6 7 7 7	211.26 338.81		-									338.81	040.00
8 7	497.70		-					126012				497.70	
9 7	44.00					1.		1				44.00	
4 - 8	76.88											76.88	
6 8	2311.92			/								2311.92	
7 8	6957.72									1		6957.72	
8 8	5041.52	1										5041.52	
9 8 D 8	3923.04							3.7				3923.04 160.00	
0 8 4 9	160.00					-		10.17.1-17.11				40.00	
4 9 6 9	40.00											512.23	200.00
7 9	17793.74							1.000	-			17793.74	
8 9	4136.58							3.4				4136.58	
9 '9	800.00											800.00	
0 9													23.00
5 10	840.00									-		840.00	600.00
6 10	254.54											254.54	46.18
7 10	14579.08	Sec. 19										14579.08 14534.01	40.00
8 10 9 10	14534.01							1				3385.47	30.52
9 10 3 11	3385.47 200.00											200.00	280.00
4 11	277.00			2								277.00	6

THE CLEVELAND-CLIFFS IRON COMPANY

LAND ACREAGE - DECEMBER 31, 1926.

SHEET NO. 2.

				45	UNPLATI	ED LAND	S		-	PT.	ATTED	TANDS	1	MINERALS RE-
TOWN	RANGE	FEE	SURFACE	MINERALS	LEASED MINERALS	MINING OPTION	TIMBER ONLY	LEASED SURFACE	WATER RIGHTS	FEE	SURFACE	MINERALS	TOTAL	SERVED IN FARM
46 47 48 49 46 47 48 49 50 45 46 47 48 49	11 11 11 12 12 12 12 12 12 13 13 13 13	$\begin{array}{c} 4102.55\\ 13773.29\\ 19592.71\\ 745.17\\ 15514.00\\ 16866.38\\ 21576.80\\ 8229.41\\ 359.65\\ 913.25\\ 5174.53\\ 19469.63\\ 16360.85\\ \end{array}$	198.41 160 114.51										$\begin{array}{r} 4102.55\\ 13773.29\\ 19592.71\\ 745.17\\ 15514.00\\ 17066.79\\ 21736.80\\ 8229.41\\ 359.65\\ 913.25\\ 5174.53\\ 19584.14\\ 16360.85\\ \end{array}$	480 1273.71 400 40
50 42 43 45 46 47 48 49 42	13 14 14 14 14 14 14 14 14 14 15	164.35 236.85 440.00 840 6069.80 18922.14 9290.07	437.25 553.68 360										164.35 236.85 440 840 6507.05 19475.82 9650.07	35
42 43 45 46 47 48 49 41	15 15 15 15 15 15 15 15	80 5392.78 8786.64 14179.22 4850.91	40 974.20 520 393.59										80 5432.78 9760.84 14699.22 5244.50	1766.77 194.10 903.65
42 43 44 45 46 47 48 49	16 16 16 16 16 16 16	80 63.85 1456.03 4448.78 8740.01 1004.60	240 495.37 600								¥.		80 63.85 1456.03 4688.78 9235.38 1604.60	14.20 485.50 80 31.06 79.25
41 42 44 45 46 47 48 39 41 43 44 45 46 47	17 17 17 17 17 17 17 17 18 18 18 18 18 18 18 18	240 676 3260.81 7953.30 4276.15 2.51 160 40 55.78 360 11733.04 11251.40	200 201 120										240 676 3260.81 8163.30 4477.15 2.51 160 40 55.78 360 11733.04 11371.40	5797.51 1840 238.69 476.37 320 320 29.92 800 160 1288.10 1025.32
48 37 38 39	18 19 19 19	520 135.60 1987.71 537.39							1.1.7			ai a	520 135.60 1987.71 537.39	601.00 4171.18 2078.36

