

MECHANICAL DEPARTMENT  
ANNUAL REPORT  
YEAR 1936

Electrical Department: (Cont'd)

	INSTALLED TO JAN. 1 1936	INSTALLED IN 1936	TAKEN OUT IN 1936	CONNECTED JAN. 1, 1937 TOTALS
brt. fwd.	5,748-1/4	407	370	5,785-1/4 HP.
<b>HARD ORE SHOPS:</b>				
Machine Shop	25			
Carpenter Shop	25			
Blacksmith Shop Punch	3			
Armature Banding Machine	2			
" " "	1/2			
" " "	1/8			
Lathe Grinder	1			
Portable Drill - small (Stanley)	1/4			
" " - large	1/4			
Commutator Slotter	1/8			
Water Supply Pump	7-1/2			
Blacksmith Shop Blower	1/4			
Hacksaw	1/2			
Small Grinder	1/4			
Portable Drill (Stanley)	1			
Carpenter Shop Saw	25			
Water Pump (S.R. Elliott)	2			
Motor-Generator Set	15			
Air Compressor	60			
Hard Ore Office Stoker	1/4			
Portable Welder - Blacksmith Shop	30		30	
" " " "	20		20	
Bandsaw	5			
Crane (correction)	5		3	
Shop Stoker		1		
Welder		35		
Punch Press		10		
				222
<b>ISHPEMING HOSPITAL:</b>				
Passenger Elevator	7-1/2			
Dumb Waiter	3			
Large Washer	2			
Small Washer	1			
Extractor	2			
Vacuum Cleaner	3			
Water Supply Pump	1-1/2			
X-Ray Machine	1/4			
Hot Water Circulating Pump	1/2			
" " Return - high pressure	5			
" " " - low "	1-1/2			
Vacuum Pump	3			
Refrigerator		1-1/2		
				31-1/4
<b>TILDEN MINE:</b>				
Compressor	150			
Centrifugal Pump	275			
Scraper on Coal Dock	15			
#29 Shovel - Motor-Generator Set	110			
" " - Air Compressor	4-1/2			
" " - Oil Pump	1/4			
" " - Trip Motor	2			
" " - Exciter Motor	10			
Cyclone Drill	10			
" Drills - 4 - 15 HP.	60			
fwd.	6,007	454-1/2	423	6,038-1/2 HP.

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Electrical Department: (Cont'd)

		INSTALLED TO JAN. 1, 1936	INSTALLED IN 1936	TAKEN OUT IN 1936	CONNECTED JAN. 1, 1937 TOTALS
	brt. fwd.	6,007	454-1/2	423	6,038-1/2 HP.
TILDEN MINE:	" "	636-3/4			
Car Dumper		30			
Large Crusher		250			
Car Fuller		10			
Sample Crusher		3			
Belt Conveyor		50			
Secondary Crushers 2 - 100 HP.		200			
Small Hoist over Crusher		3			
#31 Shovel - Motor Generator Set		110			
" " Exciter Motor		7-1/2			
" " Trip "		1-1/4			
" " Air Compressor		5-3/4			
Drill Sharpener		15			
Pump for Drills		10			
Synchronous Condenser from P.C.P. Plant		625			
Shop Motor		5			
" " #2		3			
Armstrong Drill		15			
Blower Fan			1/2		
Fan in Crusher Bldg.			1/2		
Centrifugal Pump in Compressor Pit		2			
Booster Pump		125			
Pump for Summit Pit		50			
Emery Wheel			1/4		
Marion Shovel- M.G. Set			85		
Drill Sharpener 9"			15		
Armstrong Drill 9"			20		
Blower			1-1/2		
D. Drill Pump			20		
					2,300
ATHENS MINE:					
Cage Hoist		400			
Nordberg Compressor		325			
Compressor Cooling Water Pump		3			
Auxiliary Compressor for Hoist Brakes		5			
Underground Ventilating Fan #1		15			
Skip Hoist Set		850			
" " " Oil Pump		1			
Shop		10			
Underground Haulage Converter		150			
Skip Pit Pump		2			
Underground Plunger Pumps - 2 - 400 HP.		800			
Ore Tram 2 - 50 HP.		100			
Carpenter Shop		20			
Ore Crusher		25			
Underground Ventilating Fan #2		50			
Ingersoll-Rand Compressor		450			
Rock Tram		50			
Underground Haulage Converter #2		150			
Saw Gunning Machine			1/4		
Nordberg Compressor Oil Pump			1/2		
Breitung Shaft Pump		25			
					3,431-3/4
	fwd.	11,597-1/4	596	423	11,770-1/4 HP.

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	fwd.	INSTALLED TO JAN. 1, 1936	INSTALLED IN 1936	TAKEN OUT IN 1936	CONNECTED JAN. 1, 1937 TOTALS
		11,597-1/4	596	423	11,770-1/4 HP.
<b>MAAS MINE:</b>					
(Circulating Pump		40			
Turbine Auxiliaries (Injection "		25			
(Exciter		35			
Underground Haulage Set		215			
Shop		10			
3rd Level Centrifugal Pump		350			
" " Plunger Pump #1		500			
Ore Tram 2 - 50 HP. motors		100			
Coal Crushing Plant		15			
3rd level Plunger Pump #2		250			
Ingersoll-Rand Compressors - 2 - 400 HP.		800			
Skip Hoist		700			
Gage "		400			
Skip Hoist Rheostat Pump		3			
Carpenter Shop Saw		15			
Auxiliary Compressor for Hoist Brakes		7-1/2			
Cooling Water Pump		5			
Saw Gunning Outfit in Carpenter Shop		2			
Underground Haulage Set #2 (from Neg. Mine)		215			
5th level Aldrich Pump ( 2 Boeing Mine)		100			
3rd " Centrifugal Pump		400			
" " " " - primer		50			
5th " Prescott Plunger Pump (from Lake Mine)		75			
" " Centrifugal " ( # Princeton)		125			
					4,435-1/2
<b>NEGAUNEE MINE:</b>					
Underground Haulage Set #1		300			
"Ilgner" Hoist Set		450			
Ore Tram 2- 50 HP.		100			
Carpenter Shop in Lab. Bldg. (from Athens)		5			
Auxiliary Compressor for Hoist Brakes		3			
10th level Plunger Pumps - 2 - 300 HP.		600			
" " Centrifugal Pump		350			
" " Suction Pumps 2 - 15 HP.		30			
Compressor Cooling Water Pump		3			
Nordberg Air Compressor		325			
Shop		15			
Ore Crusher		25			
Ingersoll-Rand Compressor		400			
13th level Plunger Pump		15			
11th " " Pumps - 2 - 75 HP.		150			
Exciters for 10th level Pump Motors (2)		40			
Signal System Motor-Generator Set		1/2			
Timber Hoist - #2 Shaft		25			
Ventilating Fan " "		150			
Gravel Hoist		15			
Saw in Carpenter Shop		15			
Skip Pit Pump		5			
Underground Haulage Set #2		220			
Pump - Temporary		35			
New Flywheel Set for Hoists		800			
Oil Pump on #2 Flywheel Set		1			
" " " " " "		1			
" " " Nordberg Compressor		1			
Hot Well Pump		2			
		20,114-1/4	596	423	4,081-1/2 20,287-1/4 HP.

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Electrical Department: (Cont'd)

		INSTALLED TO JAN. 1, <u>1936</u>	INSTALLED IN 1936	TAKEN OUT IN 1936	CONNECTED JAN. 1, 1937 <u>TOTALS</u>
	brt. fwd.	20,114-1/4	596	423	20,287-1/4 HP.
<b>MAAS CRUSHING PLANT:</b>					
Jaw Crusher		100			
Belt Conveyor		50			
Pan Conveyor Motor-Generator Set		<u>50</u>			200
<b>LLOYD MINE:</b>					
Skip Hoist	(from Republic)	500			
Cage "		400			
Top Tram		50			
Ore Crusher		25			
Water Supply Pump installed Underground		50			
Concrete Mixer		5			
Top Tram		50			
Compressor		100			
"		225			
Underground Haulage Converter		120			
Timber Yard Saw		7-1/2			
Underground Haulage Converter (from Wade)		150			
Compressor Cooling Water Pump		<u>3</u>			1,685-1/2
<b>MORRIS MINE:</b>					
Ingersoll-Rand Compressor #2		<u>500</u>			500
<b>SECTION 6 SHAFT:</b>					
Hoist		200			
Water Pump in Change House		<u>2</u>			202
<b>GWINN CRUSHING PLANT:</b>					
Crusher		85			
Pan Conveyor		50			
Belt "		50			
Compressor		15			
Compressor Cooling Water Pump		<u>3</u>			203
<b>FRANCIS MINE STOCKPILE:</b>					
Triplex Pump		<u>7-1/2</u>			7-1/2
<b>GARDNER MINE:</b>					
Hoist		400			
Top Tram		50			
Laboratory Crusher		<u>3</u>			453
<b>MACKINAW MINE:</b>					
Hoist		400			
Shop		7-1/2			
Ore Tram		50			
Underground Haulage Set		150			
Air Compressor		325			
Compressor Cooling Water Pump		7-1/2			
4th level Quintuplex Pump		350			
" " Triplex "		75		75	
5th " Pump - Automatic #1		30			
Winze Hoist		200			
4th level Centrifugal Pump		400			
6th " " " - Automatic #2		20			
Grinder in Shop		3			
Loader used by Railo & Rytkonen			<u>25</u>		
	fwd.	<u>25,383-1/4</u>	<u>621</u>	<u>498</u>	<u>1,968</u> 25,506-1/4 HP.

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Electrical Department: (Cont'd)

	INSTALLED TO JAN. 1, 1936	INSTALLED IN 1936	TAKEN OUT IN 1936	CONNECTED JAN. 1, 1937 TOTALS
brt. fwd.	25,383-1/4	621	498	25,506-1/4 HP.
<u>PRINCETON MINE #2:</u>				
Hoist	200			
Stockpile Loader	25		25	200
<u>PRINCETON MINE #3:</u>				
Hoist	75			75
<u>PRINCETON CENTRAL POWER PLANT:</u>				
(Circulating Pump	50			
Turbine Auxiliaries (Injection " "	40			
(Exciter	33			
Boiler Room Fan	50			
Coal Handling Machinery	10			
" " "	5			188
<u>PRINCETON CENTRAL SHOPS:</u>				
Shop Motor	25			25
<u>PRINCETON CENTRAL PUMP STATION:</u>				
Centrifugal Pump	100			
Automatic Pump	30		30	100
<u>NEW PUMP STATION at KIDDER SHAFT:</u>				
Layne & Bowler Pump		75		
Automatic Pump		30		
Booster Pump at Austin		10		115
<u>GARP PLANT:</u>				
Auxiliaries 2 - 15 HP. pump motors	30			
Water Supply Pump	1			
Air Compressor	5			36
<u>HOIST PLANT:</u>				
Exciter Motor-Generator Set	20			
Oil Pump	3			
Air Compressor	5			
Small Supply Hoist Motor (incline hoist)	3			31
<u>McCLURE PLANT:</u>				
Water Supply Pump	2			
Exciter Motor-Generator Set	17-1/2			
Air Compressor	5			24-1/2
<u>ESCANABA PLANT:</u>				
Air Compressor	5			
Oil Pump	5			
Valve Operating Motor	1			11
TOTAL MINING DEPARTMENT and CLIFFS POWER & LIGHT CO.				
	26,128-3/4	736	553	26,311-3/4 HP.

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Electrical Department (Cont'd)

	<u>INSTALLED</u> <u>TO JAN. 1,</u> <u>1936</u>	<u>INSTALLED</u> <u>In 1936</u>	<u>TAKEN OUT</u> <u>IN 1936</u>	<u>CONNECTED</u> <u>JAN. 1, 1937</u> <u>TOTALS</u>
TOTAL MINING DEPARTMENT AND CLIFFS POWER & LIGHT CO.	26,128-3/4	736	553	26,311-3/4 HP.
CLIFFS DOW CHEMICAL: Chemical Plant & Sawmill	<u>1,195</u>			1,195
L. S. & I. RR. CO. Shops, Sawmill, Ore Dock & Pumps	<u>800</u>			800
LAND DEPARTMENT: Grand Island      3 motors	<u>15-1/2</u>			15-1/2
LUMBERING DEPARTMENT: Location Water Supply Pump	5			
Tie Mill Saw	75			
"    "    Conveyors	37			
"    "    Shop	<u>10</u>			127
MICHIGAN GAS & ELECTRIC CO. Ishpeming	2,170			
Munising	250			
Munising City Pumping	<u>125</u>			2,545
REPUBLIC TOWNSHIP: Water Supply Pump	<u>25</u>			25
OLIVER IRON MINING CO. Pumps at Angeline & Sec. 16 Mines Holmes Mine	525	<u>2,552-1/2</u>		3,077-1/2
CITY OF ISHPERING: Booster Pump at Brownstone Air Compressor for Tank	15	<u>10</u>		25
CITY OF NEGAUNEE:	<u>435</u>			435
G.P.&L.CO. RETAIL	<u>100</u> Est.			100
PALMER MINING COMPANY: Volunteer Mine, Palmer	<u>800</u>			800
PIQUA MUNISING WOOD PRODUCTS CO., MUNISING	<u>695</u>			695
NORTH RANGE MINING CO. Blueberry Mine	<u>1,165</u>			1,165
INLAND STEEL CO. Greenwood Mine Morris Mine	450	<u>3,360</u>		3,810
INLAND LIME & STONE CO. Quarry & Dock	<u>4,000</u>			4,000
MICHIGAN GOLD MINE	<u>150</u>			150
ROPES GOLD MINE	<u>350</u>			350
TOTAL OUTSIDE LOAD	<u>19,315</u>	<u>0</u>	<u>0</u>	19,315 HP.
GRAND TOTAL CONNECTED LOAD	45,443-3/4	736	553	45,626-3/4 HP.

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Electrical Department: (Cont'd)

The following motors are not connected to our Power System:

	INSTALLED		CONNECTED		
	TO JAN. 1, 1936	IN 1936	TAKEN OUT IN 1936	JAN. 1, 1937 TOTALS	
<u>MESAABA RANGE:</u>					
<u>CANISTEO MINE:</u>					
Priming Pump		3			
Shop Line Shaft		10			
Washing Plant Compressor		50			
Belt Conveyors	2 - 5 HP. motors	10			
Jaw Crusher		100			
Centrifugal Pumps	2 -125 " "	125	125		
Symons Crushers	2 100 " "	200			
Belt Conveyor		75			
Armstrong Drills	2 15 " "	30			
Centrifugal Pump		25			
Portable Drill		1/2			
Hacksaw		1/2			
Wood Planer		3			
Band Saw		5			
Circular Saw		5			
Shaper		3			
Portable Drill		1/8			
Clear Water Pumps	1 3 HP. motor	6		3	
Motor-Generator Sets on Shovel No's 32 & 35		500	250		
Exciter Sets	" " " " "	40			
Dipper Trips	" " " " "	4			
Fan		6			
Heater Motors	5 - 1/2 HP. motors	2-1/2			
" Motor		1/4			
" Motors	8 - 1/8 " "	1			
Bolt & Pipe Machine		5			
Machine Shop Planer		10			
Boring Machine		15			
Pressure Pump in Boiler House		30			
Shop Air Compressor		50			
Portable Grinder		1			
Bench Grinders		1			
Blacksmith Shop Forge		1/4			
Electric Welder		15			
Punch & Sgear Machine		5			
Small Pump		3			
Portable Saw		7-1/2			
Blacksmith Shop Bit Sharpener		10			
Roll Motor in Laboratory		5			
Pulverizer " "		1			
Fan " "		1/8			
Heater " "		1/8			
Fan " "		1/8			
Centrifugal Pump		125			
Motor-Generator Set - Washing Plant		225			
Battery Charger		3			
AlliesChalmers Screen			5		
Electric Welder		15			
Priming Pump		3			
Armstrong Drill		15			
Ro-Tap In Laboratory		1/2			
Centrifugal Pump (from Holman)		125			
Battery Charger (old band saw/motor)		3			
fwd.		1,878-1/2	130	3	2,005-1/2 HP.

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Electrical Department: (Cont'd)

	brt. fwd.	INSTALLED			CONNECTED
		TO JAN. 1, 1936	INSTALLED IN 1936	TAKEN OUT IN 1936	JAN. 1, 1937 TOTALS
CANISTEO MINE: (Cont'd)		1,878-1/2	130	3	
Portable Drill		1/2			
Layne & Bowler Pump (from Holman)		350		350	
Dorr Classifiers - from Holman - 2-10 HP.		20			
Picking Belts - " " - 2 5 HP.		10			
Armstrong Drill - " "		15			
Hummer Screen - " "		5		5	
Portable Grinder - " "		1			
Shop Door Hoist - " "		5			
Shop Heater - " "		1/4			
Air Comp. in Lab. " "		1-1/2			
Exhaust Fan			1/2		
Blacksmith Forge Fan			1/2		
Pit Pump			20		
" "			125		
4'x6' Screen			5		
Lake Feed Pump			10		
4'x6' Screen			2	2	
Clear Water Pump			7-1/2		
4'x6' Screen			2	2	
5'x14' "			10		
Drive under Cutting Tool			1/4		
					2,237
HOLMAN-CLIFFS MINE:					
Bench Grinder		1/4			
Belt Conveyor		75			
Symons Crushers 2 - 100 HP. motors		200			
Jaw Crusher		100			
Air Compressor		50			
Screen		25			
Machine Shop		30			
Exhaust Fan		1/2		1/2	
Centrifugal Pump		275			
Blacksmith Forge Fan - from Drew Mine		1/2		1/2	
Motor-Generator Set		225			
Clear Water Pump - Washing Plant		3			
Bench Grinder		1/4			
Shop Heater		1-1/4			
" Heaters 10 - 1/8 HP. motors		1-1/4			
Roll Motor in Laboratory		3			
Pulverizer in "		1			
					990-1/2
	fwd.	3,277-3/4	512-3/4	363-1/2	3,227-1/2 HP.



