



NEWS VIEWS

Vol. 5, No. 5.

"What C. & H. Folks Are Doing"

March, 1947

Modernization of Lake Linden Power Plant Is Approved By Directors

Two Years Required to Complete Job

The generation of electric power for operation of the various branches of the Calumet and Hecla Consolidated Copper Company is centered at two localities—at the Ahmeek mill and at Lake Linden. The total power consumed by the Company is 22,000 kw., and equipment is on order to bring this load up to 24,000 kw.

Lake Linden Plant

The first electric power plant at Lake Linden consisted of two engine-driven generators of 1,000 kw., 440-volt capacity each. These machines were installed in 1902, and the power generated was used to operate some of the stamp mill machinery.

An addition was made to this plant in 1907 when three engine-driven generators were installed, each rated at 2,000 kw. at 13,200 volts. This permitted the extension of electric power to the Calumet district. At that time a new boiler plant was built to provide steam for the twenty-eight steam stamps at the Lake Linden mills, as well as for the increased electrical system. This boiler plant, still in operation, contains twenty-four Babcock and Wilcox boilers, each rated at 20,000 pounds of steam per hour. They are equipped with over-feed Roney stokers and generate steam at 180 pounds, and when first installed supplied steam

at this pressure to both the stamps and the steam engine-driven electrical units. About 5,500 pounds of steam per hour passed through each stamp and was exhausted to a condenser.

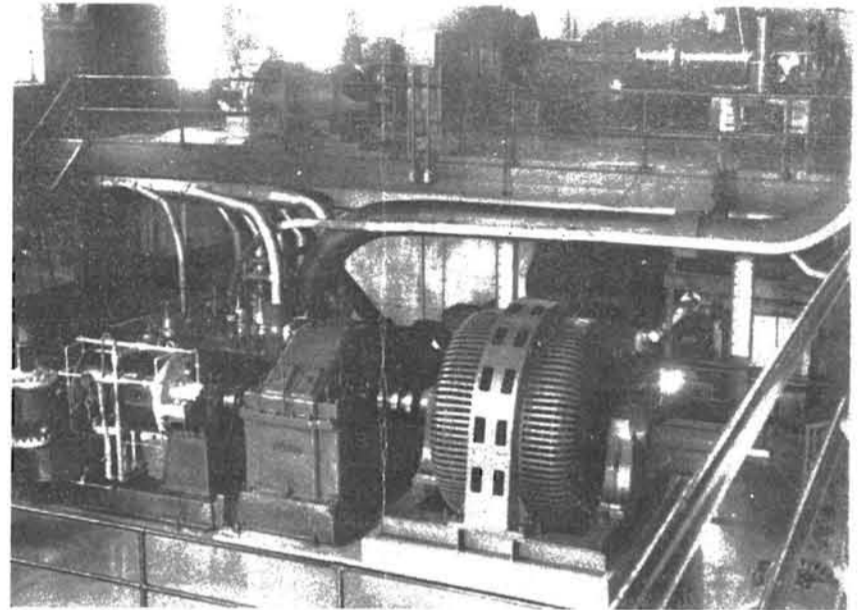
By 1911 low-pressure turbines had been developed to a degree where it was deemed advisable to install a low-pressure unit to utilize the exhaust steam from the stamp mills and generate electric power as a by-product. A 7,500 kw. mixed pressure turbine was designed to take all of the available exhaust steam from the stamps at 1-pound gauge pressure. This machine could also operate at 170 pounds steam pressure, or a combination of both. With all twenty-eight heads operating, the turbine was capable of generating approximately 6,000 kw. from the exhaust steam alone, and this resulted in a very cheap unit cost of power.

This No. 1 unit went into service in 1913 and was so satisfactory that a second unit, No. 2 turbine, rated at 10,000 kw., was installed in 1916. This, too, was a mixed pressure turbine and was originally used as a stand-by unit.

