

THE CLIFFS POWER & LIGHT CO.
ANNUAL REPORT
YEAR 1950

SUBSTATION TRANSFORMERS:

Substation transformers installed as of December 31, 1950.

<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	6	500	3,000	
Seney "	1	1	25	25	
Inland #1 "	1	3	500	1 500	
Inland #2 "	1	3	667	<u>2 001</u>	6,526 KVA
<u>2300/66,000 Volts</u>					
AuTrain Substation	1	3	333-1/3	<u>1 000</u>	1 000
<u>33,000/66,000 Volts</u>					
Gwinn Substation	1	3	1 250	<u>3 750</u>	3 750
<u>33,000/6600 Volts</u>					
Princeton Substation	1	1	37.5	<u>37.5</u>	37.5
<u>33,000/2300 Volts</u>					
Cliffs Shaft Substation	1	3	590	1 770	
Gwinn (old) "	1	3	75	225	
Morris-Lloyd "	1	3	590	1 770	
Cambria-Jackson "	1	3	400	1 200	
Mather "B" Shaft "	3	1	5 000	5 000	
Maas "	1	3	1 250	3 750	
Brownstone "	1	3	625	1 875	
Volunteer "	1	1	625	625	
" " "	1	1	400	400	
Greenwood "	1	2	400	800	
Princeton "	1	1	25	25	
Tilden "	1	3	150	450	
Palmer Rural " (3 subs.)	1	4	15	60	
Negaunee-Athens "	1	3	1 000	3 000	
Mather "A" Shaft "	3	1	5 000	5 000	
Champion Mine "	3	1	1 250	<u>1 250</u>	27 200
<u>2300/33,000 Volts</u>					
Republic Substation	1	3	250	750	
Hoist Plant "	3	1	2 500	2 500	
" " "	1	3	667	2 000	
" " "	1	3	200	600	
Escanaba Plant Substation	1	3	500	1 500	
McClure Plant "	3	2	5 000	10 000	
Carp Plant "	1	3	1 900	5 700	
Diesel Plant "	3	1	5 000	5 000	
" " "	1	3	2 000	6 000	
Steam Plant "	3	1	10 000	<u>10 000</u>	44 050
<u>12,000/2300 Volts</u>					
Green School	1	1	15	15	
McClure Plant (Furnace Line)	3	1	1 250	1 250	
Inland #1	3	1	1 250	1 250	
AuTrain Substation	1	3	185	555	
Chatham "	1	3	50	150	
Eben "	1	1	25	25	
Rumley "	1	1	25	<u>25</u>	3 270

THE CLIFFS POWER & LIGHT CO.
ANNUAL REPORT
YEAR 1950

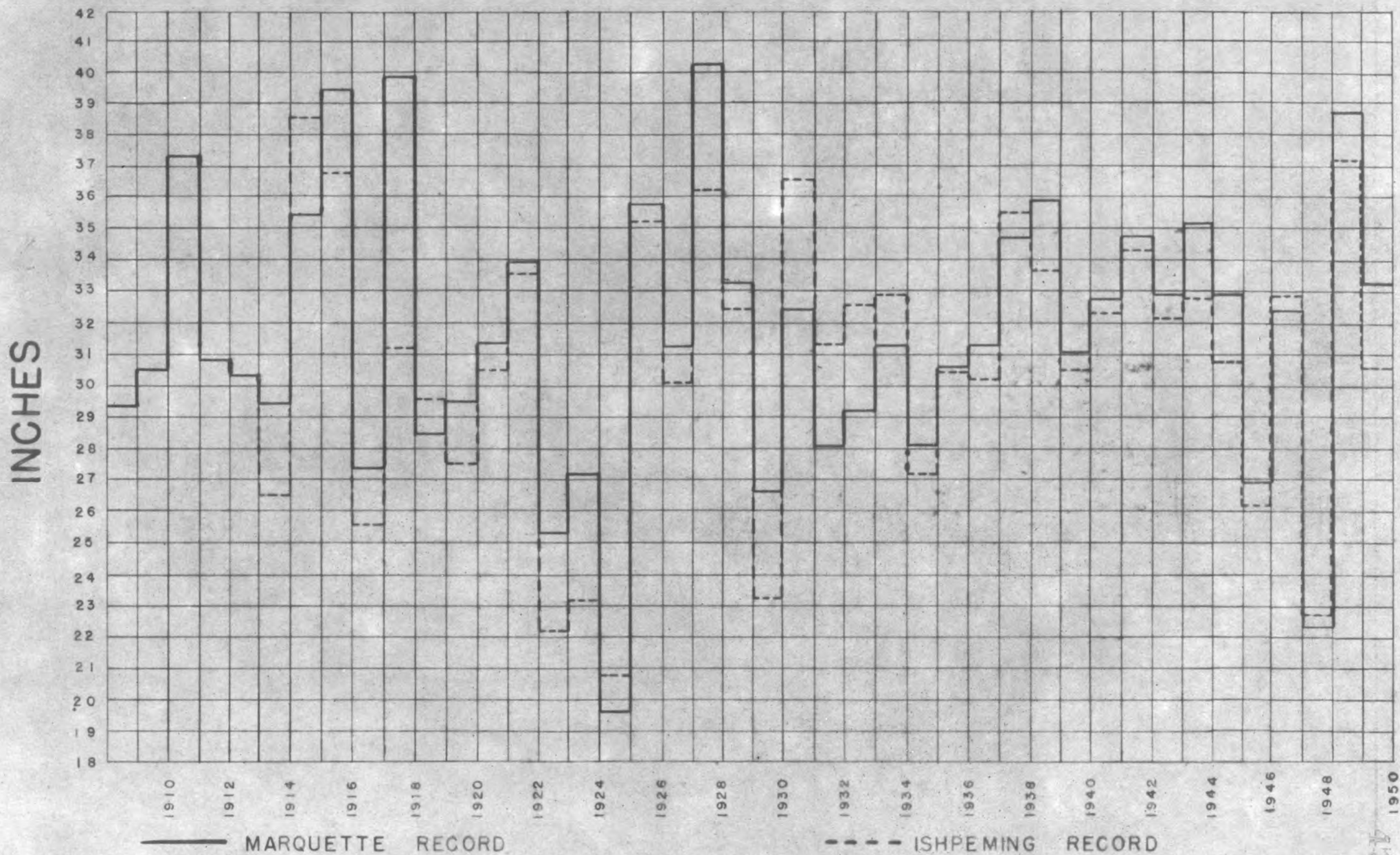
SUBSTATION TRANSFORMERS: (Continued)

	<u>Phase</u>	<u>No.</u>	<u>K.V.A.</u>	<u>Brought Fwd.</u>	<u>85,833.5</u>
<u>12,000/440 Volts</u>				<u>Total K.V.A.</u>	
Piqua Substation	1	3	500	<u>1,500</u>	1 500
<u>6600/2300 Volts</u>					
Rumley Substation	1	1	15	15	
Inland #1 "	1	2	75	150	
Blaney Park Substation	1	2	25	50	
" " "	1	1	15	15	
Sundell "	1	1	15	15	
Gwinn (old) "	1	1	185	185	
Little Lake "	1	1	50	50	
AuTrain Lake "	1	1	50	50	
Princeton "	1	1	50	<u>50</u>	580
<u>6600/115-230 Volts</u>					
Furnace Substation (Lighting)	1	1	1.5	<u>1.5</u>	1.5
<u>4160/480 Volts</u>					
Steam Plant Substation	1	3	200	<u>600</u>	600
<u>2300/460-230 Volts</u>					
Interstate Lab. Substation	1	3	100	300	
Lake Angeline Pumps	1	3	50	<u>150</u>	450
<u>2300/120-240 Volts</u>					
C. C. I. Co. Research Lab. Sub.	1	3	50	150	
Pelletizing Plant	1	2	15	30	
" " "	1	1	10	<u>10</u>	190
<u>480/120-240 Volts</u>					
Steam Plant Lighting	1	1	50	<u>50</u>	<u>50</u>
Grand Total					89,205 KVA

DISTRIBUTION TRANSFORMERS:

	<u>Number</u>	<u>Capacity</u>
Total at first of year	660	4,135.5 KVA
" purchased during year	52	220
" installed " "	47	261.5
" sold " "	23	178
" at close of year	689	4 177.5 KVA
In stock at close of year	93	531 KVA
" service at " " "	558	3 267.5
C.P.&L.Co. Plants & Auxiliaries	<u>38</u>	<u>379</u>
	689	4,177.5 KVA

PRECIPITATION BY YEARS



241

40000 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950

KILOWATTS

35000
30000
25000
20000
15000
10000
5000
0

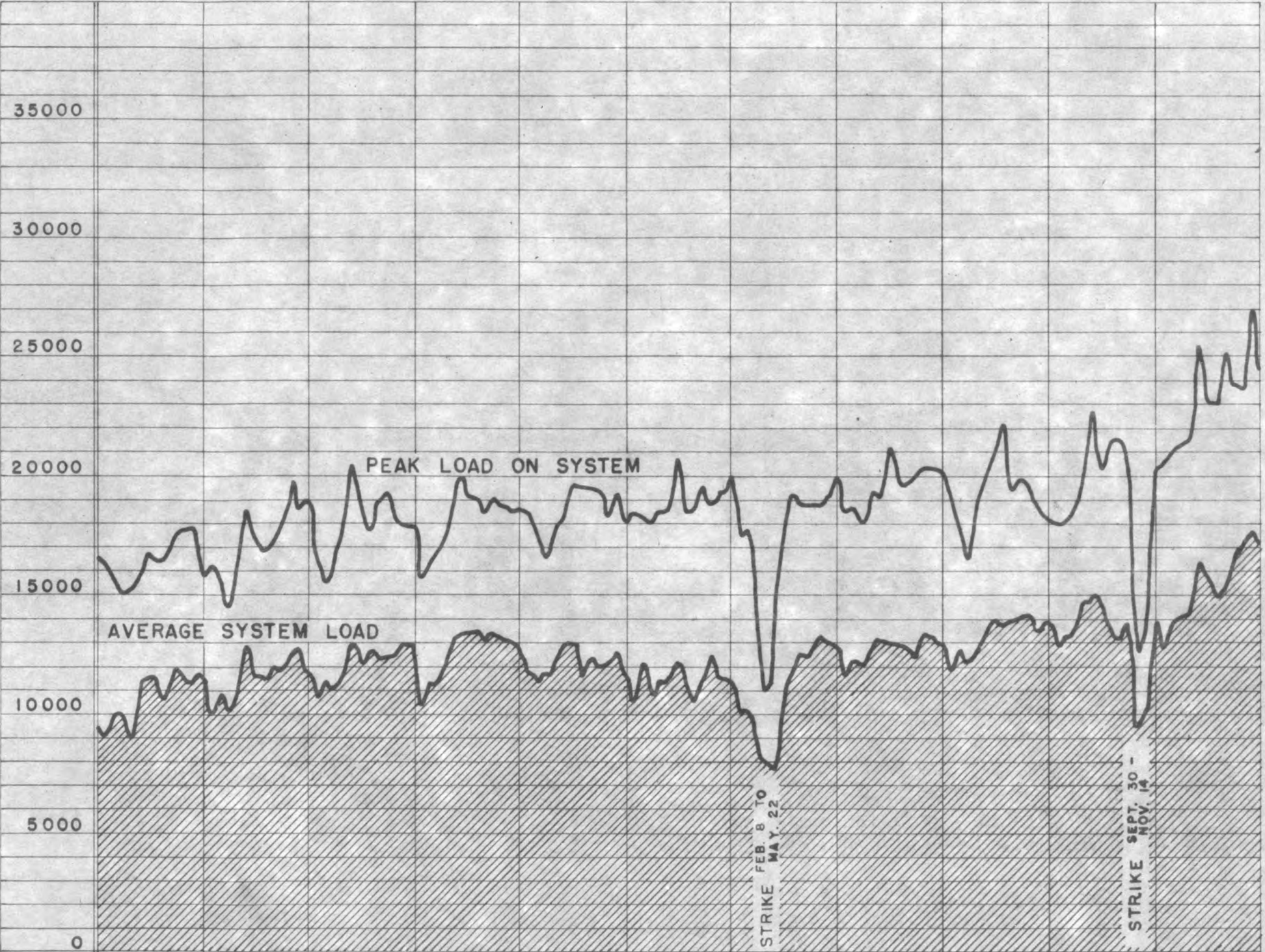
PEAK LOAD ON SYSTEM

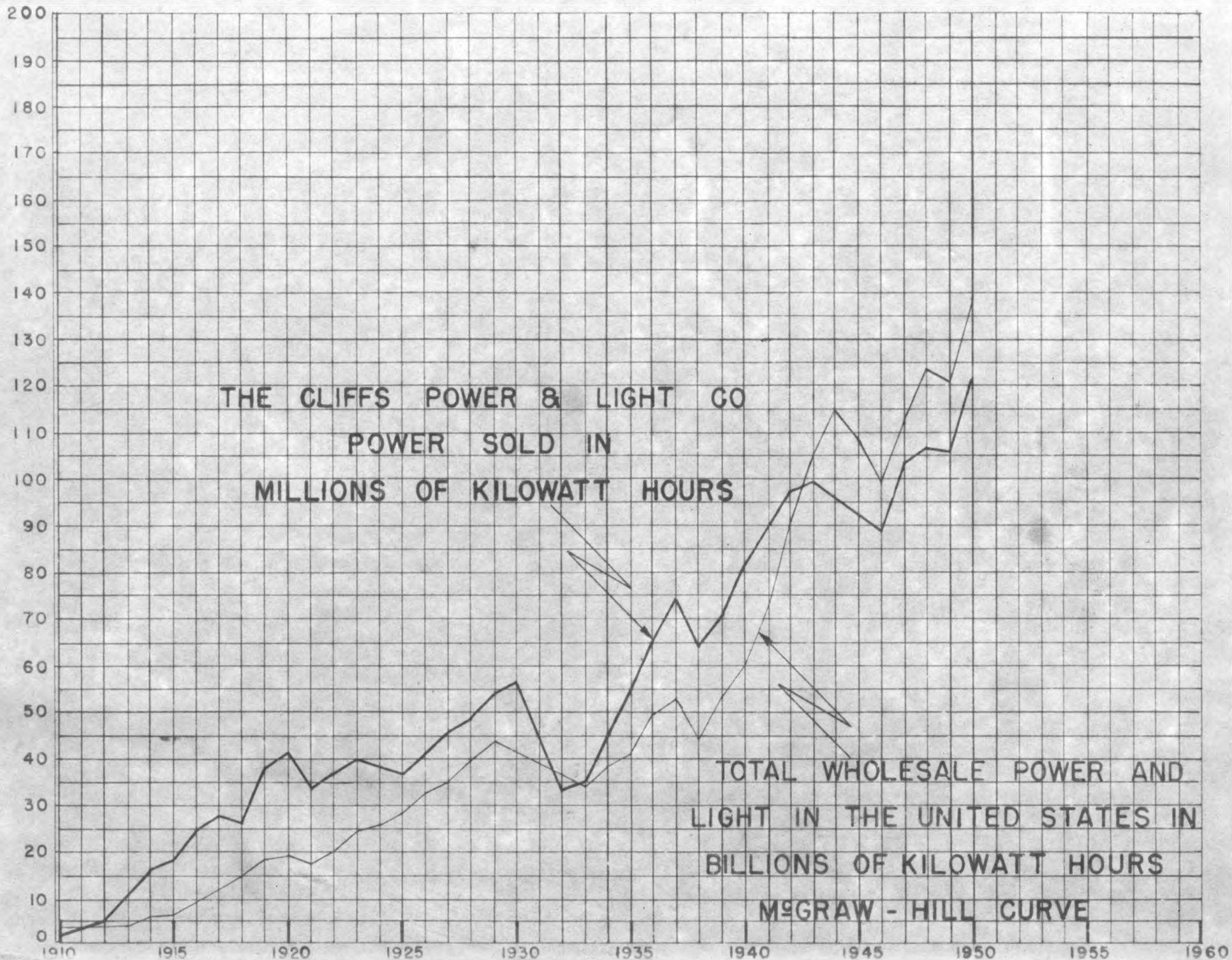
AVERAGE SYSTEM LOAD

STRIKE FEB 8 TO
MAY 22

STRIKE SEPT. 30 -
NOV. 14

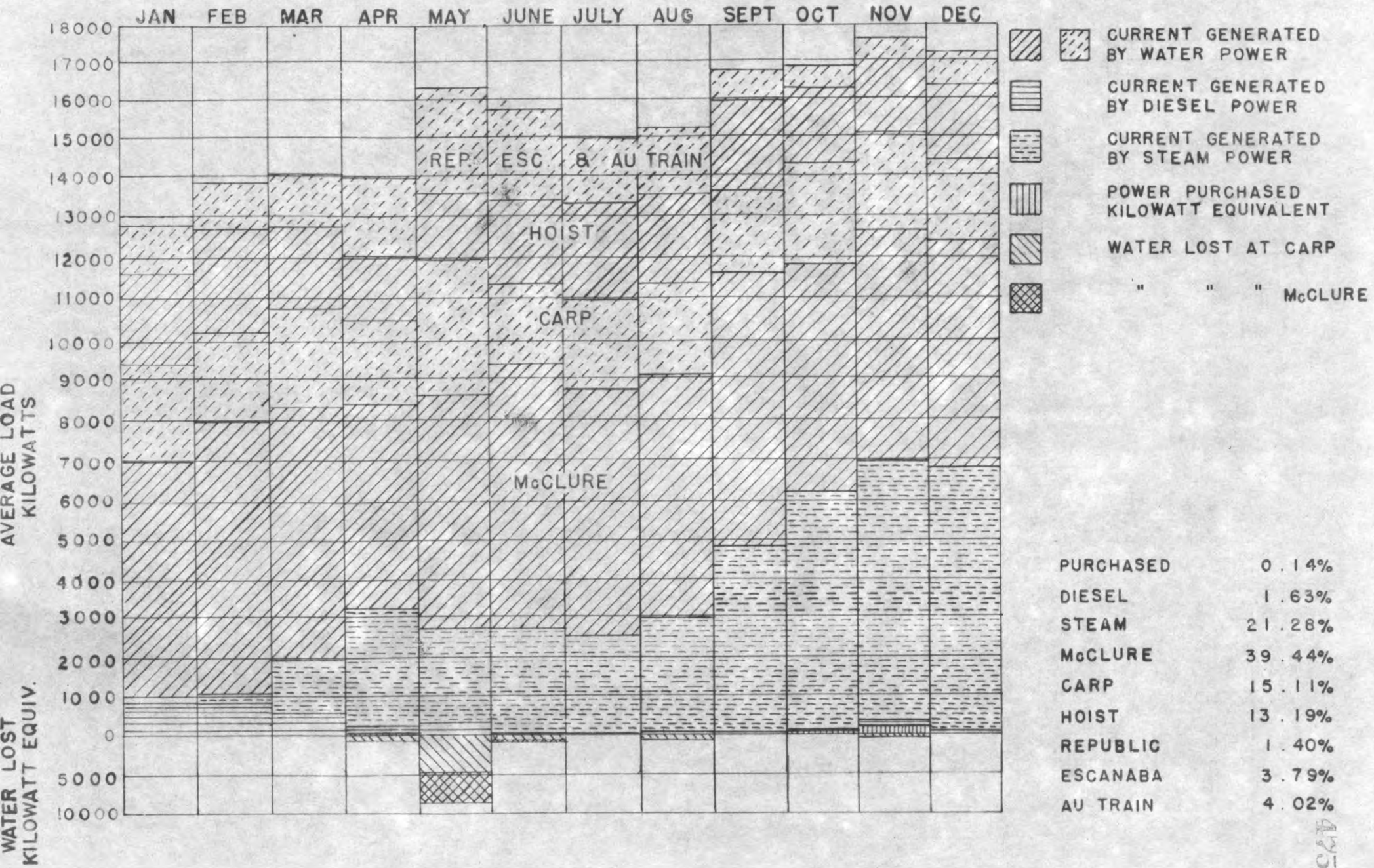
473





424

1950



PURCHASED	0.14%
DIESEL	1.63%
STEAM	21.28%
McCLURE	39.44%
CARP	15.11%
HOIST	13.19%
REPUBLIC	1.40%
ESCANABA	3.79%
AU TRAIN	4.02%

During 1950 the Welfare Department carried on the usual functions coming within its sphere of activities. These activities may include anything affecting the health, welfare and best interests of the community in general and Cleveland-Cliffs employees in particular. Specifically the functions of this department include matters concerning employee welfare and relief, group insurance, workmen's compensation, social security, safety, police and plant protection, publication of the house organ, the "Orbit", the administration of the Ishpeming Hospital, company-sponsored employee activities, and in a more general way, matters concerning civic and community affairs and public health problems. The problem of obtaining deferments for key personnel who are reservists or who are eligible for draft call has also be delegated to this department.