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	brt. fwd.	INSTALLED		TAKEN OUT IN 1936	CONNECTED JAN. 1, 1937 TOTALS
		TO JAN. 1, 1936	IN 1936		
HILL-THUMBULL MINE:		3,277-3/4	312-3/4	363	3,227-1/2 HP.
Log Washer		50			
" "		40			
Belt Conveyors	4 - 5 HP. motors	20			
Crusher		100			
Sample Crusher		10			
Frescott Fluner Pump		125			
Centrifugal Pump		150			
Shops		30			
Punch & Shear Machine in Shop		5			
Band Saw in Carpenter Shop		5			
Compressor in Shop		50			
Screen		20			
Conveyor		100			
Planer in Shop		2			
Variety Saw in Shop		5			
Electric Drill			1/4		
Motor-Generator Set		65			
Blacksmith Shop Fan			1/4		
Drill			1/4		
Washing Plant Laboratory Rools		3			
Picking Belt		5			
Car Puller		7-1/2			
Portable Grinder		1			
North Pit Pump		30			
Air Compressor at Washing Plant		25			
Churn Drill		10			
Boiler Feed Pump		5			
Chip Screens		2		2	
Layne & Bowler Pump		125			
Tool Post Grinder			1/4		
Armstrong Drill (from Drew Mine)		15			
Rack Drives on Classifiers 2 - 10 HP. motors		20			
Hummer Screen		2			
Pulverizer in Laboratory		1			
Fan " "			1/8		
Symons Crushers	2 - 100 HP. motors	200			
Bench Grinder			1/2		
Motor-Generator Set on Shovel #34		250			
Exciter " " "		20			
Dipper Trip " " "		2			
Fan " " "		3			
Fan for Blacksmith Shop		5			
Clear Water Pump		3			
Flue Machine		5			
Bench Grinder at Washing Plant			1/2		
Centrifugal Pump at Washing Plant		85			
Pit Pump			30		
TOTAL MESABA RANGE		4,881-1/4	342-3/4	365	1,631-1/2 4,859 HP.

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	<u>INSTALLED</u> <u>TO JAN. 1,</u> <u>1936</u>	<u>INSTALLED</u> <u>IN 1936</u>	<u>TAKEN OUT</u> <u>IN 1936</u>	<u>CONNECTED</u> <u>JAN. 1, 1937</u> <u>TOTALS</u>
<b>SPIES-VIRGIL MINE:</b>				
Underground Triplex Pump	50			
Crusher	50			
Air Compressor	403			
Compressor Cooling Water Pump	3			
Hoist	400			
Boiler Feed Pump	2			
Circular Saw in Carpenter Shop	25			
Shop	5			
Compressor Cooling Water Pump	3			
8th level Prescott Plunger Pumps 2 - 150 HP.	300			
Underground Haulage Converter	150			
Sump Pump	2			
Auxiliary Compressor for Hoist Brakes	<u>5</u>			
			<u>TOTAL</u>	1,398

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The following A.C. motors are on hand, (Dec. 31, 1936) but are not installed:

**CLIFFS SHAFT MINE:**

Top Tram (stator only)	50 HP.
Spare Top Tram	50
Small Conveyor Motor	2
Scraper Motors	5 - 25 HP. 125
Scraper Motor	15
Top Tram Motor from Republic	50
Magnetic Separator	3
Screen	<u>10</u>

305 HP.

**GENERAL STOREHOUSE & BARN:**

Spare from Republic concrete mixer (needs repairs)	5
" General Electric pump	50
" from Hard Ore #3 plunger pump	35
" for centrifugal pump used at North Lake	200
" motor (needs repairs)	40
Pump motor from Republic Mine (needs repairs)	10
2 - 500 HP. hoist motors from Cliffs Shaft Mine	1,000
Hoist stator only	500
Feeder Belt	5
Conveyor Belt	20
Concrete mixer from Au Train	7-1/2
Leach concrete mixer	10
Carpenter Shop from Republic Mine	20
Undg. Hoist	50
" " Maas	50
Cyclone Drill	10
Pump	100
" Republic Mine (needs repairs)	50
" " " "	7-1/2
Screen #9 Shaft	25
Crusher	100
Coal Tram	7-1/2
Pump from 3rd level	50
Screen from crusher	10
Pump from	35
Pump from Mackinaw Mine	20
Spare for small compressors (in for repairs)	5
Pump motor from Cliffs Shaft change house	2
Prescott pump motor from Maas Mine	325
Pump motor from Morris Mine	50
" " " " "	40
Gwinn Crushing Plant conveyor motor	40
Sinking hoise from Wade Mine	35
Top Tram	50
Sump pump	7-1/2
Blacksmith Shop fan	3
Air compressor	150
Clear water pump	15
Triplex pump from	50
Pump motor	100
Undg. Haulage Set from Morris Mine	150
Cooling water pump Wade	2
Sump pump from Negaunee Mine (needs repairs)	5
Allis-Chalmers 3-K-2164.1 from Armour Mine	5
Hoist	<u>150</u>

fwd. 3,602  
fwd.

305 HP.

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	brt. fwd.		305 HP.
GENERAL STOREHOUSE & BARN: (Cont'd)	brt. fwd.	3,602	
Hoist from Armour Mine		250	
Centrifugal pump " " "		150	
" " " " "		200	
" " " " "		35	
Blacksmith Shop blower (C&S.Lab.)			1/2
Centrifugal pump		5	
Skip hoist motor from Lloyd Mine		400	
" " " " Barnes-Hecker Mine		400	
Nordberg compressor at Lake Mine Engine House		325	
Compressor motor		50	
" " from Shop		10	
Top tram from Lloyd Mine		40	
Top tram		50	
Cliffs Shaft tram		100	
Lloyd tram		40	
Sump pump		2	
" "		2	
Top tram for Lloyd Mine		50	
			5,711-1/2
ISHPEMING HOSPITAL:			
Spare for dumb waiter		3	
" " hot water return		5	
			8
ATHENS MINE:			
Pump motor		50	
			50
MAAS MINE:			
Winze pump		15	
Pump from Morris Mine		50	
Hoist motor from Stephenson Mine		75	
Rheostat pump		2	
Cooling water pump		5	
Return " "		2	
Sump pump (new)		5	
			154
NEGAUNEE MINE & BARN:			
Flywheel hoist set motor		350	
Top tram		50	
Hoist from South Jackson		75	
Pump " Maas Mine		50	
			525
PRINCETON MINE:			
Underground pump		150	
			150
PRINCETON CENTRAL SHOPS & CENTRAL POWER PLANT:			
Hoist motor from Spies Mine		200	
Hoist motor		400	
			600
Top tram from Gardner Mine		25	
			25
GWINN STORAGE SHED & STEPHENSON TRANSFER:			
Stephenson 5th level plunger pump		250	
" " " " "		250	
" 8th " " "		50	
Spare for Pumping Station		30	
			580
	fwd.		7,803-1/2 HP.

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Electrical Department: (Cont'd)

	brt. fwd.	
<b>TILDEN MINE:</b>		7,803-1/2 HP.
Conveyor Belt	50	
Trip motor for shovels	1-1/4	
Scraper motor	<u>50</u>	
		<u>101-1/4</u>
	<u>TOTAL</u>	7,904-3/4 HP.
<b>Spare motors at Spies-Virgil Mine:</b>		
Underground haulage set	150	
Grinder motor	3	
Fan	<u>15</u>	
	<u>TOTAL</u>	168 HP.
<b>Spare motors on Mesaba Range:</b>		
<b>HILL-TRUMBULL MINE &amp; SHOPS:</b>		
Log washer	25	
" " from Crosby Mine	40	
Screen " " "	20	
Picking Belt " " "	3	
Chip screen " " "	3	
Tables " " " (Loaned to Charleston Mining Co.)	20	
#2 Turbo " " "	20	
Feeder " " " (Loaned to Buffalo Mine)	20	
North Pit pump " " "	30	
Planer " " "	3	
Chip Screen " " "	2	
Rakes from Drew Mine	10	
Conveyor belt " " "	15	
Feeder " " "	10	
Air compressor " " "	60	
Helmer hoist	<u>200</u>	
		481
<b>CANISTEO MINE:</b>		
Centrifugal pump	600	
" "	600	
Dipper trip	2	
H-T table motor	20	
H-T picking belt	5	
Belt conveyors - 2 motors	10	
Spare centrifugal pump	20	
Spare heaters on #35 shovel	1/8	
Dorr washers 2 - 75 HP.	150	
" " 2 - 30 HP.	<u>60</u>	
		1,467
<b>HOLMAN-CLIFFS MINE:</b>		
Shaft pump	150	
Motor-generator set	150	
Sump pump	5	
Pump loaned to Charleston Mining Co.	85	
Priming pump	2	
Air compressor from Pontiac Mine	<u>100</u>	
		<u>492</u>
	<u>TOTAL</u>	2,440 HP.

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Electrical Department: (Cont'd)

Total C.C.I.Co. & C.P.&L.Co. load connected to Power System - 12/31/36 - 26,311-3/4 HP.

" outside " " " " " " - " - 19,315 "

TOTAL CONNECTED LOAD 45,626-3/4 HP.

Total connected load at Mesaba Range Mines - Dec. 31st, 1936 - 4,859 HP.

" " " " Spies-Virgil Mine - " " " - 1,398 "

Total spare motors on hand Dec. 31st, 1936 - Ishpeming District - 7,904-3/4 HP.

" " " " " " " " - Spies-Virgil Mine - 168 "

" " " " " " " " - Mesaba Range Mines - 2,440 "

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ELECTRICAL DEPARTMENT: (Cont'd)

The following direct current generators and exciters are installed and operating as needed;

		Installed to Jan. 1, 1936	Installed in 1936	Taken Out in 1936	Jan. 1, 1937 TOTALS
AU TRAIN WATER POWER PLANT:					
Exciters	(2)	34 KW			34 KW.
CARP RIVER WATER POWER PLANT:					
Exciters	(2)	150			150
HOIST PLANT:					
Exciter		17½			54½
"		37			
McCLURE PLANT:					
Exciters	(2)	110			122
M. G. Exciter		12			
ESCANABA PLANT:					
Exciter		28			28
REPUBLIC PLANT:					
Exciter		18			33
"		15			
MAAS PLANT:					
Motor driven exciter		22½			65
Turbo " "		22½			
Compressor motor exciters (2)		20			
PRINCETON CENTRAL POWER PLANT:					
Motor Driven exciter		22½			45
Turbo " "		22½			
CLIFFS SHAFT MINE:					
Compressor motor exciters (2)		20			20
BROWNSTONE SUBSTATION & SHOPS:					
Battery charging set		2			
Line testing set		1/2			
Voltage regulator control		1/2			
Condenser exciter		15			
M. G. set in shop		10			
Welding generators	(2)	20	16	20	44
" " "		20		20	
ATHENS MINE:					
Nordberg Compressor motor exciter		10			735
Flywheel set exciter		15			
Skip hoist generator		700			
Ingersoll-Rand compressor motor exciter		10			
MAAS CRUSHING PLANT:					
Pan conveyor generator		35			
" " " exciter		1½			36¾
fwd.		1,391¼	16	40	1,367¼

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Electrical Department: (Cont'd)

	brt. fwd.	INSTALLED		Jan. 1, 1937 TOTALS
		TO JAN. 1, 1936	INSTALLED TAKEN OUT in 1936 IN 1936	
<u>NEGAUNEE MINE:</u>				
Skip Hoist generator		400		
Cage " "		150	16	
Flywheel exciter		25		
Exciters for underground pump motors		28		
Ingersoll-Rand compressor motor exciter		10		
Nordberg " " "		10		
Bell signal set		1/2		
Skip Hoist generator #2		400		
Cage " " "		200		
Exciter on new hoist set		<u>35</u>		
				1,258 1/2
<u>MORRIS MINE:</u>				
Ingersoll-Rand compressor motor exciter		<u>10</u>		
				10
<u>LLOYD MINE:</u>				
Compressor motor exciter		<u>6</u>		
				6
<u>MACKINAW MINE:</u>				
Compressor motor exciter		<u>10</u>		
				10
<u>TILDEN MINE:</u>				
Thrust generator on electric shovel #29		15		
Hoist " " " " "		75		
Swing " " " " "		15		
Exciter " " " " "		5 1/2		
" " " " #31		5 1/2		
Thrust " " " " "		15		
Hoist " " " " "		75		
Swing " " " " "		16		
Exciter for synchronous motor		15		
Thrust generator for Marion shovel			15	
Hoist " " " " "			50	
Swing " " " " "			15	
Exciter " " " " "			<u>5 1/2</u>	
				<u>328 1/2</u>
				2,974 1/2
	<u>TOTAL</u>	2,912 3/4	101 1/2	40



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Electrical Department: (Cont'd)

Underground Haulage Generators:

	INSTALLED		TAKEN OUT	JAN. 1, 1937
	TO JAN. 1, 1936	IN 1936		
<b>CLIFFS SHAFT MINE:</b>				
Motor-Generator Set #2	100 kW			
" " charging set	5			
" " set #1	<u>100</u>			205 kW
<b>ATHENS MINE:</b>				
Rotary Converter #1	100			
" " #2	<u>100</u>			200
<b>MAAS MINE:</b>				
Motor-generator set #1	100			
" " " #2	<u>100</u>			200
<b>NEGAUNEE MINE:</b>				
Motor-generator set #1 (new)	200			
" " " #2	<u>150</u>			350
<b>LLOYD MINE:</b>				
Converter #1	90			
" #2 (from Wade Mine)	<u>100</u>			190
<b>MACKINAW MINE:</b>				
Rotary Converter	<u>100</u>			100
<b>TOTAL</b>	<u>1,245 kW</u>	<u>0</u>	<u>0</u>	<u>1,245 kW</u>

Direct Current Motors:

<b>AU TRAIN WATER POWER PLANT:</b>				
Governor control motors (2)	<u>1/4</u>			1/4
<b>CARP RIVER WATER POWER PLANT:</b>				
Rheostat Control (2)	1/4			
Governor " (2)	<u>1/4</u>			1/2
<b>McCLURE PLANT:</b>				
Valve Control (2)	2			
Rheostat " (2)	<u>1/2</u>			2 1/2
<b>CLIFFS SHAFT MINE:</b>				
Portable Hoist	10			
Car Puller	6 1/2			
Scrapers	<u>165</u>		<u>75</u>	106 1/2
<b>TILDEN MINE:</b>				
Hoist motor on electric shovel #29	100			
Swing " " " " "	20			
Thrust " " " " "	20			
Swing " " " " #31	20			
Thrust " " " " "	20			
Hoist " " " " "	100			
Hoist " " Marion " "		60		
Swing " " " " "		23		
Thrust " " " " "		23		
Dipper Trip Motor " "		<u>5</u>		391
<b>fwd.</b>	<u>464 3/4</u>	<u>111</u>	<u>75</u>	<u>500 3/4</u>

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Electrical Department: (Cont'd)

		INSTALLED		TAKEN OUT		JAN. 1, 1937	
		TO JAN. 1,	INSTALLED	IN 1936	IN 1936	TOTALS	
		1936	IN 1936				
	brt. fwd.	464 $\frac{3}{4}$	111	75	500 $\frac{3}{4}$		
<b>ATHENS MINE;</b>							
	Skip Hoist	900					
	Ventilating fans 6 - 5 HP motors	30					
	Sullivan Scrapers 2 - 6 $\frac{1}{2}$ " "	13					
	" " 16 - 15 " "	225	15				
	Ventilating fan (Loaned to Mackinaw)	15		15			
	Sullivan Scrapers 2 - 20 HP motors	40					
	I. R. Scrapers 2 - 10 " "	20					
	Ventilating fan (From Maas Mine)	15					
						1,258	
<b>MAAS MINE;</b>							
	Timber Hoist - 4th level	10					
	Ventilating fan (To Athens)	15		15			
	Sullivan Scrapers 23 - 15 HP motors	285	60				
	" " 5 - 6 $\frac{1}{2}$ " "	32 $\frac{1}{2}$					
	Ventilating fans 10 - 5 " "	50					
	Scrapers 2 - 25 " "	50					
	I-R. Scrapers 9 - 15 " "	135					
	" " 3 - 10 " "	30					
	Scrapers 1 - 20 " "	20					
	Fan 1 - 3 " "	3					
		675 $\frac{1}{2}$					
<b>MAAS CRUSHING PLANT;</b>							
	Pan Conveyor	40					
						40	
<b>NEGAUNEE MINE;</b>							
	Skip Hoist	500					
	Cage "	200					
	Timber hoist - 11th level	10					
	" " - 12th "	10					
	Scrapers 3 - 7 $\frac{1}{2}$ HP motors	22 $\frac{1}{2}$		22 $\frac{1}{2}$			
	Grindstones 2 - 6 $\frac{1}{2}$ " "	13					
	Sullivan Scrapers 2 - 25 " "	50					
	Ventilating fans 4 - 5 " "	20					
	Denver Scrapers 3 - 10 " "	30					
	Sullivan " 7 - 15 " "	105					
	I-R. " 6 - 15 " "	75	15				
	" " 6 - 10 " "	60					
	Sullivan " 1 - 20 " "	20					
	Gardner-Denver Scraper 2 - 15 " "	30					
	I-R. Scraper 1 - 20 " "	20		20			
						1,158	
<b>LLOYD MINE;</b>							
	Scrapers 12 - 15 " "	105	75				
	" 1 - 10 " "	10					
	" 1 - 25 " "	75		50			
	Skip Pit 1 - 6 $\frac{1}{2}$ " "	6 $\frac{1}{2}$					
	" " 1 - 7 $\frac{1}{2}$ " "	7 $\frac{1}{2}$					
	I-R. Scraper 1 - 20 " "	20					
						249	
<b>GARDNER-MACKINAW MINE;</b>							
	Scraper 3 - 10 " "	30					
	" 1 - 20 " "	20					
	" 1 - 15 " "	15					
		65					
<b>TOTAL D.C. MOTORS</b>		<b>3,792<math>\frac{3}{4}</math></b>	<b>331</b>	<b>177<math>\frac{1}{2}</math></b>	<b>3,946<math>\frac{1}{4}</math></b>		

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ELECTRICAL DEPARTMENT: (Cont'd)

Spare Generators and Exciters on hand Dec. 31st., 1936;  
NEGAUNEE MINE;  
Skip Hoist (Armature Only) 500 H.P.

Spare Underground Haulage Generators on hand Dec. 31st., 1936;

GENERAL STOREHOUSE;  
Motor-Generator Set (From Morris Mine) 100  
Exciter - Nordberg Compressor 10  
" " 22  
Motor-Generator Set 20  
152 K.W.

Spare Direct Current Motors on hand Dec. 31st., 1936;

Cliffs Shaft Mine;  
Spare scraper motor 6 - 15 H.P. motors 90 H.P. 90 H. P.

ATHENS MINE;  
Timber Hoist Motor 10  
Fan 15 25

MAAS MINE;  
Conway Loader 50 50

LLOYD MINE;  
Crane motor 10 10

GENERAL STOREHOUSE;  
Pump Motor 20  
Spare hoist motor for shovel 105  
" swing " " " 20  
145

GARDNER-MACKINAW MINE;  
Hoist 15  
15  
335 H.P.

