

TABLE III (Cont'd.)

Boeing	Stevc Miliscovicchi	Mar. 29th	Caught by motor	Fractured leg	Preventable
Hill-Trum	Peter May	June 1st	" in planer	Loss finger point.	"

SLIGHT ACCIDENTS

Deducting the number of fatal and serious accidents (those causing a loss of time of more than two weeks) from the total there remains 200, which, using the Bureau of Mines distinction, may be listed as slight accidents. On the basis of the number of men employed the rate is 87 per 1000 men. The lowest rate in former years was 92, which was obtained in 1918.

With respect to the principal causes there are five which are responsible for 85% of the total. First are those by falls of ground with a percentage of 23; getting finger, hand or foot caught between pieces of timber, chunks of ore, etc., caused 13%; strains and wrenches by lifting and so forth amounted to 10%; flying objects, like glancing steel, etc., is credited with 10% and chunks of ore and rock rolling down piles injured 8%. The remaining 25% is divided between 23 causes.

Of the 345 non-fatal accidents 287 or 82% of the total were classified trade risk accident. Those preventable number 58, of which 3 were due to negligence of the Company, 3 to negligence of other workmen, and the rest were the result of negligence by the injured men themselves.

The following table gives a comparison of the rate of accidents per 1000 men of the Company and all metal mines in the United States from 1911 to 1919.

TABLE IV

<u>Year</u>	<u>Company</u>	<u>U.S. Metal Mines</u>
1913	244	179
1914	182	211
1915	185	248
1916	193	250
1917	184	240
1918	156	237
1919	170	231

In the following table the average number of employees, the number of serious accidents, the total number of accidents and rates per 1000 men employed for the years 1913 to 1921, inclusive, are given.

TABLE V

Year	Average Number of Employees	Number of Serious Accid.	Rate per 1000 Employees	All Accidents	Rate per 1000 Men
1913	2621	201	80	628	244
1914	2435	179	82	443	182
1915	2308	155	67	427	185
1916	3063	263	86	592	193
1917	3457	264	76	639	184
1918	3765	230	61	590	156
1919	3938	241	61	670	170
1920	4125	220	54	708	171
1921*	2309	145	62	351	152

* All of 1921 figures are subject to slight revisions.

SAFETY INSPECTION

The mines were inspected by the Safety Inspector, Workmen Committees, a Foreman Committee, and a Committee on Mechanical and Surface Equipment and the Committee on Rules and Regulations.

SAFETY INSPECTOR

All local mines were inspected monthly by the Safety Inspector, and since June it has been possible to practically double the amount of time formerly given to each mine, as a result of the reduction in the Mining Department, which occurred at that time. Two inspections of the Spies mine were made and a tour of all the mines in Minnesota was made jointly by Captain J. H. Rough and the Safety Inspector, at the same time employees were examined on Rules and Regulations.

WORKMEN COMMITTEES

Twelve mines in Marquette County were inspected by Workmen Committees during May month, representing forty-five employees. These Committees, with one exception, submitted perfect reports.

Since the Safety Department was organized, 145 Workmen Committees have been chosen by the mining captains, representing 445 workmen, comprising miners, timbermen, shaft men and in fact almost every occupation represented at the mines.

FOREMAN COMMITTEES

Three shift bosses, William Olds of the Holmes mine, Alfred Oja of the Stephenson mine and W. J. Richards of the Maas mine were designated by the Central Safety Committee to act upon this Committee. All operative mines in Marquette County were inspected in October. The Committee submitted eleven recommendations,

which called attention to slight infractions of the rules and regulations.

COMMITTEE ON MECHANICAL and SURFACE EQUIPMENT

The Central Safety Committee designated Arthur Nault, Surface Foreman of the Morris-Lloyd mine, Wm. F. Martin, electrician of the Gwinn District and Fred Staples, mechanic of the Negaunee mine, a Committee to inspect the mechanical and surface equipment of all the local mines. This Committee's inspection was made from August 29th to August 31st. Forty suggestions or recommendations were submitted.

Sixty-nine foreman have served on Foreman Inspection Committees and a total of 494 employees have served the Company as Safety Inspectors during the past eleven years.

CENTRAL SAFETY COMMITTEE

The Central Safety Committee held eleven meetings during 1921. There was no meeting in December, as there were only a few slight accidents to classify and no subject of importance for consideration.

TABLE VI

The following table gives the number of foremen and workmen by mines, who have served on Safety Inspection Committees since the beginning of Safety Work.

<u>Mines</u>	<u>Foremen</u>	<u>Workmen</u>
Angeline	0	6
Athens	3	6
Austin	1	12
Cliffs-shaft	7	45
Francis	1	9
Gardner-Mackinaw	1	6
Gwinn	3	33
Holmes	2	12
Lake	6	45
Maas	7	33
Morris-Lloyd	6	45
Negaunee	9	45
Princeton	3	21
Republic	4	27
Salisbury	5	36
Stephenson	5	39
Miscellaneous	6	15
	<u>69</u>	<u>445</u>

GENERAL SAFETY PRECAUTIONS

General Rules and Regulations.

Since January 1918 four cage riders have been killed by being thrown from a cage when the cage doors were open. The Central Safety Committee ruled

that the practice of cage riders and timbermen riding with trucks, cars, etc. should be prohibited. It is now a rule that whenever one or more men ride in a cage, the cage doors must always be closed, regardless of the distance the cage is being moved.

Two new rules were adopted as the result of the fatality which occurred at the Stephenson Mine May 21, 1921, when a tunnel employee either walked or slipped into the shaft at the tunnel, namely, a light must be kept burning on a cage when it is in use, and in dark timber tunnels a duplicate light must be installed at the shaft.

As a result of the fatality which occurred at the Hill-Trumbull mine July 22nd, 1921, it was decided that in springing a hole in all cases one man must do the tamping and the blasting.

To reduce the danger of fire in timber yards it was decided that signs should be posted prohibiting smoking by employees.

To insure more safety for cage riders it was decided that where a repeating bell system is used the hoisting engineer shall ring one bell after he has brought a cage to rest, regardless of the fact whether men, timber, or an empty cage has been in motion.

315 rule books were given to new employees, the larger number of them being distributed before June month. By languages there were 44 Finnish, 88 Italian and 183 English.

EXAMINATION OF EMPLOYEES ON RULES and REGULATIONS.

The Committee on examination of employees, consisting of Captain J. H. Rough, W. H. Moulton and the Safety Inspector, examined 66 men in January, four to five employees being selected from each of the Company's Michigan mines. The Minnesota mines were visited in May by Capt. Rough and the Safety Inspector, Mr. Moulton being detained at Ishpeming, at which time fourteen employees were examined. A second examination was held on the Marquette Range in August, when 38 employees passed a satisfactory examination. From a month to six weeks notice is posted on the bulletin boards before each examination so as to keep employees' interest more active in safety. A total of 391 men have been examined to-date.

SAFETY DEPARTMENT.

DESCRIPTION OF PREVENTABLE ACCIDENTS

After each meeting of the Central Safety Committee a description of the preventable accidents was sent to all underground and surface foremen. Whenever there was a frequent occurrence of similar accidents special emphasize was given to them. Copies were posted in the Bulletin Boards where they would attract the notice of other employees. There were but six or seven preventable accidents from the latter part of October to the end of the year, and as they were very trivial, the regular monthly descriptions were not issued those three months.

NATIONAL SAFETY COUNCIL

The Company has been a member of the National Safety Council since its organization in 1912 and has received weekly copies of its bulletin placards and its weekly publication. A monthly magazine is now issued and attached to it are copies of the placards which are available for distribution. We are entitled to select a definite number each month and under the present arrangement it is possible to obtain a larger number of those that are applicable to mining. The magazine contains a resume' of safety activities throughout the United States and much valuable information relative to the work of accident prevention.

Mr. C. L. Colburn, a mining engineer with the Bureau of Mines and stationed at Pittsburgh, Penn., visited the local mines in May as a special representative for the Mining Section of the Congress. His work is to ascertain what progress we are making in promulgating safety and to disseminate the information to other operators. He took photographs of a number of our safety devices, underground conditions, surface equipment, etc. These are being distributed through the Council to all the members of the Council. Mr. Colburn has been delegated to inspect the mines of the large operators in this country with the object of giving publicity to all safety devices and activities that are worth being adopted.

Mr. Moulton and the Safety Inspector prepared a paper on "Maintaining Interest in Safety Work", which was presented at the annual meeting of the Council at Boston in October.

VENTILATION

The Francis and Gwinn mines were connected underground early in the
SAFETY DEPARTMENT.

year and as a result immediate relief from the poor ventilation, which had prevailed in both mines, was felt. The improvement, however, did not last long for with the closing of the Gwinn mine in June and the high temperature of summer weather caused a cessation of underground air current, consequently the air became very poor and particularly so in the Gwinn mine, where it became so bad that it was impossible for workmen to make repairs in the main drifts where the timber was rapidly decaying. It then became necessary to install a large fan and accordingly one was placed at the top of the Gwinn shaft. As the two mines are comparatively small, the volume of air provided by the fan is ample but there has developed some difficulty in getting it in sufficient quantities into the Francis sub-levels, where it is most needed. These workings are south and southeast of the Francis shaft and are offset from the direct line between the downcast and upcast air current. With the coming of cold weather it became necessary to alternate the course of the current in order to prevent ice forming in the shafts. This has made it more difficult to get fresh air in the sub-levels. To overcome these difficulties air-locking doors must be installed and the construction of this device is now under consideration.

Ventilation at the Athens mine became poor due to the depth of the mine and the lack of a second outlet. To improve it the Lake mine fan was installed at the bottom level shaft station, and using the skip compartment for discharge, air is being drawn from surface through the cage compartment into the top level and from there is sucked through the mine workings and discharged by fan to surface through the skip compartment. There has been a very noticeable improvement in the ventilation, which is highly satisfactory not only to the men employed in the mine but also as a factor to lengthen the time that timber will resist decay.

SKIP and CAGE OVERWINDING DEVICE

Early in the year hoisting engineers were responsible for considerable property damage by overwinding skips. Whenever this occurs there is always the possibility of accident by a falling skip breaking into the cage compartment, by falling debris being thrown into shaft stations etc. The Mechanical Department

submitted an overwinding device at a meeting of the Central Safety Committee, which was approved and recommended for adoption at all mines. It is called the Lily patent, and has been attached to the skip and cage hoists of the Maas mine, the skip hoist of the Negaunee, the cage and skip hoists of the Athens and the Republic hoist, where skip and cage are in balance.

CAGE and SKIP COMPARTMENTS

It is very important that hoisting compartments of shafts be kept in safe condition if accidents are to be avoided. The runners or cage and skip guides are inspected each week and the reports are forwarded to the Safety Department and filed. This work is usually under the supervision of the mine timber foreman and in the skip compartment is performed by the foreman and an assistant standing on a platform set within the skip with a head protection attached to the hoisting cable, directly above them. The cage guides are inspected from the cage. A man is stationed at the bell signal at the collar of the shaft or the levels in shallow mines and in the deep mines the pull-wire bell is used by the men riding the skip or cage.

MAIN LEVELS

Much labor and money are spent annually to keep some of the main levels in a safe passageway for mechanical haulage and travel. During the past year this has been especially true of the Maas, Athens and Francis mines. In the Maas crushing of several of the haulage drifts has been caused by mining ore in close proximity above the drifts. In the Athens and Francis mines poor air has helped in a rapid destruction of the timber and as the main levels are in rocks which are comparatively soft repair work has been in progress almost continuously since the drifts were open. A limited amount of timber, treated with a preservative, was used but sufficient time has not passed to determine its value.

Repair work is not only imperative as an operative condition but it is essential as a safety factor. In 1920 we narrowly escaped the loss of a number of lives at the Negaunee mine when several main level sets of timber collapsed just as miners were passing through on their way to the shaft. Skilled timbermen or miners are chosen to do this work, and it is very gratifying to report that they succeed in overcoming very difficult conditions with a minimum delay in

the haulage of ore and so far has been exempted from serious accidents.

SECOND OUTLETS

.. It has always been a rule of the Company to provide and maintain in good condition two ladderways from the lowest workings in a mine through to surface when the life of the mine warranted the expenditure of money that would be involved in providing the second exit. Two openings into a mine represent added security to underground employees as avenues of escape in case of fire or accident to the regular hoisting shaft and they also provide a large volume of air which is a very important factor entering into the working conditions of miners. With the exception of the Spies and the Athens all mines have two separate passageways to surface, either through two shafts or a shaft and a raise.

The Spies mine is not a deep mine, the ore body small and very little timber is used. The mine atmosphere is damp and there is not much danger of fire. Because of these facts no recommendation has been offered relative to a second outlet.

The Athens mine has no second outlet from the main workings which extend from the 1800 foot level to the 2500 foot level but there is a connection from the shaft to the Negaunee mine on the 1000 elevation. The time may come when conditions will be more favorable than they are now for a more direct second outlet from the Athens workings.

While the Republic mine has two shafts there has been no complete ladderway in the Pascoe shaft to surface but it has been open as cage and skip roads. The ladder road in No. 9 shaft was damaged very badly by a skip falling through the shaft and there were quite a few months when the mine was without a complete ladderway to surface, which is not a very satisfactory condition with respect to the underground employees' sentiment. It was gradually placed in safe condition and completed in December. As the downcast current is in the Pascoe shaft it is very important to have a ladderway in it because it is a safer retreat than No. 9 shaft, in case of fire. A recommendation was offered that a ladderway be placed in this shaft from the bottom directly through to surface and Supt. Stakel was authorized to have it done. This does not mean

a new ladderway all through the shaft as there is at the present time a ladderway from the bottom of the shaft to within several hundred feet of surface.

HEADFRAMES

Steel and concrete headframes represent permanency of structure but it is surprising the number of safety recommendations that must be called to the attention of surface foremen in order to keep them in first class condition. The reason for this is the fact that skips, haulage cars and top sheaves are bulky and heavy and when they are taken out of the shafts it is necessary to remove guards. Unless attention is called to the missing guards around shafts, along stairways and sheaves there is apt to be delay in replacing them. This has been true of the Maas and Stephenson mines where a number of changes and improvements were made during the year.

The Lake mine crusher has been transferred to the Athens mine and was put in operation in November. When the last safety inspection was made in December it was not fully equipped with guards but they will be installed in a reasonable length of time.

Numerous changes have marked the surface equipment at No. 9 shaft, Republic mine, where almost everything except the headframe has been over-hauled. The Superintendent and the Safety Inspector made several inspections of the picking belt, pulley stands, headframe and transfer building to ascertain what the requirements were to conform to the safety rules. Due to a shortage of material and delay in obtaining the same there was considerable loss of time in the construction of a number of the safety devices, and later attention was given to them in the Safety Inspector's reports. The moving machinery, sheaves and ropes of the underground hoist, Pascoe shaft, were equipped with standard guards.

ABANDONED PITS and SHAFTS

The fences around the large open pits of the Tilden and Foster mines are gradually falling away in places due to decay and each year repairs must be made. There are also many small pits and shafts in the vicinity of these properties, quite a few of the shafts being deep and represent a real danger to berry pickers, hunters and wondering cattle, if they are not properly fenced. Two in-

pections are made of all outside properties like these mines, one in the spring and one in the fall. Last year two former Salisbury miners were employed four days repairing fences around the large pits at the Cliffs. Several deep shafts were filled by blasting into them the piles of rock that were dumped around their edges. This method is advisable when it can be done cheaply and it represents an end to further expense.

Fences were erected around the caved areas near the Lloyd and Section 6 shafts, North Lake district, and those at the pits and caves of the Jackson, Lucy, Nelson, Cleveland, Salisbury and Republic mines were repaired.

The unwatering of the big pits at the east end of Ishpeming and a connection with the Cliffs-shaft mine were accomplished last year. Safety inspections were carried out by the inspector and the committees while the work was in progress and as a consequence walks, platforms, ladderways, and sumps were guarded and other safety precautions adopted.