It is here again recorded that this department was formerly known as the Pension Department, and for many years, Mr. W. H. Moulton, who retired on July 1, 1938, headed the department with the title of Secretary. In July of 1938, the name of the department was changed from the Pension Department to the Welfare Department, and Mr. W. F. Gries became the head of the department with the title of Superintendent. Dealing as we do with all matters of Company interest that affects the health, welfare or peace of mind of the employee and his community, it is felt that this department has now outgrown its present name. The word "welfare" does not fully connote activity in the fields of public relations, employee relations, and industrial relations. Since the efforts of this department often go beyond the scope of welfare work and more often than not a direct effect on molding the opinion of the employee and the community toward the Cleveland-Cliffs Iron Company, we believe that the name of this department should be changed to "Industrial Relations Department" or "Department of Public and Employee Relations", or to some other more suitable name.

We wish to record at the outset that this department has had the excellent cooperation of the Safety Department under the leadership of Mr. A. J. Stromquist, Director, and Captain H. F. Rogers, Assistant Director. We believe that the cooperative association of the two departments has resulted in considerable benefit to the company and its employees.

Mr. W. E. Johnson, Compensation Agent, has been in charge of the Compensation Department since 1926. In 1950 his excellent work and great experience continued to be an invaluable asset to this department and the Company. His loyal service and cooperation are greatly appreciated.

During 1950, Mr. L. C. Holmgren continued his excellent work in carrying out most of the details in connection with our group insurance plan and the various pension payrolls. His faithful and cooperative service mean a great deal to the proper functioning of this department. Miss Marilyn Holmgren, Secretary to Mr. Johnson and Mr. Holmgren of the Compensation Department, continues to carry on in her usual efficient way, and we express again our appreciation for her loyalty and faithful service throughout another busy year.

We wish to record also our appreciation of the cooperation of Mr. Robert J. Veale, our Chief of Police, who works under the supervision of the Superintendent of the Welfare Department. He presently heads a staff of 37 regular uniformed plant policemen. Mr. Veale makes contacts with the head of the department almost daily and matters governing police supervision and plant protection are discussed continually.

In September of 1950, Mr. John S. Bowen joined the Welfare Department, having been transferred from the Cleveland office. In general, his duties are to assist Mr. Gries, Superintendent, and to handle the increasing problem of obtaining military deferments for essential personnel. His excellent work indicates that he will continue to be a valuable addition to the staff.

Miss Shirley Holmgren, Secretary and Receptionist to the Superintendent of the Welfare Department, continued her loyal, competent service throughout another busy year. Her efficiency and faithfulness are commendable and we express our appreciation.

The personnel of the Welfare Department is made up of the following:

- Walter F. Gries, Superintendent
- John S. Bowen, Assistant to the Superintendent
- Miss Shirley Holmgren, Secretary to the Superintendent and Receptionist
- Walter E. Johnson, Compensation Agent
- Lowell C. Holmgren, Group Insurance Division
- Miss Marilyn Holmgren, Secretary, Compensation and Insurance Division
- Robert J. Veale, Chief of Police

25% COTTON FIBRE
U.S.A.
GILBERT BOND

11.
a. WORKMEN'S COMPENSATION

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

Following are the cases of those men who required some special attention during the year.

EMIL HALME - PRINCETON MINE - ACC. REPT. NO. 213

This case has continued through most of 1950 as the result of a battle between our attorneys and the attorney for Mrs. Halme. As noted in last year's report in a hearing before the deputy commissioner he ruled in favor of Mrs. Halme and the case was appealed to the full board. On December 13, 1950 the Workmen's Compensation Commission issued an order granting Mrs. Halme compensation together with the customary allowance of \$300.00 for funeral expense and medical bills amounting to \$909.84. Since the litigation was started in this case we have known that Mrs. Halme was living with a man in Rock, Michigan. She claims she is his housekeeper but we have felt very strongly that they are married. We have made every effort to try to prove that a marriage exists and have checked the records in Michigan, Illinois, Wisconsin, and in Duluth, Minnesota but without any success. During the past summer an Escanaba paper carried the story that Mr. and Mrs. Charles Walline had made a trip to Finland. The record at the immigration office showed that passports were issued to Charles Walline and Esther Halme. If a legal marriage has not been consummated we feel quite strongly that there is a common law marriage but as stated above we have been unable to prove this point. Unless some favorable evidence is obtained soon we will have to pay the award.

JOVO JURICH - AGNEW MINE - ACC. REPT. NO. 13

As indicated in the 1949 report, Jurich claims to have suffered a lumbo-sacral strain due to lifting a large rock. He was awarded compensation for 20% partial disability by a referee and the referee's finding was appealed to the Industrial Commission. In the hearing before the Commission we attempted to introduce evidence to the effect that Mr. Jurich in the early stages of his disability had been paid group insurance benefits. In making his application for insurance benefits he was required to fill out a form furnished by the Metropolitan Life Insurance Company in which he indicated that his condition was not due to a compensable accident. The Industrial Commission refused to accept this statement as evidence. Considerable testimony was taken at this hearing which resulted in the Industrial Commission affirming the award of 20% disability which had been allowed by the referee. Mr. Gannon felt that the award of the Commission was illegal on the grounds that the original order issued by the Commission was signed by only two of the three Commissioners, and also that the group insurance record was very pertinent and the exclusion of this record was in error. The Supreme Court affirmed the case covering briefly the following three points:

First, the evidence was sufficient to sustain the findings.

Second, although it was error to exclude from evidence the application of Jurich for insurance, it was not sufficiently prejudicial to justify remanding the case for rehearing before the Commission.

11.
a. WORKMEN'S COMPENSATION (Continued)

JOVO JURICH - AGNEW MINE - ACC. REPT. NO. 13

Third, the Supreme Court examined the original record of the decision of the Commission on Appeal and found that it contained three signatures. They would not go behind the original record which we contended only two at the time we filed our motion for rehearing before the Commission.

There will be nothing to do but pay Mr. Jurich his compensation.

FRANK VALENTI - CLIFFS-SHAFT MINE - ACC. REPT. NO. 1244

On February 11, 1950 while employed as a chuteman at the Cliffs-Shaft Mine, Mr. Valenti was standing on the finger lever of the chute using a pinch bar to dislodge dirt that had hung up in the chute. When the dirt came down, the finger lever dropped and he lost his balance. He jumped to avoid hitting the car but his feet struck the edge of the car and caused him to fall head first. He sustained lacerations of the face but apparently no other injuries except that he was shaken up somewhat. He returned to work on February 28, 1950 and continued to work until April 1st and then some time subsequent to that date went to the Mayo Clinic at his own expense and returned with the statement that he had a fractured vertebra in the neck which he claimed was due to the injury sustained in the mine. At that time we requested that he write the Mayo Clinic for a report of their findings and this he promised to do. However, no report was forthcoming and we heard nothing further from Mr. Valenti for about six months when he again made a request for compensation and we again asked him to get the report from the Mayo Clinic. It was pointed out to him that as he had gone to the Clinic at his own expense; that he was a private patient and that he alone could request the Clinic to release the information that we needed. We have heard indirectly that what he called a fracture was really a subluxation between two of the vertebrae. However, we do know that he spent some time in the Clinic where he states that he was in a cast for a considerable period and for some time thereafter he wore the customary neck brace that is used in such cases to keep his head rigid. He has hired an attorney but at the end of the year there has been no decision made in this case. It is entirely possible that his condition may be due to the fall that he had at work and it is possible that weekly compensation will be paid or that a settlement of some kind will probably be made in 1951.

EINO ISAACSON - MAAS MINE

On June 26, 1950 we received a NOTICE AND APPLICATION FOR HEARING AND ADJUSTMENT OF CLAIM signed by Mr. Isaacson and filed through his attorney, Michael F. DeFant in which he indicated that he had sustained five separate slight accidents ranging from September 19, 1949 through June 2, 1950, all of these accidents involving his back. He stated that his disability was a back injury with aggravation and excitement of arthritic condition, plus a sprained ankle. We did have a record of several of these slight accidents and felt that they had been distinctly minor and we also felt that Isaacson's condition was largely due to a neurotic state. However, we fully realize that it would be a rather difficult case to fight so we suggested through his attorney a redemption on a minimal basis. After several interviews and some correspondence, Isaacson decided that he would like to return to work providing he was given some job other than that of mining. He offered to accept such work to take insurance benefits during the time that he had lost subsequent to June 2nd. He was paid insurance benefits from June 9, 1950 through August 20th and returned to work on August 21st as a timber hoister and subsequently withdrew his claim for compensation.

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11.

a. WORKMEN'S COMPENSATION (Continued)

Settlements on a partial disability basis were made in the following cases during 1950.

Jovo Jurich	Agnew Mine	20% permanent injury to back	2,736.51
Roy F. Ryttonen	Atkins Mine	5% permanent disability of back	405.00
Glenn High	Canisteo Mine	20% disability right middle finger	180.00
Roy R. Johnson	Canisteo Mine	40% permanent disability right ring finger	240.00
Sam Latkovich	Canisteo Mine	75% loss of use of left hand	3,937.50
Morton Mortensen	Hill Trumbull Mine	50% loss of use middle and ring fingers left hand	675.00
Carl Medalen	Holman Cliffs Mine	30% loss of hand	1,620.00

WELFARE DEPT. ANNUAL REPORT YEAR 195011.
a. WORKMEN'S COMPENSATION (Continued)

Following is a list of the more serious cases other than fatalities which occurred in 1950:

<u>Mine and Report No.</u>	<u>Name</u>	<u>Nature of Injury</u>	<u>Compensation Paid to 12-31-50</u>
Athens 544	Joseph Tremethick	Fracture both bones lower right leg.	\$ 629.00
Athens 545	Oscar Maki	Posterior dislocation right shoulder.	1,008.00*
Cliffs Shaft 1245	Paul Rosten	Fracture of larynx.	1,140.00
Cliffs Shaft 1255	Bruno Vilona	Fracture left leg with severe muscle injury to calf of left leg.	480.00*
Cliffs Shaft 1258	Salvatore Bertucci	Fracture 3 metatarsal bones left foot.	554.67
E & A CC 175 73	Norman E. Hoiem	Amputation one half of middle finger right hand.	420.00
Maas 721	Eric Turunen	Fractured left ankle.	390.00
Lloyd 899	William Nelson	Fractured left leg at head of left fibula.	986.00
Mather "A" 124	Stanley Fredrickson	Multiple fracture of pelvis. Partial severance of urether	1,043.22
Mather "A" 137	Dante Rovedo	Fracture right leg above knee.	408.00*
Mather "A" 141	Alex Marcotte	Fracture right ankle and 4th metatarsal bone right foot.	312.00*
Mather "B" 13	Matt Laitinen	Severe fracture base of left thumb.	52.00*
Mather "B" 14	Wilho Priuska	Amputation 2nd & 3rd fingers left hand.	52.00*
Mather "B" 16	Kenneth Mattson	Comminuted fracture right femur with severe laceration of thigh.	0.00*

*Payments still being made.

WELFARE DEPARTMENT

WELFARE DEPT. ANNUAL REPORT YEAR 195011.
a. WORKMEN'S COMPENSATION (Continued)

Following is a list of the more serious cases other than fatalities which occurred in 1950:

<u>Mine and Report No.</u>	<u>Name</u>	<u>Nature of Injury</u>	<u>Compensation Paid to 12-31-50</u>
Sargent 22	Matt Sikich	Fracture both bones lower left leg.	\$ 525.13
Hill Trumbull 135	Frantz Johnson	Amputation 1/2 left ring finger. 10% disability to right leg.	416.00*
Canisteco 50	Sam Latkovich	75% loss of use of left hand.	753.60

*Payments still being made.

WELFARE DEPT. ANNUAL REPORT YEAR 195011. a. WORKMEN'S COMPENSATION (Continued)FATALITIES

The following fatalities occurred in 1950:

NESTOR BLOMQUIST

Age 53

Cambria-Jackson Mine
 Occurred January 13, 1950
 Trimming brow of dog drift at entrance of
 stope. He loosened a piece of ore just
 above and behind his head. The slab fell
 striking him on the head and shoulders and
 pinned him to the bench or floor of the
 drift. Fractured skull.

Died on January 13, 1950

Dependent wife

Compensation at \$24.00 per week

Funeral expense

\$	9,600.00
	<u>300.00</u>
\$	9,900.00

VICTOR STERBENC

Age 36

Hawkins Mine
 Occurred October 12, 1950
 Mr. Sterbenc was cleaning a heavy duty
 wheel (Euclid), the lock rim and ring flange
 flew off from tire striking him on the right
 side of forehead and chest.

Head and chest injuries.

Died on October 12, 1950

No dependents

Payment to Special Compensation Fund

Funeral expense

\$	300.00
	<u>350.00</u>
\$	650.00

JACK O. HILL

Age 27

Maas Mine
 Occurred October 28, 1950
 He and his partner were preparing hitch for leg
 on side of breast, two feet in front of last set.
 In doing so a large chunk gave way from back
 striking him on back. Crushed right chest.
 Broken neck.

Died on October 28, 1950

Dependents - wife, daughter, and son

Compensation at \$28.00 per week

Funeral expense

\$	11,200.00
	<u>300.00</u>
\$	11,500.00

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11. a. WORKMEN'S COMPENSATION (Continued)

FATALITIES

WALLACE HEWITT
Age 28

Mather "B" Mine
Occurred December 12, 1950
A fall of ground from either the side or the hanging of naked mill struck him as he was standing on a ladder in naked raise preparing to take a drill machine down to the sub level 25' below him. After striking him, he fell down the raise to the 700' sub level a distance of about 60 feet.
Died on December 12, 1950
Dependents - wife and daughter
Compensation at \$26.00 per week
Funeral expense

\$ 10,400.00
300.00
\$ 10,700.00

STEPHAN LUCAS
Age 45

Sargent Mine
Occurred December 21, 1950
Mr. Lucas and Matt Sametz were going to inspect the runners in the shaft as the skip had been sticking at times. They both were on the skip and the signal had been given to the hoisting engineer to lower the skip. The engineer raised the skip up first, which is the regular practice in the winter before lowering. Mr. Sametz for some unknown reason jumped off the skip landing on the ground at the collar of the shaft. After Mr. Sametz hit the ground, he jumped up and stopped the skip with the signal bell. Mr. Lucas could not be seen and later was found in the bottom of the shaft.
Died on December 21, 1950
Dependents - wife and daughter
Compensation at \$30.00 per week
Funeral expense

\$ 10,000.00
350.00
\$ 10,350.00

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11. a. WORKMEN'S COMPENSATION (Continued)

Compensation Payments including Medical and Special Expense

<u>Year</u>	<u>C.C.I. Co.</u>	<u>Negaunee Mine Co.</u>	<u>Athens Ir. Mng. Co.</u>	<u>Cliffs Pr. & Light Co.</u>	<u>Mesaba-Cl. Mng. Co.</u>	<u>CCI Co, Opt. Agt, Atkins</u>	<u>Miscellaneous Companies</u>	<u>TOTAL</u>
1912 to 1940	1,346,072.71	193,145.81	127,679.53	15,136.92	88,431.73		10,282.71	1,780,749.41
1941	37,451.05	12,085.67	12,376.95	1,238.50	5,501.05			68,553.22
1942	38,471.33	19,984.64	10,755.90	1,575.25	6,820.97			77,708.09
1943	53,607.70	17,270.60	8,993.40	1,715.25	9,337.43			90,924.38
1944	66,219.66	21,147.85	11,489.34	1,594.75	6,325.95			106,777.55
1945	85,558.58	32,400.22	7,152.70	1,468.50	5,630.00			132,210.00
1946	84,009.42	25,391.20	5,373.63	1,528.50	7,693.03	174.50		124,170.28
1947	76,355.69	28,582.02	14,540.71	1,153.75	9,186.43	1,353.77		131,172.37
1948	73,727.12	28,162.82	8,548.15	687.00	9,083.73	824.57		121,033.39
1949	96,910.98	37,433.06	15,401.72	916.50	9,356.57	1,248.75		161,267.58
1950	87,512.40	35,352.22	12,815.81	740.00	10,757.22	3,522.62		150,700.27
	2,045,896.64	450,956.11	235,127.84	27,754.92	168,124.11	7,124.21	10,282.71	2,945,266.54

Detail of Miscellaneous Companies:

Holman-Cliffs Mining Company	2,131.39
Canisteo-Cliffs Mining Company	2,768.69
Alexandria Mine	5,382.63
	<u>10,282.71</u>

ANNUAL REPORT - 1950
STATEMENT OF COMPENSATION PAYMENTS FROM
JANUARY 1, 1950 TO DECEMBER 31, 1950

	Average No. of Employees	No. of Fatal Accs.	No. of Non-Fatal Accidents	Actual Comp. Paid in 1950	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	Estimated Compensation Still Pending	Medical & Special Expense	Fatal Cases Pending	Accidents Cases Pending	O. D. Cases Pending	
Gambria Jackson	208	1	4	18	23			10,083.67												
Cliffs Shaft	486		18	27	93			11,586.34												
General Storehouse	167			4	34															
Ishpeming Office	179		1					112.67												
Ishpeming Hospital					4			416.86												
Lloyd	151		6	15	39			9,760.16												
Maas	398	1	21	18	87			12,664.16	720.00	936.00	1,300.00	2,184.00	1,092.00	2,555.00	210.00	2,288.00	3,276.00	534.50	1,529.66	
Negaunee Shaft					1															
Princeton								1,709.00												
Spies	106		5	1	15			2,411.00												
Tilden	18																			
Miscellaneous	23				6															
Cleveland Roll	28																			
Research Laboratory					2															
Unc. Const. E&A CC 143					1			185.00												
Unc. Const. E&A CC 204					2			310.00												
Unc. Const. E&A CC 350																				
Unc. Const. E&A CC 175					1			112.00												
Cliffs Power & Light Company	80			1	5															
Negaunee	29							11,792.88	92.88		1,872.00									
Mather "A"	720		27	45	201			11,750.80			988.00									
Mather "B"	200	1	12	14	50			2,174.32				4,025.24								
Athens	338		19	28	72			8,778.09		357.76										
Total - Michigan Mines	3,131	3	117	173	630	812.88	1,293.76	6,188.00	4,264.00	6,448.00	5,670.00	11,022.24	13,381.00	11,608.66	23,158.41	180,912.18	34,356.66	17	44	16
Hibbing Office	67																			
Miscellaneous - Hibbing	38																			
Agnew	108		9	17	91			2,960.25												
Canisteo	204		2	5	79			2,148.50												
Hawkins	144	1		3	45			1,756.25												
Hill Trumbull	165		4	4	64			3,414.50												
Holman Cliffs	176		1	2	66			3,618.32			881.92									
Sargent	122	1	15	20	85			3,789.57			1,248.00									
Wanless	52			1	24			175.00												
Atkins	50		2	4	39			2,147.10												
Total - Minnesota Mines	1,126	2	33	56	493	812.88	1,293.76	6,188.00	5,145.92	6,448.00	6,918.00	11,022.24	21,335.55	16,547.35	28,144.74	207,176.39	46,843.83	20	53	16
Total - All Mines	4,257	5	150	229	1,123	1,625.76	2,587.52	12,376.00	9,410.92	12,896.00	12,588.00	22,044.48	29,928.35	28,155.81	512,088.57	80,199.49	37	97	32	

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11.
a. WORKMEN'S COMPENSATION (Continued)

ANNUAL STATEMENT OF COMPENSATION PAYMENTS
FROM JANUARY 1st, 1950 to DECEMBER 31st, 1950

Compensation paid on 1950 cases	28,144.74
Estimated compensation still pending	207,176.39
Cost of medical and hospital service, also special expense	<u>46,843.83</u>
	282,164.96
Less pending for years 1941 to 1949 inclusive	139,753.70
Less medical and special expense on accidents occurring prior to January 1, 1950	<u>4,026.01</u>
	<u>143,779.71</u>
	138,385.25
Less compensation paid on 1950 occupational disease cases	3,024.00
Estimated compensation still pending on 1950 occupational disease cases	<u>15,504.00</u>
	<u>18,528.00</u>
Estimated cost of 1950 accidents	119,857.25
Percentage of payrolls on accidents	.00832
Percentage of payrolls including Occup. Dis. cases	.00956
Number of fatal accidents	5
Number of compensable accidents	150
Number of lost-time accidents - non-compensable	229
Number of slight accidents	1,123

The following occupational disease cases occurred during 1950. The cost of these cases is included in the regular compensation costs, but for statistical purposes they are not included in the accident table.