TOTAL

MESABA RANGE;

CANISTEO MINE;  
Exciters and Generators installed up to Dec. 31st., 1936;  
Hoist generator on shovel - 2 shovels 300 kW  
Swing " " " - 2 " 80  
Thrust " " " - 2 " 78  
Washing plant generator 150  
Arc Welder 10  
Exciter on shovel - 2 " 24  
Arc Welder (From Hill-Trumbull) 10  
652 kW

HILL-TRUMBULL MINE;  
Hoist generator on shovel 150  
Swing " " " 40  
Thrust " " " 39  
Exciter " " " 12  
241

HOLMAN-CLIFFS MINE;  
Generator for feeder 150

TOTAL

150  
1,043 kW

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Electrical Department: (Cont'd)

MESABA RANGE:

Underground Haulage Generators installed up to Dec. 31st., 1936:

<u>HILL-TRUMBULL MINE;</u>			
Motor-generator set		55 KW	
" " "	for rock haulage	<u>25</u>	
	<u>TOTAL</u>		80 KW

Direct Current motors installed up to Dec. 31st., 1936:

<u>CANISTEO MINE;</u>			
Rack Drives on classifiers	2 - 5 HP motors	10 HP	
Hoist motor on shovel	2 shovels	375	
Swing " " "	2 "	80	
Thrust " " "	2 "	80	
Pan Conveyer		40	
Log Washers - from Holman	2 - 40 HP motors	<u>80</u>	665 HP
 <u>HILL-TRUMBULL MINE;</u>			
Feeder motor		60	
Hoist motor on shovel		187½	
Swing " " "		40	
Thrust " " "		39	
Dorr bowl classifiers	2 - 5 HP motors	<u>10</u>	336½
 <u>HOLMAN-CLIFFS MINE;</u>			
Pan Conveyer		<u>40</u>	
	<u>TOTAL</u>		<u>40</u> 1,041½

Spare Direct Current Motors on Mesaba Range Dec. 31st., 1936:

<u>CANISTEO MINE;</u>			
Generator	(From Pontiac Mine)	<u>7 KW</u>	7 KW
 <u>HOLMAN-CLIFFS MINE;</u>			
1 D.C. motor		5 HP	
1 " "		3	
1 " "		3	
Motor-generator set - spare from Boeing Mine		<u>115 KW</u>	

MESABA RANGE:

Total Exciters and Generators installed to Dec. 31st., 1936 -			1,043 KW
" Haulage Generators	" " " " " "	-	80 KW
" Direct Current Motors	" " " " " "	-	1,041½ HP

MECHANICAL DEPARTMENT  
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Electrical Department: (Cont'd)

SPIES-VIRGIL MINE:

Exciters installed to December 31st., 1936:

Compressor motor exciter		10 KW
Underground Haulage Generators installed to December 31st., 1936:		250 KW
Top Tram larry cars	- 20 HP D.C. motors	40
Fan		<u>15</u>
		55 HP
Spare D. C. Generator		100 KW

ISHPEMING DISTRICT:

Total D.C. Generators and Exciters installed to December 31st, 1936-		2,974½ KW
" Underground Haulage Generators	" " " "	" - 1,245 KW
" Direct Current Motors	" " " "	" - 3,946¼ HP
" Spare D. C. Generators and Exciters on hand	" " " "	" - 52 KW
" " Underground Haulage Generators	" " " "	" - 152 KW
" " Direct Current Motors	" " " "	" - 335 HP

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Electrical Department: (Cont'd)

Substation Transformers installed up to December 31st, 1936:

<u>66,000/2300 Volts</u>	<u>PHASE</u>	<u>NO.</u>	<u>K.V.A.</u>	<u>TOTAL K.V.A.</u>	
Munising Substation	1	3	667	2,001	
Seney "	1	1	25	25	
Inland #1 "	1	3	500	1 500	
" #2 "	1	3	500	1 500	
Au Train "	1	3	333-1/3	1 000	
					6,026 K.V.A.
<u>33,000/66,000 Volts</u>					
Gwinn Substation	1	3	1,250	3,750	3,750 "
<u>33,000/13,200 Volts</u>					
Clarksburg Substation	1	3	37-1/2	112 1/2	112 1/2 "
<u>33,000/110-220 Volts</u>					
Toebe Substation	1	1	10	10	10 "
<u>33,000/2300 Volts</u>					
Brownstone Substation	1	3	400	1,200	
Cliffs Shaft-Holmes Substation	1	6	500	3 000	
Morris-Lloyd "	1	3	590	1 770	
Princeton "	1	3	250	750	
Republic "	1	3	400	1 200	
Mass "	1	6	590	3 540	
Escanaba Plant "	1	3	590	1 770	
Gwinn "	1	3	625	1 875	
Munising "	1	3	200	600	
McClure Plant "	3	2	5,000	10 000	
Carp "	1	3	1 900	5 700	
Palmer "	1	3	625	1 875	
Hoist Plant "	1	3	667	2 000	
Greenwood "	1	3	150	450	
Michigan Gold Mine "	1	2	75	150	
					35,880 "
<u>12,000/440/220 Volts</u>					
Piqua - Marquette Substation	1	3	100	300	300 "
<u>12,000/220/110 Volts</u>					
D.S.&A.Ry. at Clarksburg	1	1	2-1/2	2 1/2	2 1/2 "
<u>12,000/2300 Volts</u>					
McClure Plant (Furnace Lines)	3	2	1,250	2,500	
Au Train Substation	1	3	50	150	
Chatham "	1	3	25	75	
Eben "	1	1	25	25	
Rumely "	1	2	15	30	
					2,780 "
<u>6,600/2300 Volts</u>					
Gwinn Substation	1	3	350	1,050	
Mackinaw "	1	3	350	1 050	
Inland #1 "	1	3	25	75	
Blaney Park "	1	2	25	50	
" " "	1	1	15	15	
					2,240 "
<u>6,600/115/230 Volts</u>					
Germfask	1	1	15	15	
"	1	2	1.5	3	
"	1	2	3	6	
Furnace Substation Lighting	1	1	5	5	
					29 "
<u>GRAND TOTAL</u>					51,130 K.V.A.

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Electrical Department: (Cont'd)

Distribution Transformers installed up to December 31st, 1936:

<u>2300/220/110 Volts</u>	<u>Phase</u>	<u>No.</u>	<u>K.V.A.</u>	<u>TOTAL K.V.A.</u>
<u>CLIFFS SHAFT MINE:</u>				
Office Lights	1	1	10	
" "	1	1	15	
"A" Shaft Hoists	1	2 (15)	30	
Pump Station Lights	1	1	3	
Crusher House Lights	1	2 (1)	2	
Machine Shop	1	3 (10)	30	
Underground Scrapers	1	5 (50)	250	
" " "	1	3 (25)	75	
" " "	1	3 (75)	225	
Motor-generator set for battery charging and 1st level "A" scrapers	1	2 (50)	100	
Rectifiers	1	7 (5)	35	
Lights	1	34 (1 $\frac{1}{2}$ )	51	
Scraper Lights	1	1	2	
Signal in Engine House	1	1	5	
Scraper Lights	1	1	3	
Top Tram Control	1	1	1	
Laboratory Crusher	1	2 (15)	30	
" " "	1	1	50	
" " "	1	1	15	
" " "	1	2 (10)	20	
				952
<u>HARD ORE, BROWNSTONE, ETC.:</u>				
Light & Power	1	1	15	
" " "	1	1	7 $\frac{1}{2}$	
Blacksmith Shop	1	1	30	
Manager's Residence	1	2 (10)	20	
" " "	1	1	5	
F. C. Stanford & Testing	1	1	7 $\frac{1}{2}$	
" " " " "	1	1	5	
Manager's Residence	1	1	7 $\frac{1}{2}$	
" " "	1	1	1 $\frac{1}{2}$	
Hospital	1	3 (25)	75	
Shop Power	1	3 (15)	45	
" Lights	1	1	5	
Blacksmith Shop Lights	1	1	15	
				239
<u>TILDEN MINE:</u>				
Pump	1	1 (7 $\frac{1}{2}$ )	7 $\frac{1}{2}$	
" "	1	1	10	
Lights & Power	1	2 (5)	10	
Drills	1	3 (15)	45	
Shovel	1	3 (5)	15	
Crusher	1	3 (10)	30	
Synchronous Condenser	1	2 (7 $\frac{1}{2}$ )	15	
Scrapers	1	3 (15)	45	
#31 Shovel	3	1	15	
Lights - Pump House	1	1	1/2	
Summit Pit Substation	1	3 (10)	30	
				<u>223</u>
			fwd.	1,414

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Electrical Department: (Cont'd)

## Distribution Transformers (Cont'd)

brt. fwd.	Phase	No.	K.V.A.	TOTAL K.V.A.
				1,414
<u>ATHENS MINE:</u>				
Machine Shop	1	2 (10)	20	
Surface Lights & Lab. Hot Plates	1	3 (10)	30	
Pump Station Lights	1	1	5	
" " "	1	1	2	
100 G.P.M. Pump	3	1	40	
Signal System	1	1	1	
Engine House Lights	1	1	5	
" " "	1	1	4	
Top Tram	1	1	2	
" " Control	1	1	1	
Pump at Breitung Shaft	1	3 (7½)	22½	
U. G. Haulage Converters	1	6 (35)	210	
				342½
<u>MAAS MINE:</u>				
Lights & Injection Pump	1	3 (10)	30	
Coal Crusher & Shop	1	2 (10)	20	
Signal System	1	1	1/2	
3rd Level Pump Station	1	2 (5)	10	
Cage Hoist Control	1	1	10	
Skip " "	1	1	2	
" " "	1	1	3	
Heaters in Engine House	1	1	7½	
Top Tram	1	1	2	
Shop	1	1	15	
				100
<u>MAAS CRUSHING PLANT:</u>				
Lights	1	1	7½	
				7½
<u>NEGAUNEE MINE:</u>				
Shop Light & Power	1	1	10	
" " " "	1	1	7½	
Engine House Lights & Power	1	1	10	
" " " " "	1	1	5	
Signal System	1	1	1/2	
Pump Station Lights, etc.	1	3 (7½)	22½	
13th Level Pump	1	3 (5)	15	
Barn	1	1	1	
Gravel Pit	1	1	7½	
Hoist & Lights - #2 Shaft	1	3 (10)	30	
Underground Haulage	1	1	3	
				112
<u>LLOYD MINE:</u>				
Cage Hoist Control	1	1	5	
Skip " "	1	1	7½	
Water Supply Pump House Lights	1	1	2	
Engine House Lights & Bell System	1	1	10	
" " "	1	1	5	
Saw	1	1	5	
Underground Haulage	3	1	100	
" " " from Wade Mine	1	3 (35)	105	
Office Lights	1	1	10	
Shop Power	1	3 (10)	30	
				279½
			fwd.	2,255½



MECHANICAL DEPARTMENT  
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Electrical Department: (Cont'd)

Distribution Transformers (Cont'd)	brt.	fwd.	Phase	No.	K.V.A.	TOTAL K.V.A.
						2,255½
<u>NORTH LAKE LOCATION:</u>						
Location Lights			1	1	7½	
Club House "			1	1	10	17½
<u>Section 6 Shaft:</u>						
Hoist Control			1	1	7½	
Lights			1	2	( 2 ) 4	11½
<u>REPUBLIC MINE:</u>						
Engine House Lights			1	1	7½	
Water Power Plant Lights			1	1	1½	
" " " "			1	1	3	12
<u>PALMER SUBSTATION:</u>						
Circuit Breaker Control			1	1	1½	1½
<u>AUSTIN MINE:</u>						
Shop			1	1	10	10
<u>GARDNER MINE:</u>						
Cage Hoist Control			1	1	10	10
<u>MACKINAW MINE:</u>						
Machine Shop			1	2	( 5 ) 10	
Hoist Control			1	1	10	
5th Level Lights			1	1	1	
7th Level Engine House Lights			1	1	1	
Top Tram			1	1	3	
Haulage Converters			1	3	(35) 105	
R. & R. Lumber Co.			1	2	(10) 20	150
<u>PRINCETON #3:</u>						
Lighting & Bell System			1	1	1½	1½
<u>PRINCETON CENTRAL POWER PLANT:</u>						
Coal Crusher			1	1	7½	
Power Plant Lights			1	1	10	17½
<u>PRINCETON CENTRAL SHOPS:</u>						
Power & Lights			1	2	(10) 20	20
<u>GWINN DISTRICT OFFICE:</u>						
Lights			1	1	10	10
<u>GWINN PUMP STATION:</u>						
Power			1	2	(37½) 75	75
<u>GWINN DISTRICT CRUSHING PLANT:</u>						
Power & Lights			1	2	(10) 20	20
<u>GWINN SUBSTATION:</u>						
Lights			1	1	1/2	1/2
<u>PRINCETON PUMP STATION:</u>						
Booster Pump			1	2	(7½) 15	15
						fwd. 2,627½

MECHANICAL DEPARTMENT  
ANNUAL REPORT  
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Electrical Department: (Cont'd)

## Distribution Transformers (Cont'd)

	brt.	fwd.	Phase	No.	K.V.A.	TOTAL K.V.A.
						2,627½
<u>AU TRAIN WATER POWER:</u>						
Heater at Valve House			1	1	2	
Control			1	3 (1)	3	
Power & Lights, Dixon Location			1	2 (5)	10	
" " " , Grand Island			1	2 (5)	10	
Lights, Forest Lake Location			1	1	10	
Chief Operator's Dwelling Lights			1	1	5	
Surge Tank Heaters			1	1	5	
Dixon Tie Mill			1	2 (3)	6	
Chief Operator's House			1	2 (5)	10	
Grand Island			1	1	7½	
" " "			1	2 (5)	10	
Dixon Location, Power			1	1	3	
						81½
<u>CARP RIVER WATER POWER PLANT:</u>						
Power & Lights			1	1	10	
" " "			1	1	20	
Pump			1	2 (1)	2	
						32
<u>Hoist Plant:</u>						
Power & Lights			1	3 (10)	30	
						30
<u>McCLURE PLANT:</u>						
Power & Lights in Plant			1	2 (10)	20	
" " " " Houses			1	1	5	
" " " " "			1	1	15	
						40
<u>ESCANABA RIVER PLANT:</u>						
Power & Lights			1	3 (5)	15	
						15
<u>GRAND TOTAL</u>						<u>2,826</u>
<u>RETAIL SERVICE:</u>						
Princeton Location Lighting			1	1	5	
Austin " "			1	1	10	
Gwinn Street Lights			1	2 (1)	2	
" " "			1	1	2	
" Lighting near Depot			1	1	1/2	
" " " Poplar Alley			1	1	30	
" Power - Club House			1	1	10	
" Lighting - Mineral St.			1	1	10	
" " - Pine St.			1	2 (15)	30	
" Power - School			1	3 (5)	15	
" Lighting "			1	1	10	
New Swanzy Lighting			1	1	10	
Oyr Location "			1	1	2	
Little Lake "			1	1	5	
" " "			1	1	7½	
Sundell "			1	1	5	
" " "			1	1	3	
" " "			1	1	2½	
" " Rural			1	14 (1½)	21	
Rumely "			1	1	5	
" " "			1	1	2½	
" " Rural			1	17 (1½)	25½	
fwd.						213½

MECHANICAL DEPARTMENT  
ANNUAL REPORT  
YEAR 1936

Electrical Department: (Cont'd)

Distribution Transformers (Cont'd)      Phase No.      K.V.A.      TOTAL K.V.A.  
brt. fwd.      213½

RETAIL SERVICE:

Little Lake Lighting	1	1	10	
Hirwas' Camp	1	1	5	
Winters' "	1	1	3	
Connors' "	1	1	3	
Railo-Rytkonen Camp	1	1	5	
Eben School	1	1	10	
" Corner	1	1	7½	
" Lighting (Hallstrom)	1	1	5	
" " (Ahola & Micklow)	1	1	5	
" "	1	4 (3)	12	
" "	1	8 (1½)	12	
Chatham "	1	1	10	
" " (Heldmann's Store)	1	1	5	
" " (County Garage)	1	1	5	
" " (Alger County Infirmary)	1	1	10	
" " (State Farm Chicken Coop)	1	1	5	
" " (State Farm)	1	2 (7½)	15	
" " (Maki)	1	1	5	
" " (Camp Chatham)	1	1	5	
" " (Rural)	1	1	3	
" "	1	18 (1½)	27	
" "	1	3 (3)	3	
		<u>TOTAL</u>		384

Spare Transformers on hand December 31st., 1936:

GENERAL STOREHOUSE & BARN:

General Electric for 440 V. Shaft Pump	1	1	100	
" " from Republic	1	1	7½	
" "	1	1	75	
" "	1	1	5	
" "	1	1	25	
" "	1	1	10	
" "	1	1	25	
" "	1	1	7½	
" "	1	1	5	
" "	1	1	7½	
" "	1	1	5	
" "	1	1	2	
" "	1	1	5	
New General Electric	1	3 (15)	45	
" " "	1	1	10	
" " "	1	5 (5)	25	
" " "	1	1	3	
				362½

ATHENS MINE:

Spare	1	1	3	
"	1	1	3	
				6

REPUBLIC MINE:

General Electric	1	1	4	
				4

Gwinn SUBSTATION:

Spare	1	1	10	
				10

PRINCETON MINE ENGINE HOUSE:

Surface Lighting	1	1	5	
				5
		<u>TOTAL</u>		387½

MECHANICAL DEPARTMENT  
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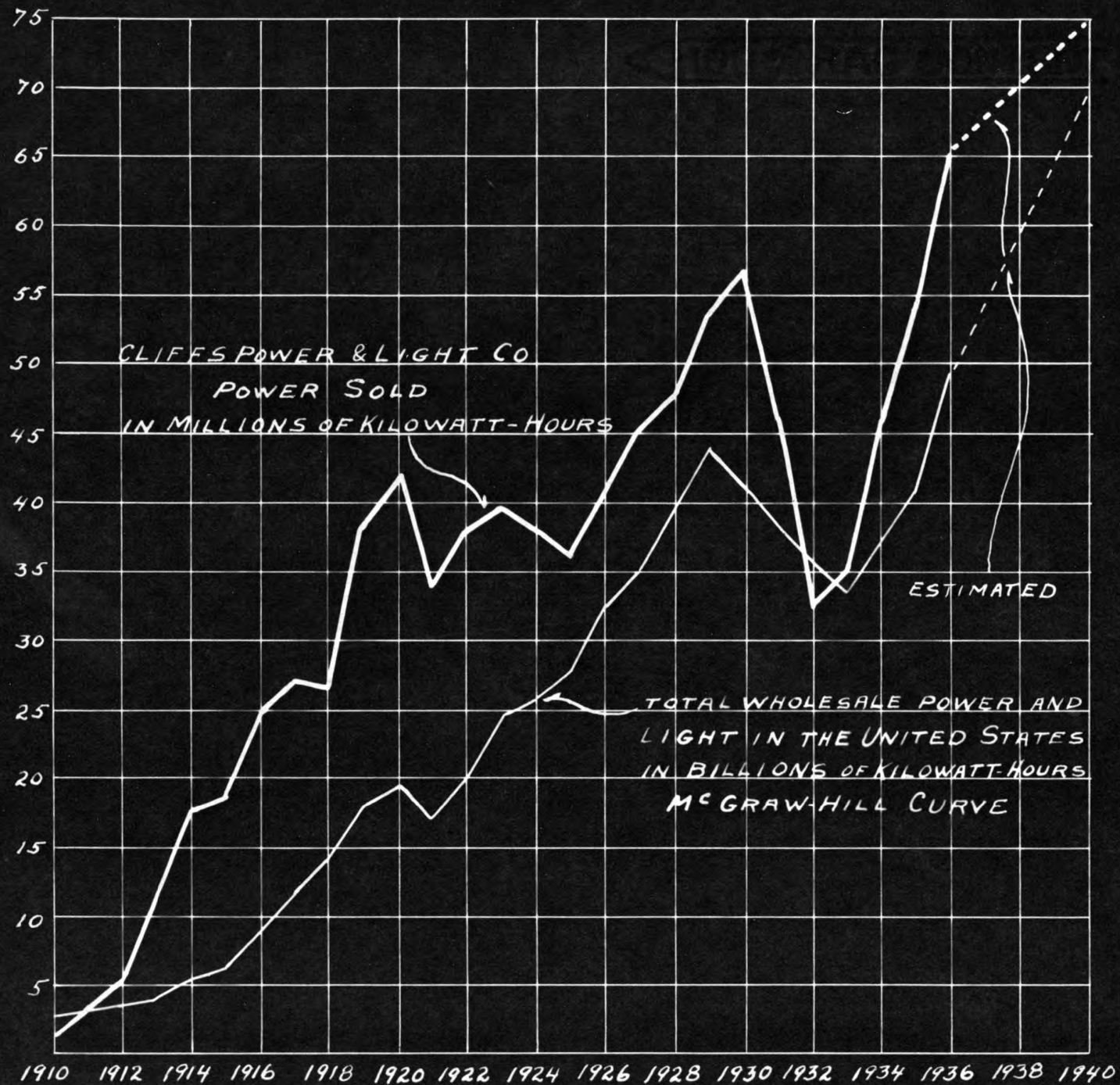
COMPARATIVE TABLES:

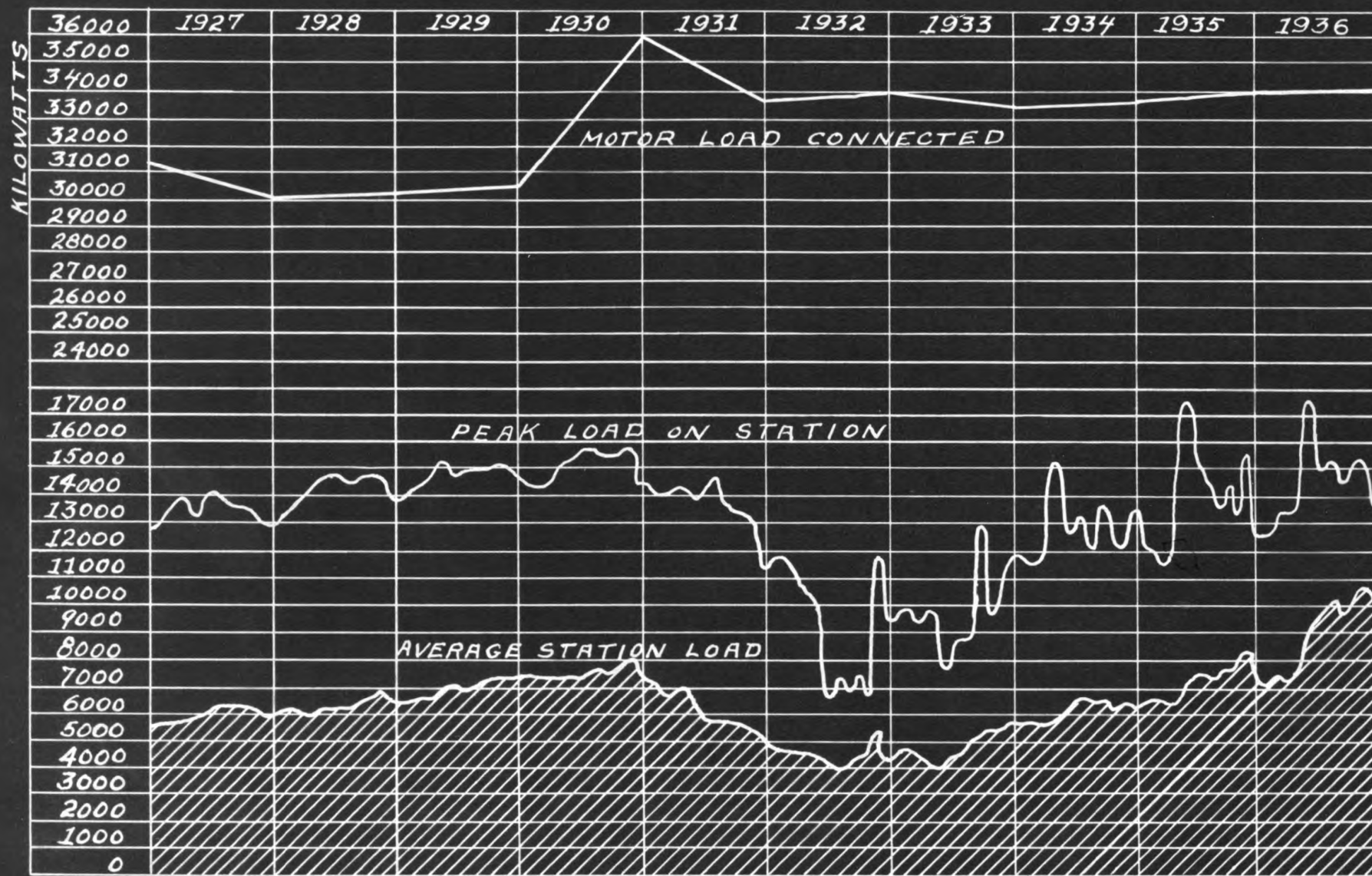
<u>YEAR</u>	<u>TONS COAL BURNED</u>	<u>TONS ORE &amp; ROCK HOISTED</u>	<u>CU. FT. AIR USED</u>	<u>CUBIC FT. AIR PER TON HOISTED</u>	<u>GALLONS OF WATER PUMPED</u>	<u>G.P.M.</u>
<u>CLIFFS SHAFT MINE:</u>						
1927	957	426,830	766,647,000	1,796	440,517,425	
1928	1,008	416 344	804 600 000	1 932	463 182 750	
1929	934	451 334	853 572 500	1 891	461 403 025	
1930	716	444 511	896 693 000	2 017	446 650 100	
1931	560	315 492	592 506 000	1 878	350 061 000	
1932	611	92 125	188 127 000	2 042	369 057 075	
1933	495	61 623	160 033 500	2 596	362 896 379	
1934	373	235 639	394 168 500	1 672	348 670 324	
1935	869	288 053	516 140 000	1 791	366 504 523	692
1936	920	484 310	907 194 600	1 873	389 395 743	739
<u>ATHENS MINE:</u>						
1927	790	233,221	679,815,000	2,914	127,086,869	
1928	827	241 977	710 640 000	2 936	120 178 303	
1929	767	344 534	1,154,380,000	3 350	117 645 969	
1930	657	384 801	1 160 650 000	2 756	121 785 145	
1931	621	254 660	686 750 000	2 696	136 215 501	
1932	578	77 639	209 925 000	2 703	205 070 447	
1933	546	49 506	152 235 000	3 075	194 073 179	
1934	672	166 412	334 485 000	2 009	179 244 454	
1935	653	205 863	527 355 000	2 561	154 911 562	292
1936	718	318 604	698 985 700	2 193	134 999 491	255
<u>MAAS MINE:</u>						
1927	767	274,586	521,730,000	1,900	508,242,996	
1928	657	272 740	679 005 000	2 489	553 419 346	
1929	577	347 232	1,067,265,000	3 074	554 452 221	
1930	606	443 504	1 374 390 000	3 098	577 702 994	
1931	618	332 206	756 405 000	2 076	585 922 823	
1932	585	97 295	210 825 000	2 166	576 727 573	
1933	662	143 845	367 560 000	2 555	554 157 402	
1934	747	294 372	601 920 000	2 044	550 020 020	
1935	804	370 399	686 520 000	1 853	597 349 626	1,129
1936	950	549 615	897 919 800	1 634	674 397 310	1,279
<u>NEGAUNEE MINE:</u>						
1927	1,139	501 516	895,680,000	1 785	603,746,976	
1928	1 278	472 459	1,047,240,000	2 216	629 675 383	
1929	1 410	569 489	1 123 840 000	1 973	648 591 436	
1930	1 254	597 364	1 044 270 000	1 748	556 227 893	
1931	885	346 533	620 641 000	1 791	482 294 599	
1932	1 092	86 650	209 970 000	2 423	477 360 416	
1933	708	65 661	166 050 000	2 528	448 928 213	
1934	819	240 808	437 985 000	1 818	435 724 897	
1935	891	311 446	481 680 000	1 546	485 600 207	918
1936		530 844	737 716 000	1 389	483 287 423	916

MECHANICAL DEPARTMENT  
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YEAR 1936

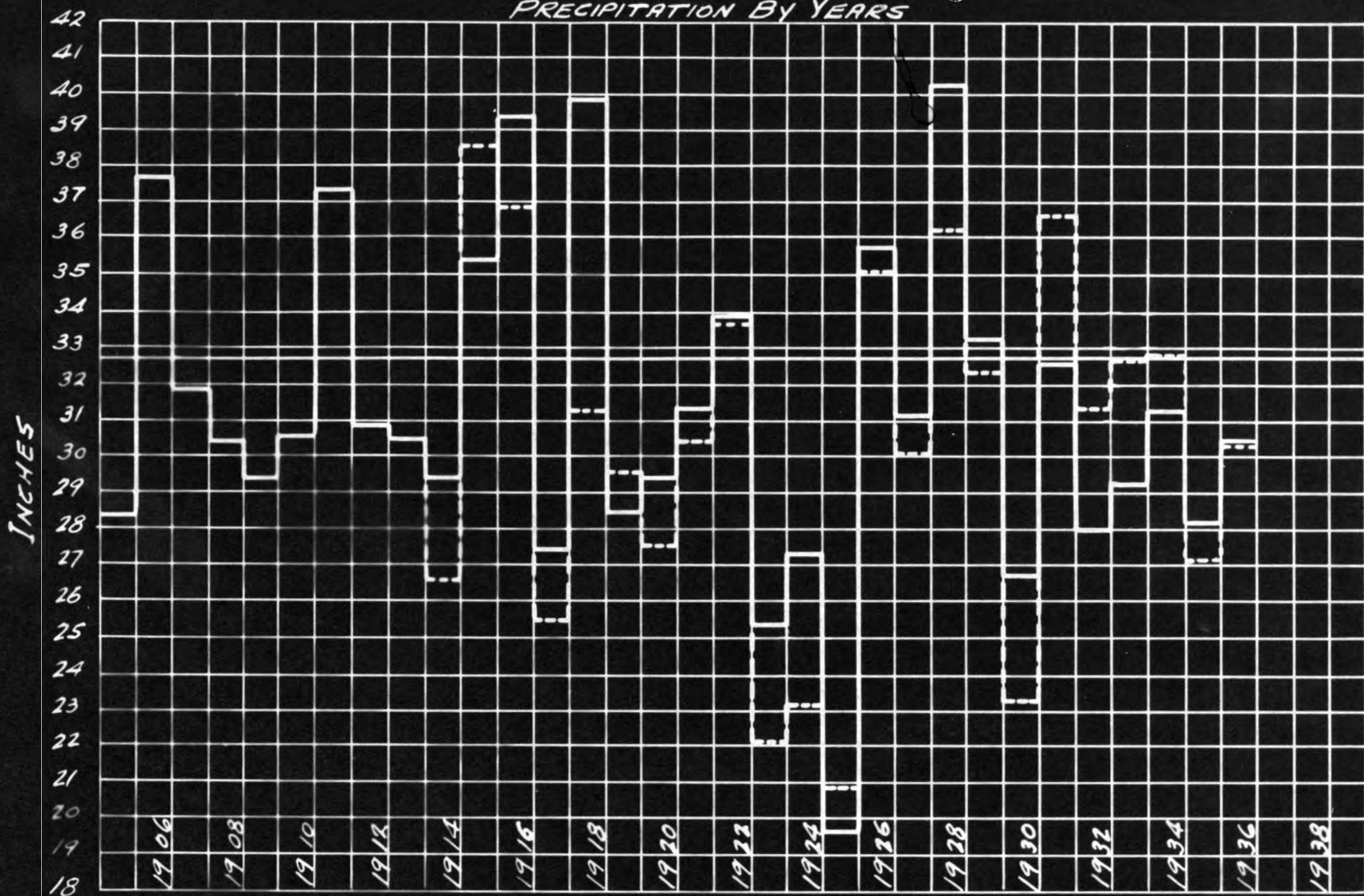
COMPARATIVE TABLES: (Cont'd)

<u>YEAR</u>	<u>TONS COAL BURNED</u>	<u>TONS ORE &amp; ROCK HOISTED</u>	<u>CU. FT. AIR USED</u>	<u>CUBIC FT. AIR PER TON HOISTED</u>	<u>GALLONS OF WATER PUMPED</u>	<u>G. P. M.</u>
<u>TILDEN MINE:</u>						
1929	625	441,769				
1930	498	287 043				
1931	244	137 010				
1932	38	19 957				
1933	164	94 194				
1934	325	167 688				
1935	394	190 511				
1936	901	291 341				
<u>LLOYD MINE:</u>						
1933	96	4,554				
1934	127	136 951	145,926,000	1,065		
1935	224	248 410	289 426 500	1 165		
1936		377 572	383 994 000	1 017		
<u>GARDNER-MACKINAW MINE:</u>						
1928	336	91,293	214,020,000	2,344	52,760,063	
1929	531	119 189	570 635 000	4 703	56 528 157	
1930	316	129 321	621 450 000	4 805	74 833 761	
1931	152	80 801	489 240 000	6 054	172 438 518	
1932	106	24 781	126 945 000	5 122	119 155 845	
1933	40	3 944	49 770 000	12 619	103 051 726	
1934	269	79 187	291 510 000	3 681	82 416 531	
1935	306	138 507	446 625 000	3 224	72 964 993	136
1936	331	185 954	692 415 000	3 723	67 049 662	126