SUMMARY

Safety work the past few years does not represent new work to the extent it did the first five or six years of our department, and with each year it is becoming more routine. Difference of opinion as to the value of safety devices and safety precautions have been overcome and it is usually a case of citing a rule or recommendation that has been adopted by the Company in order to make proper provision for the dangers that are common to mining. Frequently there will be found slight omissions or apparent disregard of a rule but when these occur it is because foremen have inadvertently overlooked them or else more pressing matters relative to production have taken up their time. Hence there will always be occasion for constant and frequent inspection to keep conditions entirely conforming to the rules and regulations. It is highly gratifying to acknowledge the hearty cooperation which is received from the superintendents, captains and foremen.

FIRST AID WORK

Six new first aid teams at local mines were trained monthly the first five months of the year and four teams at our Minnesota mines were given two lessons. With the curtailment of forces it became necessary to rearrange the schedule and consequently training was discontinued at the Cliffs-Shaft, Boeing, Wade-Helmer, Crosby and Hill-Trumbull mines. The men in training at the Gwinn mine were transferred to the Princeton mine and they were continued in training until it also was closed. Due to the reduction in the number of mines being operated we lost 29 men who had received first aid certificates. There are 38 others who are not working now for the Company due to various causes. Since May first aid training has been given to men who have completed the regular course in former years and first aid men at all the mines now in operation are given attention.

A total of 101 first aid lessons were given in which 192 men participated. 29 men completed the training and are entitled to certificates.

MINE RESCUE WORK

Men at all the mines in Marquette County were trained regularly each month to use fire fighting apparatus, providing the mine was operated. Usually five men are used at a practice but the small mines like the Gwinn, Francis, Salisbury, Angeline, etc., usually furnish two or three men at one time and a team is formed by combining crews from two mines. There were held 114 training lessons in which 116 men took part.

Of the 302 men who have had training there are 147 in the service of the Company at this time of writing and who are accepted as competent rescue men. Very often it becomes necessary to drop a man after several months training due to certain physical disability traits which renders the man unfit for mine rescue work. No man is continued in the work, unless he is physically qualified and is willing to serve in case of fire.

The Bureau of Mine Car visited the Marquette Range during the month of April and a number of men from all the local mines were given an opportunity of inspecting it and participating in practices under the direction of the men in charge of the car.

The different types of Rescue apparatus were exhibited and explained to the men, and the privilege was greatly appreciated by the men participating. 115 were examined and given Bureau of Mine Certificates.

Tables, which follow, itemize the amount of money spent for first aid and mine rescue equipment and supplies. We have a sufficient amount on hand at the end of the year to last the first half of 1922, with the possible exception of unexpected breakage in parts of the apparatus.

TABLE VII
Showing Cost of First Aid and Mine Rescue Supplies & Repairs

<u>First Aid</u>		<u>Mine Rescue</u>	
Roller Bandages	\$ 178.00	5 Breathing Bags	\$122.50
Gauze pads	48.30	25 Mouth Bits	20.00
Cotton	7.64	12 Injectors	18.00
Leather Finger Cots	45.00	12 Side Straps for Mouth	
First Aid Packets	93.60	Breather	36.00
Iodine, Vaseline	35.70	12 Tube Gaskets	4.50
Adhesive Tape	39.52	6 Diaphragm Gaskets	1.50
Ammonia	13.50	6 Hose Connections	8.10
Scissors	9.17	550 lbs. Caustic Soda	150.78
	<u>\$ 470.43</u>	2 Respiration Tubes	45.00
		2 Rubber Bags -Pulmotor	4.00
		3 Face Masks "	15.17
		1 " " Lungmotor	2.58
		8 Cylinders - Oxygen	39.20
		2 gals Euthymol	9.00
		1 gal. Glycerine	2.80
			<u>\$479.13</u>

TABLE VIII
Showing Total Number of First Aid Men Trained
1912-1921.

Number trained	449
" received certificates or entitled to them . . .	332
" left service of Company	154
" deceased	5
" now in employ of Company	290

TABLE IX
Showing Total Number of Mine Rescue Men Trained.
1912-1921.

Number trained	302
" left service of Company	91
" disqualified	57
" deceased	4
" now in employ of Company	147

TABLE X

Number of accidents, number of classified preventable and percentage preventable, 1912-1921.

Year	Number of Accidents	Preventable Accidents	Percentage Preventable
1912	207	51	25
1913	316	77	24
1914	443	118	37
1915	427	97	23
1916	592	120	20
1917	639	149	23
1918	590	124	21
1919	670	159	22
1920	708	132	19
1921	351	63	18

TABLE XI.

Comparison of Fatality Rates for Coal Mines, Metal Mines, etc.
(Based on 300 working days per man)

Year	U. S. Coal Mines	U. S. Coal Mines	Minn. Metal Mines	Mich. Metal Mines	Marquette** County	C.C. I. Company.
1911	4.97	4.45	5.46	4.28	5.42	1.89
1912	4.46	4.09	3.15	3.22	3.32	1.71
1913	4.70	3.72	3.16	3.12	2.46	4.12
1914	4.66	3.92	2.93	3.97	5.00	4.10
1915	4.44	3.89	2.71	3.74	4.09	2.16
1916	3.94	3.62	2.59	3.76	4.27	2.61
1917	4.25	4.44	3.04	3.40	3.03	1.73
1918	3.94	3.57	3.25	3.31	.42	3.45
1919	3.03*	3.43	3.09	2.84	4.20	2.79
1920	2.94*				3.06	1.21
1921					0.00	2.60
Average	4.13	3.90	3.26	3.52	3.20	2.58

* Subject to revision

** Exclusive Cleveland-Cliffs Co., but including rock quarries.

TABLE XII

CLASSIFICATION OF NON-FATAL ACCIDENTS

1 9 2 1

<u>A. Fall of Ground or Timber.</u>		
1. By fall from back or side (drift, raise or stope)		76
2. By fall of stray chunk or stick down raise or stope		2
3. By lagging, sprag, or timber falling from back or side		1
	Total	<u>79</u>
 <u>B. Shaft Accidents.</u>		 0
 <u>C. Use of Explosives.</u>		
1. By explosion of powder, detonator, etc.		1
	Total	<u>1</u>
 <u>D. Mine and Railroad Cars.</u>		
1. By being caught between cars or motor and drift		4
2. By riding or attempting to ride cars		1
3. By squeezing finger, hand or foot between box and truck, car and drift, chute, etc.		9
4. By being run over by railroad car or haulage car		1
5. By cars falling back or off track		6
6. By miscellaneous causes		4
	Total	<u>25</u>
 <u>E. Miscellaneous Causes.</u>		
1. By falling down raise, stope or mill, or pocket		1
2. By falling from ladder, trestle or stage		4
3. By falling with machine or tripod, drill breaking, etc.		5
4. By squeezing finger, hand or foot between pieces of timber, chunks of ore, etc.		45
5. By straining or wrenching arm, back, side or leg by lifting		41
6. By chunk rolling down dirtpile, stockpile, off car, etc.		27
7. By being struck by glancing dirt, tool or timber, etc.		38
8. By being struck by pick, shovel, hammer, timber, etc.		13
9. By tools or material falling or slipping from hand, staging or platform, etc.		15
10. By running nail into hand, foot or leg		6
11. By stumbling or slipping causing a fall, etc.		16
12. By catching finger, hand or foot in blocks, gears, brakes, struck by windlass, parts of machinery, etc.		10
13. By wrench or tong slipping causing a fall, etc.		1
14. By blood poison or infection from various causes		5
15. By contact with electric wire		1
16. By being scalded or burnt		2
17. By blistering hand		3
18. By sliver in finger, etc.		5
19. By miscellaneous underground causes		1
20. By miscellaneous surface accidents		1
	Total	<u>240</u>
		<hr/>
Grand Total		345

TABLE XIII

CLASSIFICATION OF FATAL and MINOR ACCIDENTS

FOR THE YEAR 1921.

BY THE CENTRAL SAFETY COMMITTEE

1. TRADE RISKS, (INCIDENTAL & NON-PREVENTABLE)	Total	288
II. NEGLIGENCE OF COMPANY:		
2. Failure to Use Proper Tools or Appliances Provided		2
3. Violation of Rules		1
6. Failure to Provide Safety Devices		1
7. Failure to Provide Proper Tools, Appliances or Place to Work		1
	Total	<u>5</u>
III. NEGLIGENCE OF WORKMEN:		
1. Failed to use Safety Devices Provided		5
2. Failed to use Proper Tools or Appliances Provided		1
A. Injured Men: 3. Violation of Rules		5
4. Improper Act or Selection of Improper Method of Doing Work. (By Workman.)		21
5. Carelessness. (By Workman.)		23
B. Other Workman: 3. Violation of Rules		1
4. Improper Act or Selection of Improper Method of Doing Work. (By Workman.)		1
5. Carelessness. (By Workman.)		1
	Total	<u>58</u>
	Grand Total	<u>351</u>

TABLE XIV

CLASSIFICATION OF CAUSES OF FATAL ACCIDENTS

FROM DEC. 1st, 1898 to JAN. 1st, 1922.

<u>A. Fall of ground or Timber.</u>	
1. By fall from back or side (Drift, raise or stope)	74
2. By fall of chunk of ore from chute	1
3. By fall of stray chunk or stick down raise or stope	1
4. By run of mud or sand	10
5. By run of ore in stope	1
Total	<u>87</u>
<u>B. Shaft Accidents.</u>	
1. By falling down shaft	17
2. By rock or timber falling down shaft	3
3. By being struck or caught by cage, skip, bucket or tool	6
4. By falling from cage, skip or bucket	8
5. By falling from ladder in shaft	6
6. By being carried or pushed into shaft by car	3
7. By attempting to jump on or off cage, skip or bucket	3
8. By being struck by crosshead	5
Total	<u>49</u>
<u>C. Use of Explosives.</u>	
1. By explosion of powder	15
2. By premature blast	3
3. By fall of ground or timber due to blast	3
4. By being overcome by gas	2
5. By erysipelas resulting from blast	1
Total	<u>24</u>
<u>D. Mine and Railroad Cars.</u>	
1. By being caught by haulage cars	14
2. By riding or attempting to ride cars	3
3. By falling with car from trestle	3
4. By being run over by railroad car	4
Total	<u>24</u>
<u>E. Miscellaneous Causes.</u>	
1. By falling in raise or pocket	4
2. By falling from ladder, trestle or stage	5
3. By falling with machine or tripod	2
4. By being caught under pump rod	2
5. By (supposing to have) coming in contact with trolley wire	2
6. By asphyxiation due to mine fires	3
7. By being ruptured	1
8. By being pulled into sheave	1
10. By contact with electric wire	1
Total	<u>21</u>
<u>Grand Total</u>	
205	

Average percent of accidents by causes

A. 42.44% B. 23.90% C. 11.71% D. 11.71 E. 10.05%

EXPENSES OF THE SAFETY DEPARTMENT FOR 1921.

TABLE XV

Supplies

Printing, air apparatus, etc.	\$95.58	
Mine Rescue and First Aid	89.65	
Total		\$185.23

Traveling

Inspector	427.30	
Foreman	345.01	
Central Safety Committee	49.82	
Miscellaneous Committee	172.74	
Total		994.87

Salaries 6369.00 6369.00

Grand Total \$ 7549.10

Damascus
Bond
MADE IN U.S.A.

Respectfully submitted,

William Coribear
Safety Inspector.

ANNUAL REPORT
OF THE PENSION DEPARTMENT
FOR THE YEAR 1921.

* * * * *

PENSION SYSTEM:

The year 1921 completed the thirteenth year of the operation of the Pension System.

The following pensions were granted during the year:

No.	Name.	Mine.	Date Pension began.	Monthly Payment.
104	William J. Chapman	Cliffs Shaft	Jan. 1, 1921	\$ 25.69
105	Matt Vanhala	Cliffs Shaft	Jan. 1, 1921	18.00
106	Matt Tuttila	Cliffs Shaft	Feb. 1, 1921	23.56
107	Erick Peterson	Lake	Jan. 1, 1921	19.85
108	Richard Nicholls	Cliffs Shaft	Mar. 1, 1921	18.00
109	Joseph Cousineau	Salisbury	Apr. 1, 1921	30.16
110	Leon Decaire	Salisbury	Apr. 1, 1921	23.71
111	William Edyvean	Salisbury	Apr. 1, 1921	20.21
112	Emilio Antonio Russo	Salisbury	Mar. 1, 1921	18.00
113	Matt Aho	Maas	Apr. 1, 1921	27.36
114	Henry Leppanen	Cliffs Shaft	Apr. 1, 1921	18.54
115	John D. Stephens	Cliffs Shaft	May 1, 1921	24.70
116	John Oie	Holmes	May 1, 1921	22.34
117	Peter Bloken	Lake	May 1, 1921	42.60
118	Theotime Garceau	Lake	June 1, 1921	26.10
119	Ole Brekken	Angeline	June 1, 1921	23.44
120	John Lemin	Lake	June 1, 1921	58.03
121	John H. Tonkin	Holmes	June 1, 1921	18.00
122	Hans Selsback	Lake	June 1, 1921	30.05
123	John H. Paynter	Lake	June 1, 1921	44.77

PENSION SYSTEM; (Continued)

No.	Name.	Mine.	Date Pen- sion began.	Monthly Payment.
124	Charles E. Haglund	Cliffs Shaft	June 1, 1921	\$ 30.92
125	John Korpela	Cliffs Shaft	June 1, 1921	31.97
126	James Brewer	Cliffs Shaft	June 1, 1921	23.27
127	John Handberg	Lake	June 1, 1921	29.24
128	Louis Farley, Sr.	Angeline	June 1, 1921	24.40
129	George Bouty	Barnes Hecker	July 1, 1921	18.00
130	Charles Vernquist	Cliffs Shaft	June 1, 1921	39.68
131	Andrew Erickson	Cliffs Shaft	June 1, 1921	18.44
132	Peter Rose	Cliffs Shaft	June 1, 1921	20.40
133	Philip Christian	Angeline	June 1, 1921	31.98
134	August E. Anderson	Cliffs Shaft	June 1, 1921	37.82
135	Ole Walline	Lake	Aug. 1, 1921	51.33
136	John H. Skewis	Lake	Aug. 1, 1921	30.52
137	John Koskie	Lake	June 1, 1921	20.18
138	W. H. Trathen	Lake	June 1, 1921	34.22
139	John August Carlson	Cliffs Shaft	June 1, 1921	25.41
140	John Endahl	Cliffs Shaft	June 1, 1921	41.79
141	W. M. Sterling	Salisbury	July 1, 1921	59.59
142	Gust Peppin	Lake	Aug. 1, 1921	45.50
143	Andrew Ross	Cliffs Shaft	June 1, 1921	19.35
144	Anton Franson	Cliffs Shaft	June 1, 1921	27.84
145	William Asikainen	Lake	June 1, 1921	18.00
146	Andrew Wahlberg	Various Mines	June 1, 1921	22.63
147	John Chillman	Cliffs Shaft	June 1, 1921	23.56
148	George Derwin	Lake	Aug. 1, 1921	31.54
149	John A. Anderson	Cliffs Shaft	Sept. 1, 1921	44.47
150	Joseph Kurtti	Cliffs Shaft	Sept. 1, 1921	26.87
151	James Holm	Maas	Oct. 1, 1921	18.00

PENSION SYSTEM: (Continued)

WIDOWS & ORPHANS PENSIONS

No. 17 Hilja Himottu. Granted Dec. 1, 1910. Ten year period expired Nov. 30, 1920. Total payments \$1680.00. At the meeting of the Pension Board, held at the Cottage on Dec. 13, 1921, this pension was authorized for an additional 5 year period commencing Dec. 1, 1921.

The following Old Age Pensions ceased during the year:

No. 77	Gustave A. Holmgren	Pension began August 1st, 1917. Died August 22d, 1921.
No. 104	William J. Chapman	Pension began January 1st, 1921. Died April 22d, 1921.
No. 116	John Oie	Pension began May 1st, 1921. Died June 2d, 1921.