The present equipment in the Lake Linden plant consists of Nos. 1, 2, and 3 turbines having generating capacities of 7,500 kw., 10,000 kw., and 2,000 kw., respectively, or a total of 19,500 kw. There is also a 1,250 kw. turbine in the Still House.

Ahmeek Plant

In 1916 a 2,000 kw. mixed pressure turbine, similar to the Lake Linden units, was installed at the Ah-



Top: 2,000 Kw. Turbine No. 6 at Ahmeek Mill. Generates power from the stamp mill exhaust at 2 lbs. gauge to 28" vacuum
Bottom: 1,250 Kw. Turbine No. 7 at Ahmeek Mill. Generates power from steam at 410 lbs. admission to 170 lbs. exhaust.

meek mill to utilize the low-pressure exhaust steam from the Ahmeek mill stamps. The power from this unit was tied in with the general power system.

In 1931 it was necessary to replace the old Ahmeek mill boilers, and in order to provide for the increasing demand for additional electrical capacity for mine and plant operation, it was decided to install three high-pressure boiler units, each capable of generating 30,000 pounds of steam per hour at 410 pounds pressure and 680 degrees temperature. A high-pressure turbo-generator, rated at 7,500 kw., was installed in a new building and a 1,250 kw. pressure reducing turbine was installed in the pump house to reduce the steam pressure from 410 pounds to 170 pounds for steam stamp operations. With this new setup of boilers and tur-

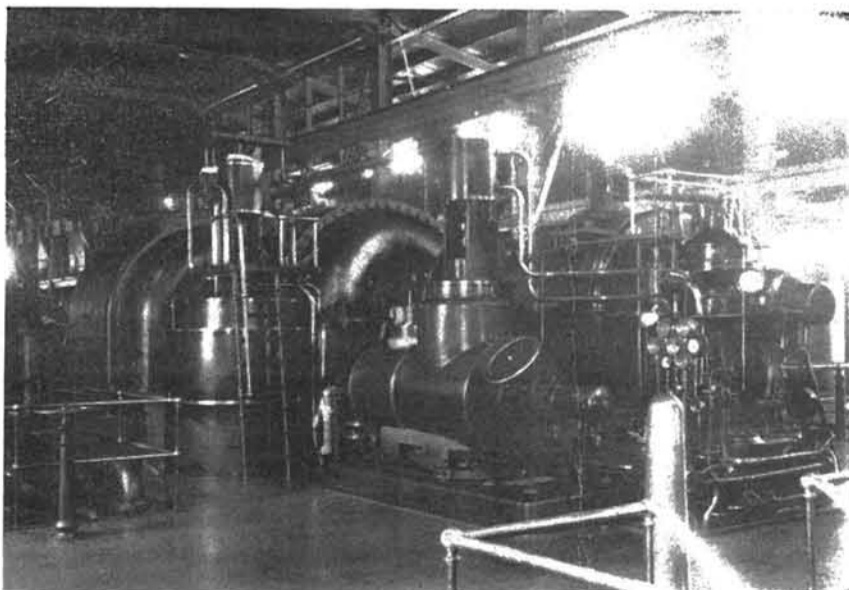
ines, the steam necessary for the operation of the mill stamps passes first through the 1,250 kw. high-pressure turbine and the exhaust steam from the stamps passes through the 2,000 kw. mixed pressure turbine.

The No. 8, 7,500 kw. unit receives steam at 410 pounds and operates condensing.