							SH	EET NO. 3.						
-						TTEDLAN				PLA	TTEDLA	NDS		MINERALS RE-
OWN	RANGE	FEE	SURFACE	MINERALS	LEASED MINERALS	MINING OPTION	TIMBER ONLY	LEASED SURFACE	WATER RIGHTS	FEE	SURFACE	MINERALS	TOTAL	SERVED IN FAR LAND SALES
41	19													360
42 43	19 19	1.2											-	560
44	19	7067.17	1080.97										8148.14	520
45	19	594.22	80.66				1453.77						2128.65	1044 01
6	19	10465.18	176.35				1403.77			39.28	14.33		10695.14	1964.81
.7	19	9480.17	108.18							8.06	14.00		9596.41	8969.50 389.26
18	19	6365.06	638.35				11			0.00				009.20
58		0305.00	600.00										7003.41	
	20	000 00						1.000					B021 00	358
14	20	6991.28	40 1039.78					1 200			-		7031.28	2000 40
5	20	4722.31					00	1.1.1					5762.09	1583.63
6	20	14723.22	80				80						14883.22	398.52
7	20	4742.01											4742.01	640
.8	20	113.96	10										113.96	
3	21	378.60	40				1000						418.60	4686.11
4	21	2998.81	634.48										3633.29	3479.33
5	21	3074.62					2020						3074.62	3656.23
6	21	8608.29	80				200			1.36			8889.65	3773.36
7	21	4274.57											4274.57	861.16
8	21	963.48	-										963.48	
0	22									.20		1	.20	
1	22	3.46											3.46	215.54
2	22							the state of the state						878.09
3	22													80
4	22	6393.63	800.00										7193.63	160
5	22	5430.42	1866.06										7296.48	428.19
6	22	4912.03	234.32			-						100	5146.35	10916.98
7	22	6501.05	1786.61										8287.66	825.09
8	22	2140.09	279.70										2419.79	
9	23	240											240	
.0	23							1.1.1						160
2	23	160											160	3229.01
3	23	680						1. State 1.					680	1120
4	23	287.31	3835.25										4122.56	39.22
5	23	1339.49	5255.17										6594.66	80
6	23	1589.75	9784.24										11373.99	636.5
7	23	2400	5574.90									1	7974.90	160
9	24	40	001100						CITATION STATISTICS				40	200
1	24												-10	400
4	24	1880.32	7846.64								1		9726.96	400
5	24	962	4602.00										5564.00	40
6	24	1986.37	240				,	- Aller - A					2226.37	
7	24	240	NIU										240	10
4	25	614.35			43.23								657.58	40
± 5	25	1562.57	659.49		43.23						58.55		3059.40	1
7	25	6059.41	450.47		118.19						56.55		6509.88	1.6
3	25	2574.93				-				1 07				142.1
9	25		160							1.97			2736.90	1941.5
1	25	40.14						1 1					40.14	831.90
		162.91											162.91	
5	26	837.47											837.47	90.0
	26	60	020 50	500 00						43 83	277 774	00 00	60	
7	26	8071.18	269.52	286.06	160 50		-	1		41.71	17.34	82.77	8768.58	2289.51
8	26	3371.48	1064.62	59.11	157.50							3.00	4655.71	1649.63
9	26	600	3654.40					and the second					4254.40	153.04
,	26							1	and the second se	and the second second				240

LAND ACREAGE - DECEMBER 31, 1926.

SHEET NO. 4.

					UNPLA	TTEDLI	NDS			PL.	ATTEDI	ANDS		MINERALS RE_
TOWN	RANGE	FEE	SURFACE	MINERALS	LEASED MINERALS	MINING OPTION	TIMBER ONLY	LEASED SURFACE	WATER RIGHTS	FEE	SURFACE	MINERALS	TOTAL	SERVED IN FARM LAND SALES
51	26	89.65	570.01										659.66	160
46	27	81.68											81.68	40
47	27	11838.10	161.77	721.88	378.65			111.60	12.00	112.64	.33	197.95	13532.92	2895.24
48	27	2911.63	1659.76	1120						-			5691.39	2379.39
49	27	919.28											919.28	
50	27													180
51	27	1449.17	79.03							1			1528.20	520
52	27	40						-					40	3
47	28	1314.79	73.60	75	727.94							-	2191.33	5
48	28	2945.64							17-	5			2945.64	4
50	28	1921.62	789.33			10000000000							2710.95	160
51	28	3320	840										4160	109.05
52	28		1											240
49	29	280							1				280	
50	29	1627.44	60						1				1687.44	577 40
51	29	4511.88											4511.88	531.40
52	29	3808.37						CONTRACTOR OF STREET, S					3808.37	704.25
45	30	46.20	160					1.1					206.20	745 Po
46	30	586.80	320				Sec. 3	- 1 × 1					906.80	345.70
47	30	327.90	860.96							-			1188.86	80.00
49	30	640											640	
50	30	5400.98	1204.26					0.00					6605.24	
51	30	5795.77	641.95										6437.72	
52	30	1960											1960	
48	31	60	120										180	
49	28		16.40					1.020					16.40	1 100
49	31	40						1.					40	6
50	31	5530.28	160										5690.28	Carlos Carlos
51	31	218.80	240										458.80	
52	31			-					-		1			40
49	32	160	1120										1280	
50	32	1395.37								1			1395.37	1
47	33	640	-	-									640	
48	33	160		1									160	
49	33	4435.14	118.62	36.55			6730.26	0.000					11320.57	
50	33	1463.17	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	40			3092.21						4595.38	
43	34				160			1.1.2		-			160	
47	34			982.34						-			982.34	
49	34	788.24					1036.25						1824.49 4295.92	10
50	34	2455.92					1840	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						40
43	35		80		120								200	711.57
48	39													480
49	39		477 7 7										43.17	168.49
45 46	29 29	1238.47	43.17	146.64								-	1385.11	182.35
40	29	40		140.64				1 Jan					40	80
47	30	40											TO	56
48	31	115.22									1		115.22	00
43	33	110.22			120								120	
42	33				120								100	80
50	22 Minn.	485.88											485.88	888.68
49	23	400.00	-	2.50				1 1 1		1 2 1			2.50	189.96
50	23	704.89		54.80				1		-			759.69	343.09
46	25	104.05		01.00			14	1.1						280.05
40	25													39.75
46	26							-				in an interest		440
40	20 1								-	-				