	<u>1920</u>	<u>1921</u>
Number of pensions granted during the year	10	48
Number of deaths	4	3
Number of Old Age Pensions in force on Dec. 31st	50	95
Average Annual Pension	\$ 249.24	\$ 296.72

The following additions were made on the Furnace Department Roll during the year:

No.	Name.	Date Began.	Amount.
4	Louis F. Pearce	May 1, 1921	\$ 36.19
5	James Barry	June 1, 1921	38.33

There are now three names on the Furnace Department Pension Roll. The average annual pension for the three men is \$372.68.

PENSION SYSTEM: (Continued)

Total amount paid to Old Age Pensioners, 1908 to 1921 inclusive:

Mining Department	\$ 97075.65	
Furnace Department	<u>3393.33</u>	
Total		\$ 100468.98

Total amount paid to Widows & Orphans, 1908 to 1921 inclusive:

Mining Department	\$ 21837.00	
Furnace Department	<u>900.00</u>	
Total		\$ 22737.00

Total Pension Payments		\$ 123205.98
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PENSION SYSTEM: (Continued)

On Sept. 14, 1920 the Board of Directors authorized that pensions be granted to the men employed at the Republic Mine, the pensions to be computed and provided in the same manner as under the provisions of the regular pension system, the pension fund for the payment of the pensions at the Republic Mine to be made up of one-half of one percent of each monthly pay roll and an appropriation of \$8000.00 per year during the continued operation of the Mine. The balance on hand in the Republic Fund to draw interest at 6%.

The following men were put on the Republic Mine Pension Roll during 1921:

No.	Name	Date Pension Began.	Monthly Payment.
4	Edward LaFave	Feb. 1, 1921	\$ 31.46
5	Fred Upperstrom	Apr. 1, 1921	41.07
6	Andrew Johnson	Mar. 1, 1921	28.09
7	Capt. Peter W. Pascoe	June 1, 1921	100.00
8	Alphonse Veunn	June 1, 1921	24.90
9	Benjamin Douquette	June 1, 1921	37.93
10	John M. Ericson	Aug. 1, 1921	26.55
11	Richard Fowler	Aug. 1, 1921	29.12
12	Andrew Leaf	Sept. 1, 1921	35.05
13	Frank Weinberg	Nov. 1, 1921	36.59
4	Edward LaFave	Pension began Feb. 1st, 1921. Died on Feb. 26th, 1921.	

Republic Mine Department:

<u>Year</u>	<u>Old Age</u>	<u>Widows & Orphans</u>	<u>Total</u>
1920	278.61		278.61
1921	3427.97		3427.97
Totals	\$ 3706.58		3706.58

Estimated possible pension for year 1921 -

\$ 4476.00

PENSION SYSTEM: (Continued)

At the present time the pensioners on the Mining Department Roll live in the following localities:

Ishpeming	70	Pelkie, Baraga County	1
Negaunee	8	Virginia, Minn.	1
Gwinn	4	Springfield, Mass.	1
Marquette	1	Oak Park, Ill.	1
Detroit	2	Kingsbury, Cal.	1
Flint	1	Long Beach, Cal.	1
Newberry	1	Canada	1
St. Ignace	1	Italy	1

All the Republic pensioners are living at Republic with the exception of John M. Ericson, who resides in Evanston, Illinois.

One of the Furnace Department pensioners lives at Marquette, one at Negaunee and one at Skandia, Michigan.

There was one addition to the Railroad Department pension roll, this being James Noctor, Pension No. 2, which began on April 1st, 1921, at the rate of \$18.00 per month.

One Railroad Department pensioner lives at Negaunee, Michigan and the other at Marquette, Michigan.

PENSION SYSTEM: (Continued)

During the latter part of the year there has been considerable discussion concerning the pension funds and the method of accounting. At a meeting of the Pension Board held at Cliffs Cottage on December 13th, the whole subject was very carefully considered. At the end of the year special investigations are being made concerning:

1. The principal sum which would be necessary to pay to the pensioners now on the pension roll, the pensions granted to them, the pensions to continue until the death of the pensioners.

2. To ascertain what percentage of the monthly pay rolls would be necessary to provide a fund to pay the pensions now granted and those which may be granted.

3. What sum would be necessary to be appropriated which, with the addition of one-half of one percent of the future pay rolls, would be sufficient to pay pensions now granted and those to be granted later.

In the above investigations interest to be figured at 4%.

At the time of completing this Annual Report we have not received from Cleveland definite information as to the handling of the General Pension Fund or the Republic Mine Pension Fund. We also have not received the Annual Statements of these Funds.

Pension payments for the years 1908 to 1921 inclusive are as follows:

Mining Department:

<u>Year</u>	<u>Old Age</u>	<u>Widows & Orphans</u>	<u>Total</u>
1908	69.10	48.00	117.10
1909	351.92	464.00	815.92
1910	896.44	1043.00	1939.44
1911	1690.37	2649.00	4339.37
1912	3865.95	3113.00	6978.95
1913	5133.62	3025.00	8158.62
1914	6179.57	3403.00	9582.57
1915	7910.35	2372.00	10282.35
1916	8787.02	1694.00	10481.02
1917	9227.22	1366.00	10593.22
1918	8889.14	944.00	9833.14
1919	9605.02	888.00	10493.02
1920	12613.29	814.00	13427.29
1921	21856.64	14.00	21870.64
Totals \$97075.65		21837.00	118912.65

Furnace Department:

<u>Year</u>	<u>Old Age</u>	<u>Widows & Orphans</u>	<u>Total</u>
1910	111.75		111.75
1911	268.20	120.00	388.20
1912	268.20	180.00	448.20
1913	268.20	180.00	448.20
1914	268.20	180.00	448.20
1915	268.20	180.00	448.20
1916	268.20	60.00	328.20
1917	268.20		268.20
1918	268.20		268.20
1919	130.55		130.55
1920	223.80		223.80
1921	781.63		781.63
Totals \$3393.33		900.00	4293.33

COMPENSATION:

The work of looking after the compensation of injured men has continued in the care of Mr. T. H. Bargh as Cashier since December 1912. Special effort has been made to see a man as soon as possible after an injury has occurred and this has generally made the settlements readily arranged for. In the majority of the cases the first weekly payment is ready at the time the agreement is presented to the employee, which materially aids in effecting a settlement and in securing the man's signature to the settlement blank provided for by the Industrial Accident Board. In this way the men are well satisfied with the working of the compensation laws.

During the year there has been only one case requiring an arbitration hearing. This was the case of Alfred Franzen, who was accidentally killed at the Maas Mine on September 8th, 1921. Accident Report #299. Mrs. Holmberg, who was his first cousin and who had been his housekeeper for about 30 years, made claim for compensation as a member of his family. Hearing was held at Marquette on December 12th with Mr. Ray Durham, Deputy Commissioner, in charge, at which time our case was presented by Mr. Thomas Clancey. Following the hearing Mr. Durham has rendered a decision in favor of Mrs. Holmberg from which an appeal has been made to the full Board at Lansing. We have now been notified that the hearing will be held in Marquette on February 1st, 1922.

The following lump sum settlements were made during the year:

Settlement, Frank Arbanos, covers injury claimed to have been received at the Meadow Mine on June 17th, 1919. Accident Report No. 21.	\$ 280.00
Settlement, Joe Andreola, Princeton Mine. Accident Report No. 118.	2150.00
Settlement, Sanna L. Luoma. Athens Mine. Accident Report No. 60.	2816.50
Settlement, Pete Schemich. Wade-Helmer Mine. Accident Report No. 43.	780.00
Settlement, Bert Back. Cliffs-Shaft Mine. Accident Report No. 583.	1499.52
Settlement, Keo Ruoha. Crosby Mine. Accident Report No. 268.	1228.12

COMPENSATION: (Continued)

Satisfaction of Judgment entered with John Znamroski for injury sustained at the Wade-Helmer Mine for 82 weeks, the balance to be paid in monthly payments, or 93 weeks. \$ 1230.00

Settlement, Battista Paris, Princeton Mine. Accident Report No. 163. 2842.22

The annual statement which is attached gives the number of accidents which occurred during the year at the different mines. It also shows the number for which compensation was paid and the number for which no compensation was paid. The report shows that there were 344 non-fatal accidents of which 222 received compensation payments.

For the last seven years, the report shows the following:

Of the accidents that occurred in 1915, 36.3% received compensation.
Of the accidents that occurred in 1916, 43.7% received compensation.
Of the accidents that occurred in 1917, 41.7% received compensation.
Of the accidents that occurred in 1918, 37.6% received compensation.
Of the accidents that occurred in 1919, 48.7% received compensation.
Of the accidents that occurred in 1920, 60.5% received compensation.
Of the accidents that occurred in 1921, 64.5% received compensation.

The annual statement shows the payments made during the year on account of accidents which occurred in 1921 and also those which had occurred in the years 1915, 1916, 1917, 1918, 1919 and 1920.

In those cases for which a definite amount is still to be paid at the end of the year, these amounts are set up in the column on the annual statement as "Compensation Still Pending".

In the cases of some accidents, which occurred late in the year, it is impossible to know definitely just how long the disability may continue and in these cases an estimate is made, based on the reports of the physicians and the corresponding amounts are included in "Compensation Still Pending". The number of such cases are small in comparison to the total so that the amount involved does not effect the percentage of cost to any appreciable extent.

The total amount of compensation to be paid after December 31st, 1921 is \$ 41,198.94, this being the total for all of the mines of the Company.

Of the above amount there is pending for the years 1915, 1916, 1917, 1918, 1919 and 1920 \$ 25,156.16 and for the year 1921 \$ 16,042.78.

COMPENSATION: (Continued)

The compensation payments for the accidents which occurred in 1921, including medical payments during the year, amount to a percentage of .01444 of the payrolls for the year.

The percentage of compensation costs since the laws went into effect are given in the following table:

Year	Percentage of Payrolls.
1912 4 months	.00649
1913	.01104
1914	.0160
1915	.01095
1916	.01903
1917	.01268
1918	.01214
1919	.00901
1920	.0079
1921	.01444

The rate of payments for medical and hospital service, which was adopted in 1918, has continued throughout the year 1921. This rate is \$1.10 per each employee per month, which is paid to the physicians for medical services for each employee and for the immediate members of his family. The Company pays 40 cents per man per month to the physicians for the care of those men who are injured while at work for the Company, this to cover the payments provided by the compensation law. The total amounts paid to the physicians is, therefore, at the rate of \$1.50 per man per month.

The payments on account of Workmen's Compensation including the payments to the physicians are given in the following table for the years 1912 to 1921, inclusive:

Year.	Cleveland-Cliffs Iron Company.	Negaunee Mine.	Athens Mng. Company.	Total
1912	1075.91	105.08	.03	1181.29
1913	13149.70	1152.87	27.15	14329.72
1914	27416.82	2840.13	446.03	30702.98
1915	15657.71	1699.28	656.07	18013.06
1916	32404.74	3496.75	672.29	36573.78
1917	45129.92	5301.30	911.46	51342.68
1918	43734.77	6198.93	1197.57	51131.27
1919	59680.51	11724.68	2234.77	73639.96
1920	62593.22	8888.01	2928.15	74409.38
1921	61832.34	4709.80	5208.92	71751.06
	362675.64	46116.83	14282.44	423075.18

COMPENSATION: (Continued)

The following list shows fatalities which occurred during the year, the family or dependents in each case, and compensation to be paid:

Edwin C. Spencer

Maas Mine. Accident Report No. 289.
Occurred March 14th, 1921. Married. Compensation for 300 weeks at \$14.00 per week.

Alfred Franzen

Maas Mine. Accident Report No. 299.
Occurred September 8th, 1921. Single. Funeral expense in this case amounted to \$200. Cousin acting as housekeeper asked for Compensation. Hearing held before Commissioner who decided in her favor. Appeal filed. Hearing before full Board set for Feb. 1, 1922.

Frank Utto

Stephenson Mine, Accident Report No. 525.
Occurred March 21st, 1921. Married. Compensation for 300 weeks at \$14.00 per week.

Oscar Kivinen

Cliffs-Shaft Mine. Accident Report No. 676. Occurred January 27th, 1921. Single. Funeral expense paid by Company - \$200.00.

Ben Lubowicki

Spies Mine. Accident Report No. 69. Occurred March 2d, 1921. Single. Funeral expense including sermon delivered by Priest, amounted to \$200.00.

Rade Blamisich

Hill-Trumbull Mine. Accident Report No. 24. Occurred July 22d, 1921. Single. Funeral expense account of burial \$ 150.00
State Treasurer - On account of no dependents in accordance with Law 100.00
\$ 250.00

In 1919 there were 11 fatal accidents of whom 5 were married and 6 were single. The compensation and funeral expenses in the 11 cases amounted to \$ 19,595.00.

In 1920 there were 5 fatal accidents and all were single men, only two of whom had any dependents. The compensation and funeral expenses in the 5 cases amounted to \$ 3,372.75.

In 1921 there were 6 fatal accidents of whom one was a married man and 5 were single men. The amount of compensation is not yet determined as there has been a hearing in the case of Alfred Franzen, his housekeeper, who was his first cousin, applying for compensation. Final hearing on appeal set for February 1st, 1922.

COMPENSATION: (Continued)

As arranged for and begun in 1915 the compensation due in fatal cases, and in those other cases for which a definite total amount is to be paid, is credited to Personal Injury Accounts Payable and the charge is made against the mine at which the accident occurred and in the month of occurrence whenever possible. The compensation payments to the men in these cases, or to their dependents, are made in the regular way and charged to this account.

The following statement shows the balance due in the different accident cases from the year 1916 to 1921, inclusive.

THE CLEVELAND CLIFFS IRON COMPANY

BALANCE DUE PERSONAL INJURY ACCOUNTS PAYABLE DECEMBER 31, 1921.

* * * * *

Year of Acct.	Name of Dependents to whom Compensation Payments are payable.		
1916	Nels Rajala, Tony Bucco, Gd. (Est. of Angelo Mongiot)	\$ 125.75 220.08	
	Cecelia Brandt	191.43	
	Bortolo Pesenti	1000.00	
	Isabella Graham	380.00	
	John Kandelin, Gd. (Est. of Gust Myllimaki)	380.00	
	Mary Maki	380.00	
	Ellen Kneebone	85.68	\$ 2,762.94
1917	Anna Rayburn	550.00	
	Hilma Pitila	770.00	
	Annie May Dally	890.00	
	Michael Alanen	455.00	\$ 2,665.00
1918	Maria C. Bergman	1050.00	
	Margaret Paddock	1070.00	
	Celina Badger	1090.00	
	Nestor Kauppinen	40.00	
	Matilda Carlson	1120.00	
	Martina D. Bianchi-Zanelli	1320.00	
	Emily Coole	1430.00	
	Rose Bertucci	1430.00	
	Hilda Jamback	1397.00	\$ 9,947.00
1919	Josephine Karkkainen	1720.00	
	Anna Salminen	2576.00	\$ 4,296.00
1920	Olaf Johnson	1482.68	
	Edward Pigeon	854.00	
	John Znamroski	1185.00	\$ 3,521.68
1921	Millicent Spencer	3626.00	
	Ida Uitto	3640.00	\$ 7,266.00
	The Cleveland-Cliffs Iron Company -		\$30,458.62
1916	Lilly J. Johnson-Reichel, Ralph Johnson, Guardian. (Est. of Martin Johnson)	343.14	\$ 343.14
1917	Amanda Lisku	810.00	810.00
1919	Wilhelmina Marjamaa	280.00	280.00
1920	Henry Wiik	530.40	530.40
	The Negaunee Mine Company		\$ 1,963.54
	Total - All Mines		\$32,422.16

COMPENSATION: (Continued)

The following is a list of more serious cases occurring during the year for which payments of \$200.00 or more were made:

Mine.	Name.	Number of Acc. Report	Nature of Injury.	Compensation Paid.
<u>ANGELINE:</u>	Louis Farley	26	Strain dorsal region of back.	\$ 644.00*
	Russell Pascoe	29	Bruised back and legs.	247.33
<u>GWINN:</u>	Victor Salminen	259	Fracture of tibia and fibula right leg.	588.00*
<u>STEPHENSON:</u>	Battista Dellangelo	508	Oblique fracture upper and middle 3d right femur.	644.00*
	Gust Wirtanen	510	Compound comminuted frae- ture of left ankle.	616.00
	Jim Possillippo	537	Strained back.	350.00*
<u>PRINCETON:</u>	Battista Paris	163	Lacerated compound frac- ture of right foot.	3332.22
	Matt Milimaki	170	Fracture of left leg 2" below ankle.	280.00
<u>FRANCIS:</u>	Andrew Pelki	100	Potts fracture of right leg.	364.00
	Ole Johnson	109	Multiple electric burns 3d degree	282.33
<u>MORRIS*LLOYD:</u>	John Lehtimaki	487	Potts fracture of right ankle.	322.00
	W. Harry Quayle	488	Transverse spiral frac- ture upper third, right femur. Compound fracture both bones lower third left leg.	210.00
<u>REPUBLIC:</u>	Alfred Dower	555	Abrasions and contusions of right upper arm and small punctured wound near elbow.	263.66
<u>NEGAUNEE:</u>	Samuel Sims	359	Infected punctured wound in palm of right hand.	238.00
<u>CROSBY:</u>	Keo Ruoha	268	Loss of right eye.	1439.37
<u>WADE-HELMER:</u>	Walter Dobson	56	Severe bruises and contu- sions legamentous strain of right ankle and foot.	206.25
<u>BOEING:</u>	Steve Milisojivicchi	11	Fracture of tibia and fibu- la of right leg about junc- tion of middle lower third bone.	510.00

* indicates incompleted payments.