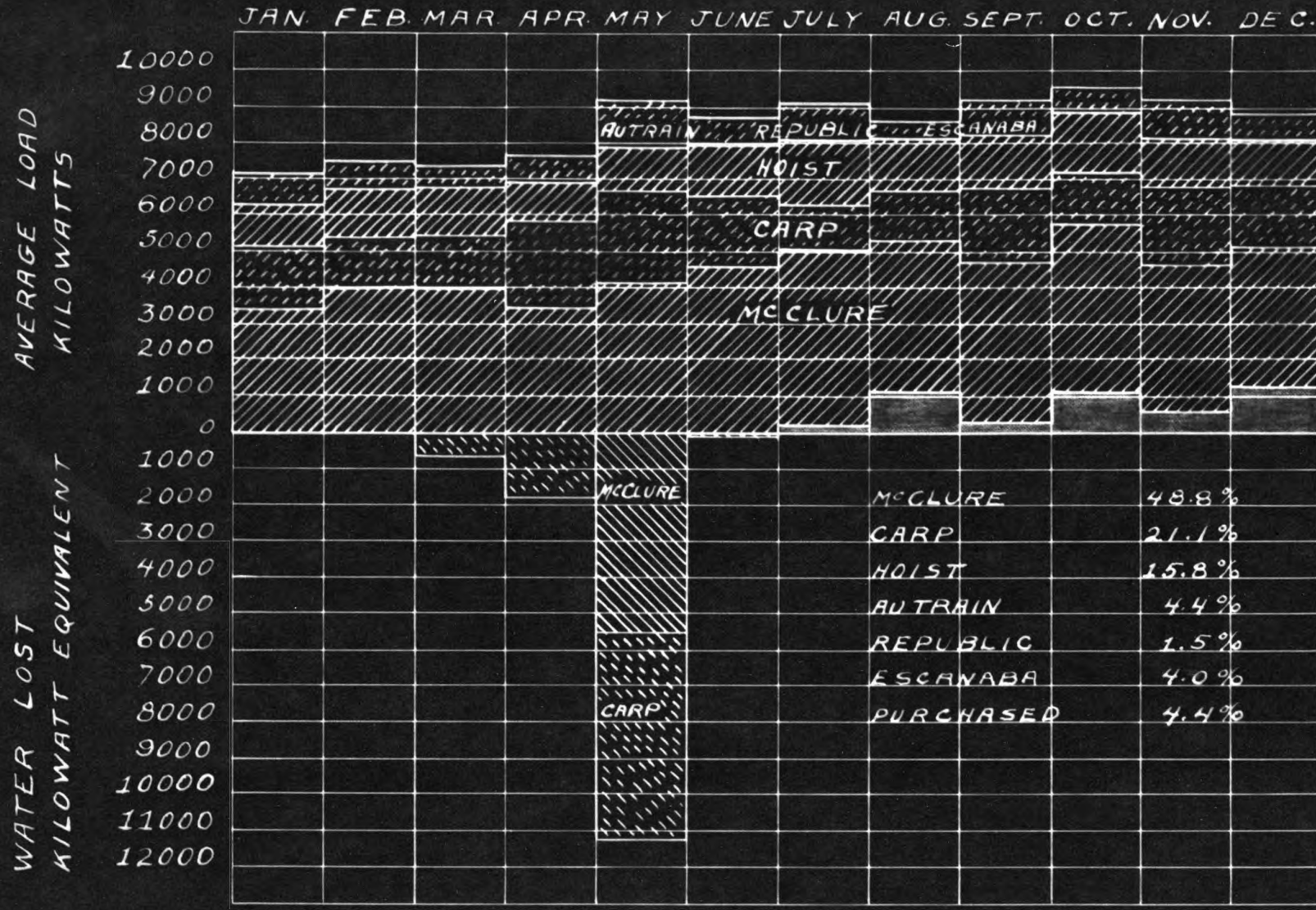
PRECIPITATION BY YEARS



— MARQUETTE RECORD      --- ISHPEMING RECORD

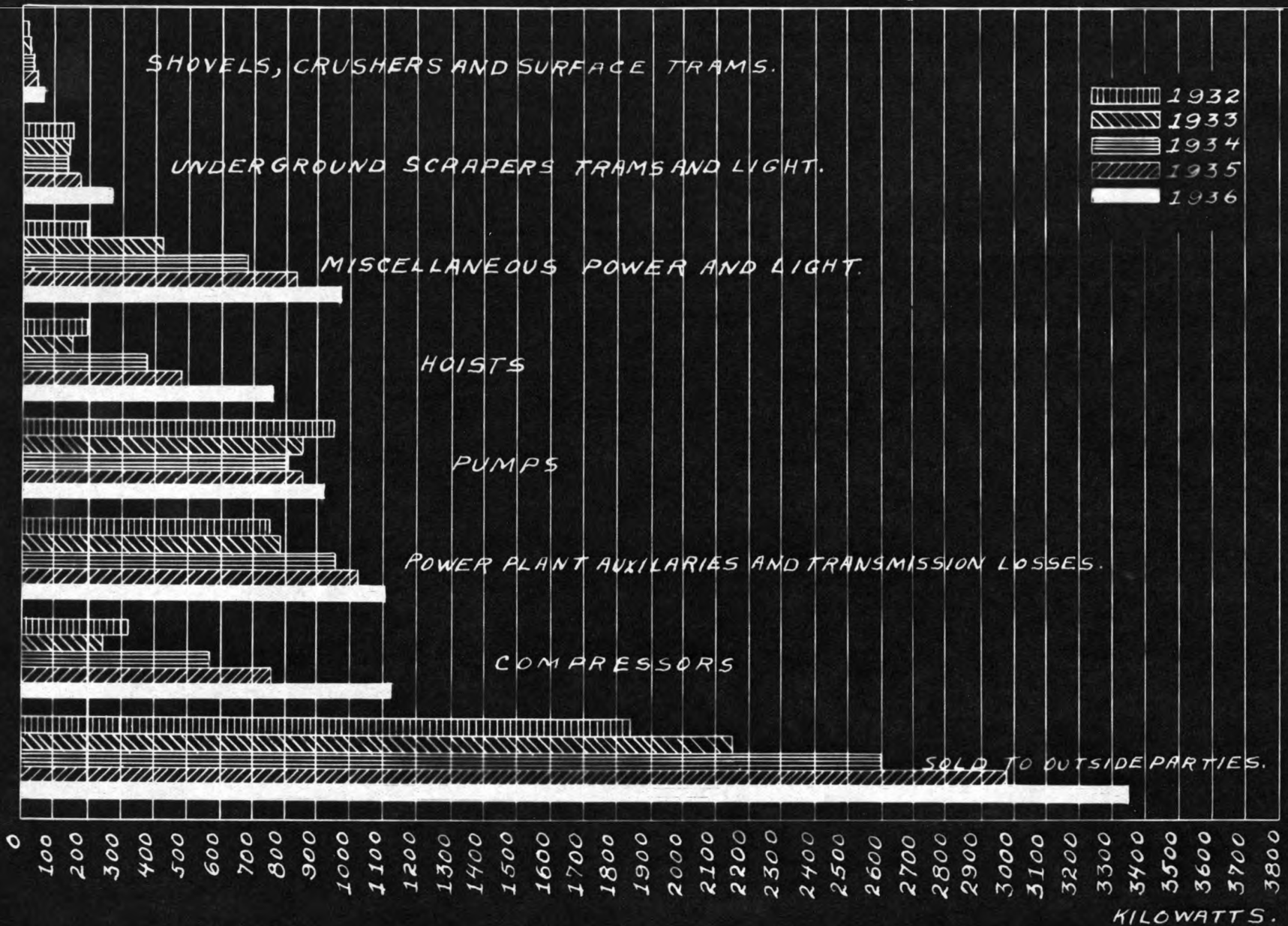


# 1936



CURRENT MADE BY WATER POWER
  WATER LOST BY OVERFLOW
  POWER PURCHASED

DISTRIBUTION OF ELECTRIC POWER 1932-1933-1934-1935-1936.



PENSION DEPT.      ANNUAL REPORT      YEAR 1936

11.

a. Workmen's Compensation.

The direct work of the Compensation Department has been taken care of by Walter E. Johnson, as has been done since 1926.

The injured man is seen just as soon as possible following an accident and this has served to make the man realize the advantages of the Workmen's Compensation Law, and in this way it has been possible to readily secure the signature of the man to the compensation agreement.

All payments have been made promptly, the checks being delivered to the men here at the office when they are able to come for them, or they are delivered to them at the hospitals or at their homes.

In the outside districts the mine clerks do this work for us.

The men have shown a good spirit in returning to work as soon as possible following an accident.

The reduced number of accidents will be reflected in our annual compensation costs and the reduction will be gradually accomplished as the fatalities and total disability cases end.

Following is a list of cases requiring special attention during the year:

Emil Linna, Cliffs Shaft mine, Acc. Report No. 1057 B.

At a hearing held on November 22nd, 1935, Linna was awarded compensation at the rate of \$13.20 a week from November 30, 1932 to March 1, 1933, because of a hernia he claims to have suffered accidentally on November 29, 1932. The period allowed was the actual time he lost following the operation to reduce the hernia. Linna had also claimed partial disability from and after March 1, 1933, but this portion of his claim was denied. He was not satisfied with the award of the deputy commissioner and appealed to the Full Board. They reviewed his case on March 5, 1936, and sustained the award of the deputy commissioner. No appeal was taken by Linna, and the case is now closed.

Sidney Wales, Spies-Virgil Mine, Acc. Report. No. 144.

Wales was injured at the Spies-Virgil mine on June 2, 1933, when he fell from a loaded railroad car while picking samples. He was paid compensation by the Fidelity & Casualty Company of New York from the date of the accident to August 15th, 1935, when they petitioned for a stop-order. A hearing was held on December 19, 1935, the testimony being all medical, and the deputy commissioner allowed him until January 21, 1936, to decide whether or not he would take the additional deposition of the physician who had examined him at Ann Arbor shortly before the date of the hearing. Wales did not take this deposition, so early in 1936 the deputy commissioner issued an award reducing his compensation from \$11.60 to \$5.80 a week, a reduction of 50 per cent. Wales appealed this award to the Full Board and the hearing on review was held on May 20, 1936. They granted him full compensation at \$11.60 per week from August 15, 1935, the date the petition to stop compensation was filed, to and including December 19, 1935, the date of the hearing before the deputy commissioner, with compensation at \$5.80 from and after December 19, 1935. He took no appeal on this award, and at the present time is being paid at the rate of \$5.80 per week.

PENSION DEPT.            ANNUAL REPORT            YEAR 1936.

11.

a. Workmen's Compensation (Continued)

Adolph Wheeler, Negaunee Mine, Acc. Report No. 584.

While working on the top tram at the Negaunee Mine on March 29, 1930, some ore slipped out of a chute and struck Wheeler in the left leg, tearing the ligaments of the knee. He was disabled until May 19, 1930, when he returned to his regular work and continued in our employ until October 1930. He had suffered from myocarditis for some time and in the latter part of 1930 his physician recommended that he quit work. Wheeler was put on the pension roll on January 1, 1931, and he died on February 12th. Mrs. Wheeler filed a claim for compensation in October 1935, claiming that her husband's death was attributable to the injury which he sustained on March 29, 1930. Her case was to be heard before a deputy commissioner on November 22, 1935, but Mrs. Wheeler did not appear and the case was continued. On January 29th, 1936, her case was again set for hearing and she failed to appear. The deputy commissioner dismissed her petition. The case was set for the third time on May 20th, 1936, at nine o'clock A.M. She did not appear. A Marquette attorney came in and discussed the case off the record saying that he was there for information only and had not decided to appear for her, although he had been approached by Mrs. Wheeler. We learned that she had contacted four or five different attorneys but apparently failed to interest them in her case. We put on three witnesses so as to make a record and the deputy commissioner gave us an award in which he stated that there was no cause for action. Mrs. Wheeler did not appeal.

William Hendrickson, Spies-Virgil Mine, Acc. Rept. No. 142A.

Following the death of William Hendrickson, which occurred on December 25, 1934, we received a notice of injury from his minor children through their attorneys, Derham & Derham, dated March 21, 1935. This notice stated that Hendrickson's death was due to an accident sustained in July 1933 when he inhaled an excessive amount of gas and powder smoke because of the plugging of the air line. Later this notice was amended to set the date of the accident as March 16, 1931. Nothing further was heard from this case until we received an Application for Adjustment of Claim in September 1936, when Mr. F. A. Bell, our attorney, immediately countered with a motion that the plaintiff should make his claim more specific as to the manner in which the accident occurred. The case was set for hearing on October 5th at Crystal Falls, and when we asked if the hearing would be held on our petition for additional information or whether it was to be a hearing on the merits of the case, we were informed by the Department of Labor and Industry that the hearing had been postponed.

Various conferences were held with the doctors who had taken care of Hendrickson both in Iron River and at the Pine Crest Sanatorium. Conferences were also held with Dr. Warfield of Milwaukee, an expert in this type of case, and with Mr. J. Barab, a powder expert of the Hercules Powder Company from Wilmington, Delaware, and the Messrs. Humphrey, attorneys of Ironwood, who have had experience in this type of case. The statements of about thirty men employed in the Spies-Virgil at the time of the alleged accident, were also taken. These were all men who might have come in contact with Hendrickson in the event that he had suffered an accidental injury on the date mentioned.

PENSION DEPT. ANNUAL REPORT YEAR 1936.

11.

a. Workmen's Compensation (Continued)

William Hendrickson (Continued)

The hearing was set for December 7th, 1936 at Crystal Falls. On December 6th we met in Iron River with the Messrs. Humphrey and again questioned the mine employees whom we intended to use as witnesses at the hearing. When we appeared before the deputy commissioner on December 7th, Ray Derham, attorney for the plaintiff, asked that the hearing be post-poned because he had been unable to have his witnesses there.

PENSION DEPT.                      ANNUAL REPORT                      YEAR 1936

11.  
a. Workmen's Compensation (Continued))

FATALITIES:

The following fatalities occurred during 1936.

<u>Domenic Valela</u> Age 43	Cliffs-Shaft Mine, Acc. Rept. #1076 Occurred January 31, 1936 Fall of ground Widow and three minor children Compensation at \$18.00 per week for 300 weeks. Funeral Expense	5400.00 200.00 <u>\$ 5600.00</u>
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<u>Harry Edner</u> Age 22	Canisteco Mine, Acc. Rept. #26 Occurred August 6, 1936 Run over by loaded railroad car he was dropping from pocket. Partially dependent father and mother. Compensation at \$9.00 per week for 300 weeks. Funeral Expense	2700.00 150.00 <u>\$ 2850.00</u>
------------------------------	---	--

Payments on account of the following fatal accidents were completed during the year:

<u>Mine</u>	<u>Name</u>	<u>Acc. Rept.</u>	<u>Date of Accident</u>	<u>Date of Final Payment</u>
Lloyd	Joseph Bussone	766	1/27/31	10/26/36
Gen. Strhse.	George Culbert	50	3/22/31	12/20/36

PENSION DEPT.                      ANNUAL REPORT                      YEAR 1936

11.

a. Workmen's Compensation (Continued)

Following is a list of the more serious cases occurring during 1936 other than fatalities:

<u>Mine and Report No.</u>	<u>Name</u>	<u>Nature of Injury</u>	<u>Compensation Paid</u>
Lloyd #781	Dominic Tasson, Sr.	Fractured 2 ribs. Collapse upper lobe of right lung. Fracture transverse process of two vertebrae.	180.00 *
Lloyd #783	Vincenzo Elverti	Abdominal squeeze. Shock pneumonia.	96.96 *
Maas #486	William H. Kempthorne	Loss of right eye due to blast.	900.00 *
Maas #491	Sam Finnila	Lacerations of both eyes. Useful vision of right eye destroyed.	450.00 *
Athens #342	John Paris	Contusion of back Partial numbness in both legs.	240.00 *
Maas Houses #4	Ole Kari	Severe sprain and dislocation of right ankle.	252.00 *

\* Payments are still being made.

PENSION DEPT.                  ANNUAL REPORT                  YEAR 1936

11. a. WORKMEN'S COMPENSATION (Continued)

Compensation Payments including Medical Expense.

<u>Year</u>	<u>C.C.I. Co.</u>	<u>Negaunee Mine Co.</u>	<u>Athens Ir. Mng. Co.</u>	<u>Cliffs Pr. &amp;Light Co.</u>	<u>Mesaba Cl. Mng. Co.</u>	<u>Holman Cl. Mng. Co.</u>	<u>Canisteeo Cl.Mng.Co.</u>	<u>Alexandria Mine</u>	<u>TOTAL</u>
1912	1073.81	105.08							1178.89
1913	13149.70	1152.87	27.15						14329.72
1914	27416.82	2840.13	446.63						30702.58
1915	15657.71	1699.28	656.07						18013.06
1916	32404.74	3496.75	672.29						36573.78
1917	45129.92	5301.30	911.46						51342.68
1918	43734.77	6198.93	1197.57						51131.27
1919	59417.51	11724.68	2234.77		263.00				73639.96
1920	59535.76	8888.01	2923.15		3057.46				74409.38
1921	59065.26	4709.80	5208.92		2953.08				71937.06
1922	56794.35	5283.24	2048.23		1866.67				65992.49
1923	57856.37	4142.00	5007.88		4874.48				71880.73
1924	56335.89	5437.07	6394.01		9408.59				77625.56
1925	49376.47	4464.79	8305.60		7316.55				69463.41
1926	51123.41	5433.85	7087.93	514.40	9537.84				73697.43
1927	86156.10	5311.69	5489.81	939.86	7147.98				105045.44
1928	87186.58	6532.66	6235.08	1331.30	4576.56	9.00			106371.18
1929	76959.01	8899.76	6303.92	1895.50	3557.86	292.83	4.50		97913.38
1930	76753.51	10603.63	5803.45	1930.48	2531.15	1236.18	1357.05	1993.76	102209.24
1931	75167.79	10723.30	5233.65	1867.50	1489.36	559.63	1346.64	1700.87	98088.74
1932	52920.75	12137.00	5012.72	1398.25	1336.00	33.75	65.50	1074.00	73972.97
1933	23425.69	9605.70	5298.56	993.45	2180.61			614.00	42128.01
1934	26672.34	7573.97	8429.38	468.46	2468.61				45612.76
1935	34874.17	6854.34	5154.12	218.75	3778.56				50879.94
1936	31597.79	7139.26	4588.74	438.50	3514.63				47278.92
Totals \$	1199796.22	156309.12	100676.09	12496.45	71858.99	2131.39	2768.69	5382.63	1551419.58



PENSION DEPT.                      ANNUAL REPORT                      YEAR 1936

11.  
a. WORKMEN'S COMPENSATION (Continued)

ANNUAL STATEMENT OF COMPENSATION PAYMENTS  
FROM JANUARY 1st, 1936 TO DECEMBER 31st, 1936

Compensation paid on 1936 accidents	6762.63	
Compensation still pending	59763.47	
Cost of medical and hospital service	<u>13306.30</u>	
Total		\$ 79832.40
Less pending for years 1927 to 1935 inclusive	46988.31	
Less medical paid on accidents occurring prior to January 1, 1936	<u>263.83</u>	
		<u>47252.14</u>
Cost of 1936 accidents		32580.26
Percentage of payrolls		.01161
Number of accidents on which compensation payments were made		37
Number of non-compensable accidents		5
Number of slight accidents which caused not over 1 day's lost time		402

The above figures, and those on the large compensation sheet, cover only those accidents on which we carry our own risk.

Our experience under the insurance plan for Michigan properties is shown on another statement.

ANNUAL REPORT - YEAR 1936

STATEMENT OF COMPENSATION PAYMENTS FROM  
JANUARY 1, 1936 TO DECEMBER 31, 1936

	Average No. of Employees	No. of Fatal Accos.	No. of Non-fatal Accidents		Actual Comp. Paid in 1936	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	Estimated Compensation still Pending	Medical & Special Expense	Fatal Cases Pending	Injury Cases Pending
Cliffs Shaft	348	1	2	59	8520.66		1872.00			936.00	171.60		2272.96	2036.29	1231.61	18979.60	2146.50	5	4	
Cliffs Shaft Laboratory	4																21.50			
Chief of Police	1																6.00			
District Welfare	4																24.00			
Employes Wood-Gwinn District					624.00						624.00						3324.00		1	
Gardner-Mackinaw	166			18	229.50									229.50			35.56	19.00	1	
General Storehouse	91			9	936.00					936.00							545.75	11.00	2	
General Welfare	2																9.25			
Geological Department	2																6.00			
Gwinn Office	1																			
Holmes					904.80				904.80								2644.80		1	
Ishpeming Office	55			1														91.50		
Lloyd	193			8	5774.57	401.33			1961.40	792.00				1971.33	648.51		5989.20	1271.50	5	
Maas	363			8 1 74	4428.38	289.33				936.00			75.60	1141.45	1986.00		7022.00	2241.38	5	
Mechanical Engineering	2																	15.00		
Mining Engineering	7																	41.00		
Purchasing Department	4																	23.00		
Safety Department	1																	5.50		
Shipping Department	6																	35.50		
Spies Virgil	14																	272.08		
Stephenson					879.67	182.00	697.67													
Tilden	53			4	936.00									936.00			3132.00	315.50	1	
Workmen's Compensation	2																	9.00		
Saranac Investigation																		2.75		
Miscellaneous	2			2														10.75		
Uncompleted Const. E & A 689				1	252.00										252.00					
The Cliffs Power & Light Co.	49			1 1 7	114.00													324.50		
The Negaunee Mine Company	262			4	5568.51			1872.00	1214.40	157.44			915.20	873.60	535.87		9543.56	1579.25	7	
The Athens Iron Mining Co.	216			7	3107.90		83.20	936.00		3107.90	114.46		416.64	198.00	1359.50		3466.88	1480.84	7	
<b>Total - Michigan Mines</b>	<b>1850</b>	<b>1</b>	<b>31 2</b>	<b>356</b>	<b>32275.99</b>	<b>872.66</b>	<b>2569.67</b>	<b>83.20</b>	<b>2808.00</b>	<b>4090.60</b>	<b>3871.90</b>	<b>795.60</b>	<b>4616.40</b>	<b>6450.17</b>	<b>6127.79</b>	<b>54137.40</b>	<b>11509.30</b>	<b>6</b>	<b>32</b>	
Hibbing Office	13																	78.50		
Holman Brown	7																	40.00		
Canisteo	242	1	4 3	44	1037.64									402.80	634.84		2547.00	1601.00	1	
Hill Trumbull	13			2	679.99					679.99							3079.07	77.50	1	
<b>Total - Minnesota Mines</b>	<b>275</b>	<b>1</b>	<b>4 3</b>	<b>46</b>	<b>1717.63</b>					<b>679.99</b>				<b>402.80</b>	<b>634.84</b>		<b>5626.07</b>	<b>1797.00</b>	<b>2</b>	
<b>Total - All Mines</b>	<b>2125</b>	<b>2</b>	<b>35 5</b>	<b>402</b>	<b>33993.62</b>	<b>872.66</b>	<b>2569.67</b>	<b>83.20</b>	<b>2808.00</b>	<b>4760.59</b>	<b>3871.90</b>	<b>795.60</b>	<b>4616.40</b>	<b>6852.97</b>	<b>6762.63</b>	<b>59763.47</b>	<b>13306.30</b>	<b>8</b>	<b>32</b>	

This statement covers only those accidents on which we carried our own risk

PENSION DEPT.      ANNUAL REPORT      YEAR 1936.

11.

a. Workmen's Compensation. (Continued)

For the purpose of reference, mention is made here of the agreement with the Fidelity and Casualty Company of New York to carry the compensation risk of the Company from May 17th, 1933 to May 16th, 1934. The insurance company wrote the compensation payments and our own Company assumed the medical expense, the payment of 50¢ per man per month being made at the different properties.