Number of deaths	0
Number of disability cases	6

During 1950 a total of \$19,598.83 was paid on occupational disease cases, and it is estimated that it will cost \$54,156.00 to complete payments on the sixteen cases still active on December 31, 1950. Of these, one originated in 1945, three in 1946, five in 1948, four in 1949, and three in 1950.

11. c. GROUP INSURANCE

The protection of a group life, disability, hospitalization and surgical fee insurance plan was available to our employees during the year. For our Michigan properties this plan is carried with the Aetna Life Insurance Company of Hartford, Connecticut under group policies 14,440, GS-14,440, and H-14,440. The plan became effective September 1, 1947 and continued without change through February 28, 1950. For the details of the original plan reference is made to the Annual Report of 1947.

Effective March 1, 1950 certain liberalized benefit changes were made in the plan without further premium cost to the employee. The lowest insurance classification under the original plan - \$1,875 - was eliminated, and all employees with annual earnings under \$3600 were eligible for the \$2,500 class of insurance. The weekly disability benefit became a standard \$26.00 for a maximum period of 26 weeks as compared to the varied weekly benefits for a maximum period of 13 weeks under the original plan. One exception to this standardization is noted in the case of salaried employees in the \$6,250 class of insurance where the weekly benefit remained at \$30.00. The only change in the hospitalization and surgical fee features of the plan was the extension from 31 to 70 of the maximum number of days for which the daily hospital benefit is payable.

It is here noted that the provision allowing a retired employee to retain one-half of his group life insurance was not changed. Effective 3/1/1950 pensioners and those men carried on the Retirement Payrolls were no longer required to pay premiums for their group life insurance. This privilege was not extended to annuitants or other categories of retired employees.

For accounting purposes a split between bargaining unit and non-bargaining unit employees was made beginning with March 1, 1950. This division was made both with respect to the computation of total premium cost and the payment of claims. Effective March 1, 1950 two sets of premium rates were used in computing the total premium cost of the plan. These premium rates follow:

Bargaining Units:	
Life	- 1.41 per month per \$1,000.00
Disability	- .088 per month per \$1.00
Hospitalization Insurance:	
Employee Daily Hosp. Benefit	- .17 per month per \$1.00
Employee Surgical Fee Benefit	- .36 per month per employee
Dependents' Daily Hosp. Benefit	- .374 per month per \$1.00
Dependents' Surgical Fee Benefit	- 1.50 per month per employee
Non-Bargaining Units:	
Life	- 1.89 per month per \$1,000.00
Disability	- .088 per month per \$1.00
Hospitalization Insurance:	
Same as for Bargaining Units	

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11. c. GROUP INSURANCE (Continued)

The following table shows the total premium cost, by unit, of our group insurance plan for the policy year from March 1, 1950 through February 28, 1951:

Unit	Premium Cost	
	Bargaining Unit	Non-Bargaining Unit
Cambria-Jackson	28,540.90	2,393.07
Cliffs-Shaft	54,700.32	3,717.57
General Storehouse & Shops	17,844.50	795.04
General Payroll - Ishp. Office	-	27,189.13
" - Ishp. Hospital	-	6,489.76
Ishpeming Office Inactive	4,261.21	1,096.21
Lloyd	17,714.35	1,547.25
Maas	48,757.58	2,734.75
Misc. Payroll - C. S. Lab.	2,781.30	-
" - Ishpeming Hosp.	-	3,283.97
Spies	12,607.54	824.38
Tilden	1,664.66	211.77
C. C. I. Co. - Old Plan	904.45	477.97
Negaunee	2,961.35	1,042.34
Mather "A"	83,287.03	6,630.18
Mather "B"	24,363.98	2,428.31
Neg. Mine Co. - Old Plan	902.93	143.00
Athens	40,099.04	3,243.50
Ath. Ir. Mng. Co. - Old Plan	335.89	63.54
C. P. & L. Co.	5,694.32	1,806.31
C.P.&L. Co. - Old Plan	29.50	9.76
Total	347,450.85	66,127.81

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11.
c. GROUP INSURANCE (Continued)

The following statement shows the amount of claims paid under the group insurance and hospitalization plan during the policy year from March 1, 1950 to February 28, 1951.

	<u>Hospitalization</u>	<u>Health & Accident</u>	<u>Death Claims</u>	<u>Total</u>
Cambria Jackson	9,293.82	2,541.72	12,500.00	24,335.54
Cliffs Shaft	17,648.58	7,353.71	7,500.00	32,502.29
Cleveland Roll	1,333.68	424.29		1,757.97
General Roll	5,420.98	2,037.45		7,458.43
General Storehouse	5,643.88	3,337.00		8,980.88
Ishpeming Hospital	3,455.63	2,826.58		6,282.21
Inactive			13,875.00	13,875.00
Lloyd	5,319.68	2,023.56	5,000.00	12,343.24
Maas	15,315.16	6,490.29	10,000.00	31,805.45
Miscellaneous	2,558.64	2,564.28		5,122.92
Spies	3,420.57	2,064.86		5,485.43
Tilden	225.00			225.00
Negaunee Shaft	304.59	26.00		330.59
Total - C. C. I. CO.	69,940.21	31,689.74	48,875.00	150,504.95
Negaunee	363.59	59.43	2,500.00	2,923.02
Mather "A"	30,164.00	9,951.68	2,500.00	42,615.68
Mather "B"	6,170.18	1,975.73	2,500.00	10,645.91
Total - Negaunee Mine Co.	36,697.77	11,986.84	7,500.00	56,184.61
Athens Iron Mining Co.	11,803.87	6,305.55		18,109.42
Cliffs Power & Light Co.	2,892.16	1,122.29		4,014.45
TOTAL-MICHIGAN DISTRICT	121,334.01	51,104.42	56,375.00	228,813.43
Paid on claims originating before 3/1/50	11,001.75	4,249.15	6,500.00	21,750.90
Bargaining Unit	95,108.85	38,643.53	39,875.00	173,627.38
Salaried & Non Bargaining Unit	15,223.41	8,211.74	10,000.00	33,435.15
	121,334.01	51,104.42	56,375.00	228,813.43

A total of 1,259 hospitalization claims were paid, 395 persons drew disability benefits and 31 death claims were paid.

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11.

c. GROUP INSURANCE (Continued)

The following death claims were paid during the period from October 1, 1949 through February 28, 1951.

<u>Name</u>	<u>Mine</u>	<u>Date of Death</u>	<u>Amount of Insurance</u>
Walter O. Wester	Athens Mine	12-17-49	2500.00
Elmer B. Maki	Athens Mine	2-3-50	5000.00
Tobias Leikas	Athens Mine	2-14-50	2500.00
Norman A. Gauthier	Cliffs Shaft Mine	10-16-49	2500.00
Charles Keskey	Cliffs Shaft Mine	11-19-49	2500.00
Jacob Hill	Cliffs Shaft Mine	2-24-50	5000.00
William Voegtline	Cliffs Shaft Mine	10-8-50	2500.00
Jalmer E. Gronberg	Cliffs Power & Light Co.	12-20-49	2500.00
Nestor Blomquist	Cambria Jackson Mine	1-13-50	5000.00
Joseph Solka	Cambria Jackson Mine	5-22-50	2500.00
John Tilot	Cambria Jackson Mine	6-4-50	5000.00
Evert Saily	Cambria Jackson Mine	12-9-50	5000.00
Thomas Trevithick	General Storehouse	12-8-49	5000.00
Angelo Bozio	Lloyd Mine	11-16-49	2500.00
Joseph LaBeau	Lloyd Mine	6-17-50	2500.00
Dominic B. Tasson, Sr.	Lloyd Mine	1-12-51	2500.00
Nicholas Tambling	Maas Mine	12-1-49	2500.00
Joseph A. Holman	Maas Mine	12-14-49	5000.00
Thomas F. Lequia	Maas Mine	6-28-50	2500.00
John Tammelin	Maas Mine	7-26-50	2500.00
Jack O. Hill	Maas Mine	10-28-50	2500.00
John Heiskanen	Maas Mine	1-31-51	2500.00
Werner Harmala	Mather "A" Mine	9-10-49	2500.00
William A. Aho	Mather "A" Mine	11-6-49	2500.00
John Helsten	Mather "A" Mine	12-15-50	2500.00
Arthur E. Lawry	Mather "B" Mine	5-20-50	2500.00
Lorraine Kelly	Miscellaneous	12-30-49	1875.00
Enoch Vincent	Negaunee Mine	7-29-50	2500.00
Richard Burrows	Inactive	9-14-49	750.00
Mary C. Ryan	Inactive	9-18-49	1875.00
Thomas H. Berryman	Inactive	9-18-49	500.00
Ernest J. Swanson	Inactive	10-7-49	1250.00
Swan Anderson	Inactive	10-4-49	500.00
Elias Laitinen	Inactive	10-8-49	750.00
Matt Hemmila	Inactive	10-20-49	500.00
Frank T. Veline	Inactive	11-8-49	500.00
Frank Martin	Inactive	11-28-49	500.00
Hemming W. Silas	Inactive	11-26-49	500.00
Noah Morin	Inactive	12-8-49	500.00
Peter Pascoe	Inactive	1-16-50	750.00
John Luoma	Inactive	2-10-50	750.00
Herman Hill	Inactive	2-19-50	750.00

WELFARE DEPT. ANNUAL REPORT YEAR 1950

11.
c. GROUP INSURANCE (Continued)

The following death claims were paid during the period from October 1, 1949 through February 28, 1951.

<u>Name</u>	<u>Mine</u>	<u>Date of Death</u>	<u>Amount of Insurance</u>
Matt Syrja	Inactive	7-14-50	1875.00
Gust Oja	Inactive	8-11-50	750.00
Herman Alongo	Inactive	9-9-50	500.00
Henry Seppi	Inactive	9-15-50	750.00
John Gensheimer	Inactive	10-19-50	750.00
John Salo	Inactive	10-25-50	750.00
Fred Carlyon	Inactive	10-27-50	1250.00
David V. Spencer	Inactive	11-3-50	500.00
Sam Roberts, Sr.	Inactive	11-29-50	750.00
Herman Johnson	Inactive	11-12-50	500.00
Sam Sims	Inactive	1-3-51	750.00
Clarence A. Steede	Inactive	12-26-50	500.00
Frank Niemi	Inactive	1-27-51	1250.00
George Hill	Inactive	2-7-51	750.00

One death was due to suicide, two were the results of non-occupational accidents and two were occupational accidents.

WELFARE DEPT. ANNUAL REPORT YEAR 1950

23. a. PENSION SYSTEM

The pension system which went into effect on January 1, 1909 completed the forty-second year of its operation in 1950.

No changes in the rates of pensions were made during the year 1950. On January 1, 1933 the pension payments were reduced fifty per cent, those under \$20.00 remaining the same and those over \$20.00 having a minimum rate of \$20.00. There have been no additions to the pension rolls since January 1, 1932.

There were four deaths on the Mining Department pension payroll during the year.

<u>No.</u>	<u>Name</u>	<u>Pension Began</u>	<u>Date of Death</u>
178	Adolph Danielson	10/1/1924	2/15/1950
225	John Lafreniere	9/1/1927	4/25/1950
259	H. E. Ellis	6/1/1931	8/16/1950
262	Matt Vanni	1/1/1932	8/15/1950

Number of deaths during year 1950	4
Number of pensions in force 1/1/1950	12
Number of pensions in force 12/31/1950	8

Average annual pension for 1950	\$200.06
Average annual pension for 1949	\$217.38

The Holmes Mine pension payroll became inactive in April of 1949 and will remain inactive.

The total expenditure over the Mining Department pension payroll for 1950 was \$2,400.68.

WELFARE DEPT. ANNUAL REPORT YEAR 1950

23. a. PENSION SYSTEM (Continued)

The table below shows pension payments for the Mining Department and Holmes Mine Department combined for the years 1908 through 1950. The Holmes Mine pension payroll became inactive with the death of its last pensioner on April 23, 1949.

<u>Year</u>	<u>Old Age</u>	<u>Widows and Orphans</u>	<u>Total</u>
1908			
thru 1940	741,774.57	22,547.00	764,321.57
1941	12,476.76	0.00	12,476.76
1942	11,632.15	0.00	11,632.15
1943	10,246.66	0.00	10,246.66
1944	8,485.25	0.00	8,485.25
1945	7,446.32	0.00	7,446.32
1946	5,648.60	0.00	5,648.60
1947	4,156.68	0.00	4,156.68
1948	3,840.68	0.00	3,840.68
1949	3,260.68	0.00	3,260.68
1950	2,400.68	0.00	2,400.68
	<u>811,369.03</u>	<u>22,547.00</u>	<u>833,916.03</u>

Includes payment of \$2,500.00 made by the Cleveland office in 1930.

Republic Mine Department

There was only one pensioner on this payroll during the year. Frank Vierela was paid a total of \$240.00 during the year.

The table below shows the pension payments made over this roll for the years 1920 through 1950.

<u>Year</u>	<u>Amount</u>
1920	
thru 1940	140,017.92
1941	1,741.92
1942	1,488.00
1943	1,285.00
1944	995.04
1945	995.04
1946	856.04
1947	715.04
1948	515.04
1949	240.00
1950	240.00
	<u>149,089.04</u>

WELFARE DEPT. ANNUAL REPORT YEAR 1950

23.
a. PENSION SYSTEM (Continued)

Land Department

Erick Johnson was the only pensioner on this payroll during the year. He was paid a total of \$240.00.

The table below shows the pension payments made over this roll for the years 1927 through 1950.

<u>Year</u>	<u>Amount</u>
1927	
thru	3,836.88
1940	
1941	240.00
1942	240.00
1943	240.00
1944	240.00
1945	240.00
1946	240.00
1947	240.00
1948	240.00
1949	240.00
1950	240.00
	6,236.88

Furnace Department

This payroll became inactive in 1948. During the years when it was active - 1910 through 1948 - a total of \$66,155.22 was expended over the payroll.

23. a. PENSION SYSTEM (Continued)

Retirement Payrolls

The purpose of our Retirement Payrolls is to provide retirement under Social Security benefits to employees who are 65 years of age or over. This retirement program went into effect March 16, 1939. It was the original policy of the Company to supplement an employee's Social Security benefit by \$10.00 per month. Effective July 1, 1948 all retirement allowances were increased by \$10.00 per month, so that the usual retirement allowance became \$20.00 per month. Retired employees are given the opportunity to carry our medical plan at \$1.00 per month, which is one-half the usual fee, and may carry one-half of the principal of their group life insurance policies at the time of retirement. In those cases where retirement took place under the group life policy which granted a twenty-five per cent increase in the principal, a ruling was received that this increase was not to be considered a part of the principal when computing the reduced coverage. Each addition to the Retirement Payrolls is carefully studied with the Superintendent of the mine and is finally referred to the General Manager for approval. With the new Pension Plan which became effective 3/1/1950 (covered elsewhere in this section) the additions to these payrolls have been sharply curtailed. It will be noted that fifty-six retired employees were dropped from the Retirement Payrolls as of 2/28/1950 when they became eligible for pensions under the two-year retroactive clause of the new Pension Plan.

Eleven additions and sixty-two deletions were recorded on the Mining Department Retirement Payroll during the year. There follows a list of these additions and deletions:

Jalmer Laine	Added effective	1/1/1950
Solomon Jokinen	"	1/1/1950
Carl O. V. Anderson	"	1/1/1950
Carl P. Exberg	"	1/1/1950
Thomas S. Ikola	"	2/1/1950
Henry Paull	"	3/1/1950
William F. Martin	"	4/1/1950
Nick H. Aho	"	5/1/1950
John Strongman	"	7/1/1950
William Maddeford	"	6/15/1950
John Tremayne	"	8/1/1950

Peter Pascoe	Died	1/16/1950
John Luoma	"	2/10/1950
Herman J. Kojala	"	2/19/1950
August Wigg	"	7/9/1950
Gust Oja	"	8/11/1950
Herman Alanko	"	9/9/1950
Henry Seppi	"	9/15/1950
John Gensheimer	"	10/19/1950
Dave Spencer	"	11/3/1950
Herman Johnson	"	11/12/1950
Sam Roberts, Sr.	"	11/29/1950
C. A. Steede	"	12/26/1950
August E. Kangas	Transfer to Age Pension	3/1/1950
Louis A. Rappazini	"	"
John H. Johns	"	"

23. a. PENSION SYSTEMS (Continued)

Retirement Payrolls (Cont'd)

Wilfred Dumble	Transfer to Age Pension 3/1/1950
Christ Anderson	"
Victor Ollikainen	"
John Lenten	"
Frank Niemi	"
Joseph Petroni	"
Charles H. Rasmussen	"
Lee Sandstrom	"
Luigi Basegio	"
Frank Ayotte	"
Robert Olds	"
James Doney	"
Gust Hautakangas	"
Carmelo Russo	"
Sam Goodman	"
Patrick Kennedy	"
Richard Konster	"
Peter Larson	"
Isaac Turri	"
George J. Heppola	"
Emil A. Granlund	"
James R. Cain	"
Walter C. Crisp	"
Fred Carlyon	"
William Chinn	"
William Hampton	"
William Kamppinen	"
Thomas Roberts	"
Tobias Savolainen	"
Luigi Suardini	"
Charles J. Ayotte	"
William Billings, Sr.	"
Paul St. John	"
Charles Racine	"
Jack Hytinen	"
Oscar Antilla, Sr.	"
Fred Borlace, Sr.	"
John Warnstrom	"
Thomas Hill, Sr.	"
Victor Maki	"
Jacob E. Kujala	"
Jalmer Laine	"
Solomon Jokinen	"
Carl O. V. Anderson	"
Carl P. Exberg	"
Thomas S. Ikola	"
Nick H. Aho	Transfer to Donation Payroll 6/1/1950

23. a. PENSION SYSTEMS (Continued)

Retirement Payrolls (Cont'd)

This office continued to handle payments to retired employees of our Minnesota properties. Two payrolls are prepared, one for the Canisteco Mine and the other for the Mesaba-Cliffs Mining Company.

The following changes were recorded on the Canisteco Mine Retirement Payroll during the year:

Bert LaRock	Added effective 1/1/1950
Elmer T. Eckland	Transferred to Age Pension 3/1/1950
Bert LaRock	"

The following changes were recorded on the Mesaba-Cliffs Mining Company Retirement Payroll during the year:

Adelbert W. Jenkins	Added effective 1/1/1950
Joseph G. Dolezel	Transferred to Age Pension 3/1/1950
John G. Ranta	"
Frank Hill	"
John M. Snarich	"
Adelbert W. Jenkins	"

23. a. PENSION SYSTEMS (Continued)

Retirement Payrolls (Cont'd)

A resume of the 1950 Retirement Payrolls follows:

Number of Mining Department Retired Employees 12/31/1949	238	
Number of Mining Department Retired Employees 12/31/1950	187	
Total Expenditure to above employees for year 1950		52,783.24
Number of Canisteo Mine Retired Employees 12/31/1949	8	
Number of Canisteo Mine Retired Employees 12/31/1950	7	
Total expenditure to above employees for year 1950		1,760.00
Number of Mesaba-Cliffs Mining Co. Retired Employees 12/31/1949	26	
Number of Mesaba-Cliffs Mining Co. Retired Employees 12/31/1950	22	
Total Expenditure to above employees for year 1950		5,480.00
Total Number of Retired Employees 12/31/1949	272	
Total Number of Retired Employees 12/31/1950	216	
Total expenditure to retired employees for year 1950		60,023.24

23. a. PENSION SYSTEMS (Continued)

Under an agreement with the Union (dated November 12, 1949) the Company established a pension plan which became effective March 1, 1950. The agreement included a two-year retroactive provision whereby employees retired because of age during the period from March 1, 1948 through February 28, 1950 were eligible for consideration under the plan. Briefly, the plan provides for pensions for bargaining unit employees who are 65 years of age or older and who have at least 15 years of continuous service with the Company. A minimum monthly pension of \$100.00 is stipulated for retiring employees having 25 or more years of continuous service with maximum pensions in all cases being worked out according to the following formula: one per cent of the average monthly wage (as computed over the ten years immediately preceding retirement) times the number of years of continuous service. Continuous service between 15 and 25 years commands a minimum monthly pension based on the following fractional formula: the number of years of continuous service/25 times \$100.00. The pension figure thus established is reducible by the amount of the employee's Social Security benefit, that portion of any other pension which Company contributions may have purchased (for example, that part of the group annuity attributable to Company payments), and certain types of other pension and workmen's compensation payments. The Company actually pays a net pension which is the difference resulting from this latter computation and which is then adjusted to the nearest dollar.