COMPENSATION: (Continued)

During the year the compensation laws in Michigan and Minnesota have both been amended. The changes in the Michigan law became effective on July 1st, 1921. The rate of compensation and the period of payments in ordinary cases remain the same as formerly. The maximum amount for permanent total disability was raised from \$6,000.00 to \$7,000.00. Funeral expenses up to \$200.00 are to be paid in all fatality cases. Formerly funeral expenses were paid only in those cases of fatality in which there were no dependents. In contested cases, instead of an arbitration committee, a member of the Board or Deputy Commissioner holds inquiry, his findings being reported to the full Board. A local stenographer is appointed by the Board to take record of all proceedings. The law has been made very much more definite in the matter of contractors and sub-contractors, compelling the general employer to be responsible for all accidents occurring to men employed on their work. If a sub-contractor is not insured or is unable to pay compensation, the general employer is obliged to pay it.

The Departments of Labor and the Industrial Accident Board have been combined and called the Department of Labor and Industry and certain duties assigned to the different members of the Board. The Workmen's Compensation matters will be handled by three members of the Board in the same manner as formerly.

The following are the Commissioners at the present time:

Jas. A. Kennedy, of Lansing - Chairman

Thos. B. Gloucester, of Detroit

Carl Young, of Muskegon.

The compensation work in Minnesota was very materially changed, the new law becoming effective on June 1st, 1921. From the adoption of the compensation law in Minnesota in 1913, up to May 31st, 1921, the work of handling compensation cases has been in the hands of Judges of the District Courts. The new law provides for an Industrial Commission at St. Paul, and the compensation work is taken care of in a manner very similar to that of Michigan. The provision of the law, as regards payments, remains as it was under the old law, the change being largely in administration. During the last six months we have not had a large number of cases to take up with this new Board, but the work seems to be handled in a very satisfactory manner.

CLEVELAND-CLIFFS IRON COMPANY
STATEMENT OF COMPENSATION AND BENEFIT PAYMENTS FROM JANUARY 1ST, 1921 TO DECEMBER 31ST, 1921.

Description	No. of Employees	No. of Accidents			Actual Compensation Paid in 1921	1915	1916	1917	1918	1919	1920	1921	Com-pensation Still Pending	Actual Payments To Physicians	Phy-sicians Still Pending	Fatal Cases Pending	Injury Cases Pending	Benefit Payments
		Fatal	Non-Fatal	Non-Fatal														
Personal Injury Accounts Payable					13270.08								27876.62					
Maas	184	2	18	5	3621.56	153.28	3162.12	1820.00	4210.00	1248.00	1109.68	1561.00	575.89	965.00				
Maas Crusher Plant											2373.00	1248.56		3.60		2	813.34	
Gwinn	51		4	4	751.52						34.99	716.33	266.00	282.79				
Stephenson	185	1	46	25	3873.42						757.07	5116.35	1194.66	965.13		1	259.17	
Princeton	111		11	4	6683.88						2705.33	3976.55	32.66	581.93		6	1175.00	
Gardner-Mackinaw	3				700.00						700.00			210.63		1	404.67	
Gwinn District Crusher														14.65				
" " Laboratory														24.60				
" " Office Expense														23.00				
Francis	78		14	7	907.72							907.72	32.66	357.05				
Morris-Lloyd	225		24	19	2237.30			520.00				366.33	1350.97	1095.55		1	192.99	
" " Laboratory														14.20		5	335.50	
Barnes-Hecker	24		3	1	156.33						140.00	16.33		129.05				
Jackson														6.20				
Electric Generating Plant														39.95			4.17	
General Storehouse			1		184.33							88.66	95.67	148.60				
Miscellaneous	66													6.50			30.00	
Lake	50		6	4	1213.31				728.00		128.33	356.98		239.10				
Cliffs-Shaft	79	1	6	4	2688.28	3497.44					1980.18	358.66		391.70			179.15	
" " Laboratory														19.40			570.00	
Salisbury	29		1	2	319.66						291.66	28.00		163.00				
Holmes	162		18	8	1684.77		520.00		520.00		158.66	486.11	214.67	977.12			95.84	
Angeline	35		8		1180.63						118.99	1061.64	5356.00	883.83		4	262.52	
Republic	150		17	19	1741.58			518.96			387.32	835.30		713.30		1	193.34	
Spies	36	1	1	1	330.66						9.33	321.33		184.40				
Central Office														359.40				
Dead River-McClure Plant														10.00				
Dead River Storage Dam														3.00				
Transmission Line McClure to Maas			1		112.00								112.00	7.40				
Pension Dept.														25.20				
Purchasing Dept.														35.40				
Section "3" Exploration														69.40				
P. I. A. P. (Negaunee Mine)					1712.36		469.56	520.00	202.80	520.00			1963.54					
Negaunee	174		11	7	626.08						135.33	490.75	392.00	2371.36			3	
P. I. A. P. (Athens Mine)					3026.50					3026.50								
Athens	121		15	5	711.64						60.67	650.97		1470.78				
Total- Michigan Mines	1932	5	205	117	47733.41	508.72	4151.68	3378.96	4412.80	6042.50	11545.53	17693.22	38416.94	12792.22		24	4515.69	
P. I. A. P. (Meadow Mine)					572.00				572.00				1397.00					
P. I. A. P. (Crosby Mine)					1228.12								1228.12					
P. I. A. P. (Wade-Helmer Mine)					210.00						210.00		1185.00					
Crosby Crude Ore	47		4		377.50								377.50	399.20				
" Concentrating Plant				15										4.80				
Meadow	32		1	2	352.33									221.00				
Wade-Helmer	72		6		4333.75				280.00			72.33		528.05				
Boeing	39		3	1	966.61						3846.25	487.50		239.20				
Hill-Trumbull	127	1	3	2	994.47						332.86	633.75		752.80		1		
Mesaba District Office Expense	18										259.47	735.00	200.00	45.60				
Total- Minnesota Mines	335	1	17	5	9034.78				572.00	280.00	4648.58	3534.20	2782.00	2190.65		1		
Total-- All Mines	2267	6	222	122	56768.19	508.72	4151.68	3378.96	4964.80	6322.50	16194.11	21227.42	41198.94	14932.87				

THE CLEVELAND-CLIFFS IRON COMPANY
STATEMENT OF COMPENSATION AND BENEFIT PAYMENTS FROM
JANUARY 1ST, 1921 TO DECEMBER 31ST, 1921.

Compensation paid on 1921 accidents	21227.42	
Compensation still pending	41198.94 X	
Cost of Medical and Hospital services	<u>14982.87</u>	
		77,409.23
Less pending for years 1916, 1917, 1918, 1919 and 1920		<u>25,156.16</u>
		52,253.07
Percentage of pay-roll		.01444

Note:

- (a) Denotes accidents on which compensation payments were made.
- (b) Denotes accidents on which no compensation payments were made.
- (c) Denotes reports of slight accidents which caused one day's time lost.

No. of Employees - Miscellaneous, 66. This figure includes men employed at General Storehouse, Gwinn District Crusher, Gwinn District Laboratory, Jackson, Electric Generating Plant, Dead River-McClure Plant, Dead River Storage Dam, Transmission Line McClure to Maas, Pension Dept, Purchasing Dept. and "Section "3" Exploration.

Central Office, 169. This includes men employed at Gwinn District Office, Morris-Lloyd Mine Laboratory, Cliffs-Shaft Laboratory and Superintendents, Captains, and Mine Clerks which are carried on the General Office pay-roll.

WHK - 1/19/22.

BENEFIT FUNDS:

We have continued to pay out the Benefit Funds in cases of injury sustained by the men while in the employ of the Company, who had worked for the Company previous to August 1st, 1912 and who had during that early period contributed to the Benefit Funds. No collections from the men, on account of benefit funds, were made after July 31st, 1912. The funds of the different mines were consolidated some years ago, and will last for some considerable time as shown by the following statement which covers the payments each year since 1912 and the balance on hand December 31st, 1921.

These payments begin on the sixth day of disability and continue during disability not to exceed one year, and are at the rate of \$25.00 per month to a married man and \$20.00 per month to a single man.

The following special payments are also provided for:

Fatality	\$ 500.00
Both arms, legs or eyes	500.00
One arm, leg or eye	166.66

On the following sheets will be found a statement of the payments from this fund from September 1st, 1912 to December 31st, 1921. There is also shown the interest credits which in 1921 amounted to \$
The sheets show payments during the year of \$

During the year 1921, Benefit payments were made to the following number of men:

	Fatal Accident Benefit.	Non-Fatal Accident Benefit.
Maas		5
Gwinn		2
Stephenson	1	21
Princeton		6
Francis		7
Morris-Lloyd		7
Barnes-Hecker		1
Lake		7
Cliffs-Shaft	1	4
Holmes		17
Angeline		6
	2	83

Of the 344 men injured during the year 1921, not including fatalities:
222 received Compensation Payments
83 received Benefit Payments

PENSION DEPARTMENT.

CONDENSED STATEMENT OF
BENEFIT FUNDS
ALL COMPANIES

CREDITS TO FUND

January 1st, 1912 Balance		65194.87
1912 Contributed by men		6182.50
1913 No Credits		
1914 Interest C.C. I. Co.	3511.43	
" C.I. M. Co.	1096.89	
" I.C. Co.	832.01	
" Negaunee	301.83	
" Athens	<u>1.11</u>	5743.27
1915 Interest C.C. I. Co.	2083.85	
" Negaunee	<u>55.25</u>	2139.10
1916 Interest C.C.I. Co.	1949.27	
" Negaunee	<u>32.85</u>	1982.12
1917 Interest C.C. I. Co.	1704.18	
" Negaunee	<u>6.37</u>	1710.55
1918 Interest C.C. I. Co.	1553.08	1553.08
1919 " C.C. I. Co.	1376.11	1376.11
1920 " C.C. I. Co.	1238.74	1238.74
1921 " C.C. I. Co.	<u>1103.40</u>	<u>1103.40</u>
Total Credits		88223.74

DISBURSEMENTS - ALL COMPANIES

January to August	1912	2562.66
September to December	1912	4713.97
Year	1913	6987.32
"	1914	11081.75
"	1915	6445.56
"	1916	8855.94
"	1917	5081.14
"	1918	5854.69
"	1919	6224.73
"	1920	3879.85
"	1921	<u>4515.69</u>
Total Debits		<u>66203.30</u>
Balance in Fund, December 31st, 1921		22020.44

WHK
1/16/22

PENSION DEPARTMENT

BENEFIT FUND DISBURSEMENTS FROM SEPTEMBER 1ST, 1912 TO DECEMBER 31ST, 1921.
ALL COMPANIES

	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	TOTAL
Ashland (a)	2952 71										2952 71
Carp River Water Power					79 16						79 16
Austin	14 05	345 90	145 83	1 67	20 83	134 83	11 67				674 78
Cliffs-Shaft	575 52	739 30	1074 55	1210 33	1128 14	640 99	1315 19	1216 86	563 34	570 00	9034 22
Morris-Lloyd	98 59	920 41	996 18	1142 51	752 00	197 81	55 83	98 84	231 50	335 50	4829 17
Hard Ore	77 50	267 67	205 83								551 00
Lake	565 00	1401 83	940 35	1712 01	1035 17	908 16	1571 02	557 63	547 67	179 15	9417 99
Jackson	9 52	194 67	24 67			69 17	29 33				327 36
Salisbury	65 84	292 50	1308 82	1 67	165 48	170 17	145 33	1195 33	113 66	95 84	3554 64
Maas	4 17	685 03	1272 16	90 01	908 00	373 00	390 65	354 18	800 98	813 34	5691 52
Stephenson	185 57	1010 66	739 66	1499 16	1653 51	849 18	102 50	147 66	160 83	1175 00	7523 73
Princeton		99 83	23 33	67 51	6 67	7 33	1022 34	562 32	422 52	404 67	2616 52
Gwinn			397 18	154 68	356 50	277 47	165 33	667 91	35 83	259 17	2314 07
Chase			31 00	15 00							46 00
General	52 67	52 54									105 21
Gardner-Mackinaw		18 50	329 18								482 19
Francis				26 00	114 50	252 33	48 67	611 83	67 85	192 99	1314 17
Dead River Water Power					88 34						88 34
Holmes					1696 14	647 50	930 00	148 32	481 67	262 52	4166 15
Angeline					10 00		10 00	16 67	278 50	193 34	508 51
Spies					40 49		6 64				47 33
Golf Club Exploration						4 67					4 67
Central Office					61 01	111 67	26 66				199 34
Barnes-Hecker							23 33	579 17	49 17	4 17	655 84
General Storehouse								18 00	65 50	30 00	113 50
Negaunee Mine	112 83	958 48	1846 66	525 01	740 00	(d)423 19					4606 17
Athens Mining Company			(b) 23 61								23 61
Crosby			(c)712.74								1712 74
	4713 97	6987 32	11081 75	6445 56	8855 94	5081 14	5854 69	6224 73	3879 85	4515 69	63640 64

On January 1st, 1914 the Benefit Fund to the credit of the different mines of the Cleveland-Cliffs Iron Company were transferred to one General Fund in one account. On May 1st, the Funds to the credit of the mines of the Iron Cliffs Company and the Cleveland Iron Mining Company were also transferred to the above account. The Jackson Iron Mining Company's Benefit Fund was transferred to above account January 31st, 1914.

(a) Paid on account of injury cases 30.93
 Turned over to Hayes Brothers 2921 78
 Total as above 2952.71

(b) \$500.00 paid to widow of Oscar Larson, killed at the Athens Mine on August 14th, 1914.
 Payment made on the following basis:
 From Benefit Fund 23.61
 Charged to Opening and Equipping Athens Mine 476.39
 Total 500.00

Above payment of \$23.61 exhausted the Athens Benefit Fund August 31st, 1914.

(c) Used in paying compensation in the case of Christ Matunovich.

(d) Above payment of \$423.19 wiped out the Negaunee Mine Benefit Fund. In order to pay men on the Benefit Fund Pay-Roll when the Fund was exhausted in July 1917 additional payments of \$95.15 were made which were charged to Gratuities. In August, 1921, Operating Negaunee Mine Account #30-B Credited account of check made payable to John Nylander for \$15.33 being returned to Company. His present whereabouts being unknown.