LAND ACREAGE - DECEMBER 31, 1926.

SHEET NO. 5.

					UNPLA	TTEDL	ANDS			PLA	TTEDL	ANDS		MINERALS RE-
POWN	RANGE	FEE	SURFACE	MINERALS	LEASED MINERALS	MINING OPTION	T IMBER ONLY	LEASED SURFACE	WATER RIGHTS	FEE	SURFACE	MINERALS	TOTAL	SERVED IN FARM LAND SALES
57 57 58	22 23 15		119.88 40		80.00 152.09			319.60 1.75			.51		519.99 40 152.09 2.83	
59 57 15 11 12 13	15 20 1 E.W: 31 Micl 31 31	is. 133.33 h.	4.50			42.38 929.79 456.85		1.75			.69		5.19 133.33 42.38 929.79 456.85	
4 5 6 1 2	31 31 31 32 32 32			4		835.45 4239.77 990 1493.40 1360							835.45 4239.77 990 1493.40 1360	
34562	32 32 32 32 32 33		-			400.05 2281.50 5709.45 4974.49 1331							400.05 2281.50 5709.45 4974.49 1331	
13 14 15 16	33 33 33 33 33					519.59 2075.18 3878.99 3227.69							519.59 2075.18 3878.99 3227.69	
45634	34 34 34 35 35					1452.85 2815.50 3182.49 1066.37 2978.74				-			1452.85 2815.50 3182.49 1066.37 2978.74	
15 13 14 17	35 36 36 32 33					2000.00 561.40 1597.92 160 1631.69							2000.00 561.40 1597.92 160 1631.69 80	119
9 7 7 8	33 35 36 36					80 475.82 120 440							80 475.82 120 440	
TO	TAL	573737.85	67453.41	3524.88	2718.20	53308.36	14432.49	432.95	ALC: NO	215.22	92.83	283.72	716,199.91	113135.44

CAJ:CN:3. 1/31/27.

THE CLEVELAND-CLIFFS IRON COMPANY AND SUBSIDIARY COMPANIES

ACREAGE STATEMENT - LANDS OWNED AND CONTROLLED - SHOWING OWNERSHIP BY COMPANIES ONLY

DECEMBER 31, 1926.

			UN	PLATTED L.	ANDS					PLATTED	LANDS		ACRES OF LAND	ACRES OF LAND	LANDS ON MINERAL	MINERAL RIGHTS RESERVED IN
COMPANIES	FEE "A"	SURFACE ONLY "B"	MINERALS ONLY "C"	LEASED MINERALS	MINING OPTION	TIMBER ONLY	LEASED SURFACE	WATER RIGHTS	FEE			TOTAL ACRES	NOT TIMBERED "H"	TIMBERED "I"	FORMATION "J"	SALES "K"
CONSTITUAT COMPANIES [Entire stock owned by The C.C.I.Co.] The Cleveland-Cliffs Iron Company <u>ALLIED COMPANIES</u> [A portion of the stock only owned by The C.C.I.Co.] The Megaunes Mine Co. Arctic Iron Co. The Athens Iron Mining Co. Bunker Hill Mining Co. Michigan Mineral Land Co.	573737.85 2.40 1004.55 41.73 43.10 49.74 28175.62	67453.41 3.49 .22 834.43	3524.68 37.98 10.00 10.20 24298.31	2718.20 213,36 22.90	53809.36	14432.49	432.95		215.22	92.83 3.77 2.70	283.72 103.53	223.02 1146.06 77.58 53.80 49.74 53308.36	203217.66 223.02 1146.06 77.55 53.30 49.74 53306.36	512982.25	105342.79 196.40 286.02 74.65 53.30 49.74 52473.93	118135.44 78.99
TOTAL ALLIED COMPANIES	29317.17	838.14	24356.49	236.26						6.47	103.53	54858.06	54858.06		53138.05	78.99
ASSOCIATE COMPANIES (The C.C.I.Co. has no ownership but acts as agant) American Iron Mining Co.	2501.70		314.50									2816.50	2016.50		2816.50	
GRAND TOTAL LANDS OWNED AND CONTROLLED - ALL COMPANIES	605556.72	68291.55	28196.17	2954.46	53308.36	14432.49	432.95		215.22	99.30	387.25	773874.47	260892.22	512982.25	161297.34	113214.43

"A" - Lands where entire fee is owned.
"B" - Lands where minerals only is owned.
"C" - Lands where minerals only is owned in known mineral district.
"D" - Lands where our interest is confined to a mining lease.
"E" - Lands where our interest is confined to a mining option from Michigan Mineral Land Co.
"F" - Lands where our interest is owned.
"G" - Lands where we own the entire fee, surface only, or minerals only in lands which are a part of recorded plats of towns or villages.