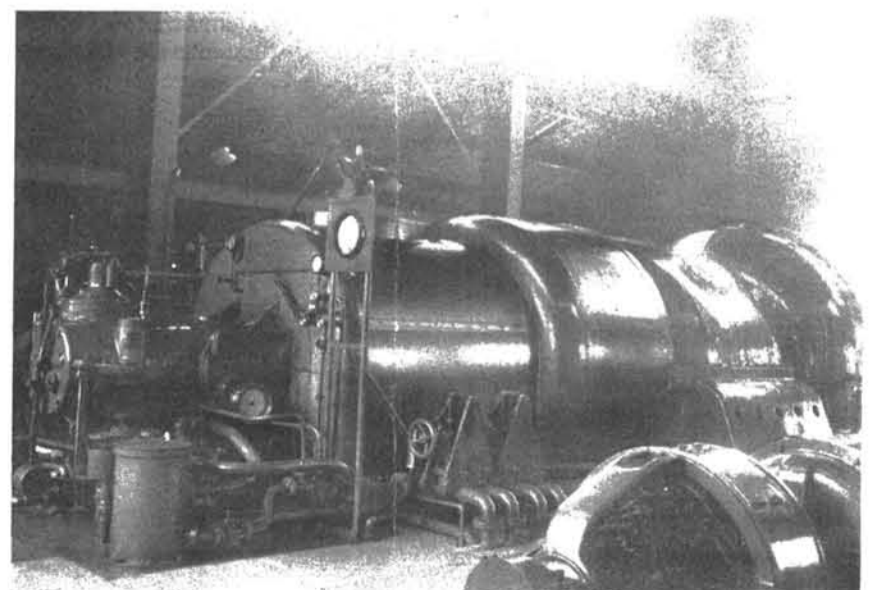
The Ahmeek plant is an efficient plant. No. 8 turbine carries a load of about 8,000 kw. continuously at a coal consumption of about 1.2 pounds per kw. No. 7 unit averages about 1,000 kw., and No. 6 unit about 2,000 kw. when the mill is in operation. Since these latter two units operate on process steam, the unit cost is very low.

The present equipment in the Ahmeek power plant consists of Nos. 6,

(Continued on Page 3)



7,500 Kw. Turbine No. 1 at Lake Linden Power Plant. Will receive steam from new topping turbine.



7,500 Kw. Turbine No. 8 at Ahmeek Mill. Generates power from 410 lbs. pressure to about 29" vacuum.

C. & H. News-Views

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In the Interest of Its Employees

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P. O. Box 231, Calumet, Michigan

News and Views of Michigan's Great
Copper Mining Company and its
Various Branches.

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Fighting the Common Cold

Medical science is getting in some telling licks against the common cold, which holds the dubious distinction of being the No. 1 nuisance among human ills.

Not that this pestiferous ailment has been entirely whipped, for the Medical Profession isn't ready to make any such claim. But Doctors of Medicine are working now on three methods for preventing colds, with encouraging results.

These are the use of germicidal ultraviolet light to kill airborne germs, glycol vapor and an army-developed oil emulsifying agent known as T-13. The latter is used in treating doors, walls, blankets, linens, etc.

Research work so far has been concentrated in schools, factories, barracks, and other places where numbers of persons gather. Results show striking reductions in the number of colds and you'll probably read

Married Forty Years



Mr and Mrs. Matt Kastelic of Calumet celebrated their 40th wedding anniversary on February 7th. Mr. Kastelic is employed at Centennial mine at present, and has worked for over 35 years for Calumet and Hecla. They are the parents of 10 children. One son, Rudolph, is employed at Kearsarge.

more about the outcome of these experiments.

When we realize that colds account for 32 per cent of all home calls by Doctors of Medicine, we appreciate the importance of this research work.

In the meantime, however, the best advice for everyone is to continue to take every reasonable precaution to avoid colds, for they strike the strong as well as the weak. If you should "catch cold," stay home as much as possible. Bed rest is still the best treatment and it will prevent spread of your cold among others. Don't treat a cold lightly. It is often the welcome mat at the door of the house of Pneumonia.

NEW DRILL BITS ARE PLACED IN USE HERE

Work in the drill-bit plant for the manufacturing of detachable drill bits has been completed, and these bits are now being used on a modest scale in the Centennial underground. The plant where the bits are manufactured is located at Calumet.

This type of bit has been in use for the past several months on a small scale. The bit, known as the Liddicoat bit, was manufactured by the Thompson Products Ltd., in St. Catherine's, Ontario, Canada. The imported bits were used here experimentally, and were found to be most practical for underground drilling operations.