*1912 column covers payment made from September 1st to December 31st.

REPUBLIC MINE FUNDS:

When we took over the Republic Mine on May 1st, 1914, the Republic Iron Company had in its possession as Trustee for the men, the following funds:

Sick Benefit Fund	\$.75
Relief Fund	990.87
Fatal Accident Fund	6132.79

On November 16th, 1914 these funds were accepted by our Company as Trustee for the men and interest has been credited on balances at the rate of 4 percent.

When these funds were turned over to us the Fatal Accident Fund had been reduced by \$200.00 which had been paid to Mrs. Anna Sirtalo on account of the death of her husband which had occurred shortly before we had purchased the property.

These funds were for the following purposes:

SICK BENEFIT FUND:

Sick benefits have been paid to men who were off on account of sickness and on the following basis: \$15.00 per month to each man off on account of sickness, but if there is not sufficient funds for this purpose in any month the amount on hand is divided proportionally between those entitled to sick benefits.

The men contribute 20 cents per man per month to this Fund.

FATAL ACCIDENT FUND:

This fund was provided to make a payment, in the case of a mine fatality, of \$200.00 this to cover the funeral expenses and other items of expense which might have been incurred.

Originally the men paid 20 cents per month and the Company contributed an equal amount. On Aug. 31st, 1899 the Company discontinued its contribution to this fund and the collections from the men ceased on Dec. 31, 1908.

RELIEF FUND:

At the time the property was purchased by our Company the Relief Fund operated the Hospital.

For many years \$1.30 of the money collected from the men was paid to the Relief Fund.

On May 1st, 1913 the contribution of the men to this fund was reduced to \$1.20.

In April of 1914 the Company began its contribution of 10 cents per man per month on account of Workmen's Compensation, the contribution at that time to cover the first three months of 1914.

From this Fund there was paid:

1. The running expenses of the Hospital.
2. 70 cents per man per month to the physician as salary for his services.
3. Benefit payments for the first two weeks of disability caused by a mine accident, this payment being at the rate of 80 cents per day for each working day lost.

On September 1st, 1916 this plan of operation of the Hospital was changed and it was put on the same basis as our other Hospitals, the physician conducting the Hospital on his own account, receiving for his services the amounts paid by the men for the medical service for themselves and family and the amounts paid by the Company to cover the care of injured men under the provisions of the Compensation Law.

When this change was made the men have continued their payments to the Relief Fund on the basis of 30 cents per man per month and payments are made from this fund during the first two weeks of disability on account of accident.

When the Republic Mine is operated on a full time basis there is collected on the pay roll \$1.60 per man per month which is distributed as follows:

- First - \$1.10 to resident physician
- Second - .20 to Sick Benefit Fund
- Third - .30 to Relief Fund.

Following will be found a statement of the three special funds for the year 1921.

REPUBLIC MINE FUNDS - 1921
* * * * *

SICK BENEFIT FUND:

Balance on hand January 1st, 1921	\$ 775.04
Receipts during the year	<u>417.57</u>
	\$ 1192.61
Expenditures during the year	<u>881.95</u>
Balance on hand December 31st, 1921	\$ 310.66

Men contribute 20 cents per man per month. Company pays interest.

RELIEF FUND:

Balance on hand January 1st, 1921	\$ 1293.39
Receipts during the year	<u>583.24</u>
	\$ 1876.63
Expenditures during the year	<u>484.30</u>
Balance on hand December 31st, 1921	\$ 1392.33

Men contribute 30 cents per man per month. Company pays interest.

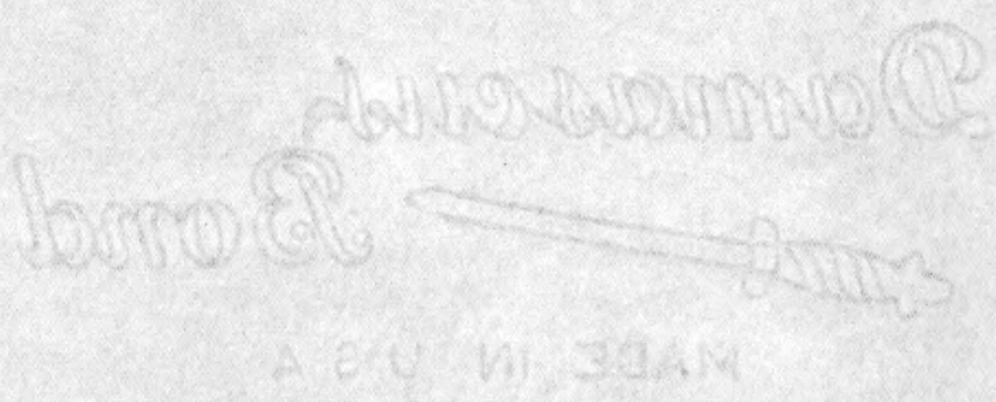
FATAL ACCIDENT FUND:

Balance on hand January 1st, 1921	\$ 5916.36
Receipts during the year	<u>239.02</u>
	\$ 6155.38
Expenditures during the year	<u>0.00</u>
Balance on hand December 31st, 1921	\$ 6155.38

The \$239.02 shown as Receipts is interest allowed by the Company. The men formerly paid 20 cents per man per month, but no collections have been made since December 31st, 1908. The Company discontinued its contributions August 31st, 1899.

SUSPENSE FUNDS:

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



VISITING NURSES:

The work of the Visiting Nurses has continued during the year in the same general manner as in previous years. This work was inaugurated in 1908 and has continued since that time with the greatest satisfaction to everyone. The following nurses have been employed during the year:

Ishpeming:

Miss Margaret L. MacDermott - Jan. 19 to Dec. 31st.

Negaunee:

Miss Ina E. Atkin

Gwinn:

Miss Johanna L. Hirwas

Iron River:

Miss L. N. Fisk

During her vacation period Miss Atkin, nurse at Negaunee, took a course of training in New York City along the line of present ideas in this work. Since her return meetings have been held with the other nurses in order to make use of her experience and additional knowledge in general health matters acquired during her studies.

The following statement shows the salaries and expenditures of the Visiting Nurses for the year 1921:

<u>Place</u>	<u>Total for Year</u>	<u>Average per Mo.</u>
Ishpeming	\$ 2995.06	\$ 249.59
Negaunee	2632.72	219.39
Gwinn	2220.62	185.05
Iron River - Our Prop.	103.25	8.60

During 1920 and 1921 the three nurses have had the use of an automobile which has added very much to the value of their work as it has enabled them to take care of their patients in a more satisfactory manner than previously.

VISITING NURSES: (Continued)

The following detail sheets show the number of patients cared for during the year, the number of new cases, total visits to patients and number of families visited for the first time. They also include the number of Adults and Children of each sex and nationality and the different diseases or ailments cared for.

VISITING NURSE - ISHPEMING

Miss M. L. MacDermott
Nurse - Feb. to Dec.

1921.

Total number of patients cared for during year	249
Number of new cases cared for during year	143
Total number of visits to patients	1294
Number of families visited for the first time	94
Number of Pension calls	2
Number of social calls	64
Number died	6

Classification of new cases for the year:

Number of Adults	85	Male	8	Female	77
Number of Children	58	Male	29	Female	29

Nationalities of new cases for the year:

American	19	Irish	4
English	20	Italian	11
Finnish	38	Norwegian	6
French	32	Swedish	13

Diseases and number of new cases:

Appendicitis	4	Infants Newborn	35	Pul. Tuberculosis	1
Bowel Trouble	4	Infections	4	Rheumatism	3
Bronchitis	2	Jaundice	1	Senility	1
Burns	1	Kidney Trouble	1	Sore Eyes	1
Carcinoma	1	Mal-Nutrition	1	Sprains	1
Colds	2	Miscarriage	3	Tonsillitis	1
Conjunctivitis	1	Osteomyelitis	1	Therapeutic Abortion	1
Circumcision	2	Obstetrical	36	Unclassified	14
Eczema	1	Pregnancy	1	Undiagnosed	3
Grippe	1	Pneumonia	5	Var. Ulcer	2
Heart Trouble	1	Post Operative	7		
Number of families investigated			11		
Number of investigation calls			14		
Infant Welfare calls			20		

VISITING NURSE - NEGAUNEE

Miss Ina E. Atkin
Nurse.

1921.

Total number of patients cared for during year	725		
Number of new cases cared for during year	489		
Total number of visits to patients	3240		
Number of families visited for the first time	40		
Number of Pension calls	48	Number of Donation calls	27
Number of social calls	730	Number died	11

Classification of new cases for the year:

Number of Adults	233	Male	11	Female	222
Number of Children	256	Male	134	Female	122

Nationalities of new cases for the year:

American	128	Finnish	157	Italian	68
Austrian	1	French	51	Swedish	45
English	37	Irish	1	German	1

Diseases and number of new cases:

Abscess	2	Heart Trouble	2	Peritonitis	1
Asthma	1	Impetigo	1	Pleurisy	3
Adenitis	1	Insanity	1	Pneumonia	8
Apoplexy	1	Infants Newborn	90	Post Operative	6
Appendicitis	6	Infections	12	Pregnancy	74
Bowel Trouble	32	Injury	13	Pul. Tuberculosis	5
Bronchitis	29	Jaundice	2	Rheumatism	3
Carcinoma	2	Laryngitis	1	Rickets	1
Chicken Pox	1	Lumbago	1	Small Pox	13
Colds	23	Mal-Nutrition	4	Sore Eyes	1
Diphtheria	23	Mastoditis	3	Spleenitis	1
Diabetes	1	Neuritis	1	Tonsilitis	8
Hernia	2	Obstetrical	95	Unclassified	13
Number of families investigated - C.C.I.Co.	85	Undiagnosed	2		
" " " " - Woman's Welfare	81				
Number of investigation calls - C. C. I. Co.	139				
" " " " - Woman's Welfare	103				

VISITING NURSE - GWINN

Miss Johanna L. Hirwas
Nurse.

1921.

Total number of patients cared for during year						733
Number of new cases cared for during year						651
Total number of visits to patients						2476
Number of families visited for the first time						58
Number of Pension calls						48
Number of social calls						286
Number died						15
Number of Adults	269	Male	53	Female	216	
Number of Children	382	Male	192	Female	188	

Nationalities of new cases for the year:

American	97	French	72
Austrian	15	Irish	2
English	71	Italian	149
Finnish	167	Swedish	78

Diseases and number of new cases:

Anemia	2	Gall Stones	10	Prenatal	2
Appendicitis	7	Heart Trouble	9	Pleurisy	5
Bowel Trouble	106	Hives	1	Pneumonia	7
Bronchitis	10	Hysteria	2	Post Operative	13
Burns	6	Infants Newborn	81	Pul. Tuberculosis	5
Chicken Pox	5	Infections	22	Quinsy	4
Cretinism	1	Injury	25	Rheumatism	15
Carcinoma	4	Kidney Trouble	1	Rupture	20
Colds	61	Lympho Blastoma	1	Scarlet Fever	1
Cancer	6	Mal-Nutrition	6	Senility	1
Colic	5	Mastoditis	1	Sore Eyes	3
Diphtheria	6	Miscarriage	11	Sporadic Cretinism	1
Eczema	16	Nephritis	8	Stomach Trouble	4
Epileptic	1	Neuralgia	4	Tonsillitis	52
Grippe	10	Neuritis	1	Unclassified	2
Gastric Ulcer	1	Obstetrical	83	Undiagnosed	3

VISITING NURSE - GWINN

1921.

Number of families investigated	79
Number of investigation calls	123
Number of families helped	27

Provisions	5
Fuel	4
Clothing	22

Commercial
Board
MADE IN U.S.A.

VISITING NURSE - IRON RIVER

1921.

Miss L. N. Fisk
Nurse - Jan. to July 1921.

Total number of patients cared for during year	38
Number of new cases cared for during year	31
Total number of visits to patients	169

Classification of new cases for the year:

Number of Adults	13	Male	1	Female	12
Number of Children	18	Male	12	Female	6

Nationalities of new cases for the year:

American	1	Irish	1
English	10	Swedish	8
Finnish	8	Polish	2
French	1		

Diseases and number of new cases:

Bowel Trouble	1	Mastoditis	1
Cold	1	Obstetrical	8
Enteritis	2	Pleurisy	1
Feeding	2	Pneumonia	3
Fracture	1	Prenatal Care	1
Hernia	1	Unclassified	1
Infants Newborn	7	Ulcer	1

NUMBER OF PATIENTS ATTENDED AND CALLS MADE BY VISITING NURSES:

	No. of Patients	No. of New Cases	Male Adults	Female Adults	Male Children	Female Children
Ishpeming	249	143	8	77	29	29
Negaunee	725	489	11	222	134	122
Gwinn	733	651	53	218	192	188
Iron River	38	31	1	12	12	6
Total -	1745	1314	73	529	367	345

	Total No. Visits	Total No. Patients Died	Social Calls	Families Vis. 1st Time	Pension Calls
Ishpeming	1294	6	64	94	2
Negaunee	3240	11	730	40	48
Gwinn	2476	15	286	58	48
Iron River	169	0	0	0	0
Total -	7179	32	1080	192	98

NATIONALITY OF CASES:

	American	Austrian	English	Finnish	French	German
Ishpeming	19	0	20	38	32	0
Negaunee	128	1	37	157	51	1
Gwinn	97	15	71	167	72	0
Iron River	1	0	10	8	1	0
Total -	245	16	138	370	156	1

	Irish	Italian	Polish	Norwegian	Swedish
Ishpeming	4	11	0	6	13
Negaunee	1	68	0	0	45
Gwinn	2	149	0	0	78
Iron River	1	0	2	0	8
Total -	8	228	2	6	144

REST COTTAGE:

The Rest Cottage was opened for guests on July 5th and closed on September 6th, a total of 64 days. The results were very satisfactory in every way. Mrs. Goldsworthy, who for several years has been cook and house-keeper, continued in her work through the season. Sanitary conditions were well looked after and the Deer Lake location caused no inconvenience during the season. The work can continue in the same place during the year 1922 without any question, but probably the conditions of the shores of Deer Lake will eventually make it necessary to change the location.

The following table gives the number of guests and cost of maintenance of the Rest Cottage work for the last 14 years:

Year.	Place.	Number of guests.	Cost of Operation.
1908	The Maples	21	\$ 89.93
1909	Deer Lake	29	305.82
1910	"	24	403.45
1911	"	45	482.89
1912	"	57	270.23
1913	"	82	358.45
1914	"	107	625.56
1915	"	137	572.40
1916	"	82	543.00
1917	"	111	745.11
1918	"	51	720.20
1919	"	84	797.69
1920	"	98	1005.83
1921	"	68	646.80
	Total -	996	\$ 7567.36

Details of Operation for the year 1921:

Number of meals furnished	2049
Total guest days	508
Number of people at Rest Cottage	68
Average number of days per person	7.5
Number of days Cottage was open for guests	64
Average number of people at Cottage per day	7.9
Total cost of operation reduced to cost per person per day	\$ 1.273

GWINN ASSOCIATION:

Mr. E. L. Miller has continued in charge of the Club through the year and the work has been increasingly satisfying. He has been assisted during the year by William Bath. On account of the business conditions the number of moving picture entertainments were reduced each week, but throughout the time the building has been constantly made use of. In normal times the seating capacity of the moving picture room is not sufficient to meet the needs.

The Bass Lake Camp was continued during the summer and this very beautiful place has served the Community in a most satisfactory manner especially during the time when the men were off from work.

On the following pages will be found a list of activities of the Club work through the year and also the Financial Statement.

Attention is called to certain features from which a revenue was received during the year:

	Receipts	Expenditures	Profit
Pool and Billiards	\$ 179.10	\$ 50.10	\$ 129.00
Lockers	14.00		14.00
Buffet	1337.58	1029.36	308.22
Towels and Soap	82.25	22.49	59.76
Bowling Alleys	439.45	275.74	163.71
Moving Pictures	4809.70	3975.37	834.33
Total -	\$ 6862.08	\$ 5353.06	\$ 1509.02

GWINN CLUB HOUSE

GWINN, MICHIGAN.