Where an employee, prior to age 65, has at least 15 years of continuous service with the Company and becomes totally and permanently incapacitated for employment of any kind, the plan provides for a disability pension. The minimum monthly pension in such a case is \$50.00 with the maximum being computed by the same formula as the age pension. This type of pension is also reducible by the amount of certain types of pension and workmen's compensation payments. There was no retroactive provision in the agreement with respect to disability retirements.

The taking and initial processing of applications for pensions under the plan became one of the functions of this Department. Final approval of the pensions rests with a Pension Committee of three members from our Cleveland office. Actual payment of these pensions is made through the Cleveland Trust Company of Cleveland, Ohio from funds deposited with the Trust Company by direction of the Pension Committee.

During 1950 the following age pensions were granted:

<u>Name</u>	<u>Mine</u>	<u>Eff. Date</u>	<u>Gross Pension</u>	<u>Net Pension</u>	
William M. Kamppinen	Maas	3/1/1950	108.08	71.00	46.00 *
Samuel Goodman	Cliffs-Shaft	"	102.67	65.00	41.00
Nestor Mattila	"	"	107.50	68.00	44.00
Thomas S. Ikola	"	"	100.00	61.00	37.00
Patrick Kennedy	"	"	103.35	67.00	42.00
Richard Konster	"	"	100.00	62.00	37.00
Lee Sandstrom	Maas	"	100.00	64.00	40.00
Bert LaRock	Canisteeo	"	100.00	65.00	40.00
Elmer T. Eckland	"	"	76.68	42.00	17.00
Albert H. Kolp	"	"	79.00	45.00	21.00
James Doney	Cliffs-Shaft	"	100.00	64.00	39.00
Tobias Savolainen	Maas	"	100.00	62.00	38.00
Joseph Pitrone	"	"	100.00	65.00	40.00

WELFARE DEPT. ANNUAL REPORT YEAR 1950

23. a. PENSION SYSTEMS (Continued)

Name	Mine	Eff. Date	Gross Pension	Net Pension	
Robert R. Olds	Cliffs-Shaft	3/1/1950	99.68	62.00	38.00 *
Henry V. Ollikainen	"	"	100.00	68.00	43.00
William H. Hampton	Maas	"	100.00	63.00	39.00
Thomas H. Roberts	"	"	100.00	63.00	39.00
Fred G. Carlyon	"	"	100.00	64.00	40.00
William Billings, Sr.	Lloyd	"	100.00	64.00	39.00
Frank Niemi	Maas	"	100.00	65.00	41.00
Charles H. Rasmussen	"	"	100.00	66.00	41.00
John Warnstrom	"	"	96.68	60.00	36.00
Paul St. John	Gen. Sthse.	"	100.00	66.00	42.00
Peter Larson	Spies	"	100.00	63.00	39.00
William Chinn	Maas	"	79.32	45.00	21.00
Carmelo Russo	Cambria-Jackson	"	100.00	63.00	39.00
Jack Hytinen	Maas	"	79.00	42.00	18.00
John Lenten	"	"	100.00	64.00	40.00
Walter S. Crisp	Gen. Sthse.	"	86.68	50.00	25.00
Jalmer Laine	Lloyd	"	100.00	62.00	38.00
Gust Hautakangas	Cliffs-Shaft	"	100.00	61.00	37.00
William Cornish	"	"	110.41	72.00	48.00
Jalmer J. Hendrickson	Lloyd	6/1/1950	100.00	63.00	39.00
Michael Sinko, Sr.	Agnew	5/1/1950	81.00	49.00	25.00
Jacob Adams	Sargent	3/1/1950	76.00	40.00	16.00
Matt Moilanen	"	"	80.00	43.00	19.00
Severt J. Lee	Hawkins	"	75.00	36.00	12.00
Elrick Roberts	Maas	6/1/1950	100.00	64.00	40.00
Tony Denofrio	Cliffs-Shaft	"	100.00	64.00	40.00
Mile Lemich	Agnew	3/1/1950	77.00	42.00	18.00
Vasil Galovich	"	"	61.00	28.00	4.00
Oscar Pulkinen	Cambria-Jackson	5/1/1950	100.00	65.00	41.00
William Roine	Cliffs-Shaft	6/1/1950	109.18	69.00	45.00
Ernest Decaire	"	8/1/1950	101.00	64.00	40.00
Axel V. Carlson	"	"	105.46	67.00	42.00
John Juhola	"	"	100.00	60.00	36.00
William H. Maddock	"	"	100.00	64.00	39.00
Ludwig A. Lee	Gen. Sthse.	"	100.00	63.00	39.00
Solomon Jokinen	Maas	3/1/1950	93.00	56.00	32.00
Charles J. Ayotte	Lloyd	"	100.00	65.00	41.00
Charles E. Racine	Maas	"	61.32	23.00	0.00
Frederick J. Borlace	"	"	89.00	51.00	27.00
John Remington	Cliffs-Shaft	6/1/1950	96.00	60.00	36.00
Luis Suardini	Maas	3/1/1950	96.32	59.00	35.00
Carl O. V. Anderson	Gen. Sthse.	"	100.00	65.00	41.00
Carl P. Exberg	"	"	100.00	63.00	39.00
Thomas G. Hill	Tilden	"	100.00	66.00	41.00
William Bond, Sr.	Cambria-Jackson	8/1/1950	100.00	65.00	40.00
George Westlund	Cliffs-Shaft	"	100.00	62.00	38.00
Gust A. Johnson	Gen. Sthse.	6/1/1950	100.00	69.00	45.00
Matt Korpi	Cliffs-Shaft	9/1/1950	60.32		0.00
Charles G. Wallenstein	"	10/1/1950	100.00		35.00
Chester A. Vicary	"	"	100.00		37.00

WELFARE DEPT. ANNUAL REPORT YEAR 1950

23. a. PENSION SYSTEMS (Continued)

<u>Name</u>	<u>Mine</u>	<u>Eff. Date</u>	<u>Gross Pension</u>	<u>Net Pension</u>	
Jacob Pari	Lloyd	10/1/1950	100.00	41.00	
Joseph Gambotto	Maas	11/1/1950	100.00	37.00	
Joseph Marra	Cliffs-Shaft	10/1/1950	84.32	23.00	
John R. Jones	"	"	100.00	37.00	
Matt W. Lahti	Hawkins	9/1/1950	69.00	14.00	
Iver J. Eckstrom	Sargent	3/1/1950	80.68	45.00	20.00 *
John Vesel	Agnew	9/1/1950	76.68	13.00	
Louis A. Rappazini	Athens	3/1/1950	81.68	48.00	24.00
John H. Johns	"	"	100.00	67.00	43.00
James R. Cain	"	"	100.00	64.00	40.00
August E. Kangas	"	"	72.00	35.00	11.00
Luigi Basegio	"	"	100.00	66.00	42.00
Wilfred Dumble	"	"	100.00	68.00	44.00 /
Jacob E. Kujala	"	"	100.00	61.00	37.00
Isaac Tuuri	Negaunee	3/1/1950	100.00	62.00	38.00
Peter Larson	Mather A	"	100.00	63.00	39.00
George J. Hepola	Negaunee	"	100.00	62.00	38.00
Oscar Antilla, Sr.	Mather A	"	100.00	65.00	41.00
Christ Anderson	Negaunee	"	100.00	66.00	42.00
Emil Granlund	"	"	100.00	61.00	37.00
Charles Saari	Mather A	4/1/1950	100.00	62.00	37.00
Frank Ayotte	"	3/1/1950	90.32	54.00	30.00
Victor Maki	Negaunee	"	100.00	64.00	40.00
Sam Racine	Mather A	12/1/1950	100.00	39.00	
Adelbert W. Jenkins	Holman-Cliffs	3/1/1950	77.68	42.00	18.00
John M. Snarich	Hill-Trumbull	"	85.68	50.00	26.00
John G. Ranta	"	"	100.00	65.00	41.00
Frank Hill	"	"	89.68	57.00	32.00
Joseph Dolezel	Holman-Cliffs	"	78.00	39.00	15.00
Archie Dubord, Sr.	C. P. & L. Co.	7/1/1950	100.00	64.00	40.00
Gust W. Nyquist	"	3/1/1950	100.00	19.00	0.00 **

* Social Security benefits were increased effective 9/1/1950, and the net pensions were revised as a result. The second figure shown under the column "Net Pension" represents the net pension effective 9/1/1950. This is true in all cases where two figures appear in the "Net Pension" column.

** Gust W. Nyquist is receiving \$45.29 as a group annuity purchased by Company contribution in addition to his Social Security benefit. This accounts for the comparatively small amount shown as his net pension.

WELFARE DEPT. ANNUAL REPORT YEAR 1950

23. a. PENSION SYSTEMS (Continued)

Pensions under the Pension Plan of March 1, 1950 were discontinued in the following cases:

Fred G. Carlyon	Maas Mine	\$40.00	Died 10/27/1950
Frank Niemi	"	41.00	Discontinued 11/1950. Was awarded Occupational Disease compensation benefits in excess of his gross pension. Died 1/27/1951.

The following disability pension was approved under the Pension Plan of March 1, 1950:

Mike Cvitkovich	Sargent Mine	Eff. 7/1/1950	\$50.00
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WELFARE DEPT. ANNUAL REPORT YEAR 1950

23.

o. INCAPACITATED EMPLOYEES

During the year payments have continued to certain men and certain families who originally did not have sufficient service to bring them within the provisions of the pension system, or, more recently, who were not employed long enough under the Social Security system to bring them benefits from that source. Donations were granted to these people. Some of these men had suffered some disability through accidents at the mines, and there are some with large families who have become incapacitated. Recent additions to this payroll are individuals who have become disabled prior to the retirement age of sixty-five and are not eligible for disability pensions under the Pension Plan of March 1, 1950. When they become sixty-five and are eligible for Social Security benefits, they are ordinarily transferred to our Retirement Payroll or granted a pension under the March 1, 1950 Pension Plan.

For the purpose of record it is mentioned that on February 1, 1947 those individuals who were receiving regular Company aid in the form of grocery, fuel, or clothing orders were granted monetary allowances over this payroll. This resulted in a cutback in record keeping and paper work.

The Mining Department Donation Payroll included twenty-nine people on December 31, 1949, and on December 31, 1950 there were twenty-seven payees. The total amount expended over the roll during the year was \$8,414.80. Following are the additions and deletions for the year:

Andrew Nocenti	Monthly Allow. - \$20	Added effective 9/1/1950
Victor Johnson	" - \$50	" 10/1/1950
John Vercoe	" - \$30	" 11/1/1950
Isaac Leppala	" - \$30	" 12/1/1950
Abel Laitinen	Monthly Allow. - \$30	Transf. to Annuity as of 4/30/1950
William Sealey	" - \$8	Died 6/3/1950
Gust A. Johnson	" - \$30	Transf. to Age Pension as of 6/30/1950
Donato Valenzio	" - \$20	Died 6/22/1950
Matt Syrja	" - \$30	Died 7/14/1950
William Bond, Sr.	" - \$30	Transf. to Age Pension as of 8/31/1950

One death, that of Bernt Wiggen on 10/28/1950, was recorded on the Holmes Mine Donation Payroll as the only change during the year. There is one payee remaining on the payroll, and the total expenditure for the year was \$440.00.

23.
o. INCAPACITATED EMPLOYEES (Continued)

The Furnace Department donations, after being granted, were paid originally by the Furnace Department itself and later by the Cliffs-Dow Chemical Company. By directions from Cleveland on September 1, 1937 the donations have been paid from this office. With the death of Mr. Julius Olson on 8/15/1950 this payroll was closed out and will, undoubtedly, remain inactive in the future. A total of \$200.00 was expended over the payroll during the year.

The Mesaba-Cliffs Mining Company Donation Payroll continued to be inactive during the year. The last payment over this payroll was made in March 1948.

There are five widows on the Donation Payrolls, all being included on the Mining Department roll. Two of these widows, Mrs. J. H. Tregoning and Mrs. Fiina Kampinen, have been granted regular donation payments. The other three, Mrs. Johanna Forstrom, Mrs. Charles Hill, and Mrs. Hilma Maunula, appear on the payroll as a result of the discontinuance of direct relief payments as mentioned in a previous paragraph.

Amount of Mining Department Donations (including widows)	\$8,414.80
Amount of Holmes Mine Donations	440.00
Amount of Furnace Department Donations	<u>200.00</u>
	\$9,054.80

23.

b. REPUBLIC MINE FUNDS

Each year we have recorded in our Annual Report the history of the Republic Mine Funds. Since this fund is no longer in assistance we recommend where any information desired at any time regarding these funds may be reviewed by referring to the statement made in our 1949 Annual Report.

c. SUSPENSE FUNDS

This fund has been closed out and in case it becomes necessary to review the background, the statement made in our 1949 Annual Report will give information and reference.

d. VISITING NURSES

Our visiting nurses continued their usual services throughout the year 1950. These services, particularly since we have had fewer doctors, have been especially necessary to the employees and their families. Each nurse presents a monthly report showing activities during the month. The type of service which our industrial nurses render is a very fine example of social medical service extended to employees and helps develop good public relations. We are fortunate in having industrial nurses who have been with us a long time. They are experienced and tactful people. Their work during the past year was especially heavy, as indicated by their reports. We wish to express our appreciation for the fine work which has been conducted throughout the years by our industrial nursing staff.

The out-patient work carried on by our industrial nurses is a very important part of our medical plan. The industrial nurses are not charged to the medical plan but are charged against the operation of the Welfare Department. It is felt that this part of our services to our employees is highly appreciated.

The work of the visiting nurses was started in Ishpeming on May 1, 1908, and in Negaunee on September 8, 1912. These services were also available in Gwinn from September 1, 1910 until October 1, 1927, when the Gwinn mines were closed.

During 1950 the following nurses were employed:

Ishpeming - Miss Myrtle Welander
Negaunee - Miss Ina E. Atkin

We submit a monthly report from our visiting nurses. The monthly report for the month of December is attached.

WELFARE DEPARTMENT

23.

f. NORTH LAKE CLUBHOUSE

The last information received by this Department indicates that the North Lake Clubhouse has been deeded to the Catholic Diocese of the Northern Peninsula of Michigan and the Clubhouse at North Lake will be used as a Catholic Church.

g. GWINN ASSOCIATION

The Board of Education of Forsyth Township at Gwinn has transferred the Clubhouse to the Forsyth Township Board and the necessary papers are being processed by our attorneys.

h. ISHPEMING Y.M.C.A. BUILDING

The Ishpeming Y.M.C.A building has now been taken over by the State and has become a National Guard Armory.

i. SAFETY WORK

Under the direction of Mr. A. J. Stromquist, Safety Director, the Central Safety Committee held monthly meetings during 1950. Mr. Stromquist submits brief reviews of all accidents previous to the meetings and a general discussion is had at the meetings and a study is made of the possibility of preventing like accidents in the near future. Each accident is then classified. Meetings were held on the following dates in 1950:

- | | |
|-------------|-------------------------------|
| January 13 | July 13 |
| February 13 | August - no meeting |
| March 10 | September 14 |
| April 12 | October 16 |
| May 8 | November 10 |
| June 8 | December 8 |
| | Special meeting - December 14 |

The following are members of the Central Safety Committee:

- | | |
|-------------------------|------------------|
| H. O. Moulton, Chairman | F. J. Haller |
| C. J. Stakel | Onnie Marjama |
| C. W. Allen | S. W. Sundeen |
| Carl Brewer | W. R. Atkins |
| W. F. Gries | John Trosvig |
| A. J. Stromquist | J. S. Westwater |
| W. E. Johnson | Curtis Sundeen |
| H. F. Rogers | H. W. Sundberg |
| J. D. Preston | Dr. G. M. Waldie |
| E. D. Cory | Richard Schaal |
| J. S. Bowen | L. C. Holmgren |
| T. A. Kauppila | |

23.

j. HOSPITALS AND MEDICAL SERVICE

The Superintendent of the Welfare Department serves in the capacity of Administrator of the Ishpeming Hospital and maintains almost daily contact with the hospital and the Negaunee Dispensary. He also serves on the Board of Trustees of the General Hospital of the Iron River District and contacts are made with that hospital at regular intervals. Throughout the year the Ishpeming Hospital Advisory Administrative Committee has continued to meet on the second Tuesday of each month and the following men make up the committee: Mr. C. W. Allen, Manager; Mr. J. S. McNabb, Chief Clerk; Mr. W. F. Gries, Superintendent, Welfare Department; Mr. Ray Satterley, Superintendent, Inland Steel Company; Mr. Joseph Cameron, Manager, Hercules Powder Company; Mr. Harry Peterson, Superintendent, Jones & Laughlin Ore Company. The meetings are also attended by Dr. A. W. Erickson, Chief of Staff, and Mrs. Miriam Thomas, R.N., Superintendent of the Hospital.

Our visits to the Gwinn District are less frequent since the closing of the Princeton Mine. Occasionally, however, we contact some of our employees in the district who may have special problems. We also keep in contact with Dr. S. J. Green who takes care of the medical needs of our employees in the Gwinn area.

For the purpose of the record we note here that in June of 1946, the monthly medical fee for employees who subscribe to our medical plan was raised from \$1.50 per month to \$2.00 per month. The \$2.00 per month rate is still in force.

Dr. R. A. Burke of Negaunee remains a member of our medical staff and he has the special assignment of taking care of the employees of the Cambria Jackson Mine. However, many of the Cambria Jackson employees prefer to go to Dr. Mudge or Dr. Paine for medical attention and the need for Dr. Burke's services is not as great as it was formerly. In fact, it has been suggested that we consider the possibility of dispensing with Dr. Burke's services if and when a reorganization of our present plan is undertaken.

ISHPEMING HOSPITAL

A review of the reports for the year will indicate that the Ishpeming Hospital had a very busy year. The hospital continues to maintain its high standard and has again been granted membership in the American Hospital Association and in the American College of Surgeons. Most of the time the full capacity of the hospital is in use.

Our staff of nurses, while fewer in number than in the pre-war years, continues to be a well-balanced staff and we are fortunate that many of the local married nurses continue to work full time at the Hospital.

Each year it has been mentioned in this report that the people of this community and the surrounding communities do not fully appreciate the real service which is rendered by the Ishpeming Hospital. The hospital is without

23.

j. HOSPITAL AND MEDICAL SERVICE (Continued)

a doubt the greatest asset from a community standpoint in the whole area. The hospital, while owned, operated and maintained entirely by the Cleveland-Cliffs Iron Company with the assistance of the cooperating and coordinating companies in the district, is being called upon more each year because of the fact that people are becoming more hospital conscious year by year. The Community does not in any way contribute to the hospital. That is, there are no special funds coming from any groups or any individuals in the support of the hospital. The lack of appreciation of the hospital on the part of people in this area is not a conscious thought at all but over the years the people of the community have come to think of the Cleveland-Cliffs Iron Company as providing hospital facilities somewhat in the nature of a contribution to the general welfare and health of the entire community. There is no question but the hospital does bring much good will to the company although this good will is not very often expressed by local people who take the hospital too much for granted.

During the year there was discussion again of the possibility of reorganization of the administration of the hospital. Various plans have been studied and some definite conclusions have been reached. The Superintendent of the Welfare Department, as Administrator of the hospital, feels very definitely that control of the hospital should be kept by the company. It has often been pointed out that the services which are rendered in connection with compensation and injury cases are of such importance to the company that it should always be in position to guide and control these particular important phases of the company's work. The hospital could be reorganized as a non-profit institution which would dissolve the necessity for paying the Michigan State Sales Tax. The medical staff should be completely disengaged from the company payroll and they should no longer be in any way direct employees of the company. The program which has been established on the Mesaba Range would undoubtedly work very well in this district. During 1950 several conferences regarding the future of the Ishpeming Hospital were held. A survey was made by Mr. D. E. Sadler, Comptroller, pointing out many of the figures involved in the administration of a hospital. The brief conclusions reached as a result of this survey are as follows: (1) Our hospital facilities are inadequate because of the growing hospital consciousness by the public. (2) It is generally agreed that the present medical plan wherein the doctors are direct employees of the Cleveland-Cliffs Iron Company should be abolished and another plan set up.