The six machines which are using these bits at the Centennial operations are using Liddicoat bits exclusively. Those in charge of the manufacturing of this new piece of equipment are continuing experimentation which ultimately will result in a perfect detachable drill bit.

Preamble to the Charter of the United Nation

Editor's Note: Very few of us, we believe, have read the charter of the United Nations. The meat of it is contained in the preamble. We are happy to reproduce its important message here.

We, The People of the United Nations, Determined

. . . to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and
. . . to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and
. . . to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and
. . . to promote social progress and better standards of life in larger freedom.

And for These Ends

. . . to practice tolerance and live together in peace with one another as good neighbors, and
. . . to unite our strength to maintain international peace and security, and
. . . to insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and
. . . to employ international machinery for the promotion of the economic and social advancement of all peoples.

Have Resolved to Combine Our Efforts to Accomplish These Aims

Accordingly, our respective governments, through representatives assembled in the City of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

Harmony?



A group of singers from No. 3 Allouez and Ahmeek Mine at a safety party.

WANTED

Every employee in every shop, plant, department and mine, making the month of April without a compensable accident. All it takes is just a little more safety effort on the part of everyone.

To buy—a 60-pound bow string for a bow and arrow set—by "Gene" Lepine of the Ahmeek Mill Boiler Plant.

All of Roy Brinkman's discarded winter clothing to make polishing cloths—by Roy Cassette of the Lake Linden Reclamation.

Rubber rails—by Joe Huot of the Centennial Mine.

A good rabbit dog to be used to keep the rabbits out of the garden—by Fred Gipp of the Centennial Mine.

Last summer Fred's two rabbit dogs let the rabbits eat the tops off of all of his aster plants.

Engagements by "Vic" Giacometto's Peninsula Quartet, radio and club work preferred—contact "Bob" Koiby of Ahmeek Mine.

Someone to modernize a dog house—by Lloyd Goninan of the Lake Linden Reclamation.

To buy—a canoe—by "Jake" Alt.

A large spool of heavy black thread—by Frank Stanfel, Calumet office janitor.

To buy—second-hand records—by Stanley Richards of the Lake Linden Boiler Plant, who resides on Acorn Street, Yellow Jacket.

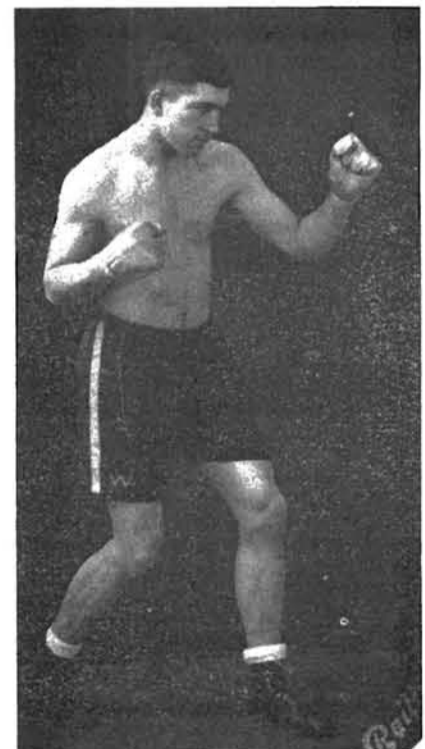
Pictures like the one of "Guess Who?" that appeared in the February issue of the News-Views.

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Make Every Day a Safety Day!

GUESS WHO?

(For answer turn to page 7.)



MODERNIZATION OF LAKE LINDEN POWER PLANT IS APPROVED BY DIRECTORS

(Continued from Page 1)

7, and 8 turbines, having generating capacities of 2,000 kw., 1,250 kw., and 7,500 kw., respectively, or a total generating capacity of 10,750 kw. The generating capacity of the Lake Linden and Ahmeek plants is therefore 31,500 kw.