Balance on hand January 1st, 1921	\$	464.86
Receipts during the year		<u>8287.36</u>
Total		\$ 8752.22
Total Expenditures		<u>8714.31</u>
Balance on hand December 31st, 1921.	\$	37.91

RECEIPTS

Membership Fees - Men	1,248.75	
Theatre	4,809.70	
Coupon Books	16.00	
Bowling Alley	439.45	
Pool and Billiards	179.10	
Lockers	14.00	
Buffet	1,337.58	
Towels and Soap	82.25	
Camp	18.80	
Discount	17.01	
Miscellaneous	146.92	
Total		\$ 8,309.56
Less coupons returned		22.20
Net Receipts		\$ 8,287.36

EXPENDITURES

Building, Maintenance	270.71	
Equipment	252.65	
Grounds	18.31	
Education	178.50	
Lighting	581.13	
Heating	594.69	
Water	57.00	
Bowling Alleys	275.74	
Pool Room	50.10	
Buffet	1,029.36	
Entertainments	129.20	
Towels and Soap	22.49	
Laundry	45.46	
Office Expense	40.61	
Camp	33.42	
Salaries	262.50	
Theatre	3,975.37	
Library	15.97	
Reading Room	162.63	
Athletic	400.86	
Miscellaneous	26.50	
Telephone	72.00	
Music	219.11	
Total		\$ 8,714.31

GWINN ASSOCIATION

1921.

The following report and summary of the activities of the Association for the year 1921 has been taken and compiled from the regular monthly reports:

Total attendance at building	82608
Average monthly attendance	6886
Total estimated attendance for all outdoor activities conducted by the Association including Ice Skating, Rink, Tennis Courts, Swimming Pool, Baseball Games, Track Meet & Bass Lake Camp	
	21265
Membership January 1st, 1921	519
Membership January 1st, 1922	367
High membership for year	519
Low membership for year	367

Note: The decrease in the membership is due to the fact that many of the members have been transferred from one mine to another and also that many have been temporarily out of work and when starting again have failed to sign the Association membership blank.

No effort has been made to have some of the men pay membership dues at this time, as many of them have large families and are unable to afford it.

Under the present circumstances we feel that the membership is holding up exceedingly well.

GENERAL ACTIVITIES AND ORGANIZATIONS USING BUILDING:

- 67 - Rehearsals by Association Band, Orchestra, Carol Singers and Junior Chorus.
- 12 - Home Engagements by Band.
- 5 - Out of town engagements by Band.
- 3 - Sales of Fancy Work articles held.
- 7 - Dancing Classes under supervision of High School.
- 29 - Dances held during year, including regular dance and those on special occasions.
- 5 - Parties were held by Young Ladies.
- 30 - Meetings by Board of Directors, American Legion, Church Organizations and special committees.
- 130 - Out of town visitors were shown through the building during the summer.

GWINN ASSOCIATION: (Continued)

EVENTS OF SPECIAL INTEREST:

Easter Monday Ball by Basketball Team.
Banquet by Association for the different active organizations.
Dance and Reception by Local Order of Owls.
Supper by the Episcopal Church.
Carnival by Ladies Guild of the Episcopal Church.
Reception and Dance by the Association for the Stephenson
Mine Baseball Team - Champions of the Mine League 1921.
Bachelor Club Annual Dance.
Parent-Teachers Annual Musical and Reception.
Hallowe'en Dance by Association Football Team.
Annual Charity Ball by the Association.
Married Folks Dance.
Community Christmas Tree by Gwinn Fire Department.

MOVING PICTURE THEATRE:

161 - Different Pictures Shown		
514 - Shows held during year		
37521 - Total Paid Attendance -	Adults	30293
	Children	7228

Special Free Shows:

8 - Shows - Films furnished by C. C. I. Power Club	804
1 - Show - Films from Mine Rescue Car	140
1 - Show - "Last of the Mohicans" to Students of Gwinn High School	145
5 - Shows - December 28th, to children as a Christmas Treat	<u>630</u>
Grand Total for Year -	39240

ADMISSION PRICES CHARGED DURING YEAR:

Adults

79 - Shows at 10 cents.
65 - Shows at 15 cents.
17 - Shows at 20 cents.

An admission price of 5 cents was charged for all
afternoon shows for children.

LIBRARY AND READING ROOM:

LIBRARY:

Number of books contained in library	1248
Number of books drawn during year	4479
Number of books drawn per month	374
Number of new books added during year	25
Fines collected from overdue books	\$ 16.50

GWINN ASSOCIATION: (Continued)

LIBRARY: (Continued)

The books contained in the Library are very much appreciated and no doubt many new books will be added during the coming year.

READING ROOM:

The following number of Current Magazines and Newspapers are received at present and placed on the reading tables:

Weekly Magazines	11
Monthly Magazines	19
Weekly Newspapers	4
Daily Newspapers	4

EDUCATIONAL DEPARTMENT:

Educational Classes were conducted during January, February, March and April. Those attending were very much interested in the work, especially the beginners.

	<u>Classes Held.</u>	<u>Attendance.</u>
Beginners English (Men)	41	242
Advanced English (Men)	31	121
English Classes (Women)	15	55
Total -	87	418

The expense of conducting these classes was paid by the Association. No charge was made for books and instruction work.

The work was given by 5 instructors.

PHYSICAL & ATHLETIC DEPARTMENT:

Including all work conducted in the Gymnasium, Swimming Pool and all Outdoor Recreations: Skating Rink, Tennis Courts and Playground, Baseball, Football, Track and Outdoor Swimming Pool.

This part of the Association's Activities increased over other years and is now one of the most interesting departments of the institution.

The Association is represented in all branches of sport by teams that are above the average. These teams have been able to finance themselves on receipts from home games.

The baseball mine league is financed by the Association and for the number of people that enjoy the sport it is well worth the expenditure.

GWINN ASSOCIATION: (Continued)

General Activities of Physical and Athletic Department:

	<u>Periods.</u>	<u>Attendance.</u>
Boys' Gym. Classes including Boys' H. S. Basketball Practice	83	1713
Girls' Gym. Classes including Girls' H. S. Basketball Practice	43	894
Seniors using Gym. for Class Work, Basketball, Handball, Volleyball, Indoor Baseball, Boxing & Wrestling	102	1515
Older Girls Gym.	8	78
Boys supervised swimming	73	1478
Girls supervised Swimming	66	773
Number baths taken during year		5850
Basketball games during year:	5 games between local teams. 15 games with outside teams. 10 games away from Gwinn.	

Estimated attendance on Playground and Tennis 1500

The Association Ice Skating Rink constructed and cared for by the Association in rear of Club House proved very popular. The rink was in good condition during January, February and March. Attendance - 3590

The Outdoor Swimming Pool constructed during the summer was very successful and very much appreciated. It is near the town and accessible to all. The older persons using the pool enjoyed the sport as much as the children. The conduct of all persons using the pool was above reproach at all times. Attendance - 4100

BASEBALL:

The second season of the Mine Twilight Baseball League proved to be even more successful than the first. The brand of ball played was much better and the games continued to draw large crowds.

One of the pleasant features were the number of Ladies that attended the games.

The Stephenson Mine Team won the Championship and the Trophy Cup, presented to the Association by Mr. Wm. G. Mather, was turned over to them by the former champions "The Francis Mine Team" at the reception and dance held September 24th.

Practice games played by teams before League opened	6	
Games played in Mine League	40	Att. 7200

GWINN ASSOCIATION: (Continued)

BASEBALL: (Continued)

The Association Baseball Team which is made up from the best players of the Mine League had a very successful season as to victories and in a financial way, being able to pay all of its expenses:

Games played at home	8	8	
Games played away from home	3	3	Att. 2500

FOOTBALL:

The Association organized a Football Team and although many of the players were without any previous experience, the team made a very creditable showing.

5 - Games were played during the season, all games being played away from home.

The team was able to pay all its traveling expenses and for the necessary equipment by the guarantees received on these trips.

TRACK:

The first Association Track and Field Meet was held in July. It aroused much interest throughout the entire district.

The prizes were offered by local merchants and were very worth while.

Good time was made in all the running events and the field events brought out some good material and it is predicted that the next meet will get the men into actual training.

There were 18 events, and 202 persons entered.		
43 - prizes were offered.	Attendance -	600

BOWLING:

The Mine Bowling League organized during the latter part of 1920 and completed in March 1921, was a great success. The entire schedule was run off and the standings of the teams were close throughout the season.

The M. M. Duncan Bowling Trophy was presented to "The Town Team", the winners of the league at the banquet held in honor of all the organizations of the Association, March 28th.

Number of games rolled in league	135
----------------------------------	-----

The Association entered a team in the Upper Peninsula Bowling Tournament held at Ishpeming.

GWINN ASSOCIATION: (Continued)

SCOUT ACTIVITIES:

BOYS:

The boys troop is now in its third year and continues with a full special troop membership of 40.

There are 18 members of the troop that have been members since its organization. Their meetings were devoted to strictly class work and are held every Friday night. The recreation or play period is held on Saturday morning under direction of the Scoutmaster.

	<u>Periods.</u>	<u>Attendance.</u>
Class Meetings during year	31	832
Recreation periods in Gym.	20	478
Outdoor Recreation periods	16	318

During the winter an inter-patrol Basketball League is formed. Also a Scout Team to play outside Scout Organizations is maintained. Two such games were played during the past year.

During the summer months all recreation activities are held outdoors and consists of Hikes and Camping Trips.

A Scout Baseball Team was organized and played three games with other Scout troops.

Special Scout Activities:

- | | |
|--------------------------------------|-------------------------|
| 2 - Parties | 1 - Banquet |
| 2 - Hikes | 1 - Overnight Camp Trip |
| 1 - 3 day Camping Trip to Bass Lake. | |

GIRLS:

The girl scout movement has met with fair success. At present there are two full troops.

Troop No. 1 - is the most active as it consists of the larger or older members and was organized first.

Troop No. 2 - is just now being re-organized under new leadership.

The following report covers both troops for the entire year. The largest part of the work has been done by Troop No. 1. Meetings were held every Thursday and covers the regular class and ceremonial work, after which a play hour is held.

	<u>Periods.</u>	<u>Attendance.</u>
Class meetings during year	34	948

Troop No. 1 is at full strength and all members have been registered with the National Council.

Troop No. 1:

- 4 - Socials and Picnics
- 1 - Lawn Social
- 1 - Entertainment for Mothers.
- 1 - Social for Boy Scouts
- 1 - Social for Girl Troop No. 2.
- 1 - Christmas party for Boy Scouts.
- Served Lunch at Parent-Teachers Musical and Reception.

Troop No. 2:

- 3 - Socials and Picnics
- 1 - Party for Troop No. 1.

The Girl Scout Movement is under control of five local members known as "Local Council Girl Scouts" and during year they have held one Dance & Rummage Sale to raise funds to help carry on the work.

GWINN ASSOCIATION: (Continued)

BASS LAKE CAMP:

The Camp opened May 21st and closed September 30th.

Estimated attendance for season	1775
Number of families using camp at different periods for entire week	7
Parties using Camp week-ends	5
All-day Picnics (Schools & Churches)	7
Families using Camp for basket picnics	19
Families using Camp evenings	11
Girl Scouts use of Camp - (Days)	4
Boy Scouts use of Camp - (Days)	3
Receipts for Boat hire for season	\$ 18.80

Special repairs and new equipment added during year, the expense of which was met by the Association.

EQUIPMENT:

New large Bass Horn for Association Band.
New Candy Show case.
New Rugs for living quarters.
New Stair Matting and Nosing for all steps.
New Scale installed in lobby.
New lights installed in Mens' Locker Room.
New bath towels purchased (30)

CONSTRUCTION WORK AND REPAIRS:

Individual Dressing Rooms installed in Ladies Dressing Room.

Repairs on Motor and Pump for Swimming Pool.
Repaired tin gutters on roof.
All lockers re-painted and put in good condition.
Frame work around windows in rear re-painted.
Screens constructed for Gymnasium stage.
A large portion of the building was re-calcedimined and wood-work re-varnished.

Bowling Alleys re-planed and put in good condition.
Walls and ceiling re-painted.
4 bowling balls repaired and 4 sets of pins purchased.

Gymnasium and Athletic purchased baseball, handball, basketballs and leather basketball nets.

The usual stock of Office, Janitor and Library supplies were purchased during the year.

All boats for Bass Lake Camp were overhauled and placed in good condition.

NORTH LAKE CLUB HOUSE:

The work at the Club has been as usual throughout the year with one of our former Mine Clerks in charge under Mr. Bush's direction. The building has been used constantly and the men, while away from work, have spent a large portion of their leisure time there. On account of the business conditions the Moving Pictures through the summer and fall were cut down to one evening a week, but the demand has increased in the early winter and an additional show has been provided.

The following sheet shows the Financial Statement for the year.

N O R T H L A K E C L U B H O U S E
I S H P E M I N G , M I C H I G A N .

Balance on hand January 1st, 1921.		\$ 423.93
Receipts during the year		<u>2465.46</u>
Total		\$ 2889.39
Total Expenditures		<u>2688.18</u>
Balance on hand December 31st, 1921.		\$ 201.21

R E C E I P T S

Membership Fees - Men	\$ 544.25	
Theatre	1310.95	
Bowling Alley	414.94	
Pool and Billiards	164.09	
Towels and Soap	.93	
Miscellaneous	<u>30.30</u>	
Total -		\$ 2465.46

E X P E N D I T U R E S

Building, Maintenance	\$ 85.15	
Equipment	19.62	
Bowling Alleys	212.23	
Pool Room	61.57	
Office Expense	135.81	
Salaries	12.00	
Theatre	1041.50	
Reading Room	129.89	
Miscellaneous	1.75	
Last year Accounts	<u>988.66</u>	
Total -		\$ 2688.18

ISHPEMING Y. M. C. A.:

The Association has continued with Mr. T. E. Ludlow in charge as general Secretary. The activities have been mostly for the older boys and younger men and during the winter months basketball has been the principal attraction. As in 1920 the adult basketball games have been under the direction of the Hercules Explosives Company, as the Legion were not able to finance the basketball team for the season. Many organizations are making use of the building through the year, some of them on single occasions and others meeting at regular intervals either weekly or monthly. The following list shows those which have made use of the facilities offered during 1921:

- | | |
|--|--|
| <p>The American Red Cross.
 The American Legion.
 The American Legion Ladies Auxiliary.
 The Boy Scouts.
 Boys Glee Club - Junior High School.
 Boys Drum Corps - City.
 Boys Italian Club.
 Boys & Girls Clubs from the Townships,
 (Mr. Simon Anderson & Miss VanHeulen)
 Community Council
 Committee - Lyceum Course.
 Girl Scouts.
 Girls Community Club.
 High School Football.
 High School Basketball.
 High School Faculty Dinners.
 Ishp. City Boys Activities for Summer.
 (Mr. Gries, Mr. Bennett)
 Ishp. City Girls Activities for Summer.
 Ishp. Theatre Basketball.
 Ishpeming Toy Factory.
 Ishpeming City Band.
 Ishp. Junior High School Basketball.
 Knights of Kaleva.</p> | <p>Orchestra & Choral Club - Mr. Thomas
 Presbyterian Boys Basketball & Club.
 Episcopal Boys Sunday School Club.
 Salisbury S.S. Boys Club - Methodist.
 S. S. Committee - Upper Peninsula.
 Hercules Powder Co. Basketball.
 Negaunee Junior High School Boys.
 Womans' Service Club.
 Metropolitan Life Insurance Company.
 U. P. Peninsula Athletic Association.
 U. P. " Sportsman "
 Equipment loaned and assistance given
 to the following:
 The Presbyterian Church.
 The Salisbury Methodist Church.
 The Finnish Methodist Church.
 The Swedish Lutheran Church.
 The Swedish Methodist Church.
 The Episcopal Church.
 The Epworth League.
 Vampa's Band.
 Marq. County Medical Association.
 Nursing Classes, Mrs. Johnson.
 Knights of Phythias.</p> |
|--|--|

The statement of Receipts and Expenditures show profits on certain features as is given below. In spite of the business conditions the work has been very satisfactory and the building in constant use:

	<u>Receipts.</u>	<u>Expenditures.</u>	<u>Profit.</u>
Dormitory	\$ 2480.50	\$ 492.62	\$ 1987.88
Bowling	338.90	142.53	196.37
Billiards	406.00	126.60	279.40
Athletic Games	218.34	17.48	200.86
Spa	547.88	381.06	166.82
Baths	441.56	195.18	246.38
	\$ 4433.18	\$ 1355.47	\$ 3077.71

ISHPEMING Y. M. C. A.
FINANCIAL REPORT FOR YEAR 1921

* * * * *

RECEIPTS:

Membership Fees - Sustaining	\$	192.00
- Seniors		340.75
- Boys		259.00
		\$ 791.75
Miscellaneous		157.35
Mining Companies		3600.00
Total Contributions		3757.35
Dormitory Rentals		2480.50
Bowling		338.90
Billiards		406.00
Athletic Games		218.34
Bath Towels		441.56
Spa		547.88
		4433.18
Total Other Income		4433.18
Total Receipts	\$	8982.28

EXPENDITURES:

Miscellaneous and Advertising		177.84
Building - Equipment		2.51
Repairs		558.36
Fuel		40.88
Electricity & Gas		252.00
Water		91.77
Supplies		188.03
Salaries		5779.00
Stationery and Printing		21.50
Telephone Service		75.41
Postage and Office Supplies		73.19
Reading Room Supplies		13.95
Religious Work		10.95
Interest		29.46
Dormitory Maintenance		492.62
Gymnasium		9.62
Bowling Alleys		142.53
Billiards		126.60
Athletic Games		17.48
Bath		195.18
Spa		381.06
		381.06
Total Expenditures	\$	8679.94

SAFETY WORK:

This Department has co-operated during the year in the work of the Safety Department. Two trips have been made to the mines of the Company, in this district, in the examination of the men upon the rules covering their work in and among the mines. One trip was made by the other members of the Committee to the mines in Minnesota.