PENSION DEPT.                      ANNUAL REPORT                      YEAR 1936

11. a. Workmen's Compensation (Continued)

Estimated cost of accidents which occurred at Michigan properties during the year from May 17, 1933 to May 16, 1934, inclusive, the compensation risk being carried by the Fidelity & Casualty Company of New York during this period.

	<u>C.C.I.CO.</u>	<u>C.P.&amp;L.CO.</u>	<u>Negaunee Mine Co.</u>	<u>Athens Iron Mining Co.</u>	<u>Total</u>
Premium earned	9197.47	664.87	1564.67	1338.09	12765.10
Medical Expense	4014.43	164.30	814.99	727.16	5720.88
Cost to Company	13211.90	829.17	2379.66	2065.25	18485.98
Compensation paid by The Fidelity & Casualty Co.					
1933	973.60		89.88		1063.48
1934	3479.60	811.52	386.68	24.01	4701.81
1935	2034.00	757.12			2791.12
1936	1750.05	757.12			2507.17
Total compensation payments	8237.25	2325.76	476.56	24.01	11063.58
Estimated deferred liability	3903.03	2242.24			6145.27
Cost of Accidents	12140.28	4568.00	476.56	24.01	17208.85
Premium earned as above					12765.10
Estimated loss to insurance Co.					4443.75

An award of 50% disability - \$5.80 per week was obtained in the Sidney Wales case, Spies Virgil Mine.

PENSION DEPT.                      ANNUAL REPORT                      YEAR 1936

11.  
a. WORKMEN'S COMPENSATION (Continued)

The following table shows the percentage of compensation costs since the law went into effect, the percentage of non-fatal accidents on which compensation payments were made, and the percentage of the cases in which compensation payments were made of the total number of men employed. These figures cover only our own risk.

	<u>Percentage of Payroll</u>	<u>Percentage of Compensable Accidents</u>	<u>Percentage of Men Paid Compensation</u>
1912 (4 months)	.00648		
1913	.01104	42.88	8.06
1914	.0160	42.49	6.51
1915	.01095	36.26	6.63
1916	.01903	43.76	8.29
1917	.01268	41.71	7.84
1918	.01214	37.61	5.73
1919	.00901	48.71	8.15
1920	.0079	60.56	10.52
1921	.01444	64.53	9.79
1922	.01570	68.49	10.22
1923	.01590	61.67	10.23
1924	.01885	66.59	10.15
1925	.01613	69.61	10.19
1926	.07641	66.75	10.73
1927	.01356	68.24	6.55
1928	.01357	69.92	4.27
1929	.01616	74.12	3.02
1930	.01254	78.20	2.33
1931	.01697	89.28	1.11
1932	.01503	100.00	.71
1933 to 5/17/33	.01479	90.00	.60
1934 after 5/17/34	.02214	93.75	.90
1935	.01675	95.12	2.11
1936	.01161	88.01	1.74

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

11.

a. WORKMEN'S COMPENSATION (Continued)

There were no changes made in the Compensation Law of Michigan in 1936.

There was a complete change in the Department of Labor and Industry in the year 1935. The Board is now as follows:

Frank F. Ford,	Chairman.
William H. Wise	
Frank B. Wade	
Betty W. Allie	
W. F. Doyle,	Secretary.

John W. Bennett was appointed Deputy Commissioner for the Upper Peninsula District.

In June 1935 by separate enactment a Commission of five men was appointed to investigate the matter of occupational disease, to report thereon to the next legislature, including a form of law which, in their opinion, will meet the requirements. Mr. Clancey was appointed one member of this commission.

The following table shows the principal items of the changes made at different periods as affecting our properties.

	When Law went into effect <u>Sept.1,1912</u>	As amended in effect <u>Aug.14,1919</u>	In effect <u>Aug.18,1931</u>	In effect <u>Sept.4,1927</u>
<u>MICHIGAN LAW</u>				
Percentage of weekly wages	50	60	60	66 2/3
Maximum weekly compensation	10.00	14.00	14.00	18.00
Minimum weekly compensation	4.00	7.00	7.00	7.00
Waiting period	2 weeks	1 week	1 week	1 week
Waiting period picked up at end of	8 weeks	6 weeks	6 weeks	6 weeks
Maximum payment	3000.00	4200.00	4200.00	5400.00
Maximum compensation for total disability	\$ 4000.00	6000.00	7000.00	9000.00

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

11.  
a. WORKMEN'S COMPENSATION (Continued)

MINNESOTA COMPENSATION LAW.

There were no changes made in the Minnesota Compensation Law in 1936.

The present members of the commission are as follows:

- F. T. Starkey,                      Chairman.
- J. D. Williams
- N. H. Debel
- E. C. Nelson,                      Secretary.
- Emily L. Olson,                  Assistant Secretary.

The following table shows the principal items of the changes made at different periods as affecting our properties:

<u>MINNESOTA LAW</u>	<u>When Law went into effect Oct. 1, 1913</u>	<u>As Amended April 26, 1919</u>	<u>As Amended June 6, 1921</u>	<u>In effect since Oct. 1, 1923</u>
Percentage of weekly wage	50	66 2/3	66 2/3	66 2/3
Maximum weekly compensation	10.00	15.00	18.00	20.00
Minimum weekly compensation	6.00	6.50	8.00	8.00
Waiting period	2 weeks	1 week	1 week	1 week
Waiting period picked up at end of	- - -	- - -	4 weeks	4 weeks
Maximum death payment	\$ 3000.00	4500.00	7500.00	7500.00
Maximum compensation for total disability	4000.00	5000.00	10000.00	10000.00

PENSION DEPT.      ANNUAL REPORT      YEAR 1936.

11.

b. Benefit Funds.

The general Benefit Funds were wiped out during the year 1927, and a complete record is shown in the annual report for that year.

Reference is made here so that this statement may be readily located at any time.



PENSION DEPT.      ANNUAL REPORT      YEAR 1936

11.

c. GROUP INSURANCE.

The matter of group insurance having been favorably acted upon in Cleveland, representatives of the Metropolitan and Aetna Companies came here the first of October and arrangements made to present the group insurance plan to the men at all of the properties, which includes the mines in Michigan and Minnesota; the plan also includes the employees of the Land Department, the L. S. & I. Ry. Company, the Piqua-Munising Wood Products Company, and the coal docks at Green Bay and Escanaba. The representatives of the insurance companies visited the different properties and the men were very enthusiastic about the acceptance of the plan. Arrangements covered the handling of premiums at each mine by the Mine Clerk, with reports to be made by them in the matter of claims, which will be handled by this department. Mr. Walter E. Johnson is in direct charge of the claims and forms were adopted, in addition to those furnished by the insurance company, to provide for prompt reports from each property of the sickness of any employee which lasts over one week.

The men have been greatly benefitted by the weekly benefits in case of sickness and non-occupational accidents which have occurred since October first, the date on which the plan became effective. During this time the Mining Department has had one death, it being that of Mr. William R. Meyers, superintendent of the Maas Mine, who died in Louisville, Kentucky on December 25th, 1936, after having been under the care of Dr. Isaacs at Ann Arbor for some time. The matter of payments in this case has been taken up with the insurance company and arrangements are being made for monthly payments instead of it being paid in a lump sum. As soon as the details are arranged this will become effective.

The following statement shows the number of cases and the amount of money paid to our employees under the group insurance plan during the months of October, November and December.

	<u>October</u>		<u>November</u>		<u>December</u>		<u>Total</u>	
	<u>No. of Cases</u>	<u>Amount Paid</u>	<u>No. of Cases</u>	<u>Amount Paid</u>	<u>No. of Cases</u>	<u>Amount Paid</u>	<u>No. of Cases</u>	<u>Amt. Paid</u>
Cleveland-Cliffs Iron Co.,	4	97.71	10	630.00	10	668.85	24	1396.56
Negaunee Mine Co.,	1	4.00	4	44.00	2	50.00	7	98.00
Athens Iron Mining Co.,	1	4.00	8	183.15	2	120.00	11	307.15
Total	6	105.71	22	857.15	14	838.85	42	1801.71

PENSION DEPT. ANNUAL REPORT YEAR 1936

23.

a. PENSION SYSTEM.

The year 1936 completed the twenty-eighth year of the operation of the pension system.

On January 1, 1933 the pension payments were reduced fifty per cent, those under \$20.00 remaining the same; those over \$20.00 having a minimum rate of \$20.00. The pensions continued during 1936 at the same rate.

No pensions were granted during the year:

The following Mining Department pensioners died during the year:

<u>No.</u>	<u>Name</u>	<u>Date Pensioned</u>	<u>Date Died</u>
166	Alphonse Pepin	1- 1-1924	9- 3-1936
171	John Asplund	5-1-1924	5- 2-1936
177	Thomas Creer	10- 1-1924	3-24-1936
181	John A. Peterson	1- 1-1925	3-27-1936
199	Chris Hanson	7- 1-1926	5- 3-1936
231	Victor Silas	8- 1-1928	4- 7-1936
232	Joseph Gaborie	10- 1-1928	9-23-1936
250	Isaac Hendrickson	12- 1-1930	8-23-1936

	<u>1935</u>	<u>1936</u>
Number of pensions granted during the year	0	0
Number of deaths	10	8
Number of Old Age pensions in force Dec. 31,	84	76
Average annual pension	\$ 284.33	\$ 286.08

There were no additions to the Furnace Department roll during 1936. There was one death, this being

<u>No.</u>	<u>Name</u>	<u>Date Pensioned</u>	<u>Date Died</u>
7	Louis DeVet	12- 1-1923	12-13-1936

On December 31, 1936 there were seven pensioners on the Furnace Department pension roll with an average annual pension of \$271.80.

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

23.  
a. PENSION SYSTEM (Continued)

Pension payments for the years 1908 to 1936 inclusive are as follows:

Mining Department

<u>Year</u>	<u>Old Age</u>	<u>Widows and Orphans</u>	<u>Total</u>
1908	60.10	48.00	117.10
1909	351.92	464.00	815.92
1910	896.44	1043.00	1939.44
1911	1690.37	2649.00	4339.37
1912	3865.95	3113.00	6978.95
1913	5133.62	3025.00	8158.62
1914	6179.57	3403.00	9582.57
1915	7910.35	2372.00	10282.35
1916	8787.02	1694.00	10481.02
1917	9327.22	1266.00	10593.22
1918	8889.14	944.00	9833.14
1919	9605.02	888.00	10493.02
1920	12613.29	814.00	13427.29
1921	21856.64	14.00	21870.64
1922	29063.85	168.00	29231.85
1923	29564.57	168.00	29732.57
1924	31987.64	168.00	32155.64
1925	34926.34	163.00	35089.34
1926	38924.88	143.00	39067.88
1927	45841.03	0.00	45841.03
1928	51869.03	0.00	51869.03
1929	52701.19	0.00	52701.19
1930	53779.24	0.00	53779.24
1931	56379.39	0.00	56379.39
1932	40615.13	0.00	40615.13
1933	30981.29	0.00	30981.29
1934	28205.25	0.00	28205.25
1935	24987.66	0.00	24987.66
1936	<u>22736.32</u>	<u>0.00</u>	<u>22736.32</u>
	\$ 669738.46	22547.00	692285.46
Payment made by Cleveland Office in 1930	<u>2500.00</u>	<u>          </u>	<u>2500.00</u>
	\$ 672238.46	22547.00	694785.46

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

23. a. PENSION SYSTEM (Continued)

FURNACE DEPARTMENT.

The pension payments for the years 1910 to 1935 inclusive are as follows:

<u>Year</u>	<u>Old Age</u>	<u>Widows and Orphans</u>	<u>Total</u>
1910	111.75	0.00	111.75
1911	268.20	120.00	388.20
1912	268.20	180.00	448.20
1913	268.20	180.00	448.20
1914	268.20	180.00	448.20
1915	268.20	180.00	448.20
1916	268.20	60.00	328.20
1917	268.20	0.00	268.20
1918	268.20	0.00	268.20
1919	130.55	0.00	130.55
1920	223.80	0.00	223.80
1921	781.63	0.00	781.63
1922	1118.04	0.00	1118.04
1923	1178.38	0.00	1178.38
1924	2085.82	0.00	2085.82
1925	2833.39	0.00	2833.39
1926	5351.35	0.00	5351.35
1927	4819.73	0.00	4819.73
1928	5481.50	0.00	5481.50
1929	6137.02	0.00	6137.02
1930	6191.42	0.00	6191.42
1931	5531.30	0.00	5531.30
1932	3327.09	0.00	3327.09
1933	2528.04	0.00	2528.04
1934	2309.43	0.00	2309.43
1935	1930.54	0.00	1930.54
1936	<u>1902.72</u>	<u>0.00</u>	<u>1902.72</u>
	\$ 56120.10	\$ 900.00	\$ 57020.10

There was one death in the Furnace Department roll during the year:

<u>Pension No</u>	<u>Name</u>	<u>Date Pensioned</u>	<u>Date Died</u>
7	Louis DeVet	12- 1-1923	12-13-1936

PENSION DEPT.      ANNUAL REPORT      YEAR 1936.

23.

a. PENSION SYSTEM (Continued)

REPUBLIC MINE

No new pensioners were added to the pay-roll during the year.

There are twelve pensioners on the roll, the average annual pension being \$297.55.

The payments made from October 1, 1920 to December 31, 1936, follow:

1920	278.61
1921	3427.97
1922	5672.84
1923	6641.51
1924	8172.96
1925	8279.07
1926	9539.90
1927	12185.24
1928	12768.21
1929	14199.74
1930	13148.40
1931	11809.51
1932	7673.30
1933	4908.04
1934	4400.52
1935	4160.52
1936	<u>4031.36</u>

\$ 131397.71

There were two deaths of Republic Mine pensioners during the year:

Pension No.	Name	Date Pensioned	Date Died
8	Alphonse Veunn	6- 1-1921	7- 4-1936
20	Frank Pascoe	12- 1-1923	11-27-1936

LAND DEPARTMENT.

Erick Johnson continued on the pension roll during the year.

Total pension payments from January 1, 1927 to December 31, 1936, are as follows:

1927	333.36
1928	333.36
1929	333.36
1930	333.36
1931	333.36
1932	250.08
1933	240.00
1934	240.00
1935	240.00
1936	<u>240.00</u>

\$ 2876.88

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

23.

b. Republic Mine Funds.

In the report for 1930 will be found a full statement of the Sick Benefit Relief and Fatal Accident Funds.

When the balance remaining unpaid was turned over to the Marquette Chapter of the American Red Cross a small amount was retained to take care of outstanding checks and within a few years this balance can be safely turned over to the Red Cross if no further payments are called for.

It is probably best to keep these funds intact in these small savings accounts for some time longer to make sure that there can be no question as to the payment to any people to whom the money rightfully belongs.

The funds turned over to the Red Cross were to be used for emergency relief and in accordance with this understanding some use has already been made of the funds. A new boiler was put in the hospital and for a time the school furnished the fuel and Dr. Van Riper made examinations of the school children at the hospital. Later the School Board was short of funds and during 1936 coal was furnished from the funds in the hands of the Red Cross.

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

23.

b. REPUBLIC MINE FUNDS (Continued)

Republic Mine Relief and Sick Benefit Fund.

Miners' National Bank:

Amount on Deposit Dec. 31, 1933		\$ 58.83
Distribution 1934      60%	35.30	
Distribution 1934      20%	11.77	
Distribution 1935      12½%	<u>7.35</u>	54.42
Balance on old bank Dec. 31, 1935		<u>4.41</u>
Distribution 1936      7½%		<u>4.41</u>
Balance in old bank Dec. 31, 1936		0.00

Miners' First National Bank:

January 15th, 1934      60%	35.30	
Interest for 1934		.79
Distribution 1934      20%		11.77
Interest for 1935		1.12
Distribution 1935      12½%		<u>7.35</u>
Balance Dec. 31, 1935		56.33
Distribution 1936      7½%		4.41
Interest for 1936		1.17
Balance December 31, 1936		<u>\$ 61.91</u>

Republic Mine Fatal Accident Fund.

Miners' National Bank:

Amount on Deposit December 31, 1933		169.32
Distribution 1934      60%	101.59	
Distribution 1934      20%	33.86	
Distribution 1935      12½%	<u>21.17</u>	156.62
Balance in old bank Dec. 31, 1935		<u>12.70</u>
Distribution 1936      7½%		<u>12.70</u>
Balance in old bank Dec. 31, 1936		0.00

Miners' First National Bank:

January 15th, 1934      60%	101.59	
Interest for 1934		2.28
Distribution 1934      20%		33.86
Interest for 1935		3.24
Distribution 1935      12½%		<u>21.17</u>
		162.14
Less check No. 370 paid in 1935		2.22
Balance on hand December 31, 1935		<u>159.92</u>
Distribution 1936      7½%		12.70
Interest for 1936		3.36
Balance on hand December 31, 1936		<u>\$ 175.98</u>

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

23.

c. Suspense Funds.

In the 1918 Annual Report there is a complete statement of the payments made from the Suspense Funds from September 1st, 1912, at which time the Compensation Law in Michigan went into effect. The Funds were exhausted and report is made here from year to year so that it can always be readily determined where to look for the final report of the Suspense Funds.

d. Visiting Nurses.

The work of the visiting nurses has continued throughout the year and their services have been of very great help.

This work was begun in Ishpeming on May 1, 1908, at Negaunee on September 1, 1912. It began at Gwinn on September 1, 1910 and was continued until October 1, 1927, when the mines were closed.

The following nurses were employed during the year:

Ishpeming	-	Miss Myrtle Welander.
Negaunee	-	Miss Ina E. Atkin.
Iron River	-	Miss Laura N. Fisk,
		(Who is employed jointly with other companies).



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23.

d. Visiting Nurses.

The following is the report of the Ishpeming Visiting Nurse for the year 1936:

Total number of patients cared for during year	712
Number of new cases cared for during year	290
Total number of visits to patients	4756
Number of families visited for the first time	53
Number of social calls	13
Number died	7

## Classification of new cases for the year:

Number of adults	163	Male	18	Female	145
Number of children	127	Male	57	Female	70

## Nationalities of new cases for the year:

American	215	Italian	16
English	12	Norwegian	1
Finnish	24	Swedish	13
French	9		

## Diseases and number of new cases:

Asthma	3	Gall Bladder	2	Phlebitis	1
Baby Welfare	8	Gall Stones	1	Pneumonia	4
Bowel Trouble	9	Gastritis	2	Post Operative	26
Bronchitis	10	Heart Trouble	8	Prenatal	26
Burns	4	Infants, Newborn	21	Rheumatism	7
Carcinoma	1	Infections	23	Scarlet Fever	1
Cervical Adenitis	2	Influenza	1	Sore Eyes	1
Cold	26	Injury	20	Stomach Trouble	9
Colitis	1	Jaundice	2	Thrombosis	1
Cystitis	1	Mastoditis	2	Tonsilitis	3
Diabetic	2	Mumps	2	Typhoid Fever	1
Dysentery	3	Neuritis	1	Unclassified	7
Fracture	4	Obstetrical	7	Undiagnosed	20
Frost Bites	1	Otitis Media	5	Var. Ulcer	6

Helped Dr. Erickson with 612 Typhoid inoculations at North Lake.