For a period of twenty years while the stamp mills were in operation, the cost of generating power at the Lake Linden plant was most satisfactory, but as the rock tonnage from the conglomerate lode diminished and was finally cut off entirely, the cost of power from this plant, operating at 180 pounds pressure, became excessive. Present coal consumption per kw. is in excess of 2 pounds.

The cost of coal is the largest factor in the cost of generating power, and since the price of coal has advanced from \$2.70 per ton delivered to the boiler house at Lake Linden in 1913 to a cost of \$7.33 per ton at the present time, it becomes imperative to supply Lake Linden with a more efficient plant. It was therefore decided to call in a firm of outside consulting engineers to make a survey and analysis of the entire power plant situation. The Chicago firm of Vern E. Alden Company, Engineers, after an investigation covering a period of three months, showed that a saving of approximately \$300,000 per year on operating cost could be effected by making the following changes:

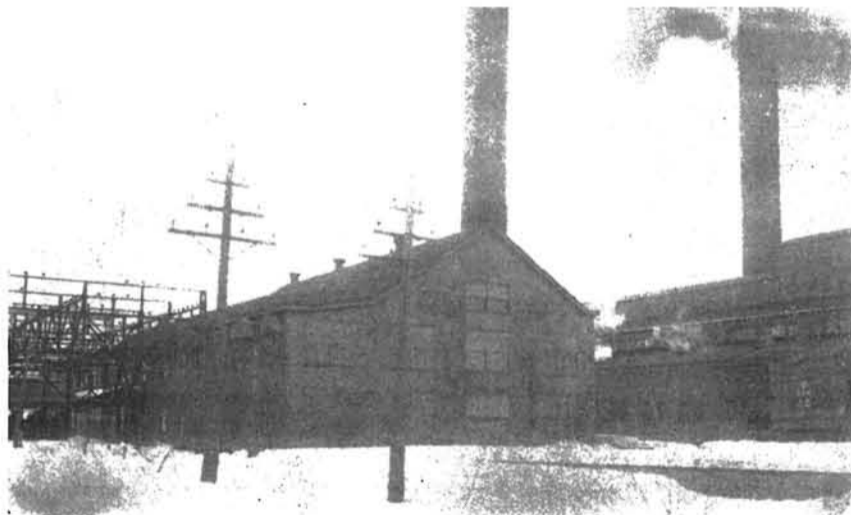
By the installation of a pulverized-coal-fired boiler to be erected in the south end of the Lake Linden power

plant. This boiler is rated at 180,000 pounds of steam per hour at 850 pounds pressure and 825 degrees temperature. It will have a capacity to furnish steam for our present operations, the proposed new turbine, and have available steam for the Calumet mill should additional milling facilities, over and above present facilities, be required.

The electrical equipment will consist of a 7,500 kw. non-condensing turbine operating at 850 pounds and exhausting at 170 pounds. This turbine, operating at 3,600 r.p.m., will drive through a reducing gear a 6,000 kw., 13,800-volt generator which will feed into the system. Mounted on the same shaft will be a 1,700 kw., 2,300-volt generator and auxiliary drives. The exhaust from this topping turbine will flow to either No. 1 or No. 2 turbine units. It is estimated that this combination will produce power at a coal consumption of slightly less than one pound per kw.

In addition to the new equipment, No. 1 and No. 2 turbines will be thoroughly overhauled and brought back to near the original operating efficiency. No. 8 turbine at Ahmeek will also be overhauled. Changes in the distribution system will be made to make the entire plant more reliable. It will take about two years to complete this work.

This scheme met with the approval of the Management and was approved by the Board of Directors at the February meeting. An agreement has been made with the Alden Company for the purchase and erection of this plant.



South end of Lake Linden Power Plant.

Roof to be raised about 35 feet over main section for about 25 feet to accommodate new 850-lbs. pulverized fuel boiler.

We Wish

"Dick" Buzzo of the Lake Linden Reclamation Blacksmith Shop would tell why he does not believe in rules and why he believes if there are rules there always should be exceptions.