The Central Safety Committee has met regularly once each month, the report of which is covered in the Annual Report of the Safety Department.

HOSPITALS:

During the year this Department has kept in close touch with the Hospitals in Ishpeming, Negaunee, Gwinn and Republic and Iron River.

ISHPEMING HOSPITAL:

The new building, erected in 1918, has continued to prove very satisfactory in every way. The present superintendent is Miss Victoria White, who has succeeded Miss Benzinger on December 14th, 1920 and been in charge throughout the year. She is proving an admirable superintendent.

The medical force for the year was as follows:

Dr. V. H. Vandeventer, Chief of Staff
Dr. H. S. Smith,
Dr. J. D. Crane,
Dr. W. J. Hewson,
Dr. G. B. Dowland.

Dr. Dowland finished his connection with the Hospital on the 31st of December. His place is to be filled by Dr. P. P. Hartt, beginning January 1st.

The Hospital is filling an important need in the Community and has made it possible for the families to have operative work done in many cases which otherwise would have been neglected. There would have been more work this year if business conditions had been normal, as some people refrained from coming to the Hospital for treatment who under other conditions probably would have thought best to avail themselves of the opportunities provided.

On a following sheet will be found statement showing the number of office consultations handled by each physician and number of house calls cared for, these calls being classified according to employers of the men and the families visited. This includes the cases of the Cleveland-Cliffs Iron Company, Oliver Iron Mining Company, Hercules Explosives Company and private cases of each physician. This sheet also shows the percentage of work which is done for our own Company.

ISHPEMING HOSPITAL
STATISTICAL REPORT FOR THE YEAR
1921.

Number of patients remaining in the hospital at beginning of year	10
Number of patients admitted during year	499
Number of patients discharged during year	476
Number of patients remaining in hospital on Dec. 31st, 1921	8
Number of operations	281
Number of births	68
Number of deaths	25
Number of patients, days	5826
Number of meals for patients	17478
Number of meals for nurses	9972
Number of meals for help	4296

The report shows an average of 15.9 patients per day as compared with 17.6 patients during the year 1920. The average for 1919 was 12.2 per day.

ISHPEMING HOSPITAL
1921
OFFICE AND HOUSE CALLS OF
- THE DIFFERENT PHYSICIANS -

* * * * *

	C.C.I.Co.	O.I.M.Co.	Hercules Expl. Co.	Private	Total	C.C.I.Co. Percent
<u>OFFICE CALLS:</u>						
Vandeventer	2809	374	27	197	3407	82.4
Smith	3312	826	34	96	4268	77.6
Crane	3208	494	67	92	3861	83.1
Hewson	1971	102	3	43	2119	93.0
Dowland	2248	734	140	113	3235	69.5
Total -	13548	2530	271	541	16890	80.2
<u>HOUSE CALLS:</u>						
Vandeventer	1720	203	7	711	2641	65.1
Smith	2172	684	21	351	3228	67.3
Crane	1349	314	20	111	1794	75.2
Hewson	1653	23	4	32	1712	96.5
Dowland	1118	712	179	112	2121	52.7
Total -	8012	1936	231	1317	11496	69.7
<u>TOTAL CALLS:</u>						
Vandeventer	4529	577	34	908	6048	74.9
Smith	5484	1510	55	447	7496	73.2
Crane	4557	808	87	203	5655	80.6
Hewson	3624	125	7	75	3831	94.6
Dowland	3366	1446	319	225	5356	62.8
Total -	21560	4466	502	1858	28386	76.0

NEGAUNEE HOSPITAL:

The work of the Negaunee Hospital has been satisfactory during the year with Drs. Sheldon and Andrus in charge. They have been assisted by Dr. W. A. Mudge and Dr. R. C. Whittemore was with them during the early months of the year.

The Statistical Report for the year follows:

NEGAUNEE HOSPITAL
STATISTICAL REPORT FOR YEAR 1921.

Patients in hospital January 1st, 1921	1
Number of C. C. I. Co. injury cases admitted during year	1
Number of other cases admitted during year	68
Number of births during year	0
Number of deaths during year	58
Number discharged during year	59
Patients in hospital on December 31, 1921 - C.C.I. Injury cases	0
Patients in hospital on December 31, 1921 - Other cases	3
Number of operations during year	48
Number of hospital calls - All cases	16220
Number of visits - C. C. I. families	13981
Number of visits - Other cases	6438
Number of nurses employed during year	2
Number of meals served to patients	1734
Number of meals served to nurses, help, etc.	4680
Total number of meals served	6414
Total number of days of patients	578

REPUBLIC HOSPITAL:

Dr. Loveland's work at Republic throughout the year has been very satisfactory especially as his health has been quite a little better than during the previous year. There was quite an epidemic of Small Pox in the outskirts of Republic, some of which got into the town itself, but the cases were not generally serious and at the end of the year this had all cleared up.

The following shows the statement of Receipts and Expenditures during the year:

REPUBLIC HOSPITAL
FINANCIAL REPORT FOR YEAR 1921.

RECEIPTS:

From The Cleveland-Cliffs Iron Co.	\$ 4482.93	
From Other Sources	<u>2929.87</u>	
Total Receipts -		\$ 7412.80

EXPENDITURES:

Salaries - Nurses	1.00	
Wages - Help	120.00	
Electricity and Lamps	58.73	
Fuel	337.00	
Water	12.00	
Telephone	46.96	
Drugs	696.60	
Repairs	.80	
Insurance and Taxes	169.11	
Equipment	32.59	
Hospital Supplies	265.47	
Miscellaneous	96.14	
Barn	<u>318.66</u>	
Total Expenditures -		\$ 2155.06
Net Income -		\$ 5257.74

GWINN HOSPITAL:

The work through the year has been as usual in charge of Dr. Mac-Intyre, who has had as his assistant for another year Dr. R. A. A. Oldfield

The following sheet shows the Financial Statement of receipts and expenditures during the year.

MADE IN U.S.A.

Wm. B. ...
...
...
...

GWINN HOSPITAL
FINANCIAL REPORT FOR YEAR 1921.

RECEIPTS:

From The Cleveland-Cliffs Iron Company	\$ 10836.90
From Hospital Service	4345.85
From Other Sources	<u>240.00</u>
Total Receipts -	\$ 15422.75

EXPENDITURES:

Salaries - Physicians	1200.00
Salaries - Nurses	1143.34
Wages- Help	1704.62
Electricity and Lamps	75.06
Fuel	1190.23
Water	45.00
Provisions	2455.46
Telephone	94.20
Drugs	656.13
Repairs	30.35
Insurance and Taxes	457.21
Laundry	481.62
Kitchen Supplies	28.70
Hospital Supplies	652.16
Miscellaneous	41.75
Barn	537.75
Express and Freight	102.06
Office Expense	86.93
Automobiles	695.44
Grounds	24.54
Livery	<u>7.25</u>
Total Expenditures -	\$ <u>11709.80</u>
Net Income -	\$ 3712.95

HEALTH:

During 1921 there was no recurrence of Influenza and the general health conditions of our various communities were good with two exceptions and these were not serious.

At Republic there was some Small Pox brought in from wood camps south of there, and quite a number of new cases developed but it was not of a severe character and did not become a menace.

At Negaunee there were a considerable number of Diphtheria cases, but it did not become an epidemic. There were but a very few cases in Ishpeming.

The Health Officers, Dr. David Littlejohn in Ishpeming, Dr. C. J. Larson in Negaunee and Dr. C. P. Drury in Marquette, have done excellent work throughout the year and much credit is due them for the general healthy conditions of our cities.

RED CROSS & SOLDIER RELIEF:

We have continued to co-operate with the officers of the Red Cross in looking after the incapacitated returned soldiers and sailors,

Matters relating to Insurance have been referred generally to Mr. T. E. Ludlow, Secretary of the Ishpeming Y. M. C. A.

The County Red Cross Secretary at Marquette has made frequent visits to Ishpeming to assist in this work.

Mr. G. R. Jackson has been elected Chairman of the Marquette County Chapter and has arranged to have the Secretary spend one-half day at Negaunee and one-half day at Ishpeming each week, which should add very materially in the work in the County.

The Legions in all three cities have special committees to assist in this matter.

The trustees of the Marquette County War Funds are using the income of the fund for the needs of ex-service men in the County and this supplemented by the Red Cross Funds in the different branches of the Chapter, has so far met the needs that have arisen.

IMPROVEMENT WORK:

Mr. Manning has made four visits here in the following months:
March, April, May and October.

Mr. Julien Payen has looked after the work in Ishpeming and Negau-
nee, the McClure Plant and has assisted in the work at the Furnace.

Only such work was done this year as would keep the various proper-
ties in good condition, no amount of new work being undertaken.

The work at the Furnace, all-ready started, was finished and the
ground made available to garden lots.

Eighty-two lots were staked out and all were used to very good
advantage.

At the McClure Plant the seeds collected by Mr. Payen, and those se-
cured from the Rochester, N. Y. Parks, by Mr. Manning, were planted and the
percentage that came up and are growing is very satisfactory.

The various locations were in good condition through the year.

PRIZE AWARDS:

The prize contest in the various localities showed the same in-
terest as in former years, the prizes being given for best kept premises
and vegetable gardens.

The following sheet shows the distribution of the prizes.

BEST KEPT PREMISES AND VEGETABLE GARDENS:

The following prize awards were made for the season of 1921:

Ishpeming:

Best kept Premises	\$ 100.00	
Vegetable Gardens	100.00	
Ishpeming Schools	<u>12.50</u>	
		\$ 212.50

Negaunee:

Best Kept Premises	50.00	
Vegetable Gardens	<u>50.00</u>	
		100.00

Gwinn District:

Best Kept Premises	50.00	
Vegetable Gardens	<u>50.00</u>	
		100.00

Republic:

Best Kept Premises	50.00	
Vegetable Gardens	<u>50.00</u>	
		100.00

North Lake:

Best Kept Premises	50.00	
Vegetable Gardens	<u>50.00</u>	
		100.00

SPIES MINE:

Best Kept Premises	15.00	<u>15.00</u>
Total -		\$ 627.50

COST OF LIVING:

On the 15th of each month we receive complete prices of the 46 principal items of food from the dealers in our different cities and these are checked frequently with prices in other localities and with the Government Reports.

Since June 1920 there has been a general reduction although some months have shown a slight increase over the preceding month.

On the following sheet will be found the Cost of Living in Ishpeming at different periods from 1913 to Dec. 1921. The cost of living is estimated at a yearly figure based on the actual cost at the date upon which the estimate is made.

From the highest point which was in June 1920, to the present time December 1921, the cost of living in Ishpeming has decreased 27 percent. The cost on Dec. 15, 1921 was, however, 48.4 percent higher than it was in 1913.

The cost of food for an Ishpeming family on Dec. 15, 1921 was 35.7 percent lower than it was in June 1920, but is still 38.5 percent higher than it was in 1913.

The cost of fuel is 13.5 percent lower than it was in June 1920, but it is still 105.6 percent higher than it was in June 1913.

According to the Government Reports, the cost of food throughout the United States advanced 21.9 percent from 1913 to June 1920. Our Ishpeming costs showed an advance of a trifle under 21.6 percent.

The following is a comparison between the Government data and our Ishpeming costs to October 1921, the date covered by the latest Government report:

Food Costs	Percentage of Reduction From June 1920 to Oct. 1921.	Percentage higher in Oct. 1921 than in 1913.
U. S. Govt. Reports	30.1 %	53. %
Ishpeming "	32.6 %	45.4 %

The sheet following also shows the average yearly earnings at the different periods from 1913 to December 1921, but as the men are now working generally on a half time basis, a real comparison at the present time is difficult.

COMPARISON OF WAGES AND COST OF LIVING IN ISHPEMING

1913 - 1921

	Average Wages	Earnings Per Year	Cost of Living	Yearly earnings above cost of living	Yearly earnings below cost of living
1913 For Year	2.74	723.36	June 692.56	30.80	
1914 Jan.	2.74	723.36	June 706.17	17.19	
Oct.	#2.51	662.64			
1915 Aug.	*2.76	728.64			
1916 Jan.	2.81	741.84			
Feb.	*2.98	786.72	Feb. 738.00	48.72	
May	3.10	818.40	Nov. 866.31		47.91
Dec. Increase on 16th	*3.32	876.48			
1917 Jan.	3.51	926.64			
May	*3.81	1005.84	June 1006.79		.95
Oct.	*4.20	1108.80			
1918 Jan.	4.21	1111.44	Jan. 998.55	112.89	
Apr. Increase on 16th	*4.46	1177.44			
May	4.73	1248.72			
Aug.	*5.18	1367.52			
Oct.	*5.75	1518.00	Nov. 1143.72	374.28	
1919 For Year	5.73	1512.72	July 1235.97	284.67	
1920 Feb.	*6.28	1657.92	June 1408.65	254.55	
1921 Jan.	6.26	1652.64	Jan. 1174.49	478.15	
Feb.	#5.34	1409.76	Apr. 1164.20	242.92	
June - Half time basis	5.20	686.40	June 1054.28		367.88
Aug. - " " "	#4.51	595.32	Aug. 1138.25		542.93
Sept. - " " "	4.58	604.56	Sept. 1077.77		473.21
Oct. - " " "	#4.13	545.16			
Nov. - " " "	4.17	550.44			
Dec. - " " "	4.17	550.44	Dec. 1027.88		477.44

The earnings per year is based on an average of 22 days per man per month.

- indicates a decrease in wages.

* - indicates an increase in wages.

Note: The average wages have not yet been computed for Dec. but in this estimate we have used for Dec. 4.17 which is the same as for Nov. which figures we have.

EMPLOYMENT:

All applications for employment are referred to this Department and careful investigations have been made throughout the year by correspondence with former employers. On account of the work at the Mines there has been comparatively little of such work necessary, but some records were looked up during the early part of the year and investigations made of men who were transferred. During the year 280 applications for employment were investigated.