It is felt that the monthly meetings of the Ishpeming Hospital Advisory Administrative Committee has served a good purpose since several of the executives of our company and coordinating companies have come to know something of the problems which arise in the operating of a hospital business. This committee has been interested and very loyal to the needs of the hospital. We express here our sincere appreciation for their continued loyalty and support in the problems which we meet in operating a hospital. The hospital has really become a big business.

23

j. HOSPITALS AND MEDICAL SERVICE (Continued)

The staff of the Ishpeming Hospital during the year 1950 was made up of the following:

- Dr. A. W. Erickson, Chief of Staff
- Dr. R. G. Williams
- Dr. R. G. Jaedecke

The staff at the Negaunee Dispensary is made up of the following:

- Dr. W. A. Mudge
- Dr. R. L. Paine

In the Gwinh District, Dr. S. J. Green continues to serve.

Dr. R. A. Burke who conducts his own hospital in Negaunee serves our Cambria Jackson employees by agreement. Dr. Burke is paid \$1.50 per man per month for each of the Cambria Jackson employees for medical and we also supplement this with \$1.00 per man per month to assist Dr. Burke in caring for accidents and injuries and in the maintenance of his own hospital.

We feel that our first obligation is to our people at the hospital and we provide for the care of our employees by reserving two beds at all times for accidents and injuries regardless of what other conditions may be. At present we list our hospital as having a capacity of 52 beds and 24 bassinets. We have, of course, a closed medical staff, a complete nursing staff and we engage only graduate nurses. We also have a trained and experienced anesthetist, a surgical nurse with special training, two laboratory technicians and one x-ray technician as well as a well-organized business staff. The business staff has been increased due to the fact that so many people now carry group hospitalization, and since we have a group hospitalization program now for our own employees, this phase alone requires almost the full time services of one clerk.

The hospital is very well equipped for a hospital of its size. I think it can be safely said that the equipment at the Ishpeming Hospital, including such equipment as x-ray apparatus, laboratory facilities, surgical equipment, operating room equipment, laundry and dietitian department equipment, compares very favorably with any hospital of our size. We are, also, well equipped in our maternity wards and obstetrical department.

The emergency room on the first floor probably has greater use than any other department of the hospital. Here most of the minor injuries, slight injuries and treatments are cared for. It is estimated that at least 35 to 40 people are taken care of in this department every day.

23.

j. HOSPITALS AND MEDICAL SERVICE (Continued)

The Welfare Department, as a department of the company, and the Administrator of the hospital, wish to record here their appreciation to the participating companies in the district, to the Hospital Advisory Committee, and to the employees at the hospital for their continued loyalty and cooperation.

A special report is attached to this general report, giving considerable information regarding the operation of the Ishpeming Hospital for the year 1950.

NEGAUNEE DISPENSARY

The building formerly known as the Negaunee Hospital and in recent years known as the Negaunee Dispensary continues to serve as the medical center for our employees in Negaunee and environs. Dr. W. A. Mudge and Dr. R. L. Paine maintain their offices in the Negaunee Dispensary, as does Miss Atkin, the industrial nurse for the Negaunee District. There are over 1500 employees in the Negaunee area and most of them have their medical needs taken care of through the Negaunee Dispensary. We have maintained through the year a regular registered nurse as part of the staff at the Negaunee Dispensary and a nurses' aide also, who has had over a year's training as a nurse. During the year we have also had Mr. George Landry, a registered pharmacist, on duty at the Negaunee Dispensary pharmacy and upon his resignation, we hired Mr. Leo Syrjanen, a registered pharmacist.

Dr. R. A. Burke, who owns and operates the Twin City Hospital at Negaunee, is a member of our staff in that he serves the medical needs of our men at the Cambria Jackson Mine.

The Negaunee Dispensary serves as an emergency hospital or clinic in the Negaunee District. Many of the emergency cases, particularly injuries, are not brought to the hospital in Ishpeming but are taken care of at the Negaunee Dispensary. We do not hospitalize anyone, however, in the Negaunee Dispensary.

The living quarters in the Negaunee Dispensary are occupied by Mr. and Mrs. Charles Johnson. Mr. Johnson is the custodian and janitor of the building. He keeps the building in good shape, takes care of the fires, unpacks the supplies and materials and takes care of the doctors' and nurses' cars, as well as any other type of work that normally falls within the sphere of a custodian of a building.

GWINN DISTRICT

Dr. S. J. Green continues to serve our employees in the Gwinn area. He occupies the home which the doctor has always had and in which he has his office and a small dispensary. We do not maintain an industrial nurse in the Gwinn District.

WELFARE DEPARTMENT

23. j. HOSPITALS AND MEDICAL SERVICE (Continued)

GOVERNING BOARD

A. C. Brown, President
 E. B. Greene, Chairman, Board of Directors
 C. J. Stakel, General Manager
 C. W. Allen, Manager of Michigan Mines

ADVISORY COMMITTEE

C. W. Allen
 J. S. McNabb
 W. F. Gries, Secretary and Chairman
 J. C. Cameron
 R. D. Satterley
 H. S. Peterson

ACTIVE MEDICAL STAFF

A. W. Erickson, M.D., President	George McL. Waldie, M.D.
W. A. Mudge, M.D.	R. G. Williams, M.D.
R. G. Jaedecke, M.D.	R. L. Paine, M.D.
	S. J. Green, M.D.

COURTESY STAFF

P. Van Riper, M.D.
 I. Sicotte, M.D.
 F. O. Paull, M.D.

DEPARTMENTS

Laboratory and Roentgenology
 A. W. Erickson, M.D.

Anesthesia
 A. W. Erickson, M.D.

Gwinn Dispensary
 S. J. Green, M.D.

Histories
 * A. W. Erickson, M.D.

Negaunee Dispensary
 W. A. Mudge, M.D.
 R. L. Paine, M.D.

Industrial Hygiene
 Geo. McL. Waldie, M.D.

Walter F. Gries, Administrator

23. j. HOSPITALS AND MEDICAL SERVICE (Continued)

REPUBLIC HOSPITAL

Each year we have mentioned the Republic Hospital. If at any time information is desired regarding the Republic Hospital, it is suggested that that Annual Report 1949 be reviewed.

IRON RIVER HOSPITAL

During the year several calls were made at the General Hospital of the Iron River District at Stambaugh. The Superintendent of the Welfare Department attended several of their meetings, as well as the annual meeting. The General Hospital of the Iron River District provided for the medical and hospital needs of our employees at the Spies-Virgil Mine at Iron River. This hospital is managed by a board of trustees representing the different stockholding mining companies and it is administered and operated in a very business-like manner. The Superintendent of the Welfare Department represents our company on the Board of Trustees of the Iron River General Hospital.

Dr. L. E. Irvine continues to provide the necessary medical attention for our Spies-Virgil employees. He also gives the physical examinations, both pre-employment and periodical. Dr. Addison at Crystal Falls, who is associated with the hospital there, provides medical care for a small group of our employees who particularly request his services.

PAYMENTS TO PHYSICIANS

For reference purposes the following statement is made in each annual report:

On August 1, 1927, the rate of payment for the Cleveland-Cliffs Iron Company went into effect. The employees paid \$1.25 for medical services for themselves and the dependent members of their families, and the Company paid 50¢ per man per month to cover medical and hospital services for cases coming under the Compensation Act.

From time to time the rates for membership in the Company's medical plan have been changed. On January 1, 1944, the monthly rate was raised from \$1.25 to \$1.50. The Company increased its contribution at that time from 50¢ to 75¢ per man per month. In June of 1946 the employees' rate was increased from \$1.50 per man to \$2.00 per man per month.

PHYSICAL EXAMINATION OF EMPLOYEES

The Industrial Hygiene Department, under the direction of Dr. George McL. Waldie, continues to give the physical examinations to employees and to counsel with them regarding physical deficiencies and whose cases require consideration and study.

The contract which the company formerly carried with the Trudeau Foundation of Saranac Lake, New York was not renewed in the fall of 1945. We are convinced that our own Industrial Hygiene Department can carry on the program very well.

23.

j. HOSPITALS AND MEDICAL SERVICE (Continued)INDUSTRIAL HYGIENE DEPARTMENT

Our Industrial Hygiene Department was organized on April 1, 1939. Dr. George McL. Waldie continues to have charge of this department. The department continues the usual physical examination program, as well as the follow-up program in cases where employees have been found to have some deficiency. Considerable valuable information has been gathered by this department during the past several years and we feel that we have excellent records on all employees from the standpoint of their physical condition.

The work of the Department of Industrial Hygiene has increased since we did not renew our Saranac contract in the fall of 1945. All films which formerly were sent to Saranac for reading and interpretation are being read and interpreted locally by Dr. Waldie. This work covers also the Inland Steel Company and the North Range Mining Company's employees on the Marquette and Menominee Ranges, as well as the employees of the Hercules Powder Company. Dr. Waldie submits monthly reports, as well as periodical reports, covering the work of his department.

In cases where it seems necessary for an employee to have medical attention of some kind, Dr. Waldie refers him to a regular member of our medical staff. The department makes an effort to correct any defect or some type of illness, a follow-up program is instituted and a check-up is made from time to time to determine what the employee's condition is.

The expansion of operations on the part of our Company has made it necessary to employ additional manpower. This has given the Department of Industrial Hygiene additional responsibility and we again wish to recommend that an effort be made at once to secure an assistant or an understudy for Dr. Waldie.

The Cleveland-Cliffs Iron Company	27,936
Inland Steel Company	4,438
Other Companies - Misc.	3,118
Pickands Mather	149
Jones & Laughlin Ore Co.	6
Oliver Mng. Co.	725
Marq. Co. Rd. Comm.	10
Hercules Pdr. Co.	350
Total	<u>36,732</u>

23.

k. COMMUNITY HEALTH

Each year we include in this report a statement concerning the general health conditions in Marquette County. It is pleasing to again report that the general health conditions in the county were good and there were no epidemics or loss of time at the mines because of illness.

There continues to be an increase in the use of the Ishpeming Hospital, so much so that very often the hospital has to arrange a schedule for admittances of people due to the fact that there is a great demand for hospitalization. Presently there is a waiting list in the community of persons who are waiting to be hospitalized.

The three cities in Marquette County each have a health officer and a full time school nurse. The City of Marquette also employs a full-time nurse whose services are made available for the most part to the township districts. The townships also have health officers.

The city health officers in Marquette County are:

- Ishpeming - Dr. W. A. Corcoran
- Negaunee - Dr. G. A. Knudson
- Marquette - Dr. C. P. Drury

The Northern Michigan Children's Clinic at Marquette, operated in connection with St. Luke's Hospital and supported largely by funds from the Michigan Children's Fund, has continued to service children throughout the entire Northern Peninsula. The counties of the Northern Peninsula are very fortunate in having available such a fine clinic.

The Bay Cliff Health Camp at Big Bay was in session again during the summer of 1950, completing fifteen years of service. There were about 150 children in the camp from the counties in the Northern Peninsula. These children are cared for for about six or seven weeks and special services are rendered for various groups, such as services for poliomyelitis convalescent children, cardiac cases, rheumatic hearts, speech and hearing defects, diabetics and under-nourished children. The Superintendent of the Welfare Department has continued to serve as Chairman of the Board of Directors of Bay Cliff Health Camp.

23.

m. RELIEF WORK

During 1950 we carried on our usual program of extending assistance to certain special cases.

The following is a statement of assistance, not including cash assistance, rendered in 1950:

	<u>Gwinn</u>	<u>Ishpeming</u>	<u>Negaunee</u>	<u>Total</u>
January			\$ 35.76	\$ 35.76
February			5.40	5.40
March		15.00	35.04	50.04
April				
May		10.00	5.10	15.10
June			89.97	89.97
July			5.10	5.10
August		15.00	5.27	20.27
September		10.30	20.27	30.57
October	99.25	5.40		104.65
November			5.58	5.58
December			80.70	80.70
	<u>\$99.25</u>	<u>\$55.70</u>	<u>\$288.19</u>	<u>\$443.14</u>

n. EMPLOYMENT

The Welfare Department keeps in almost daily touch with the Employment Office, in charge of Mr. H. W. Sundberg. In cases where there may be some question regarding the employment of a certain individual the case is reviewed. Every effort is made to protect the best interests of the Company in connection with the employment of people.

23.

1. RED CROSS

Each year we receive a report from the Marquette County Chapter of the American Red Cross. The county chapter maintains a nursing service with a full time nurse. The statistical portion of this report is omitted but is available in the files of this department. The Superintendent of the Welfare Department serves on the Red Cross Board.

23.

p. COST OF LIVING

Each year there appears in the Annual Report a brief statement with respect to living costs as they come to our attention during the year. We checked the Federal Department of Agriculture and the State Department of Social Welfare reports and indices in determining the local living rates as compared with previous years. During the year 1950, generally speaking, the cost of living increased. A periodical check on local prices indicate a gradual increase. This increase still seems to be on an upward trend.

Our local merchants report that business conditions generally are good. We seldom have any requests from local business men for the bringing of any pressure of any of our employees for accounts receivable.

HOUSING

The housing situation may be described as acute. While a number of new homes were built during the year, it seems that the demand is gradually increasing and it is greater than it has been at any time for many years. During the past few years we have hired men from some of the areas outside of Ishpeming and Negaunee, such as the City of Marquette, and they eventually will wish to live in the area. At the present time there are no available homes for them. There is much interest locally in the housing program which the Company is contemplating.

RELIEF SITUATION

The year 1950 showed a decrease in the number of relief cases in Marquette County. In December of 1949 there were 236 cases whereas in December of 1950 there were 135 cases on direct relief in the entire county. The availability of work has reduced the relief rolls. The number of older persons in Marquette County who are granted Old Age Assistance in the State increased only by 8 cases since 1949. The average Old Age Assistance grant decreased from \$45.25 in 1949 to \$44.70 in 1950. This indicates that some of the persons receiving Old Age Assistance undoubtedly increased their income from private sources. The case load in the Aid to Dependent Children category increased by only 3 cases, from 240 to 243 cases. The average grant per case decreased from \$81.97 per case to \$78.14.

23.

q. IMPROVEMENT WORK

Mr. Julian Payen, the company's landscape gardener, continues to have charge of all the improvement work for all the grounds in the whole district. In the fall of 1950, Mr. Payen went to Cleveland to be with Mr. Mather. (He returned to Ishpeming in March of 1951.) Mr. Payen has done a very outstanding work in the landscaping of our properties, particularly in the new mines, Mather A and B, and we feel that this is a good investment since it seems to have a very decided effect upon the morale of the entire community.

r. GARDENS AND WELL KEPT PREMISES

The Best Kept Premises and Vegetable Gardens contest was not conducted during 1950. It is felt that this contest should be re-established since it gives opportunity to make contacts with certain employees who go along year after year without any particular problems of relief and welfare and many of them are regarded as the company's most loyal employees.

s. COMMUNITY SERVICE WORK

The American Legion Building, which for many years has been the center for the majority of the community activities, has been transferred to the local Legion Post by our company and the Oliver Iron Mining Company.

The American Legion Building in Negaunee is leased from our company and recommendations for transfer to the local Legion Post in Negaunee have been made and are underway. We continue to keep the building in condition and regular inspections are made. Considerable of the community activities centers around the Negaunee Legion Clubhouse.

The number of fraternal organizations in the district is rather large for a community of this size. Many of the fraternal orders maintain their own club rooms and considerable of the social life of the community centers around these organizations.

t. SATURDAY NOON LUNCHEON CLUB

The Saturday Noon Luncheon Club, made up of superintendents and heads of departments, approximately thirty in number, has had only two meetings during the year.

u. OUTDOOR ACTIVITIES

The interest in outdoor activities in the community has increased considerably in recent years. The Winter Sports Club, which maintains a clubhouse north of the city, is a very popular organization and there is greater activity there each winter. This area is also made available during the summer months for various types of outdoor meetings.

The Ishpeming Ski Club conducted its 63rd Annual Ski Tournament on February 18, 1950. These tournaments seem to interest more people every year. Several of the employees of our company participate in the ski jumping.

23.

v. THE MATHER INN

The Mather Inn continues to be the most popular hotel in the Northern Peninsula. It is serving the public in a very fine manner. Many of the civic and community meetings are held here.

w. VARIOUS DEPARTMENTS AND ACTIVITIES

The Superintendent of the Welfare Department serves as first vice-president of the Michigan Society for Crippled Children and Adults, and during 1950 was elected a vice-president of the Michigan Tuberculosis Association. He also continues to serve as a member of the Michigan Welfare League and as director of District XI for the University of Michigan Memorial-Phoenix Project.

The Superintendent of the Welfare Department continues to serve as Chairman of the Board of Directors of Bay Cliff Health Camp at Big Bay. He also serves as a member of the Advisory Consultant Staff to the State Department of Public Instruction on community planning and programming.

On December 23, the employees of the Central Office held their second annual Christmas Party.

x. POLICE DEPARTMENT

The police Department is under the supervision of the Superintendent of the Welfare Department and is in direct charge of Mr. R. J. Veale, Chief. Almost daily conferences are held with Mr. Veale, dealing with police work and plant protection. Mr. Veale submits a monthly report. Our police have been uniformed for several years and we have felt that we get excellent service from them. Now men for the department are selected with care and we no longer follow the old policy of using older men in their declining years as members of the police force.

y. THE CLEVELAND CLIFFS "ORBIT"

The last number of the Cleveland-Cliffs "Orbit" was issued in December of 1950. The new magazine, the "Cliffs News" will be published starting in 1951.

z. CENTENNIAL

The Company observed its centennial year during 1950 and two days were set aside in this area for the observance, June 29 and 30. We had many favorable reports on the various activities in connection with the centennial such as the history of the Company in book form, "A Century of Iron and Men", written by Dr. Harlan Hatcher, the essay contest, the banquet for the executive group and guests at the Masonic Temple in Marquette, on June 29, and the big Family Day on Friday, June 30, at the Winter Sports Area. Almost weekly we received requests for information on our centennial, particularly the request for a book and samples of ore which were prepared in a lucite cylinder.

APPRECIATION

It is a privilege to again record in this report my appreciation for the cooperation, the guidance and the understanding which have always been given this department by Mr. C. J. Stakel, General Manager, and by Mr. C. W. Allen, Manager of Michigan Mines. I wish also to express my appreciation for the cooperation which has always been received from Mr. A. J. Stromquist, Safety Director, and from Captain H. F. Rogers, his assistant. We shall strive to coordinate and cooperate with the work of this department at all times. It should also be mentioned here that the Superintendent of the Welfare Department, who acts as Administrator of the Ishpeming Hospital, appreciates the splendid cooperation and help of Mr. C. W. Allen, Manager, Mr. J. S. McNabb, Chief Clerk, Mr. Joseph Cameron, Superintendent of the Hercules Powder Company, Mr. Ray Satterley, Superintendent of the Inland Steel Company, and Mr. Harry Peterson, Superintendent of the Jones & Laughlin Ore Company, who have been serving as members of the Ishpeming Hospital Advisory Administrative Committee.

I wish to conclude my annual report by expressing appreciation for the splendid help and assistance of Mr. W. E. Johnson, Compensation Agent, and for the fine service rendered by Mr. L. C. Holmgren and Miss Marilyn Holmgren, assistants to Mr. Johnson. We record again that we are very pleased to express appreciation for the fine services rendered by Miss Shirley Holmgren, Secretary to the Superintendent of the Welfare Department.