To thank Mrs. Matt Kastelic of Yellow Jacket for the fine compliment she paid the News-Views.

We had a picture of Emil "Porter" Plante of the Tamarack Reclamation making all those strikes on the Lake Linden bowling alleys recently.

To thank Ed. Hjort of Ahmeek Mine for the fine things he said about

the last issue of the News-Views.

To thank Raymond Mayotte of the Ahmeek Mill for his safety suggestion.

To thank Charles Hanner of the Ahmeek Mill for his safety suggestion.

To thank Garfield Maynard of No. 3 Allouez for the fine compliment he paid the News-Views.

"Jack" Bryant of the Calumet Construction Department would tell the Ahmeek boys who shovels his drive-way.

To thank Joe Monette of the Ahmeek Mill for his safety suggestion.

We had a picture of "Ernie" Frisk of the Ahmeek Mine Drill Shop pre-

senting his wife with the pressure cooker he had won as a prize. A year ago Mrs. Frisk presented "Ernie" with some door chimes, a prize she had won for a high bowling score.

To thank Paul Herman of the Ahmeek Mill for his safety suggestion.

We had a picture of Preston Richards of the Lake Linden Reclamation using his new can opener.

Charles Hanner of the Ahmeek Mill would tell the boys why he is called "Pork Chop."

To thank Paul Olli of the Lake Chemical Company for his safety suggestion.

To thank Leonard Wasberg and Chester L. Butler of the Ahmeek Mill for their suggestion regarding the News-Views.

"Bob" Spencer would keep his promise to the boys of the Calumet Machine Shop.

We had a picture of the quartet of which Joe Winnen and Fred Peters are members.

John "Puddy" Voelker of the Smelter would tell the boys what he means by "skuddling."

You could see James "Luther Burbank" Gray's colored photographs of his last summer's garden. "Jimmy" is employed at the Calumet Machine Shop, and resides on School Street.

Do You Know?

1. The name of the deepest operating shaft of the C. & H. and the incline depth of this shaft?
2. The number of tons of rock stamped at the Ahmeek Mill in 1946?
3. Which Plant or Department has the best safety record in number of days since their last compensable accident?
4. The number of gallons of water pumped daily by the pumps of the Calumet and Tamarack Waterworks?
5. The population of Houghton County?

(For answers turn to page 7)

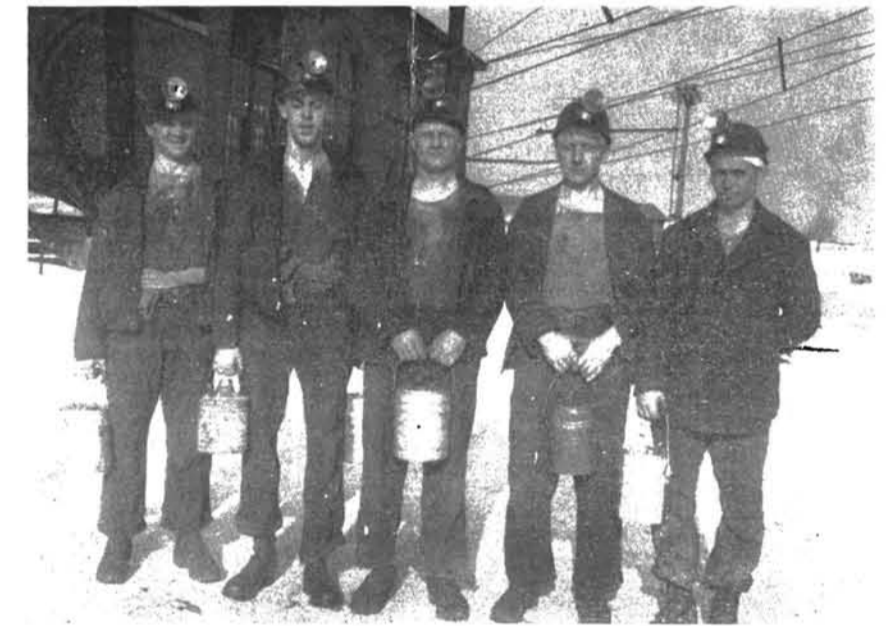
A WILDE ONE

When asked how he had spent the day, Oscar Wilde is said to have reported: "I spent the morning reading proof on one of my poems and took out a comma. In the afternoon I put it back."