"H" - Lands which have been examined and which reports show do not contain sufficient timber to be classed as timber land.
"I" - All lands not included in "H". This includes both lands that have been examined and other lands which have not but which were purchased for timber purposes and are classed as timber lands until such time as reports will show that they are barren either through fire or through operation of the lambering Department.
"J" - Approximate acreage of lands inside the minoral formation as indicated by maps furnished to the Lambering partment, April 1914.
"K" - Acres of minorals reserved in Farm Land Sales, outside of minoral formation.

A MARICAN 17	AON MINI	NO GONPAN		AUP	OREAGE STATEMENT -	LANDS OWNED	AND CONTROL	ASD = BHORING	OWWINDELP DI	COMPANIES ONLI	ACC DEST	Any Contraction				
	LAND DIPARCHENT						DECEMBER 3	1, 1926.								
LAND ACHINE							SHEET NO	0. 2.								
	FEE	SURFACE ONLY		PLATTEDLA LEASED MINERALS		TIMBER ONLY	LEASED SURFACE	WATER RIGHTS	PL FEE	ATTED LAN SURFACE ONLY	N D S MINERALS ONLY	TOTAL	ACRES OF LAND NOT TIMBERED	ACRES OF LAND TIMBERED	LANDS ON MINEPAL FORMATION	MINERAL RIGH RESERVED IN SALES
otal Acreage Dec. 31, 1925. urchased during 1926 The C. C. 1. 00. The Athens Iron Mining Co. Cancelled Contracts (The C.O.I.Co.)	613528.00 151.96	74625.27 .14	28049.53	2954.46	53308.36	17299.92	432.95	4793.45	216.99	97.64 1.55 .11	387.25	795693.82 1.69 .11 151.96	279003.30 1.69 .11 151.96	516690.52	161297.34	105574.80
TOTAL	613679.96	74625.41	28049.53	2954.46	53308.36	17299.92	432.95	4793.45	216.99	99.30	387.25	795847.58	279157.06	516690.52	161297.34	105422.8
ales - The C. C. I. Co. urrendered - The C. C. I. Co. perated and Classification Changed	8123.24	6333.86	146.64			2867.43		4793.45	1.77			19105.68 2867.43	17893.68 371.16	1212.00 2867.43 371.16		7791.5
TOTAL	8123.24	6333.86	146.64	Course and	asettate	2867.43		4793.45	1.77	A Shared		21973.11	18264.84	3708.27		7791.8
TOTAL ACREAGE DEC. 31, 1926	605556.72	68291.55	28196.17	2954.46	53308.36	14432.49	432.95	AST STORE	215.22	99.30	387.25	773874.47	260892.22	512982.25	181297.34	113214.4

192

CAJ-AJE:CN:3. 1/29/27.

AMERICAN IRON MINING COMPANY

LAND DEPARTMENT

LAND ACREAGE

DECEMBER 31, 1926

		UNPLATTED LANDS					
TOWN	RANGE	FEE	MINERALS	TOTAL			
47 48	31 31	515.98 1985.72	38.42 276.38	554.40 2262.10			
TOTA	L	2501.70	314.80	2816.50			

CAJ:CN:2. 1/31/27.

BUNKER HILL MINING COMPANY

LAND DEPARTMENT

LAND ACREAGE

DECEMBER 31, 1926

		UN	PLATTED L	ANDS
TOWN	RANGE	FEE	MINERALS	TOTAL
47	26	43.10	10.20	53.30

CAJ:CN:2. 1/31/27.

ARCTIC IRON COMPANY

LAND DEPARTMENT

LAND ACREAGE

DECEMBER 31, 1926.

		UNPLA	PTED LANDS	PLATTED LANDS		MINERALS RESERVED I		
TOWN	RANGE	FEE	MINERALS	MINERALS	TOTAL	FARM LAND SALES		
47	25	32.12			32.12			
47	26	824.43	4.43	88.03	916.89	78.99		
48	26	148.00	33.55	15.50	197.05			
TOTAL		1004.55	37.98	103.53	1146.06	78.99		

CAJ:CN:2. 1/31/27.