Ishpeming Hospital
Ishpeming, Michigan

THIRTY-SECOND ANNUAL REPORT
OF
THE ISHPEMING HOSPITAL

INCORPORATED 1917

Unit of the Cleveland-Cliffs Iron Company
Opened for the Reception of Patients - 1918

Reports close with the Calendar Year, December 31, 1950

GOVERNING BOARD

E. B. Greene, President
C. J. Stakel, General Manager, Retired August 1, 1950
C. W. Allen, Manager of Michigan Mines, until August 1, 1950
General Manager, beginning August 1, 1950

ADVISORY COMMITTEE

C. W. Allen, until August 1, 1950
J. S. McNabb
W. F. Gries, Secretary and Chairman
J. C. Cameron
R. D. Satterley
H. S. Peterson
F. J. Haller, beginning August 1, 1950

ACTIVE MEDICAL STAFF

A. W. Erickson, M. D., Chief of Staff	Geo. McL. Waldie, M. D.
W. A. Mudge, M. D.	R. G. Jaedecke, M. D.
R. G. Williams, M. D.	R. L. Paine, M. D.
	S. J. Green, M. D.

COURTESY STAFF

E. R. Elzinga, M. D.
F. Van Riper, M. D.
I. Sicotte, M. D.
F. O. Paull, M. D.
Local Dentists

CONSULTING STAFF

A. W. Erickson, M. D.

DEPARTMENTS

Ishpeming Hospital
A. W. Erickson, M. D., Chief of Staff

Negaunee Dispensary
W. A. Mudge, M. D., Senior Doctor

Gwinn Dispensary
S. J. Green, M. D.

Industrial Hygiene
Geo. McL. Waldie, M. D.

ISHPEMING HOSPITAL
ISHPEMING MICHIGAN

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PERSONNEL AS OF DECEMBER 31, 1950

A. W. Erickson, M. D.	Chief of Staff
R. G. Williams, M. D.	
R. G. Jaedecke, M. D.	
Geo. McL. Waldie, M. D.	Industrial Hygiene Department
Mrs. Miriam Thomas, R. N.	Superintendent
Mrs. Helen Romeli, R. N.	Assistant with Practical Nurse Program
Edgar Holmgren	Pharmacist
Edmund Holmgren	Bookkeeper
Miss E. Anna Ruhl	Dietician
Miss Myrtle Welander, R. N.	Visiting Nurse
Miss Ruth Pasander, R. N.	Anesthetist and Operating Room Supervisor
Mrs. Florence Dawe, R. N.	Surgical Nurse
Miss Edna Thomas, R. N.	Surgical Nurse
Mrs. Marion Silas, R. N.	Physiotherapist
Mrs. Germaine Myllymaki, R. N.	Emergency Room and Out-Patient Department Nurse
Mrs. Lydia Carlson, R. N.	Emergency Room and Out-Patient Department Nurse
Mrs. Doreen Gyles, R. N.	Emergency Room and Out-Patient Department Nurse
Mrs. Marion Lindberg, R. N.	Third Floor Supervisor
Mrs. Marie Wassberg, R. N.	Second Floor Supervisor
Miss Frances Harrington, R. N.	General Duty Nurse
Mrs. Mathilda Strand, R. N.	General Duty Nurse
Mrs. Queenie LaFave, R. N.	General Duty Nurse
Miss Patricia Regan, R. N.	General Duty Nurse
Mrs. Martha Bennett, R. N.	
(ill on Dec. 31)	General Duty Nurse
Mrs. Frances Oja, R. N.	General Duty Nurse
Miss Anna Koski, R. N.	General Duty Nurse
Miss Marilyn Arsenault	General Duty Nurse
Mrs. Mary Payne, R. N.	General Duty Nurse
Mrs. Lillian Larson, R. N.	General Duty Nurse
Mrs. Margaret Berg, R. N.	General Duty Nurse
Miss Therese Grondine (ill)	Practical Nurse
Miss Irene Moraski	Practical Nurse
Fritz Ring	Chief Orderly
Harry Gall	Orderly
Charles Larson	Orderly
Arvo Lyyski	Orderly
George Clark	Orderly
Matt Heikkinen	Garage Man
John Williams	Janitor and Fireman
Mrs. Anita Holmgren	Office Girl
Miss Ann Quayle	Office Girl
Miss Irene Klippel	Relief Operator and Business Office Clerk
Miss Eileen Cahill	Business Office Clerk
Miss Joyce Johnson	Business Office Clerk
Miss Ann Sundblad	Historian
Mrs. Taini Mais	Assistant Historian
Miss Ruby Hooper	Secretary, Industrial Hygiene
Clayton Quinn	Industrial Hygiene Technician
Paul Peterson	Laboratory Technician
Mrs. Evelyn Laksonen	Laboratory Technician
Mrs. Joan DeHart	X-ray Technician
Mrs. Tillie Wallenstein	Cook

NEGAUNEE DISPENSARY

W. A. Mudge, M. D.
R. L. Paine, M. D.
Miss Ina Atkins
Charles P. Johnson
Mrs. Nona Hares, R. N.
Miss Ada Lehtonen, R. N.
Leo Syrjanen

Visiting Nurse
Caretaker
Nurse
Nurse
Pharmacist

GWINN DISPENSARY

S. J. Green, M. D.

RELIEF GENERAL DUTY NURSES DURING DECEMBER

Mrs. Shirley Hoiem, R. N.
Mrs. Frances Nowell, R. N.
Mrs. Lucy Beard, R. N.
Mrs. Isabelle Vercellino, R. N.
Mrs. Mary St. Andre, R. N.
Miss Laila Namela, R. N.
Mrs. Dorothy Maloney, R. N.
Mrs. Helvi Jennings, R. N.

DAY WORKERS, DECEMBER 1950

Regular Kitchen

Tillie Wallenstein	Full Time
Elizabeth Ayotte	Full Time
Ethel Oie	Full Time
Aino Kuisti	Full Time
Mildred DeRoche	Full Time
Angela DeRoche	Part Time
Dagney Rock	Part Time

Housekeeper

Florence Hanna	Full Time
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Diet Kitchen Supervisor

Emma Argall	Full Time
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Receptionist

Elna Elson	Full Time
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Diet Kitchen, Second Floor

Edith Wheeler	Full Time
Helen McQuiggin	Full Time
Clara Solomon	Full Time
Marilyn Rock	Part Time
Elsie Lundin	Relief

Diet Kitchen, Third Floor

Olga Norell	Full Time
Albina George	Full Time
Jennie Urich	Full Time

CLEANING

Alice Backlund	Full Time
Lilyan Olson	Full Time
Jennie Sirtola	Full Time
Chrissie Keskey	Full Time

Nurses' Aids

Donna Brown	Full Time
Alezina Gibbs	Full Time
Bertha Hill	Full Time
Lempi Haavisto	Full Time

DAY WORKERS, DECEMBER 1950

Continued

Nurses' Aids, Continued

Blanche Moyle	Full Time
Viola Moffatt	Full Time
Ruth Mattson	Full Time
Mae Johnson	Full Time
Hazel Tynismaa	Full Time
Georgina Anderson	Extra Relief

Laundry

Lyda Turgeon	Full Time
Beatrice Pryor	Full Time
Dorothy Oliver	Full Time
Bertha Nault	Full Time
Columbia Johnson	Full Time
Leona Rule	Full Time
Marie Eckloff	Full Time
Abie Olson	Full Time

Temporary Employee

Loretta Brown	Part Time
Ruth Trebilcock	Extra Relief

Maintenance

John M. Johnson	Full Time
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DAY WORKERS WHO RESIGNED IN 1950

Regular Kitchen

Barbara Anderson	June 17
Doreen Lawson	January 31

Diet Kitchen, Second Floor

Alice Francis	December 15
Barbara Demmer	April 31

Cleaning

Dora Borlace	July 12
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Diet Kitchen, Third Floor

Doris Scott	June 17
Shirley Tippett	August 21

Nurses' Aids

Jane Gill	May 12
Therese Graham	September 8
Merle Nault	September 25

CHANGES IN PERSONNEL

Mrs. Martha Palo, R. N.	Charge Nurse, Third Floor, Resigned January 31
Miss Marion Lawson, R. N.	General Duty to Charge, February 1
Mrs. Barbara Perrault	X-ray Technician, Resigned January 31
Mrs. Joan DeHart	X-ray Technician, January 1
Miss Irene Klippel	Relief Operator, January 5
Mrs. Betty Bannon, R. N.	Relief General Duty, Resigned, February 28
Miss Shirley Birch, R. N.	General Duty, Began February 26, Resigned July 27
Mrs. Helen Lundstrom, R. N.	General Duty, Resigned March 18
Mrs. Helvi Jennings, R. N.	Relief General Duty, Resigned April 1
Mrs. Taini Mais	Relief Industrial Hygiene Department April 7-May 26
	Relief Secretary, as needed
Miss Ruth Kulju, R. N.	Emergency Room Nurse, Resigned May 31
Mrs. Doreen Gyles, R. N.	Emergency Room, May 21
Miss Joyce Ketola	Graduate Practical Nurse, Resigned May 31
Mrs. Eleanore Bennett, R. N.	Relief General Duty, May 30 to September, 1950
Miss Irene Maroski	Graduate Practical Nurse, Began June 25
Mrs. Gloria Quaal, R. N.	Operating Room Nurse, Resigned July 31
Mrs. Florence Dawe, R. N.	General Duty to Operating Room Nurse, July 1
Miss Edna Mae Thomas, R. N.	General Duty, July 9, to Operating Room Nurse, August 6
Miss Anna Koski, R. N.	General Duty, July 16
Miss Bonna Lee Mukavtz	Graduate Practical Nurse, Began July 16, Resigned, August 31
Mrs. Barbara Perrault	Relief Laboratory Technician to cover vacations
Mrs. Ann Marie Hammar, R. N.	Operating Room Nurse, Resigned August 31
Mrs. Laila Mariette, R. N.	Relief Emergency Room Nurse, August
Mrs. Lillian Hoff, R. N.	Relief Emergency Room Nurse, September
Miss Aileen Erickson, R. N.	General Duty, Resigned, September 2
Mrs. Emily Torma, R. N.	General Duty, Resigned, September 2
Mrs. L. Mary Payne, R. N.	General Duty, Began September 3
Mrs. Lillian Larson, R. N.	Relief General Duty, Began September 10; General Duty, Oct. 1
Mrs. Margaret Berg, R. N.	Relief General Duty, Sept. 10 to 24; General Duty, Dec., 1950
Miss Marilyn Arsenault, R. N.	General Duty, October 8
Miss Donna Harvala, R. N.	General Duty, October 8; Resigned, November 19
Mrs. Syma Poobus, R. N.	Resigned, October 15
Mrs. Colleen Sundblad	Assistant Historian, Resigned November 15
Mrs. Taini Mais	Assistant Historian, November, 1950

ISHPEMING HOSPITAL
Ishpeming, Michigan

RELIEF NURSES

Miss Laila Niemela, R. N.
Mrs. Betty Bannon, R. N.
Mrs. Syma Poobus, R. N.
Mrs. Shirley Hoiem, R. N.
Mrs. Frances Oja, R. N.
Mrs. Frances Nowell, R. N.
Mrs. Florence Johnson, R. N.
Mrs. Mary St. Andre, R. N.
Mrs. Doreen Gyles, R. N.
Mrs. Helen Cox, R. N.
Mrs. Helvi Jennings, R. N.
Mrs. Lucy Beard, R. N.
Mrs. Isabelle Vercelliho, R. N.
Mrs. Dorothy Maloney, R. N.
Mrs. Lillian Hoff, R. N.
Mrs. Eleanor Bennett, R. N.
Mrs. Laila Marietti, R. N.
Mrs. Lillian Larson, R. N.
Mrs. Margaret Berg, R. N.

ISHPEMING HOSPITAL
Ishpeming, Michigan

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<u>Month</u>	<u>General Duty</u>	<u>Relief Days</u>	<u>Operating Room</u>	<u>Supervisors</u>	<u>Physiotherapist</u>	<u>Practical Nurse</u>	<u>Assistant with</u>
	<u>Nurses</u>		<u>Nurses</u>		<u>and Emergency Room</u>		<u>Education</u>
January	10	120	2	3	4 / 1 ill	11	1
February	10	96	2	3	4 / 1 ill	10	1
March	10	127	2	3	4 / 1 ill	10	1
April	9	121	2	3	4 / 1 ill	10	1
May	9	130 ¹ / ₄	2	3	4 / 1 ill	10	1
June	10	108 ³ / ₄	2	3	4	10	1
July	10 / 1 ill	110 ¹ / ₂	3	3	4	10	1
August	9	116	2	3	4 / 1 ill	10	1
September	7 / 1 ill	134	2	3	4 / 1 ill	11	1
October	10 / 1 ill	107	2	3	4	11	1
November	10 / 1 ill	106	2	3	4	11	1
December	10 / 1 ill	96	2	3	4	10	1

<u>Month</u>	<u>Graduate</u>	<u>Nurses Aides</u>	<u>Visiting Nurse</u>
	<u>Practical Nurses</u>		
January	2	9	1
February	2	9	1
March	2	9	1
April	2	7 - / 3 ill	1
May	2	9 / 1 ill	1
June	1 / 1 ill	10	1
July	2 / 1 ill	9	1
August	2 / 1 ill	8 / 2 ill	1
September	1 / 1 ill	7 / 2 ill	1
October	1 / 1 ill	8 / 1 ill	1
November	2	8 / 2 ill	1
December	1 / 1 ill	7 / 2 ill	1

ISHPEMING HOSPITAL
Ishpeming, Michigan

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HOSPITAL REPORT FOR THE YEAR 1950

Number of patients remaining in the hospital at the beginning of the year		43
Number of adult patients admitted	1356	
Number of child patients admitted	221	
Number of births	303	
Total new patients for year		<u>1880</u>
Total of all patients during year		<u>1923</u>
Number of deaths	76	
Number discharged during year	<u>1806</u>	
Total number leaving hospital		<u>1882</u>
Number of patients remaining at the end of the year		41

CLASSIFICATION OF NEW CASES:

Newborn	303	
Surgical	696	
Medical	550	
Obstetrical	<u>331</u>	
Total		1880

NUMBER OF PATIENTS OPERATED ON:

Major	296	
Minor	548	
Circumcisions	<u>142</u>	
Total		986
Emergency Room Operations	416	
Physiotherapy Treatments	3005	

NUMBER OF PATIENT DAYS:

Newborn	1960	
Other	<u>17710</u>	
Total		19670

Average number of patients per day	53.8	
Number of meals for patients	53130	
Number of meals for nurses, superintendent and dietitian	12440	
Number of meals for physicians and guests	181	
Number of meals for help	<u>12728</u>	
Total Meals		78479

Average stay per patient	10.2	
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DEATHS FOR 1950 CLASSIFIED BY DISEASE

Adenocarcinoma (anular--sigmoid colon)	1
Adenocarcinoma, uterus, grade II	1
Arteriosclerosis	1
Arteriosclerotic Heart Disease, Advanced	1
Bronchopneumonia	1
Carcinoma, head of the pancreas	1
Carcinoma of the rectum	1
Carcinoma of the stomach with metastasis	1
Carcinoma of the uterus	1
Cardiac Failure	2
Cardiovascular Accident	1
Cardiovascular Disease	3
Cardiovascular Failure	8
Cardiovascular renal Disease	2
Cerebral Hemorrhage	5
Cerebral Vascular Accident	9
Cerebrovascular Thrombosis	1
Cholecystitis, acute	1
Chronic Congestive Myocardial Failure	1
Congenital Atelectasis	1
Congestive Heart Disease	1
Coronary Occlusion	3
Coronary Thrombosis	1
Epithelioma of the ear with metastasis into the neck	1
Fracture, ribs, with rupture of lung and resulting hemorrhage, left	1
Glomerulonephritis, acute	1
Influenza and Bronchopneumonia	1
Lobar Pneumonia	2

DEATHS FOR 1950 CLASSIFIED BY DISEASE
continued

Monstrosity	1
Myocarditis	5
Nasal Hemorrhage, moderately severe	1
Nephritis	1
Occlusion, mesenteric artery, superior branch	1
Perforated Gastric Ulcer	2
Pneumonia with cardiac failure	1
Premature	3
Pulmonary Atelectasis	1
Pulmonary Embolus	1
Pulmonary tuberculosis	1
Spontaneous subarachnoid hemorrhage	1
Stillbirths	<u>4</u>
Total	76

DEATHS DURING YEAR - 1950

Surgical	5
Medical	58
Gynecological	0
Traumatic	3
Newborn	6
Stillborn	4
Total	76
Deaths under 48 hours	23
Deaths over 48 hours	49
Stillborn	4

TRAUMATIC DEATHS

<u>Month</u>	<u>No.</u>	<u>Case No.</u>	<u>Name</u>	<u>Age</u>	<u>Diagnosis</u>
January	1	33824	Louis Cowling	80	Pulmonary Embolus Fracture, hip, right
February	0				
March	0				
April	1	34070	Richard Mason	72	Fracture, right hip
May	0				
June	0				
July	0				
August	0				
September	0				
October	0				
November	1	35476	James Hooper	53	Fracture of ribs with rupture of lung, resulting hemorrhage (left)
December	0				

CLASSIFICATION OF PATIENTS ON ADMISSION

Medical	557
Surgical	272
Obstetrical	331
Newborn	303
Gynecological	106
E. E. N. T.	125
Traumatic	186
TOTAL	<u>1880</u>
Women	880
Men	476
Children	221
Newborn	303
TOTAL	<u>1880</u>

CLASSIFICATION OF PATIENTS ON DISCHARGE

Medical	410
Surgical	285
Obstetrical	298
Not Delivered	29
Newborn	280
Gynecological	108
E. E. N. T.	125
Traumatic	195
DISCHARGED	<u>1730</u>
Deaths	76
TOTAL DISCHARGED	<u>1806</u>
Recovered	1450
Improved	312
Not Improved	13
Not Treated	
(Inc. Undelivered OB)	29
For Diagnosis Only	2
TOTAL	<u>1806</u>

DEATHS

Under 48 hours	23
Over 48 hours	49
Stillborn	4
TOTAL	<u>76</u>
Medical deaths	58
Surgical deaths	5
Newborn deaths	6
Stillborn	4
Traumatic	3
TOTAL	<u>76</u>

DIETARY REPORT - YEAR 1950

Patient Meals	53130
Doctor, Nurse, Employees, Visitors	25349
Total Meals for the Year	78479
Formulas	303

SPECIAL DIET PATIENT DAYS

Diabetic	734
Selective	1005
Salt Free	1077
Salt Free, 1200 Calories	36
High Protein	238
Low Salt	176
Neutral	206
High Protein, Salt Free	77
Nephritic	26
Fat Free	238
1800 Calories	3
Final Ulcer	3
Bland	144
Second Week Ulcer	7
Third Week Ulcer	5
1200 Calories	109
Salt Free, Cardiac	6
Modified Sippy	75
Salt Poor	51
Initial Ulcer	222
High Caloric	132
High Carbohydrate	25
Low Residue	127
Allergy	54
Fat Free, High Caloric	22
Low Fat, Salt Free	27
Sippy	32
Salt Free, Diabetic	94
Rice	44
1500 Calories	22
Low Purin	8
Ulcerative Colitis	13
Low Fat	179
Pernicious Anemia	13
1000 Calories	11
Colitis	6
Low Sodium	43
Low Fat, High Carbohydrate	43
Constipation	15
1400 Calories	12
Salt Free, Low Fiber	18
Salt Free, Fat Free, 1200 Calories	8
Ground Meat	8
Low Salt, 1200 Calories	12
Total Special Diet Patient Days	5406
Total Special Diet Meals	16218

X-RAY REPORT FOR THE YEAR 1950

Extremities	1127
Shoulders	123
Spine	212
Ribs	72
Skull	56
I. V. Pyelogram	9
Kidney	28
Pelvis	69
Gastrointestinal	51
Fluoroscope	1
Foreign Bodies	7
Colon	16
Mastoid	1
Abdomen	32
Chest	360
Jaw	12
E. K. G.	182
Fetus	117
Gallbladder	77
Nasal Bone	2
Sternum	<u>3</u>
Total	2557
No. of Out Patients	1758
No. of In Patients	<u>1799</u>
Total	<u>2557</u>

FRACTURES
X-ray Department

Cleveland-Cliffs Iron Company		
Athens	6	
Cambria-Jackson	1	
Cliffs Shaft	12	
Lloyd	1	
Maas	8	
Mather A	10	
Mather B	6	
Negaunee	1	
Brownstone	4	
Diamond Drill	<u>1</u>	50
Inland Steel Company		
Greenwood	1	
Morris	<u>2</u>	3
Hercules	0	
Outside	<u>136</u>	<u>136</u>
Total		189