INCAPACITATED EMPLOYEES:

During the year payments have been made to certain men whose years of service did not bring them within the provisions of the Pension System and some who were incapacitated through injury and whose condition made some assistance necessary in addition to the regular payments of Workmen's Compensation.

Some families are receiving Compensation, in fatal cases, at the rate of \$10.00 per week, this being the maximum rate payable at the time of the accident. Some of these widows, who have a considerable number of children, have found it still difficult with the present prices of food and fuel to get along, and as authorized we have increased this rate by the payment of additional amounts as a donation of \$15.00 per month. This brings the rate below the present Compensation rate of \$14.00 per week.

The following list shows the men and families to whom these payments have been made.

INCAPACITATED EMPLOYEES: (Continued)

DONATIONS - 1921.

		Per Month	Per Year
Fred Fredette	Ishpeming	\$ 25.00	\$ 300.00
John Beale	"	15.00	180.00
John Salson	"	25.00	300.00
Solomon Kangas	"	42.33	507.96
" "	Special -		74.15
Wm. H. Harris	"	15.00	180.00
Charles Chronstrom	"	18.00	18.00 Began in Dec.
" "	Special -		288.55
Bert Back	"	10.00	50.00 Jan. to May.
William Holman	Negaunee	15.00	180.00
Mrs. John Makela	"	25.00	300.00
Mrs. Wilhelmina Marjamaa	"	15.00	180.00
Isabella Graham	Ishpeming	15.00	45.00 Began in Oct.
" "	Special -		8.75
Mathilda Carlson	"	15.00	45.00 Began in Oct.
" "	Special -		17.75
Hilma Pitila	"	15.00	45.00 Began in Oct.
Cecelia Brandt	"	12.00	144.00
Mrs. Henry Hill	"	15.00	180.00
Mrs. Henry Karkkainen	"	15.00	180.00
Mrs. Rose Bertucci	"	15.00	195.00 Began Dec.'20.
" " "	Special -		17.50
Mrs. William Viant	" "		17.75
Andrew Dinette	" "		32.00
Mrs. William Mongeau	" "		10.00
Total -			\$ 3496.41

UNEMPLOYMENT:

COUNTY ROAD WORK:

Because of the unemployment in the County, the County Road Commissioners decided to build a section of the road east of Little Lake by day-labor instead of letting out as a contract, with the understanding that the men employed should be those living in Marquette County, who were out of employment and who had dependents.

A committee of three were appointed by the County Road Commission, consisting of John Stickney of Marquette, Peter Trudell, Jr. of Negaunee and W. H. Moulton of Ishpeming. The committee organized with W. H. Moulton as Chairman and K. I. Sawyer, Supt. of the County Road Commission, as Secretary. Men were selected from Marquette, Negaunee, Ishpeming and the different townships, for the work to be done, the larger proportion of them being from Ishpeming as there were more out of employment here. There were about 300 employed during the busier portion of the time. Mr. Sawyer now reports that about 120 are employed, while the townships have some men at work on the roads making in all about 200 men, who have been employed steadily since construction work was finished on the Highways in the fall.

This has proven of very great assistance through the whole season, and will continue so throughout the remainder of the winter, as the Quarry at MacFarland is being operated to get out the rock for the roads.

Additional road work was undertaken in Ishpeming which served to employ a considerable number of men.

Towards the close of the year investigation was made of the number of men out of employment in our various communities and recommendations made concerning the assistance which the families would require during the winter. This matter was fully discussed with Mr. Mather when here during the week of December 12th to 17th. During December, the assistance rendered to the needy families for provisions, fuel and clothing, amounted to a total of \$167.60.

COMMUNITY SERVICE:

Mr. Sharp, who was employed to look after the Community Service work in Ishpeming and Negaunee, continued his work until the spring of 1921 at which time Negaunee decided not to make any appropriation for a paid Secretary. Ishpeming did not feel it wise to endeavor to maintain the work at so high an expense as would be necessary if Mr. Sharp was employed by Ishpeming alone, and his services were dispensed with, he finishing his work in March.

At this same time there was a great deal of agitation at Lansing over the work of the Community Service Commission and because of so much adverse criticism the plans, as originally contemplated, were discontinued.

Mr. Sharp's work while with us was satisfactory and he and his wife rendered a real service in the Community. In March a skating festival was held at the Ishpeming rink under his management and special skating events and races made a most attractive day.

An effort has been made throughout the year to keep up as much interest in Community activities as possible. After the decision was made that the Community work would not be continued as it was during the previous year, an effort was made to interest the people in various activities during the summer, especially the pupils of the schools. The City Council became interested in the matter and Walter Gries, Principal of the Grammar School, was engaged with one assistant to devote the principal part of the summer in looking after Playground work for the school children. This was continued through the summer very satisfactorily. The Swimming Beach at Cedar Lake was kept in good condition and, at a small lake in the northern part of the city, another swimming place was provided especially for the younger people, this being looked after by Mr. Gries and his assistant. The work was very well taken care of, Mr. Gries being especially fine in organizing these activities.

Certain groups made use of the Maples for a resting place after hikes and for special outings and the use of it proved very satisfactory.

GROUP LIFE INSURANCE:

Some further consideration was given to the matter of Group Life Insurance during the year, but it was definitely decided that no further consideration would be given to the matter at this time.

CLUBS:

The Mining Club has continued its meetings during the winter and the annual outing was held in August at Champion Beach at Michigamme. The meetings of the Club have been of as much interest to the members as in previous years.

OUT-OF-DOOR SPORTS:

The annual Ski Tournament on Washington's Birthday was given up but the Dog Races were held as usual. Negaunee had planned to hold a Ski Tournament on their new ski slide, but there was not enough snow available on the 22d and this was abandoned.

During the summer the younger men employed at the mines have, during their leisure time, spent considerable portion of time in playing baseball. This has been general through the city and proven to be a very good thing indeed, and it kept the men occupied during their leisure time. The city baseball team was organized and games played on Sundays and holidays. No salaries were paid the players, but proceeds on hand at the end of the season were divided among the players proportionally, according to the services rendered.

EDUCATIONAL:

The Power Club, made up of the electrical men working under Mr. Stanford, have met during the year in the club rooms at the office, taking up various features of electrical and power work.

Full report of this has been made by Mr. Stanford.

VARIOUS DEPARTMENTS:

The Secretary has co-operated throughout the year with the various departments especially in matters of Compensation Payments. With Mr. Manning we have visited the Furnace and Railroad grounds and have looked after the completing of the improvement work at the Furnace and the arrangement of the garden lots.

On account of press of work, in closing up for the year, the regular Welfare Statements have not been received from the different departments, but they are expected this week and if received in time will be made a part of the report.

MADE IN U.S.A.

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STATEMENT OF EXPENSES OF PENSION DEPARTMENT

FOR FIVE YEAR PERIOD FROM JANUARY 1ST, 1917 TO DECEMBER 31ST, 1921.

ACCT. NO.		1917	1918	1919	1920	1921
A-1	Salaries of Superintendent of Pension Department and assistants	5476 24	6805 83	8962 01	10396 82	8622 50
B	Prizes to tenants and employees for Best Kept Premises, gardens, etc.	624 50		584 50	713 50	620 50
C	All expenses of Supt. of Pension Department including travelling expenses and livery	358 21	321 72	323 46	459 37	277 13
D	Salary and expenses of Visiting Nurse - Ishpeming	1333 38	1653 27	1535 50	2378 64	2995 06
	Rest Cottage - Deer Lake	745 11	720 20	797 69	1005 63	646 80
	Expense of Erecting Garage and Stable - North Lake					272 24
	Salary and expenses of Visiting Nurse - Negaunee	1252 38	1605 60	2164 20	2697 24	2632 72
	Salary and expenses of Visiting Nurse - Gwinn	641 09	1280 79	1258 30	1820 46	2220 62
	Rest Cottage - Bass Lake			285 76	314 76	316 80
	Our proportion of Visiting Nurse Expense - Iron River	134 23	265 39	83 43	56 38	103 25
E	Apparatus, Express and Freight	23 66	15 13	18 12	50 92	19 47
F	Miscellaneous Expense					
	Books, cuts, magazines, papers, etc.	42 05	57 90	80 02	234 12	75 00
	Incidental Expenses - Mining Department	86 75	6 78	40 26	103 29	2 84
	Incidental Expenses - To Treasurer	27 50	19 50	4 50	39 50	5 25
	Donations to Incapacitated Employees	1471 48	1820 00	2205 00	1986 65	2195 96
	Other Donations	373 04	547 10	415 79	1041 59	2159 98
	Membership in Associations	105 00	220 00	281 00	350 00	164 09
	Spanish Influenza Epidemic - Gwinn		1357 02	255 11		
	Expense of Vaccine in connection with Spanish Influenza Epidemic		1161 70	381 19		
	Food Preparedness - Including parcels of Land used by Employees for Gardens			351 59	83 40	94 01
	Expenses incurred during Spanish Influenza Epidemic - Kimney				30 79	
G	Employees Clubs					
	Bowling Alley and Club Work	215 42	383 65	374 19	158 60	137 87
	Our proportion of expense on account of repairs to Union Park				133 10	
	Superintendents Lunches and Incidentals	149 12	88 16	86 50	179 51	144 30
	Gwinn Club House	3591 05	5226 54	4082 47	5608 81	6355 08
	Ishpeming Y. M. C. A.	1680 00	2412 00	2412 00	2412 00	2412 00
	North Lake Club House		1957 71	3643 33	4075 64	3325 86
H	Office Expense					
	Stationery, Office Supplies and Expenses - To Treasurer	374 80	616 49	557 80	874 39	361 19
	Stationery, Office Supplies and Expenses - Mining Department	84 15	23 73	57 05	257 27	48 62
	Office Furniture and Equipment	152 27	255 81	144 36	54 50	3 00
	Postage	172 00	194 25	187 75	222 00	163 00
SCHOOL OF INSTRUCTION						
I-1	Salary of Instructor	868 00				
I-2	Travelling expenses, livery, printing, stationery, etc.	88 71		41 56	34 75	
		20000 14	29016 27	30752 06	37773 83	36375 14
DISTRIBUTION						
	Mining Department	14060 29	18923 64	22475 84	27291 07	25491 58
	Land Department	252 48	281 74	380 19	497 34	505 00
	Furnace Department	872 08	1271 18	1296 26	1575 61	892 93
	Lumbering Department	583 15	675 36	718 13	665 78	593 13
	Gwinn District Office Expense	4232 14	7864 35	5881 64	7744 03	8892 50
		20000 14	29016 27	30752 06	37773 83	36375 14

THE CLEVELAND-CLIFFS IRON COMPANY

RAILROAD DEPARTMENT

COMPARATIVE STATEMENT OF GENERAL WELFARE EXPENSES

FOR THE YEARS 1917 TO 1921 INCLUSIVE

	1917	1918	1919	1920	1921
Prizes to Tenants:					
Donations:					
Fire Department Societies Celebrations	30 00	10 00	25 00	35 00	33 75
Visiting Nurse - Marquette	120 00	120 00	120 00		
Munising Hospital	150 00	150 00	150 00	412 50	
St. Luke's Hospital	200 00	200 00	175 00	400 00	400 00
Safety Work:					
Equipment & Work					
Compensation:					
Compensation Paid	3461 06	3788 40	2364 34	13745 64	3409 23 *
Medical Expense	1941 42	1422 22	1469 02	5498 69	2742 10
Total -	5902 48	5690 62	4303 36	20091 83	6585 08
Compensation Payments:					
Percentage of Pay Rolls	.0085	.0063	.0049	.0171	.0099

* \$728.00 of above amount Federal. In addition to this, \$1500.00 was paid for injuries to persons other than employees, and \$393.30 medical expense for persons other than employees.

THE CLEVELAND CLIFFS IRON COMPANY
MINING DEPARTMENT

MEMORANDUM SHOWING MINES IN OPERATION JANUARY 1ST, 1921 ALSO SHIFTS AND HOURS
WORKED AND CHANGES DURING THE YEAR 1921.

<u>MINES</u>			
Lake -----	Jan. 1st, to May 31st,	1-8 Hr.-6	Days per week
	Closed May 31st, 1921.		
Salisbury-----	Jan. 1st, to March 5th,	2-8 Hr.-6	" " "
	Closed March 5th, 1921.		
Cliffs Shaft-----	Jan. 1st, to May 1st,	1-8 Hr.-6	" " "
	May 1st, to May 31st,	1-8 Hr.-5	" " "
	Closed May 31st, 1921.		
Holmes-----	Jan. 1st, to March 4th,	2-8 Hr.-6	" " "
	March 4th, to May 31st,	2-8 Hr.-5	" " "
	May 31st, to Dec. 31st,	1-8 Hr.-6	" " "
Angeline-----	Jan. 1st, to May 31st,	2-8 Hr.-6	" " "
	Closed May 31st, 1921.		
Morris-Lloyd-----	Jan. 1st, to March 4th	2-8 Hr.-6	" " "
	March 4th, to May 31st,	2-8 Hr.-5	" " "
	May 31st to Dec. 31st,	1-4 Hr.-6	" " "
Negaunee-----	Jan. 1st, to March 25th,	1-8 Hr.-6	" " "
	March 25th to May 16th	1-8 Hr.-5	" " "
	May 16th, to Dec. 31st	1-4 Hr.-6	" " "
Maas-----	Jan. 1st to March 25th	1-8 Hr.-6	" " "
	March 25th to May 31st	1-8 Hr.-5	" " "
	May 31st to Dec. 31st	1-4 Hr.-6	" " "
Athens-----	Jan. 1st to March 25th	2-8 Hr.-6	" " "
	March 25th to April 25th	2-8 Hr.-5	" " "
	April 25th to May 16th	1-8 Hr.-6	" " "
	May 16th to Dec. 31st	1-4 Hr.-6	" " "
South Jackson-----	Jan. 1st to Sept. 27th,	Idle	
	Sept. 27th, to Oct. 14th	1-10 Hr.	
Gwinn-----	Jan. 1st to March 25th	1-8 Hr.-6	" " "
	March 31st to May 31st	1-8 Hr.-5	" " "
	Closed May 31st, 1921.		
Stephenson-----	Jan. 1st, to March 25th	1-8 Hr.-6	" " "
	March 25th to May 31st	1-8 Hr.-5	" " "
	May 31st to Dec. 31st,	2-4 Hr.-6	" " "
Princeton-----	Jan. 1st to March 25th	1-8 Hr.-6	" " "
	March 25th to May 31st	1-8 Hr.-5	" " "
	May 31st to Aug. 26th,	1-4 Hr.-6	" " "
	Closed August 26th, 1921.		
Francis-----	Jan. 1st to March 25th,	1-8 Hr.-6	" " "
	March 25th to May 31st,	1-8 Hr.-5	" " "
	May 31st to Dec. 31st,	1-4 Hr.-6	" " "
Republic-----	Jan. 1st to Feb. 7th,	2-8 Hr.-6	" " "
	Feb. 7th to May 31st	2-8 Hr.-5	" " "
	May 31st to Dec. 31st	1-8 Hr.-3	" " "
Spies-----	Jan. 1st to April 17th	2-8 Hr.-6	" " "
	April 17th to May 31st	1-8 Hr.-6	" " "
Crosby-----	Jan. 1st to May 7th,	2-8 Hr.-6	" " "
	Closed May 7th, 1921.		
Meadow-Fowler-----	Jan. 1st to June 3rd,	2-8 Hr.-6	" " "
	Closed June 3rd, 1921.		
Wade-Helmer-----	Jan. 1st to May 27th,	2-8 Hr.-6	" " "
	Closed May 27th, 1921.		
Boeing-----	Jan. 1st to April 30th	2-8 Hr.-6	" " "
	Closed April 30th, 1921.		
Hill-Trumbull-----	Began producing May 12th, 1-shift to August 7th,		
	Operated 2-shifts August 7th, to September 23rd,		
	Closed September 23rd, 1921.		