All jokes aside, the comma is a very important little item. Take the following sentence and see for yourself: The father, said his daughter, is a miner at the Iroquois Mine.

Ahmeek Mine "College" Boys

These men have been taking a course of instruction and getting practical experience on how to become miners.

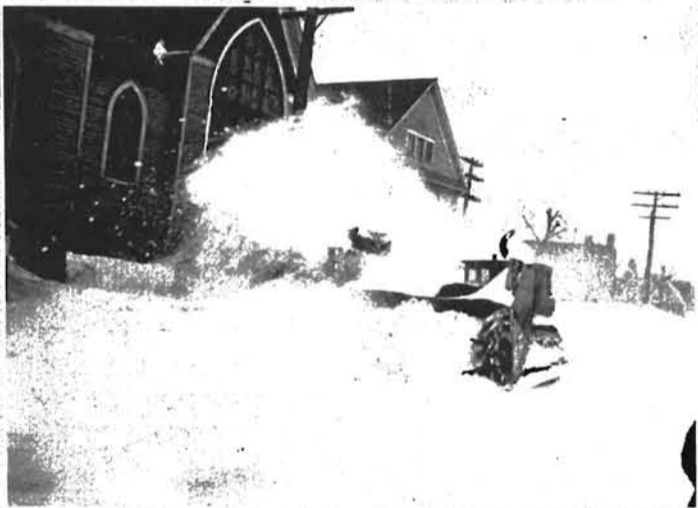


Harry Hill, Frederick Phillips, Instructor John Karppinen, William Pelto and Emil Sorvisto.



Waino Karppinen, Ernest Lundholm, Edward Haggren, Instructor John Soivio, George Karppinen.

Winter's Mantle Brings Added Beau



Beauty to Copper Country Landscape



BOWLING

POST SEASON GAMES ARE BEING ROLLED

Although the C. & H. Bowling League wound up its affairs for the current season on February 16, when the Smelter copped the championship and possession of the Klopsch trophy, some of the teams are still active.

Allouez, confident that they could "take" the champions, challenged the Smelter to a match. Smelter won, two out of three. Still not convinced, Allouez asked for a return match to be rolled on their home alleys at the Whitehouse to which the Smelter agreed. The match was set for March 23rd.

The Office team split into two groups for a match, with the general office gang bowling against the supply office boys. Captain Bill Yeo was hard pressed to round up a team as some of his stalwarts were already out of condition, and he was forced to call on veteran Wilbur Nicholas for help. Wilbur, after a shaky start, rapidly regained his oldtime form and was going great guns as the match ended. However, Supply walked off with three of the four games.

There has been some sentiment expressed in favor of a longer schedule for next season. This can be arranged easily, one method being to plan for two legs instead of the usual one. However, the decision is in the hands of the members and they have until next Fall to decide.

Officers of the League voice their thanks to the team captains and individual team members for the fine cooperation and splendid sportsmanship shown throughout the season. It is hoped that next season will be even more successful with an increased number of teams enrolled in the League.