ISHPEMING HOSPITAL
Ishpeming, Michigan

538

LABORATORY REPORT FOR 1950

Blood Chemistry	763
Blood Type or Match	130
Bleeding time	209
Cultures	36
Coagulation Time	209
Differential Count	4246
Feces	52
Gastric Analysis	9
Glucose Tolerance	15
Hemoglobin	4349
Icteric Index	84
Miscellaneous Examinations	73
Red Cell Count	4409
Sedimentation	5712
Smears	49
Special Blood Exams	3
Spinal Fluid	7
Sputum	32
Urinalysis	5668
Vena Punctures	3382
White Blood Count	4741
Prothrombin Time	28
RH Factor	244
Galactose Tolerance	10
Bromsulfa-lin Test	11
Hematocrit	31
P. S. P. Test	18
Platlet Count	29
Blood Transfusions	70

Total 34587

Department of Industrial Hygiene

Blood Chemistry	6
Blood Type or Match	3
Differential Count	9
Glucose Tolerance	10
Hemoglobin	1911
Miscellaneous Examinations	3
Red Cell Count	13
Sedimentation	1906
Urinalysis	1912
Vena Punctures	1911
White Blood Count	1911
Blood Sugar Screen	7

Total 9602

ISHPEMING HOSPITAL
Ishpeming, Michigan

EMERGENCY ROOM ANNUAL REPORT

	<u>Co. Cases</u>	<u>Mine Acc. Cases</u>	<u>Outside Cases</u>	<u>Total Cases</u>
January	198	36	174	408
February	277	43	174	494
March	253	32	167	452
April	167	32	184	383
May	288	54	140	482
June	312	53	146	511
July	290	30	101	421
August	286	46	193	525
September	183	66	102	351
October	176	43	99	318
November	118	29	84	231
December	208	49	88	345
Total	2756	513	1652	4921

	<u>Co. Visits</u>	<u>Mine Acc. Visits</u>	<u>Outside Visits</u>	<u>Total Visits</u>
January	563	99	416	1078
February	680	96	391	1167
March	695	73	485	1253
April	734	48	522	1304
May	513	132	489	1134
June	817	149	458	1424
July	695	135	485	1315
August	587	168	518	1273
September	746	143	440	1329
October	753	134	489	1376
November	551	73	436	1060
December	683	151	320	1154
Total	8017	1401	5449	14867

Operations

January	26
February	29
March	24
April	19
May	52
June	41
July	60
August	45
September	41
October	28
November	28
December	23
Total	416

TREATMENTS FOR THE YEAR OF 1950

Total number of treatments given	3005
Total number of patients	481

BASAL METABOLISM

Total number taken	71
Total number of patients	70
Company Cases, Outside	30
Company Cases, Hospital	8
Private Cases, Outside	26
Private Cases, Hospital	6

ULTRA-VIOLET RAY

Total number of treatments given	292
Total number of patients	33
Company cases, Outside	22
Company cases, Hospital	0
Private Cases, Outside	9
Private Cases, Hospital	2

INFRA-RED

Total Number of treatments given	150
Total number of patients	20
Company cases, Outside	8
Company cases, Hospital	1
Private Cases, Outside	4
Private Cases, Hospital	7

DIATHERMY

Total number of treatments given	1758
Total number of patients	253
Total number of new mine accident patients	19
Total number of mine accident treatments	428
Company cases, Outside	173
Company cases, Hospital	11
Private Cases, Outside	49
Private Cases, Hospital	16

CAUTERY

Total Number of treatments	80
Total number of patients	76
Company cases, Outside	37
Company cases, Hospital	5
Private Cases, outside	20
Private Cases, Hospital	9

BURDICK CONSTRICTOR THERAPY

Total number of treatments	120
Total number of patients	7
Company cases, Outside	5
Company cases, Hospital	2
Private cases, Outside	0
Private Cases, Hospital	0

ISHPEMING HOSPITAL
Ishpeming, Michigan

541

-2-

MASSAGE AND MANIPULATIONS

Total number of treatments	323
Total number of patients	22
Company cases, Outside	8
Company cases, Hospital	2
Private cases, Outside	0
Private cases, Hospital	12
INTRAMUSCULAR INJECTIONS	191
DRESSINGS	20

Ishpeming Hospital
 Ishpeming, Michigan
SURGERY, 195D
CLASSIFIED BY OPERATION

542

Abortions, Therapeutic	5	Gastro-enterostomy	3
Adenoidectomy	4	Hemorrhoidectomy	19
Adhesions, Freeing	4	Herniorrhaphy	44
Amputations	4	Hydrocele, Repair	7
Amputation of Cervix	2	Hysterectomy	8
Appendectomy	129	Incision and Drainage	19
Aspiration	2	Insertion Kerschner wire	2
Biopsy	27	Insertion Steinman Pin	7
Bursectomy	2	Ligation Fallopian Tubes	42
Bunionectomy	1	Ligation Vas Deferens	2
Caesarean Section	21	Mastectomy	3
Casts	63	Oophorectomy	26
Catheterization, Gen. An.	1	Open Reduction	7
Cauterization	24	Orchiectomy	1
Cecostomy	1	Packing	1
Cholecystectomy	12	Plastic repair	2
Cholecystostomy	4	Proctoscopic examination	6
Circumcisions	161	Prostatectomy	5
Closed Reductions	33	Removal foreign body	4
Conization	3	Repair abdominal viscera	3
Cystocele, Repair	6	Repair rectocele	11
Cystostomy	4	Repair traumatic injuries	26
Cyst-Punctured	4	Bowel Resection	1
Debridement	2	Salpingectomy	17
Dilatation	8	Saphenous Ligation	12
Dilatation and Curettage	87	Skin Graft	2
Drainage	2	Smith-Peterson Nailing	2
Dressing, Hemostatic	1	Spinal Tap	2
Entero-enterostomy	1	Tendon Repair	2
Exam. Under Anesthesia	7	Thoracentesis	1
Excision	24	Thyroidectomy	1
Excision, cysts, moles, etc	70	Tonsillectomy	13
Excision, ingrown toenail	8	Tonsillectomy, Adenoidectomy	114
Excision, Pilonidal sinus	3	Tooth Extraction	10
Exploratory Laparotomy	5	Trachelorrhaphy	1
Excision, Cervical polyps	4	Tracheotomy	1
Cystoscopy	3	Uterine Suspension	<u>10</u>

TOTAL 1179

MAJORS 296
 MINORS 548
 CIRCUMCISIONS 142

Total Patients 986

1 9 5 0

	<u>Jan.</u>	<u>Feb.</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Total</u>
Patients admitted	146	122	137	171	150	143	180	196	161	151	162	161	1880
Patients discharged	124	118	133	155	162	140	167	178	167	151	149	162	1806
Number of adults	103	86	99	124	111	96	128	141	116	111	123	118	1356
Number of children	23	13	11	26	11	26	23	20	11	18	16	23	221
Newborn	20	23	27	21	28	21	29	35	34	22	23	20	303
Classified as:													
Newborn	20	23	27	21	28	21	29	35	34	22	23	20	303
Obstetrical	22	27	27	24	29	20	33	40	35	24	25	25	331
Medical	44	21	38	54	43	41	57	49	42	46	59	56	550
Surgical	60	51	45	72	50	61	61	72	50	59	55	60	696
Daily Average	54.5	62.6	64.2	60.1	57.1	47.3	50.1	52.3	56.9	48.0	48.6	45.2	53.7
Newborn Days	104	176	147	163	184	169	161	185	228	156	173	114	1960
Patient Days	1587	1578	1845	1642	1587	1250	1393	1441	1481	1333	1285	1288	17710
Total Days	1691	1754	1992	1805	1771	1419	1554	1626	1709	1489	1458	1402	19670
Operations:													
Emergency Room	26	29	24	19	52	41	60	45	41	28	28	23	416
Major	20	28	28	29	32	26	29	31	25	14	20	14	296
Minor	44	43	39	56	31	57	42	50	43	55	37	60	548
Circumcisions	14	12	10	10	15	8	11	15	21	11	12	3	142

76 deaths included in discharges

ELECTRICAL DEPARTMENT
ANNUAL REPORT
YEAR 1950

ATHENS MINE:

Several interruptions occurred during the year in the ore hoist due to failure in the equipment. The most costly were failures of coils and risers in the D.C. generator of the M-G set. The hoist was kept in operation with a grounded armature coil during the month of April while occasional stops were made for tests in attempts to locate the faults. The coil failure was finally located and temporarily repaired April 29. A complete set of coils for the rewind of this armature was ordered from the General Electric Company. The material for the job arrived and the rewind was made in July.

The usual maintenance and minor repairs were made to the cage hoist motor and controls during the year.

The 400 HP Ingersoll-Rand compressor synchronous motor and exciter were repaired and repainted during the vacation period. The switches and starting equipment were also repaired at this time.

Some of the panel wiring and a potential transformer failed when the low voltage release coil on the oil breaker for the Nordberg compressor burned out. Repairs were made with Negaunee Mine spare equipment.

Several improvements were made in the M-G haulage setup during the year. The current carrying capacity was increased with the installation of twin conductor 500 MCM cables from the distribution panels on the 10th level to the 6th and 8th levels and the extension of the same size cable about 1400 ft. into the 8th level.

Several minor repairs were made to controls and grids for the 10th level pumping equipment.

The #1, 400 HP Westinghouse wound rotor pump motor was taken out for repairs to the rotor. The #2, 400 HP pump motor was taken apart for a cleaning and repaint job.

CAMBRIA-JACKSON MINE:

Several delays occurred in the hoisting during the year due to failures in the rotor of the 700 HP Westinghouse motor taken from the Maas Mine and installed for the Cambria hoist in August, 1949. This rotor was built for the Maas skip hoist in 1934 and was stored at the Maas Mine until the Cambria installation. The first failure occurred in March, 1950, when repairs were made at the mine. A break in the insulation occurred again April 24 which could not be repaired on the job, so the entire motor was sent to the General Shops for a change to the spare rotor which was completed April 26. The faulty glass insulated rotor was then shipped to the Westinghouse Electric Corporation for repairs and returned for the change of rotors July 1-2. The glass tape wound rotor is now operating while the old rotor is stored at the Cambria-Jackson Mine.

Some failures in the stator winding of the Allis-Chalmers 250 HP motor on the Laidlaw-Dunn-Gordon compressor occurred until August 13 to 20 when this stator was completely rewound. New overload relays were also installed during the rewinding period for the protection of this motor.

ELECTRICAL DEPARTMENT
ANNUAL REPORT
YEAR 1950

CAMBRIA-JACKSON MINE: (Continued)

Considerable repair work was done on the General Electric 150 KW haulage M-G set in the month of March. The motor and generator were taken apart for a new line-up and rebuilding of bearings and repairs to brush-holders and couplings.

The single conductor 300 MCM cables taken from the Negaunee Mine 12th and 13th levels were installed on the 8th level from the shaft to the new winze location.

The 2300 volt, 3-conductor cable from the pump station connections on the 7th level to the location of the conveyor at the winze was tested and connections completed in March. A three pole oil circuit breaker and disconnecting fuse jacks are provided at the pump house connections. The automatic pushbutton control for the 75 HP, 2300 volt wound rotor motor for operation of the conveyor belt was also set up at that time.

The failure of a 10-conductor signal cable in the main shaft near the 7th level occurred and caused some delay. Temporary connections were made with several 2-conductor Tirex portable cords until a 10-conductor cable formerly used at the Republic Mine was put in to replace the faulty cable.

The new 600 ampere Westinghouse oil circuit breaker bought to replace the overloaded breaker in the main line at the engine house panel was installed in July. New 600 ampere line disconnecting switches were also put in the line ahead of the breaker at this time.

CLIFFS SHAFT MINE:

The hoisting equipment has served very well during the year with regular maintenance plus a few inspections when the motors were taken apart during "off" hoisting periods. Inspections of the motor and rotor band wires of the 750 HP "B" Shaft hoist motor were made in April and September. A number of the soldered holding clips of the band wire had failed and were renewed.

A similar inspection of the "A" Shaft 750 HP hoist motor was made in September. These banding clips made of heavier brass material were all in good condition. A change in material from thin copper to the brass type was then made on the "B" Shaft motor with good results.

Rotor bar failures have occurred on the rotors of the 438 HP General Electric synchronous Ingersoll-Rand compressor motors. Riveting these bars to the end rings was considered a remedy for several years but the burning and loosening occurred too often. The #1 compressor motor was tied up for several days after such a rotor bar difficulty. All the bars were then welded to the outer rings which seems to have resulted in a permanent remedy.

Only minor changes in the haulage equipment were made during the year. The 100 HP rotary converter was taken out of the engine house and sent to the General Shops for repairs to the commutator and slip rings.

The pumping equipment has been in operation with routine maintenance during the year.

ELECTRICAL DEPARTMENT
ANNUAL REPORT
YEAR 1950

CLIFFS SHAFT MINE: (Continued)

The main blower on the 6th level for mine ventilation was stopped on account of a rectifier failure in the automatic starter. A rectifier from the starter of the #2 Ingersoll-Rand compressor at the Mather Mine "B" Shaft was used until their installation was completed, at which time the rectifier was returned to Mather Mine "B" Shaft. The blower starter was set up with a 220 volt A.C. magnetic contactor to keep the blower in operation until the arrival of the necessary rectifier on order from the General Electric Company.

LLOYD MINE:

Routine repairs and maintenance of the hoisting equipment was carried on during the year. One short delay occurred due to the failure of a control contactor on the cage hoist panel. A temporary repair was made until a rebuilt contactor was installed.

The installation of a geared limit switch formerly used at the Mackinaw Mine was made with the overwind equipment of the hoist at the winze. Some damage to the equipment and several delays occurred during the year before the installation of this overwind protection.

The motors and starting equipment of the two compressors were taken apart for repairs during the month of August.

On account of water difficulties in the mine during the month of May, a number of changes were made in the pumping setup. A 40 HP Allis-Chalmers line starter and pump were taken from Mather Mine "A" Shaft to the 7th level; also, a 30 HP pump and magnetic starter from the Spies Mine and a 40 HP starter and pump from Mather Mine "B" Shaft. A new 3-conductor, #4, 2300 volt cable in the shaft was extended from the 5th to the 7th level, three 25 KVA, 2200/480/240 volt transformers from stock were installed on the 7th level, and three 25 KVA, 2200/240/120 volt transformers from Mather Mine "B" Shaft were installed on the 9th level to replace two 15 KVA transformers and one 10 KVA transformer taken from stock for the emergency and later returned to the Storehouse. Some changes in cables and switches are now being made for a more permanent setup of pumps in the next year.

MAAS MINE:

The D.C. Ward Leonard controlled skip hoist equipment has served well during the year with the exception of some delays caused by overloaded skips. Two bearing failures occurred during the summer season, one on the commutator end and the other on the coupling end of the D.C. generator. Spare bearings are kept at the mine so little time was lost in bearing changes.

Thermo relays with signal lights and alarms have been installed for the skip hoist motor and generator bearings and set for contact closing at 65° C.

Installation of the 200 HP hoist equipment on the 5th level for the winze was completed in April.

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ELECTRICAL DEPARTMENT
ANNUAL REPORT
YEAR 1950

MAAS MINE: (Continued)

The temporary sinking hoist at the 6th level winze was taken to the west end of the timber tunnel on surface and set up for handling equipment and unloading trucks. It has a 50 HP A.C. motor which is now connected to three 10 KVA, 2300/440/220 volt transformers recently used at the old Lake Mine.

No. 2 Ingersoll-Rand compressor was tied up from September 12 to 18 for shimming and wedging coils in the stator of the 438 HP General Electric synchronous motor. This repair job occurred on account of shrinkage of coil insulation. Air was supplied by Negaunee Mine during the shutdown.

The haulage generators have been overloaded much of the time, mostly from the extra demand due to more continuous operation of scraper machines. Arrangements are now made for a larger generator, also feeder cables and control equipment. The compensator and starter switch for the No. 2, 100 KW haulage M-G set failed on February 17, and set fire to the switch and wiring on the panel which finally opened the main overload protecting breaker and cut off all power from the mine until the equipment could be properly disconnected. The panel wiring has been repaired and the switch rebuilt in the General Shops while the trip coils were rebuilt by the Industrial Engineering & Sales.

MATHER MINE "A" SHAFT:

The skip and cage hoist equipment has worked well for the year on regular maintenance with the exception of one delay when a riser broke down in the armature of the south generator of the skip hoist M-G set. This was discovered December 3 and was repaired and running again December 4.

Material for the hoist to be set up underground for shaft sinking has been prepared in the shops and sent to the mine. This includes the 75 HP General Electric wound rotor motor recently loaned to the North Range Mining Company. A primary contactor panel formerly used at the Princeton Mine top tram and a controller from the Maas Mine were also rebuilt and are now stored at the mine for this hoist job.

Relocating compressor panels and exciter M-G sets in the engine house has been completed.

Installation of the electrical equipment for the screen, conveyor and crusher in the headframe was also completed.

Three 8-ton Westinghouse locomotives on order during 1950 were delivered in December and are now on the trestle ready for top tram car operation.

Extension of the two 350 MCM, 3-conductor, 2300 volt power cables from the 6th to the 7th level with the necessary subway boxes and switch connections, and the installation of a 150 KVA substation on the 7th level were also completed.

One of the older battery locomotives from Mather Mine "A" Shaft has been rebuilt in their shop and sent to Mather Mine "B" Shaft for their timber tunnel operations. The Mather Mine "A" Shaft now has two of the Jeffrey combination locomotives. The 10-ton General Electric locomotive, Serial No. 4083, from Negaunee Mine was rebuilt in the General Shops and sent to the Mather Mine "A" Shaft in February.

ELECTRICAL DEPARTMENT
ANNUAL REPORT
YEAR 1950

MATHER MINE "A" SHAFT: (Continued)

Some difficulty occurred with the 275 HP main drive motor of the 120-B shovel. The motor was taken into the shops for a complete rewind of the stator and returned to the shovel in the month of March.

MATHER MINE "B" SHAFT:

Installation of the M-G sets and auxiliary generators and control equipment for skip and cage hoists was completed during the year.

The 500 HP synchronous motor with controls and M-G exciter set for the No. 2 Ingersoll-Rand compressor was also completed with the compressor installation.

The Negaunee Mine 200 KW haulage M-G set with D.C. and A.C. control equipment was taken from the Negaunee Mine engine house and stored at the Mather Mine "B" Shaft for installation on the 7th level.

Installation of the new Allis-Chalmers haulage M-G set was made in the engine house with panels and circuit breakers completed and the 4/0 600 volt concentric twin conductor cable extended to the 10th level. The main 2300 volt, 350 MCM, 3-conductor power cables with subway boxes and connections at the levels have also been extended to the 10th level.

Five Goodman combination locomotives were taken into the mine, four to be used on the 6th level and one on the 7th level.

The surface electrical equipment completed during the year also includes a 300 KVA substation near the shop building for the supply of A.C. power at 440/220 volts for power and 110 volts for lighting, and the electrical equipment in the headframe for the crusher and conveyor setup.

NEGAUNEE MINE:

The 350 HP Westinghouse motor of the older flywheel M-G hoist set was taken to the shops where the stator was completely rewound and the rotor rebanded. The main circuit breakers and control panels were then moved from the east end of the building into that section near the old M-G set which was used for power and control of both skip and cage hoists from the month of August for the remainder of the year. The motors, generators and control grids for the hoist M-G set in the east wing of the engine house were removed to make room for the new building changes. Line and main service entrance to the building were also rebuilt temporarily. The control panels, circuit breakers, oil tanks and pumps for the lubricating system were stored at the mine. The larger motors, generators, and bearings are stored in the Princeton shop building.

Moving of the 200 KW haulage M-G set from the Negaunee engine house to the Mather Mine "B" Shaft left Negaunee Mine without D.C. power for the timber tunnel locomotive. To supply this power temporarily, the 35 KW M-G set formerly used for the pan conveyor at the Maas crusher and moved to the Mather Mine "B" Shaft for D.C. power supply for the engine house crane, was taken to Negaunee Mine and is temporarily set up in the engine house.

ELECTRICAL DEPARTMENT
ANNUAL REPORT
YEAR 1950

NEGAUNEE MINE: (Continued)

Circuit breaker and cables for the main blower plant were also moved from the east end of the engine house and relocated temporarily.

The three 5 KVA, 2200/240/120 volt transformers formerly used on the controls of the Kennedy Mine hoist were reconditioned in the shops and set up in the 10th level pump station for the 220 volt, 3 phase cable connection and power supply for welding the discharge pipe lines and the new 11th level pipe line to the Athens Mine.