Visiting Nurse: Miss Myrtle Welander.

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23.

d. Visiting Nurses (Continued)

The following is the report of the Negaunee Visiting Nurse for the year 1936:

Total number of patients cared for during year					953
Number of new cases cared for during year					548
Total number of visits to patients					4560
Number of families visited for the first time					16
Number of families investigated	5	Number of investigation calls			19
Number of families helped	5	Provisions	5		
Number of social calls					747
Number died					6

## Classification of new cases for the year:

Number of adults	307	Male	83	Female	224
Number of children	241	Male	117	Female	124

## Nationalities of new cases for the year:

American	253	Italian		51
English	17	Norwegian		1
Finnish	196	Swedish		22
French	8			

## Diseases and number of new cases:

Aenemia	5	Goitre	1	Pin Worms	1
Apoplexy	1	Grippe	23	Pleurisy	2
Appendicitis	31	Heart Trouble	6	Pneumonia	11
Asthma	4	Heat Stroke	1	Poisoning	4
Bowel Trouble	16	Herpes	1	Post Operative	86
Bronchitis	17	Infants, Newborn	16	Pregnancy	23
Burns	3	Infections	23	Pul. Tuberculosis	3
Carcinoma	1	Injury	52	Quincy	3
Cervical Adenitis	3	Insanity	2	Rheumatism	11
Chicken Pox	5	Intestinal Flu	8	Rupture	3
Cholecystitis	12	Kidney Trouble	6	Senility	2
Colic	2	Lumbago	2	Sore Eyes	2
Croup	2	Mal-Nutrition	15	Sprains	8
Cystitis	1	Mastoditis	2	Stomach Trouble	9
Diabetes	4	Nephritis	1	Tonsilitis	28
Eczema	3	Obstetrical	22	Unclassified	5
Gastritis	1	Osteomyelitis	1	Undiagnosed	1
Gen. Debility	7	Otitis Media	3	Var. Ulcer	4
				Var. Veins	3

Visiting Nurse: Miss Ina E. Atkin.

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23.  
d. Visiting Nurses (Continued)

NUMBER OF PATIENTS ATTENDED AND CALLS MADE BY VISITING NURSES.

	<u>No. of Patients</u>	<u>No. of New Cases</u>	<u>Male Adult</u>	<u>Female Adult</u>	<u>Male Children</u>	<u>Female Children</u>
Ishpeming	712	290	18	145	57	70
Negaunee	953	548	83	224	117	124
	<u>1665</u>	<u>838</u>	<u>101</u>	<u>369</u>	<u>174</u>	<u>194</u>

	<u>Total No. of Visits</u>	<u>Number Died</u>	<u>Social Calls</u>	<u>Families Visited for the First Time</u>
Ishpeming	4756	7	13	53
Negaunee	4560	6	747	16
	<u>9316</u>	<u>13</u>	<u>760</u>	<u>69</u>

NATIONALITIES OF CASES:

	<u>American</u>	<u>English</u>	<u>Finnish</u>	<u>French</u>
Ishpeming	215	12	24	9
Negaunee	253	17	196	8
	<u>468</u>	<u>29</u>	<u>220</u>	<u>17</u>

	<u>Italian</u>	<u>Norwegian</u>	<u>Swedish</u>
Ishpeming	16	1	13
Negaunee	51	1	22
	<u>67</u>	<u>2</u>	<u>35</u>

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23.

f. North Lake Club.

The work of the Club has continued during the year under the supervision of Mr. Stakel. John A. Peterson has acted as Treasurer and Dewey Urquhart as Superintendent.

The Inland Steel Company has cooperated in its operation and management and the Club is filling a very useful place in the community.

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23.

g. GWINN ASSOCIATION.

Mr. E. L. Miller has continued in charge of the work at the Club House as superintendent.

After our properties shut down a new plan of operation went into effect on October 1, 1927. At this time the Company reduced its salary payments to \$50.00 per month, paying this amount in order to retain control and supervision of the Club.

Those employed at the mines have paid 50 cents per month and the School Board pays a substantial sum for the use of the building for its physical training and the assistance rendered by Mr. Miller in this and the school athletic work.

In November 1932 it was decided to reduce the payment made by the men to 25¢ per month, the Company paying an additional 25 cents.

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23. Gwinn Association (Continued.)  
 g. The following report and summary of the activities of the Association Clubhouse is taken from the records kept daily during the year. The report includes activities taking place in the clubhouse and those that are supervised by other agencies, but where the equipment is furnished by the club, whether taking place indoors or on some location outdoors.

MEMBERSHIP

Number on roll January, 1st, 1936	248
Number on roll January 1st, 1937	237
High membership for year - June	277
Low membership for year - November	233
Average monthly membership	249

No memberships were given this year for services in securing cord wood for fuel, as most of those accepting membership in this manner during the past two years are now employed.

ATTENDANCE.

The estimated attendance at the building showed a slight decrease over the previous year; no doubt due to the fact that the Gwinn district is now served with a Movie Picture Theatre and those desiring this form of entertainment attend. However, the attendance during the winter months continues about the same.

Total estimated attendance at building	67015
Average monthly attendance	5585
High monthly attendance - January	9300
Low monthly attendance - August	2850

The attendance for outdoor activities showed a slight decrease due to the fact that during the month of December the weather was too mild to construct the Ice Skating Rink and also to a falling off in the attendance at Bass Lake Camp, due mainly to the fact that many of the regular visitors could only attend on week-ends, as they are now employed.

The following estimated attendance covers: ice skating rink; 3 playgrounds; tennis and horseshoe pitching courts; baseball and softball leagues for men and boys; supervision of city baseball team and Bass Lake cottage and grounds . . . . . 14,780

SUMMARY - RECEIPTS AND EXPENDITURES

Taken from December Financial Statement

Total receipts including 1935 balance (\$1,239.25)	\$ 5,632.84
Total expenditures 1936	<u>4,244.81</u>
Balance January, 1937	1,388.03

BUFFET - BILLIARDS - BOWLING ACCOUNTS

Receipts for year	642.09
Expenditures for year	<u>259.42</u>
Profit	\$ 382.67

PENSION DEPT.      ANNUAL REPORT      YEAR 1936

23.

g. Gwinn Association (Continued)GENERAL ACTIVITIES AND ORGANIZATIONS USING BUILDING.

- 15 general committee meetings
- 17 meetings - 7 social - 2 dances - Town Club.
- 15 meetings Womens' Study Club.
- 2 High School parties- 1 Hallowe'en - 1 X-mas party- no dancing.
- 14 dancing parties during year by High School students.
- 4 dancing and cribbage parties by Married Folks.
- 28 dancing classes- 20 regular- 8 maypole- High School.
- 2 meetings Sportsmen's Association.
- 1 marriage shower by women.
- 1 meeting by Ex-Service Men.
- 17 night's play in men's cribbage league.
- 3 social dances by young people.
- 3 dances after basket-ball games.
- 2 dances by Girl Scout Troops to raise funds.
- 14 nights play in Women's Bridge League.
- 11 rehearsals by home talent plays and chorus.
- 8 meetings by women- State Health lectures.
- 11 meetings C.C.I.Co., employees- 10 First Aid- 1 insurance.
- 91 lunches or dinners served by different organizations.
- 30 total number of dances held by different organizations during year.
- 178 sessions kindergarten school.

EVENTS OF SPECIAL INTEREST.

- |  |                                       |
|--|---------------------------------------|
| Annual Easter Monday Ball                                  | by Town Club.                         |
| Annual Meeting of Managers                                 | Inter-County Amateur Baseball League. |
| Annual Junior Prom Party                                   | Junior Class High School.             |
| Annual Scout Ceremonial                                    | Local Scout Council and Troops.       |
| Annual Banquet for basketball team                         | Town Club                             |
| Annual Party for Scout Mothers                             | Scout Troops.                         |
| Annual Dance to raise funds for children's Christmas treat | Town Club.                            |
| Annual Hallowe'en Party for entire Junior High School      | Supervision of High School.           |
| Annual Card Party to raise funds for Christmas treat       | Gwinn Ladies Guild.                   |
| Annual Christmas party- for grade students                 | Supervision grade teachers.           |
| Annual Christmas party for children                        | Entire community.                     |
| Annual Firemen's Ball                                      | Local Firemen.                        |

CHURCH ORGANIZATIONS USING BUILDING.

- 7 meetings by Gwinn Ladies Guild.
- 12 meetings by Methodist Ladies Aid.
- 2 rummage sales by Methodist Church.
- 11 meetings by Gwinn Missionary Society.

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23.

g. Gwinn Association (Continued)CHURCH ORGANIZATIONS USING BUILDING (Continued)

- 8 meetings and card parties by St. Anthony's Guild.
- 1 pot-luck supper by Catholic Church.
- 2 parties by Epworth League.
- 1 meeting by Swedish Church Guild.

ASSOCIATION BAND.

The Association Band is still intact, although not holding rehearsals as often as in previous years. However, they will begin holding regular rehearsals for the 1937 summer season about April first. They had

- 18 rehearsals
- 1 out-of-town engagement
- 3 local concerts.

LIBRARY AND READING ROOM.

The Club library is again in fine condition, as all books were re-checked and those needing repairs were given attention during the month of December.

During the year eighty new books were added and twenty-two taken out as beyond repair.

Number of books loaned during the year . . . . . 1308.

The reading room is not used quite as much as when the men were unemployed but the Club continues to receive the better magazines, which are placed on the files and tables.

Weekly magazines . . . . .	5	Daily newspapers . . . . .	2
Monthly magazines . . . . .	20	Weekly newspapers . . . . .	2

SUPERVISED CARD PLAYING LEAGUE.

The cribbage league continues to interest many members. A six-team league consisting of 48 players completed their league schedule April 2nd and the championship team was given a banquet. The league is again organized for the coming season, the play starting in December and will continue until the first week in April.

The ladies are also organized for their bridge tournament, which will be held one afternoon each week until the first week in May.

During the year married couples inaugurated a combination cribbage and dancing parties. The first part of the evening was given over to the playing of cribbage and then dancing is enjoyed in the gymnasium. These affairs usually end with a lunch and those attending enjoy them very much.



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23.

8. Gwinn Association (Continued)BOWLING.

The Senior Men's League consisted of eight three-member teams and they all completed their schedule of 63 games. After the regular league schedule a tournament was held for team, doubles and singles events. The league is underway again this year and two new teams have been added.

The Women's League consisted of four three-member teams and they completed a schedule of 45 games.

As in other years, High School students are given instruction in bowling as part of their physical training program.

High School girls receive instruction in playing billiards.

PHYSICAL AND ATHLETIC DEPARTMENTS.

This includes all work done in the gymnasium and all outdoor recreations, such as- supervising work at school and other playgrounds; baseball league for adults, Junior Boys softball leagues, management of Association baseball team, ice skating rink, tennis and horse-shoe pitching courts, and supervision of Bass Lake cottage and grounds.

Employees of the Association continue to supervise the High School physical training program and to act as coach of their athletic teams. The Association furnishes most of the equipment to carry on the above work and also provides equipment for other activities where supervising work is done by other agencies.

Senior members makes use of the gymnasium facilities for volleyball, handball, and basketball. This year equipment has been purchased for badminton, a fine indoor sport for the winter season.

## Summary of Supervised Work: Gymnasium.

	<u>Periods</u>	<u>Attendance</u>
High School Girls' Classes	148	3206
High School Boys' Classes	170	3750
High School basketball practice	79	891
Junior Boys (Saturday mornings)	13	855
Senior men using gym	34	256
Women's classes	15	128
Total	<u>459</u>	<u>9086</u>

The following basketball games were played under Association supervision:

High School team played 5 games at home - 9 away.

(High School team again won district championship)

Junior League games (including local tournament) 73 games

Senior League- consisting of 4 teams 24 games

Senior League practice sessions 12 games.

Attendance at all home games and practice sessions . . . . . 6000.

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23.

g. Gwinn Association (Continued)TENNIS COURT AND PLAYGROUND.

The tennis court was in condition for play 71 days- attendance at court 600.  
Attendance at playground . . . 1000.      Horse-shoe pitching court . . . .850.

ICE SKATING RINK

On account of the weather being too mild to construct the rink in December this year, two weeks skating was lost. Attendance for January and February 4125.

The Association supplied most of the equipment used at the three play-grounds, where some of the supervision was under WPA workers, but all organization details of forming leagues and the planning of activities was under Association direction.

The Association again sponsored and managed the Inter-County Amateur Baseball League through its ninth successful season. Eight teams from the larger cities and towns in Marquette and Alger counties make up the league. The increase in attendance at all games indicate the popularity of the circuit.

The Association Team entered in the league played 8 games at home and ten away-winning the championship for the third time since the league was organized.

SUMMARY OF PLAYGROUND ACTIVITIES.

Softball	3 league	. . . . .	82 games
Senior hardball league		. . . . .	25 games
Attendance at all home games		. . . . .	7700.

BASS LAKE CAMP

The attendance at the camp grounds decreased somewhat during the season, due mostly to the fact that many of those that were regular visitors in other years are now employed and could only attend during Saturdays or Sundays.

There was an increase in the number of out-of-town people who visited the camp on Sundays bringing their own boats on trailers. Many of these visitors were from Marquette and Escanaba. The men would fish while the women and children would enjoy the bathing.

The Cleveland-Cliffs Iron Company again arranged for a care-taker to look after the grounds, under Association direction.

During the year there were 60 basket picnics

- 3 all-day church picnics
- 1 party of six had use of cottage six days.
- 1 family had use of cottage seven days.
- 2 families had use of cottage 3 days.
- Local Girl Scouts had use of camp 5 days.
- Sunday School Class had use of camp 1 day.
- Local Sportsmen's Association had use of cottage for annual rabbit supper.

Attendance at grounds for season . . . . . 1200.

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23.

g. Gwinn Association (Continued)SCOUT ACTIVITIES

During the year a troop of boy scouts was organized and this will fill a long-felt need. This troop will be brought up to full strength shortly after the first of the year. It is under capable leadership and no doubt they will have an active year.

The two troops of Girl Scouts continue as very successful organizations and a community the size of Gwinn should feel very proud of the fact that enough young girls are interested in scout work to have two active troops.

Troop No. 1 has been organized since 1920 and is usually kept at full strength while Troop No. 2 is made up of the younger girls and is used as a feeder troop for the older organization.

The following summary covers the work of all scout activities- both boys and girls.

Meeting for class and social activities . . . . . 97  
Attendance . . . . . 2162

21 lunches or suppers were held; this includes lunches after meetings indoors, or after hikes outdoors.

2 all-day picnics at lake or park.

13 hikes.

11 meetings outdoors.

2 skating parties.

1 Christmas party for pre-school children.

6 social parties.

3 dances.

1 Valentine Party.

1 Hallowe'en party.

1 annual mothers' party.

1 annual ceremonial service - awarding of merit badges.

26 scouts spent five days at Bass Lake Camp.

Scouts raise funds locally for their needs under the direction of the local council. The local council continue to assist in an advisory capacity and are to be complimented on the work of the scout activities in this district.

BUILDING.

During the year the Association received financial assistance or service from the Cliffs Power & Light Company, The Cleveland-Cliffs Iron Company, and the Local Board of Education. Those in charge realize that without this assistance the Club would be unable to operate and the members of the Association express appreciation for this assistance.

The building was again put in good condition during the summer months, all floors being re-varnished and waxed, and some re-decorating done. The club kitchen was re-modelled and new dishes, silverware, and stove purchased. Equipment was secured to keep all activities functioning and during the summer much time was spent on conditioning the grounds. During the coming year it will be necessary to overhaul some of the plumbing as indications are that some is in bad shape.

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23.

g. Gwinn Association. (Continued)

On hand January 1, 1936	\$ 1,239.25
Total Receipts	<u>4,393.59</u>
Total	5,632.84
Total Expenditures	<u>4,244.81</u>
Balance	1,388.03

Receipts

Membership fees-Men	1,191.50
Rent	2,505.00
Bowling Alley	245.00
Pool and Billiards	205.00
Buffet	192.09
Towels and soap	17.00
Camp	25.00
Telephone	13.00
	<u>\$4,393.59</u>

Expenditures.

Building, maintenance	141.39
Equipment	42.77
Lighting	18.33
Heating	358.56
Water	14.40
Bowling alleys	122.02
Pool and Billiards	11.87
Buffet	125.53
Stationery and Printing	10.00
Entertainments	14.44
Towels and soap	8.50
Office Expense	18.93
Camp	9.31
Salaries	3,070.00
Library	31.10
Reading Room	23.50
Athletics	143.02
Music	21.29
Telephone	59.85
	<u>\$4,244.81</u>

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23.

h. ISHPEMING Y.M.C.A.

The building was closed on October 31, 1935, and has remained closed ever since, except that some relief workers occupied the building making garments for a short time, and at another time a prospecting party from Canada, looking for gold north of Ishpeming, occupied the building.

During the latter part of the year there was some consideration given to the matter of handling the building as a community enterprise and the city officials have the matter in mind at the end of the year.

Arrangements were made with the Boy Scouts of the County to assume the responsibility of the Ross Lake Camp and a deal was made with them for the property. The understanding was that the boys and girls of Ishpeming should have the use of the facilities there as required during the summer for camp activities.

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23.

i. Safety Work.

Meetings of the Central Safety Committee were held when necessary throughout the year.

The following are the present members of the Committee:

Mr. G. R. Jackson,      Chairman.  
Mr. S. R. Elliott  
Mr. O. D. McClure  
Mr. C. J. Stakel  
Mr. W. W. Graff  
Mr. H. O. Moulton  
Mr. C. W. Allen  
Mr. Carl Brewer  
Mr. William Conibear  
Mr. W. H. Moulton,      Secretary.

The regular work of the Safety Department is covered by Mr. Conibear's report.

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23.

j. HOSPITALS AND MEDICAL SERVICE.

Throughout the year this Department has kept in touch with the hospitals in Ishpeming and Iron River, and the dispensary service at Negaunee and Republic.

ISHPEMING HOSPITAL.

The hospital has maintained its standards of fine service and has continued on the accredited list of the American College of Physicians and Surgeons.

Miss Hildur Swanson has continued in charge as Superintendent, having begun her work as superintendent on July 1, 1930.

The work of the hospital force has been very satisfactory in every way. The operating costs have resulted in a very good showing for the year.

The staff of the Ishpeming Hospital and the Negaunee Dispensary are as follows:

Dr. V. H. Vandeventer,    Chief.  
Dr. J. D. Crane,  
Dr. P. P. Hartt  
Dr. A. W. Erickson  
Dr. W. A. Corcoran  
Dr. D. R. MacIntyre  
Dr. W. A. Mudge  
Miss Hildur Swanson,    Superintendent.

During the year regular meetings of the staff have been held each month with Dr. Vandeventer as Chairman.