Electrical repair jobs on the pumping equipment have been small during the year. Some trouble occurred in the 75 HP Westinghouse wound rotor motor of the 14th level plunger pump due to bearing wear. The motor was taken to surface in March and sent to the General Shops for bearing and rotor repairs.

SPIES MINE:

Some difficulty occurred due to overloaded skips from the 6th level trench. The current limiting relay setting was changed to 300 amperes for the increased power requirement. A 300 ampere current transformer from Negaunee Mine was put into the control circuit to replace the 200 ampere transformer formerly used. Larger cables were also put into the rotor circuit from the motor to the secondary control panel.

The failure of a 6-way subway box connecting the 2300 volt, 3 phase power cables at the 8th level occurred several times, and temporary repairs were made until it was decided to replace the old equipment. The installation of a new subway box complete with potheads and disconnecting links was made in December.

Extension of a 3-conductor, #4, 440 volt cable to the newly prepared sump on the 6th level was completed and a 40 HP, 250 gallon pump was set up to pump water to the 4th level. This pump failed due to the acid condition of the water and a pump with a 60 HP motor borrowed from one of the Iron River mines was put in its place in September. A combination magnetic starter formerly used with a 40 HP pump motor at the air shaft was set up with the 60 HP motor to operate with a relay and electrode water level control. Seven hundred (700) feet of #4, 3-conductor cable for this change was bought from Mather Mine "A" Shaft.

Failure of the shunt field rheostat of #1 haulage generator occurred in October. A rheostat which was formerly a part of the Negaunee Mine Westinghouse haulage M-G set and stored in the Princeton shops was used to replace the broken down equipment.

The #4/0 twin conductor cable connecting the 4th and 6th level trolley and rails through a raise near the workings to improve the D.C. voltage was completed in the month of May.

Negaunee Mine General Electric 6-ton LM-2T6-LL locomotive, Object No. C-2-11D-D57, was rebuilt in the shops and sent to the Spies Mine in April.

Ishpeming, Michigan
September 17, 1951

REPORT OF GEOLOGICAL DEPARTMENT FOR YEAR ENDING, DECEMBER 31, 1950

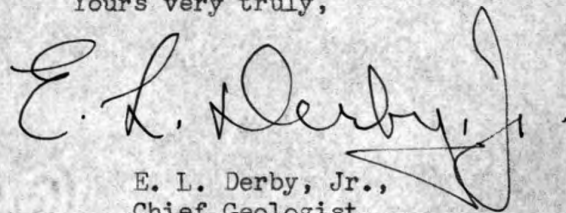
Mr. C. W. Allen,
General Manager,
Building.

Dear Sir:

I am handing you, herewith, the usual two copies of the report of the Geological Department for the year ending, December 31, 1950, which has been prepared by Mr. Boyum. There is nothing of importance that I can add to this report because I worked closely with Mr. Boyum in its preparation and, therefore, the report incorporates our combined efforts.

This is the first Annual report that we have been able to prepare since that for the period ending, December 31, 1946. Because of that gap, during which period the Department was expanded considerably, both in personnel and its field of activities, we thought it best, perhaps, to go into the item of personnel and the duties of the individual members of the current permanent staff a little more fully than may be necessary in the future.

Yours very truly,



E. L. Derby, Jr.,
Chief Geologist

ELD:JJ

Encls.



REPORT OF GEOLOGICAL DEPARTMENT FOR YEAR
ENDING DECEMBER 31, 1950

The following is the report of the Geological Department for the year 1950:

CONTENTS

- I. Department Activities Summary
- II. Staff
- III. Geologic Field Work
- IV. Geophysical Field Work
- V. Surface Drilling
- VI. Underground Drilling
- VII. Other Departmental Highlights

I. DEPARTMENT ACTIVITIES SUMMARY

The prime function of the Geological Department is to find iron ore effectively, efficiently and economically. This scope embraces finding extensions of known ore bodies, finding new ore bodies in known districts and finding new districts containing iron ore. By the term **ore**, both direct shipping and treating materials are included as well as the profit aspect.

The principal methods employed are geologic mapping, geophysical prospecting and drilling with infrequent use of test pitting on surface and dog-drifting underground. The goal of the work is the ore estimate itself.

The Department is concerned with establishing and maintaining uniform standards of rock names and mapping conventions. As the Exploration Division of the Company, it maintains the permanent records of the exploration and development work. All exploration samples are processed through the Department. Uniform control is exercised over sampling technique and drilling operations. A greater part of the Company drilling equipment is owned and operated by the Geological Department through its Exploration Drilling Division, the balance is provided by contractors.

In many cases, prior to a drilling campaign, geologic studies and geophysical prospecting are carried on. These phases, together with the preparation of maps, sections and ore estimates are all part of the integrated exploration program of the Company.

The Department also investigates mineral Land Offers, mine subsidence and ground water control. It collaborates with the Engineering Department on matters of taxation and Aerial Photography.

II. STAFF

Ishpeming continued to be the headquarters of the Geological Department. The greater part of the staff has been based here.

The Departmental Staff is comprised as follows:

TABLE I

Edwin L. Derby, Jr., Chief Geologist
Burton H. Boyum, Assistant Chief Geologist

Exploration Drilling Division

H. Walter Rembold, Ass't. Supt. (A)
 Edwin R. Jacka, Foreman
 Swante Merrila, Foreman

Geologists

Robert M. Becker (B)
 Layton C. Binon
 Gilbert A. Dawe
 Eric J. Rex (C)
 Robert W. Riedel (B)
 John S. Sumner (D)

Prof. Wm. A. Longacre, Consulting Geophysicist
 Prof. F. C. Kruger, Consulting Geologist

George M. Olson, Technician
 Robert W. Ryan, Technician
 Mrs. Belle F. Bloch, Secretary
 Donald W. Carlson, Secretary (E)
 Mrs. Esther Fandrem, Secretary (E)

Archie Minnear, Draftsman
 Pat S. Johnson, Draftsman

Field Assistants, temporary

Eugene A. Enyart, Geologist
 John A. Halpin, Geologist
 Walter H. Sermon, Jr., Geologist
 Paul Chidwick, Notekeeper

Darwin C. Cedarleaf, Compassman
 Carl A. Corneliuson, Compassman
 John L. Preston, Compassman
 Terence T. Quirke, Jr., Compassman

- (A) Joined Department, April 1, 1950 (transferred from Eng'g. Dept.)
- (B) Joined Department, June 12, 1950
- (C) Joined Department, October 16, 1950
- (D) Called to Active Duty, U. S. Marine Corps, August 1, 1950
- (E) Shared with Engineering Department

Thus the staff consisted of 16 permanent members who worked 26,202 hours and 10 temporary employees who worked 5,144 hours. This makes a total of 26 employees and 31,346 hours worked. To this may be added the 37 drill runners and helpers.

III. GEOLOGIC FIELD WORK

For the most part our geologic field work consisted of two-man reconnaissance parties. One member acted as geologist and the other as a compassman. Their work consisted to running sun-dial compass survey lines, mapping outcrops, dumps and pits, sampling and collecting hand specimens.

A. Michigan

We employed three, two-man field parties in Michigan during the summer of 1950.

Party 1 conducted prospecting in the Cascade District and in the Fitch-Saginaw Area. Favorable treating material was found in both vicinities.

Parties 2 and 3 conducted prospecting in the Michigamme River Area. This work covered both sides of the Michigamme River from the Republic Mine to the Magnetic Mine. Favorable treating material was found on our lands, on Lease No. 90 (State Lease No. 42) and the Ford Motor Company lands. The work on the latter was done for Ford account and payed for by it.

Additional field work was carried on in the Michigamme, Pumpselly, Floodwood and Conrad Area by Messrs. Becker, Boyum, Rex, Riedel, Sumner, Olson and Johnson.

B. Minnesota

One field party conducted prospecting a geological reconnaissance on the Vermilion Range, Minnesota. The geologist was Dr. Frederick C. Kruger, Geological Consultant to the Company, and Professor of Geology at the University of Tennessee. The field work was directed to determine the nature and extent of treatable iron formation. Test results of field sampling was termed "favorable" by the Metallurgical Department. No large tonnage, however, was found on lands of open ownership. The Oliver Iron Mining Company owns the major part of the favorable areas.

IV. GEOPHYSICAL FIELD WORK (MICHIGAN)

A. Geophysical field work in 1950 was confined largely to magnetic prospecting. Both the Ruska Magnetometer and Hotchkiss Superdip were employed. Generally, stations were occupied every 50' along the traverse lines. Data were reduced and plotted in both plan and profile.

Party 1 conducted magnetic prospecting with a two-man party. Professor William A. Longacre, Consultant, of the Michigan College of Mining & Technology, was the instrument man and also worked on interpretation. Areas in which traversing was conducted were the Cascade, Fitch, Michigamme, Michigamme River and Pumpselly.

Additional magnetic work also was done by Messrs. Sumner and Riedel, of our Staff, especially in the Michigamme and Michigamme River Areas.

B. A limited gravimetric survey was made in the Lloyd Mine in cooperation with Professor Lloyal Bacon, Geophysicist, Michigan College of Mining and Technology. This survey was made on the 1350 W. meridian along the 8th level exploration cross-cut to the South.

C. No geophysical work was conducted in Minnesota.

V. SURFACE DRILLING

A. Michigan

1. During the year 1950, the Exploration Drilling Division of the Department was augmented with the services of Mr. H. W. Rembold as Operating Engineer, and later, Assistant Superintendent. Mr. Rembold took over the supervision of the drilling personnel and equipment formerly handled by Mr. Boyum.

During the year a total of 7 drill rigs of the Department were engaged in surface drilling. Four of these were in deep exploration and three in shallow exploration. Five contract drill rigs were employed, also. The distribution of holes is shown as follows:

TABLE II

<u>LOCATION</u>	<u>HOLES</u>	<u>RIGS</u>	<u>TOTAL FOOTAGE</u>
<u>Cascade</u>			
Sec. 29, 47-26	1, 1-A, 2	Geol. Dept.	2181
<u>Ishpeming</u>			
Sec. 4, 47-27	37B, 42, 43	Geol. Dept.	1206
Sec. 9, 47-27	58	Geol. Dept.	224
Sec. 10, 47-27	23, 24	Geol. Dept.	118
Sec. 11, 47-27	9D, 11, 12, 13	Geol. Dept.	4291
Sec. 11, 47-27	14	Longyear	867
			<u>5158</u>
<u>Tilden Area</u>			
Sec. 23, 47-27	1, 2, 3	Geol. Dept.	1170
Sec. 24, 47-27	1, 2	Geol. Dept.	984
Sec. 25, 47-27	1, 2	Geol. Dept.	1432
Sec. 27, 47-27	21, 22, 23	Geol. Dept.	1646
<u>Michigamme Mine</u>			
Sec. 19, 48-30	1, 2, 3, 4, 5, 6, 7, 7A, 8	Geol. Dept.	2706
Sec. 20, 48-30	1, 2	Geol. Dept.	965
<u>Ohio Mine, et al</u>			
Sec. 22, 48-31	1, 2, 3, 4, 5, 6, 7, 8	Longyear	1477
Sec. 23, 48-31	1, 2	Longyear	215
Sec. 26, 48-31	10, 11, 12 13, 14	Longyear	408
<u>Boyington</u>			
Sec. 13, 43-35	1, 2, 3, 4	Joy (Sullivan)	3868
<u>Hilltop</u>			
Sec. 26, 43-35	1, 2, 2A, 3	Longyear	3502
Sec. 27, 43-35	1, 2	Longyear	2140

TABLE III

RECAP - SURFACE DRILLING

<u>ORGANIZATION</u>	<u>RIGS</u>	<u>FOOTAGE</u>	<u>PROPORTION</u>
Geological Department	7	16,923	57.6%
Longyear	4	8,609	29.3%
Joy (Sullivan)	1	3,868	13.1%
	<u>12</u>	<u>29,400</u>	<u>100.0%</u>

2. Summary of Results

Cascade. The initial exploration was for direct shipping material in the structure North of the Isabella dike and South of the Volunteer dike. We did not reach the target area because of excessive drill-hole deviation.

Ishpeming

Section 4, 47-27. Hole #37-B had to be abandoned without reaching the footwall contact due to extremely adverse drilling conditions. Holes #42 and #43 continued the exploration to the Northwest of hole #37.

Section 9, 47-27. Exploration was resumed for the Cliffs-Shaft Mine extension to the Southwest of present workings and West of surface hole #57.

Section 11, 47-27. Hole #9-D cut first class ore from 3842' to 4227' at which point drilling was abandoned, still in ore, due to adverse drilling conditions. This is a new depth record for the Lake Superior area. Hole #11 was bottomed without encountering high grade ore. Holes #12, #13 and #14 were started to explore South, East and West, of hole #9-D respectively.

Tilden Area. Relatively shallow core drilling was conducted in Sections 23, 24, 25, and 27, all in 47-27, in the Tilden Area, to determine the treating characteristics of this type of iron formation. This was a joint exploration with the Bethlehem Steel Company. The core was tested at its metallurgical laboratory at Lebanon, Pennsylvania.

Michigamme Mine. Core drilling was employed in determining the grade and tonnage of treating type of iron formation on Sections 19 and 20, 48-30. The principal zone explored was adjacent to the upper contact of the iron formation although one hole (#7-A) was drilled in the iron formation lying geologically under the intrusive sill. In general, the results by flotation concentration were encouraging.

Ohio Mine, et al. A Longyear contract drill, using standard Mesabi structure drilling practice combined with core drilling, explored from the Webster Mine thru the Portland, Steward, Ohio and Norwood properties for treating type of iron-formation. Sufficient material of favorable concentration characteristics was found to warrant an operation.

Boyington Area. The Company obtained an option on the Boyington Area comprising the SE $\frac{1}{4}$ of Section 13, 43-35. Holes #1, #2 and #4, each encountered significant runs of iron-formation. None of the iron-formation was oxidized, however, and the exploration was discontinued.

Hilltop Area. This area comprises 160 acre tracts in each of Sections 26 and 27, 43-35. Drilling in Section 27, in 1950, found only unoxidized iron-formation. The exploration was shifted to Section 26 on the east limb of the syncline. Holes #2-A and #3 found oxidized iron-formation and enough ore to warrant a continuation of this drilling.

B. Minnesota

The Minnesota exploration drilling is covered in the Annual Report of Mr. Grover J. Holt, Manager for Minnesota.

VI. UNDERGROUND EXPLORATION (MICHIGAN)

A. During the year 1950, the trend toward parallel staffing of underground mines continued with numerous properties each having a separate mine engineer and a mine geologist. The mine or "operating" geologist mapped the geology of all main level developments and the critical sub-levels, maintained the mine cross-sections, made structure studies, directed the mine exploration program (generally, as the immediate supervisor of the drilling crews), and collaborated with the mine engineer in the preparation of the ore estimates.

The following shows the distribution of the staff:

TABLE IV

<u>OPERATING GEOLOGIST</u>	<u>PROPERTY</u>
1. Robert M. Becker	Cliffs-Shaft Mine
2. Layton C. Binon	Mather Mine "A" Shaft
3. Gilbert A. Dawe	Mather Mine "B" Shaft
4. Eric J. Rex	Athens, Cambria-Jackson, Maas
5. Robert W. Riedel	Lloyd, Spies

B. The following table shows the exploration drilling by properties:

TABLE V

UNDERGROUND DRILLING

<u>PROPERTY</u>	<u>HOLES (inclusive)</u>	<u>RIGS</u>	<u>FOOTAGE</u>	<u>PERCENT OF FIRST CLASS ORE CUT</u>
Athens	41-44	Geol. Dept. (1)	386	33.7%
Cliffs-Shaft	629-667	Mine (2)	6118	14.7%
Lloyd	180-184	Geol. Dept. (1)	1892	2.3%
Mather Mine "A" Shaft	35,65-69	Mine (1)	2118	13.2%
Mather Mine "B" Shaft	8-18	(Mine (2) (Geol. Dept. (1))	5094	34.4%
Spies	44-53	Odgers	4378	14.6%

C. As mentioned previously (page 1) much of the drilling equipment is owned by the Department. The trend has been for the properties having extensive drilling in sight to purchase their own drills and accessories and to employ the runners on the mine payroll. In these cases, the supervision still remains with the mine geologist.

It may be seen from the above tabulation (Table V) that during the year, 3 rigs were used from the Geological Department, 5 rigs were mine owned and 1 rig was contracted from the Odgers Drilling Company. Table VI shows this distribution:

TABLE VI
DISTRIBUTION OF UNDERGROUND DRILLING

<u>ORGANIZATION</u>	<u>RIGS</u>	<u>FOOTAGE</u>	<u>PROPORTION</u>
Geological Department	3	2,705	13.5%
Mines	5	12,903	64.6%
Odgers (Contractor)	<u>1</u>	<u>4,378</u>	<u>21.9%</u>
	9	19,986	100.0%

D. Summary By Properties

Athens Mine. The principal exploration has been the North ore body from seventh level to tenth level. The work confirmed our anticipated outlines.

Cliffs-Shaft Mine. The most significant exploration in 1950 was that done on eighth level (Section 10 Lease) where an entirely new area was opened by development and found to extend to the old Moro Mine. New ore extensions also were added to the "B" Shaft dome above first level and several other areas to a lesser extent.
(M.C.B.)

Lloyd Mine. Exploration was directed to areas below the eighth level with a drilling campaign from the long cross-cut on the 1350 W. meridian. Results were discouraging in that outlined structures were not ore filled. Another highlight of exploration work was the raise development from the long eighth level cross-cut to the +260' sub-level.

Mather Mine "A" Shaft. The drilling on third, fifth and seventh levels indicated no new major reserves. The drilling on the sixth level indicated only minor extensions of known reserves.
(M.C.B.)

Mather Mine "B" Shaft. Problems of immediate concern in 1950 were: first, to find a substantial tonnage of ore that was immediately accessible for mining operations from the sixth level elevation; and secondly, what is the general geologic structure adjacent to the sixth level development and what is its relationship to future mining operations at the Mather Mine "B" Shaft property.

Explorations during the year accomplished the following:

1. Established the ore outlines at the sixth level elevation adjacent to the main sixth level drift.
2. Established that the structure of the footwall Siamo formation and the overlying Negaunee Iron Formation was very complicated due to excessive faulting and folding.
3. Provided openings into the saturated areas in the fault structure to drain these areas for mining operations.

4. Established the need for further exploration, up the dip, to determine the extent of ore reserves above the fifth level elevation.

Exploration was speeded up considerably toward the end of the year with an increase from one to three drills operating underground. (C.A.D.)

Spies Mine. The Spies Mine exploration was devoted to outlining the ore body on and above eighth level.

VII. OTHER DEPARTMENTAL HIGHLIGHTS

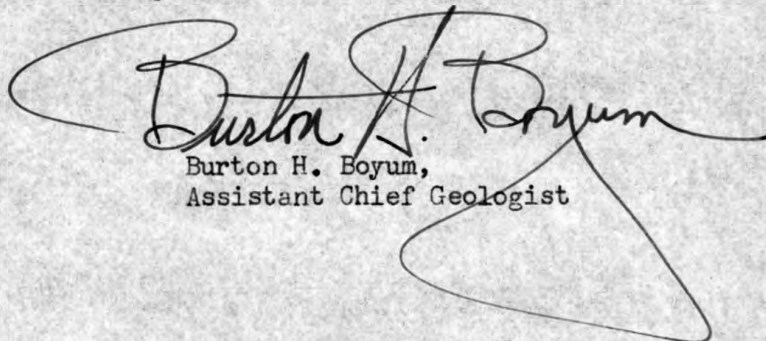
A. During the year 1950, Land Offers numbers 2559 through 2620, 2623, 2624 and 2633, (a total of 64) were processed.

B. Studies continued on the matter of ground water problems of active properties. Close liason has been maintained with Messrs. Stuart, Rhodehamel and Brown of the U. S. Geological Survey, Water Supply Division.

C. Subsidence studies continued on the Marquette and Menominee Ranges. This includes both geological structure studies and microseismic (geophone) observations. This is a joint program with the Applied Physics Division, U. S. Bureau of Mines.

D. During the year the Department collaborated with the Engineering Department on the production of mine models of the Mather Mine.

Respectfully submitted



Burton H. Boyum,
Assistant Chief Geologist

BHB:BB:JJ

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