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23. j. Hospitals, (Continued)

ISHPEMING HOSPITAL  
STATISTICAL REPORT FOR THE YEAR 1936.

Number of patients remaining in hospital at beginning of year		28
Number of adult patients admitted	936	
Number of child patients admitted	134	
Number of births	<u>184</u>	
Total new patients for the year		1254
Total of all patients for the year		<u>1282</u>
Number of deaths	74	
Number discharged during year	<u>1174</u>	
Total number leaving hospital		<u>1248</u>
Number of patients remaining in hospital Dec. 31, 1936		34
Classification of new cases:		
Surgical	601	
Medical	276	
Obstetrical	193	
New Born	<u>184</u>	
Total		1254
Number of operations		459
Number of emergency room operations		59
Number of patient days		13915
Number of meals for patients	41745	
Number of meals for nurses, Superintendent & Dietitian	19649	
Number of meals for physicians and guests	189	
Number of meals for help	<u>5546</u>	
Total number of meals		67129
Average number of patients per day:		
1919	12.2	
1920	17.6	
1921	15.9	
1922	16.5	
1923	20.1	
1924	20.5	
1925	19.9	
1926	21.3	
1927	21.8	
1928	25.4	
1929	30.1	
1930	31.4	
1931	29.9	
1932	21.8	
1933	19.6	
1934	28.9	
1935	36.0	
1936	38.0	



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23.

j. HOSPITALS, (Continued)

NEGAUNEE HOSPITAL.

The plan of using the former hospital building for the doctors' offices and a dispensary has continued to work out well, all hospital cases being taken to the Ishpeming Hospital.

The work in Negaunee has been taken care of during the year by two physicians, Dr. D.R. MacIntyre and Dr. W.A. Mudge, who have been kept very busy.

REPUBLIC HOSPITAL.

Dr. Van Riper goes to Republic regularly for one hour each day and at such other times as he is called. Dr. Van Riper is exceedingly conscientious in his work and he has done a great deal of work for which there can be no payment, but he receives some payment from the County as Poor Physician which helps to re-imburse him for the work, and some payment for men living in Republic, Champion, and Humboldt, and who work in the mines of our Company and for the Inland Steel Company.

GWINN.

Early in the spring of 1936 it was found that the Gardner-Mackinaw mine would be quite busy throughout the year and it was decided to have our own physician in charge of our work. Arrangements were made with Dr. C.A. Serbst, who had for some time been in charge of a group of C.C. Camps in Wisconsin. Dr. Serbst began his work for us at Gwinn on May first. All hospital cases are brought to the Ishpeming Hospital, and his services and the work at Gwinn has been very satisfactory.

IRON RIVER.

The new hospital has now had five years of service and it has been very satisfactory in all respects.

PAYMENTS TO PHYSICIANS.

For reference purposes the following statement is made:

On August 1, 1927, a new rate of payment for our Company went into effect. The men pay \$1.25 for the medical service for themselves and immediate members of their families, the Company paying 50¢ per man per month to cover medical and hospital services under the provisions of the Workmen's Compensation Law.

The above paragraph is put in each annual report to show the date on which the new rate of payments became effective.

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23.

j. Medical Services (Continued)PHYSICAL EXAMINATION OF EMPLOYEES.

The arrangement with the Trudeau Foundation of Saranac, N.Y. continued throughout the year with very satisfactory results.

The first examination was made on November 28th, 1933, and the examinations have continued with a representative of the Trudeau Foundation at the Ishpeming Hospital for the X-ray examinations. Our examinations were about completed in March and Mr. Libby, the representative of the Trudeau Foundation, was in this region until June, at which time he took his vacation and returned to Saranac. He resumed his work here on October 23rd, 1935.

A new arrangement was entered into in regard to the re-examinations of the men, which began on November 1st, 1935 and continued through the year 1936. On account of the new men who were being taken on it was found necessary to continue the examinations with the help of the Saranac man and Mr. Libby, therefore, stayed on from November 1st until the end of the year, as a part of the new agreement.

The following examinations have been made up to December 31st, 1936 -

Cleveland-Cliffs Iron Co.,	2537
Cliffs Power & Light Co.,	42
Athens Mine	459
Negaunee Mine	588
Inland Steel Co.,	676
Pickands, Mather Co.,	72
Richmond Iron Co.,	37
Republic Steel Co.,	313
Calumet & Hecla Co.,	19
North Range Mining Co.,	<u>213</u>
Total	4956

Mr. D. E. Cummings who was constantly at work and was going from one district to another, became used up and it was necessary for him to take a rest and to save him being connected directly with the Saranac Institution where he would have this work in mind all the time he was sent to a sanatorium at Englewood, just outside of Denver, Colorado. This was early in February of 1936 and he has remained there through out the year and has improved to a considerable degree, and it is expected that by June he will be able to leave the sanatorium and take up some of his work.

During the year we have had a visit from Dr. L. U. Gardner and Dr. H. L. Sampson and later on in the year we had another visit from Dr. Gardner.

The films of each case are sent to Saranac where they are studied by Dr. Sampson, who then reports his findings to us. These reports are gone over by us with Mr. Libby, and the superintendents at the different mines are advised

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j. Medical Services (Continued)PHYSICAL EXAMINATION OF EMPLOYEES (Continued)

of the condition of any man requiring further consideration or examination.

The work has been very satisfactory and the examinations so thorough that the Company and the men themselves are bound to be greatly benefitted by the knowledge thus obtained.

k. Health.

All of our cities have been free from any serious epidemic or general illness until late in the year at which time there was a great deal of "flu" accompanied with many cases of pneumonia. This has continued through December without any let-up, but at the time of writing this report there were indications that this was lessening.

The Health Officers of our three cities have been very active and the work done by them throughout the year has been very satisfactory.

Following the organization of the new City Council in April Dr. N.J. McCann was appointed city Health Officer in place of Dr. J. P. Bertucci. His work during the year has been very satisfactory.

The Health Officers are

Ishpeming -	Dr. N. J. McCann
Negaunee -	Dr. W. A. Mudge
Marquette -	Dr. C. P. Drury.

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1. RED CROSS.

There was no change in officers in 1936, the officers remaining the same as were elected in October 1934.

Chairman:            T. M. Redmond  
 Vice-Chairmen:  
   Marquette-        E. L. Pearce  
                       Miss Elba L. Morse

  Negaunee:         G. Sherman Collins  
                       Michael F. DeFant

  Ishpeming:        R. J. Cheneour  
                       G. R. Jackson

Secretary:          John Walsh  
 Treasurer:          Edward S. Bice

Directors for Three Years

Walter F. Gries	Marquette
R. S. Archibald	Negaunee
J. E. Hayden	Ishpeming
Dr. Paul Van Riper	Champion
H. E. Perkins	Big Bay

Directors for Two Years

Webster Pearce	Marquette
W. W. Graff	Negaunee
George Quinnell	Marquette
Miss Stella Fuller	Morgan Heights
C. J. Stakel	North Lake

Directors for One Year.

Peter Trudell	Negaunee
Mrs. Kiril Rosberg	Ishpeming
Dr. J.E. Elzinga	Marquette
Sam Cohodas	Ishpeming
R. J. Jeffrey	Gwinn

Mrs. A. L. Johnson has continued as County Nurse under the direction of the Nursing Activities Committee of the Red Cross. Her salary and expenses are paid by the County, the Committee directing her work by request of the County Board of Supervisors.

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1. Red Cross. (Continued)

Report of Nurse  
Marquette County Chapter  
American Red Cross

School Examinations

Number of schools in County	33
Number of schools examined	33
Number of children	1933

Number of Children Found with Defects:

Eyes	105
Teeth	1763
Tonsils	195
Ears	4
Orthopedic Defects	<u>3</u>
	2070

Number of Corrections made by Parents:

Eyes	2
Teeth	4
Tonsils	<u>2</u>
	8

Number of Days Spent at Clinics.

Preschool & Infant	2
Psychiatric	4
Chest	1
Eyes	<u>6</u>
	13

Children Cared for at Summer Dental Clinic

Number of Children	735
Number of Extractions	823
Number of Fillings	858

No. Children having glasses from Children's Fund      39

Number of Children and Adults taken to  
Hospitals, Schools, and Health Camp.

Orthopedic cases adult & children to hospitals	49
Children to Deaf School - Flint	7
Children to Blind School - Lansing	2
Michigan Children's Clinic - Marquette	56
Children to Nutrition Camp - Big Bay	4
Children to Morgan Heights	3
Children to Ann Arbor	1
Adult to County Infirmary	<u>1</u>
	123

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1. Red Cross (Continued)Report of Nurse (Continued)Investigations Made.

For County	130
Home Calls	958
Red Cross	<u>2</u>
	1090

Meetings Attended

District Nurses Meetings	11
Social Workers Conference	2
Teacher's Conference	1
Red Cross	2
Achievement Day	1
State Supervisor of Nurses	1
County Educational	2
Dental & Medical	<u>2</u>
	22

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m. RELIEF WORK.

Help has been extended to certain families who have been in special need, through sickness or death, or special disability.

Following is a list of the assistance rendered.

	<u>Ishpeming</u>	<u>Negaunee</u>	<u>Republic</u>	<u>Gwinn</u>	<u>Total</u>
January	218.93	261.20	19.23	59.69	659.05
February	276.97	159.74	38.99	88.59	565.29
March	286.28	168.70	18.57	42.46	516.01
April	437.99	130.01	32.22	81.69	681.91
May	254.05	74.25	21.05	51.34	400.69
June	360.53	75.35	19.60	40.46	495.94
July	381.03	59.72	177.41	63.09	681.25
August	252.96	92.49	34.91	51.94	432.30
September	269.38	60.70	27.54	52.04	409.66
October	264.95	75.51	28.81	63.41	432.68
November	295.41	103.45	50.65	89.46	538.97
December	<u>285.95</u>	<u>82.60</u>	<u>41.09</u>	<u>156.53</u>	<u>566.17</u>
	3648.43	1343.72	510.07	840.70	6378.92

No. of families assisted	31	15	3	5	54
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Average amount of relief per family . . . . . \$ 118.13

n. EMPLOYMENT.

The records of employment are kept in this Department, although from lack of clerical assistance the records are not now up to date. These will be gone over and corrected as opportunity permits.

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o. INCAPACITATED EMPLOYEES.

During the year payments have continued to certain men whose years of service to not bring them within the provisions of the pension system. These men are those who have become incapacitated after a considerable period of service, and some with very large families, and who have been injured while in our employment.

Some widows of men who lost their lives in previous years are included in this list.

The following is a statement of the families to whom these donations have been made:

DONATIONS TO INCAPACITATED EMPLOYEES.

	<u>Monthly Rate</u> <u>for 1936</u>	<u>Total Amount Paid</u> <u>during 1936</u>	
Fred Fredette	20.00	240.00	
Sam Metherell	14.40	172.80	
August Samuelson	20.00	240.00	
John Aho	14.40	172.80	
Bennett Andrew	16.00	192.00	
Andrew Niemi	16.60	199.20	
Edmond Durante	20.00	240.00	
August Walline	20.00	240.00	
Axel Erickson	20.00	240.00	
Edward Van Langenhoven	20.00	240.00	
Nick Detoma	18.00	216.00	
Edwin J. Goodman	20.00	240.00	
Henry Maki	20.00	240.00	
Donato Valenzio	20.00	240.00	
William Anderson	20.00	240.00	
Fred Carlson	16.00	192.00	
Joseph Thomas	75.00	900.00	
J. H. Tregoning	100.00	700.00	Began June 1, 1936.
A. J. Yungbluth	100.00	200.00	Began Nov. 1, 1936.
Total		\$ 5344.80	

HOLMES MINE DONATIONS.

Peter Lesage	20.00	240.00
Carl Jarvinen	16.99	203.88
Bernt Wiggen	20.00	240.00
Martin Troidson	20.00	240.00
Evan Kinnish	20.00	240.00
		\$ 1163.88



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o. INCAPACITATED EMPLOYEES      (Continued)

DONATIONS TO WIDOWS.

	<u>Monthly Rate for Year 1936</u>	<u>Total amount Paid during 1936</u>
Mrs. John Makela	20.00	240.00
Mrs. Wilhelmina Marjamaa	12.00	144.00
Mrs. Mathilda Carlson	12.00	<u>144.00</u>
		\$ 528.00

Amount of Donations paid to Incapacitated Employees during 1936	\$ 5344.88
Amount of Donations paid to Incapacitated Holmes Mine Employees	1163.88
Amount of Donations paid to Widows during 1936	<u>528.00</u>
Total Donations . . . . .	\$ 7036.76

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p. COST OF LIVING.

We have continued to send out report blanks on the 15th of each month to various stores in our different communities upon which are reported the prices of the different commodities considered by the United States Government in computing the cost of living.

This serves to advise the storekeepers that we are keeping track of the prices which they are charging, which we believe has served in some measure to keep the prices in our various stores at a somewhat reasonable figure.

We have made one complete calculation of Cost of Living, this being on December 15, 1935.

The following tabulation shows comparison with previous years based on a family of five.

June 1913	\$ 692.56
June 1914	706.17
June 1917	1006.79
June 1920	1408.65
June 1921	1054.28
June 1924	1015.83
Dec. 1925	1049.16
Oct. 1931	910.82
Dec. 1932	752.52
Dec. 1933	757.89
Dec. 1934	801.94
Dec. 1935	870.82
Dec. 1936	874.90

The Government reports show that the index number for the cost of living in November 1936 as compared with 1914 is 138.29. This compares with 130.49 for November 1934.

From our own calculations from the prices furnished to us by the storekeepers here the cost of living in Ishpeming is lower than it is in some other places.

Our index figure for the cost of living in Ishpeming in November 1936 as compared with 1914 is 123.89.

The value of \$1.00 as compared with 1914 by the U. S. Tables in November 1936 was 72.25. Our living costs in Ishpeming for November 1936 give us the value of \$1.00 as compared with 1914 as 80.72.

q. IMPROVEMENT WORK.

Mr. Payen returned to Ishpeming in July and looked after our work at the different properties throughout the remainder of the season. No new work was undertaken but the different locations were brought in good shape with his assistance. The superintendents had looked after the work themselves during the time Mr. Payen was away from Ishpeming, and all properties were kept in good order under their supervision.

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r. PRIZE PREMISES

No prizes were offered for the season of 1936 but the home owners and occupants continued to interest themselves in good home conditions and the grounds of the Ishpeming homes showed their usual excellence.

In Munising the interest in the improvement of home grounds continued and prizes were offered for the season of 1936.

There were entries from all parts of the town and the improvement made during the last few years was very marked.

We assisted the Committee and the judges during the season.

s. COMMUNITY SERVICE WORK.

The Y.M.C.A. and Legion buildings served the city as a meeting place for civic activities, and these were supplemented by the High School auditorium and gymnasium and with frequent meetings at the Mather Inn.

t. CLUBS.

There have been no general meetings of the regular clubs during the year but meetings have been held of the different groups from the mines for the consideration of mine matters.

u. OUT-DOOR SPORTS.

The Department helped with the Ski Tournament held in Ishpeming on February 22nd.

The hill has been improved and the grounds arranged for the better parking of cars, the Ski Club being assisted by WPA work. The Association of the business men became interested, largely through the efforts of the Mather Inn, for a winter carnival to be held during the week of the ski tournament in February 1936, and this worked out very satisfactorily, both in regard to the ski tournament, and the general ski riding, bob-sledding, skating, etc., There were a great many out-of-town visitors during this week.

The Association, in connection with the Upper Peninsula Development Bureau, and the Chicago and Northwestern Railroad, has been at work arranging for week-end excursions from Chicago and Milwaukee and before the end of December a good many people had already come to Ishpeming. It is expected with the increase in snow there will be a great many visitors throughout the remainder of the winter.

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w. VARIOUS DEPARTMENTS.

Throughout the year we have co-operated with the different Departments, principally with accident cases and Workmen's Compensation, and with safety matters.

The Welfare and Compensation statements for the Land and Railroad Departments are on the following sheets.

In view of the change in the operation of the Furnace Department, to the Cliffs Dow Chemical Company, no report of that department is now attached.

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w. VARIOUS DEPARTMENTS (Continued)

LAKE SUPERIOR & ISHPEMING RAILROAD CO.,

COMPARATIVE STATEMENT OF GENERAL WELFARE EXPENSE.

YEARS 1933 to 1936, INCLUSIVE.

<u>Donations:</u>	<u>1933</u>	<u>1934</u>	<u>1935</u>	<u>1936</u>
Fire Department	25.00	25.00	25.00	25.00
Visiting Nurse- Marquette	120.00	120.00	120.00	120.00
To employees and families	203.40	20.00	140.00	769.25
Boy and Girl Scouts- Munising	- -	- -	- -	25.00
St. Luke's Hospital	<u>400.00</u>	<u>400.00</u>	<u>200.00</u>	<u>- -</u>
	\$ 748.40	565.00	485.00	939.25
<u>Pensions</u>	<u>2207.88</u>	<u>3479.28</u>	<u>3443.28</u>	<u>3998.40</u>
Total	\$ 2956.28	4044.28	3928.28	4937.65
<u>Compensation</u>				
Compensation Paid	\$ 2548.30	2938.18	990.00	1034.00
Medical Expense	763.05	251.94	317.16	541.11
Percentage of Payrolls				
Acct. Comp. Payments	.0049	.0052	.0015	.0014

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w. Various Departments.

LAND DEPARTMENT

COMPARATIVE STATEMENT OF GENERAL WELFARE EXPENSE

FOR THE YEARS 1933 to 1936, INCLUSIVE.

<u>General Welfare Acct. No. 11.</u>	<u>1933</u>	<u>1934</u>	<u>1935</u>	<u>1936</u>
A-2 Prop. Charged by Treas.	323.01	540.50	677.60	500.00
11-F Miscellaneous Expense	246.51	240.00	240.00	240.00
	<u>569.52</u>	<u>780.00</u>	<u>917.60</u>	<u>740.00</u>
 <u>Donations</u>				
Negaunee Fire Department				7.50
Munising Fire Department	10.00	10.00	10.00	10.00
U.P. Development Bureau	500.00	500.00	500.00	500.00
Christmas Presents to School				
Children - Logging Operations	28.18	22.23	19.82	
	<u>538.18</u>	<u>532.23</u>	<u>529.82</u>	<u>517.50</u>
 <u>Compensation</u>				
a. Funeral Expense				
d. Legal Expense				
g. Medical Expense				
h. Compensation				
i. Monthly Payments to Doctors	86.00	95.50	101.50	100.50
 <u>Safety Work - Logging Operations</u>				
Supplies	23.27	14.56	33.62	11.72
 <u>Compensation - Logging Operations.</u>				
Medical & Hospital	4103.12	5147.41	4626.05	6206.50
Compensation Payments	5620.88	4660.84	7831.50	8914.40
Compensation Insurance Premium	7116.76	4916.77	- -	- -
Percentage of Pay-Roll	.0891	.04987	.0398	.0446