INDIVIDUAL AVERAGES OF CALUMET & HECLA BOWLERS

| Name | Ave. | Games |
|----------------|------|-------|
| J. Mugford | 184 | 6 |
| A. Barberis | 172 | 26 |
| R. Hellner | 180 | 33 |
| W. Chapman | 175 | 30 |
| O. Hammerberg | 172 | 21 |
| H. Berg | 170 | 24 |
| R. Dracicevich | 169 | 30 |
| F. Shaltz | 168 | 12 |
| D. MacEachran | 165 | 27 |
| C. Lindstrom | 165 | 24 |
| J. Pastor | 165 | 27 |

| | | |
|----------------|-----|----|
| J. Traven | 165 | 27 |
| J. Servich | 163 | 15 |
| H. Farley | 163 | 26 |
| M. Kezele | 163 | 30 |
| G. Dower | 162 | 12 |
| P. Dimmer | 162 | 27 |
| R. Davey | 161 | 27 |
| J. Harris | 161 | 30 |
| L. Pastor | 161 | 27 |
| J. Wilson | 161 | 24 |
| C. Regis | 161 | 33 |
| P. Sifra | 160 | 19 |
| E. Messner | 159 | 9 |
| H. Larson | 159 | 30 |
| Herman Berg | 159 | 28 |
| R. Clouthier | 158 | 17 |
| W. Seigham | 158 | 32 |
| J. Primeau | 157 | 18 |
| H. Bennetts | 157 | 30 |
| H. Schnotala | 156 | 16 |
| H. Brown | 156 | 33 |
| C. Tremberth | 156 | 33 |
| W. Kline | 156 | 18 |
| J. Goraczniak | 155 | 6 |
| J. C. Sullivan | 155 | 18 |
| J. Morrison | 155 | 33 |
| R. Williams | 154 | 32 |
| M. Radosevich | 154 | 9 |
| T. Lutz | 154 | 9 |
| R. Hella | 154 | 20 |
| J. Banovetz | 153 | 26 |
| C. Kirou | 153 | 21 |
| J. Kessler | 153 | 24 |
| C. Kuopus | 153 | 25 |
| R. Rowe | 153 | 3 |
| C. Bickle | 152 | 27 |
| H. Wills | 152 | 29 |
| J. Bray | 151 | 27 |
| W. Yeo | 151 | 33 |
| J. Dragman | 150 | 22 |
| E. Orchard | 150 | 24 |
| G. Tuomala | 150 | 15 |
| H. Kamula | 149 | 25 |
| J. Sullivan | 149 | 11 |
| A. Korby | 149 | 21 |
| C. Krs | 149 | 27 |
| P. Fink | 149 | 25 |
| V. Rowe | 148 | 26 |
| L. Picotte | 148 | 7 |
| M. Brunskole | 148 | 9 |
| C. J. Miller | 148 | 1 |
| D. Watts | 148 | 18 |
| W. Little | 146 | 27 |
| E. Mugford | 144 | 24 |
| W. Chapman | 144 | 24 |
| H. Salsini | 143 | 4 |
| R. Daavettila | 143 | 20 |
| J. Muretich | 142 | 25 |
| R. Charrier | 142 | 6 |
| F. Gresnick | 142 | 7 |
| A. Kump | 141 | 15 |
| H. Anderson | 141 | 26 |
| W. Martin | 140 | 25 |
| B. Knopus | 139 | 27 |
| P. Tomasi | 138 | 16 |

Smelter Team, 1947 C. & H. Bowling Champions



Standing: Rudy Hellner, Hank Schnotala, Joeko Salsini, Joe Sullivan, Doug MacEachran.

Seated: Bob Clouthier, Ken Farley, Captain; Dave Watts.

| | | |
|--------------|-----|----|
| L. Blau | 138 | 24 |
| J. Peters | 137 | 24 |
| E. Kujala | 137 | 28 |
| J. Pascoe | 137 | 27 |
| A. Hambly | 132 | 16 |
| W. Sincock | 131 | 3 |
| M. Clouthier | 129 | 26 |
| W. Rader | 119 | 7 |
| E. Poisson | 117 | 18 |
| J. Brill | 114 | 9 |
| D. Mechlin | 113 | 3 |
| R. Mayotte | 105 | 9 |

CALUMET & HECLA FUEL BILL IS NO SMALL ITEM

A score of Great Lakes coal boats, and scores of railroad, freight and tank cars were required to handle the Calumet and Hecla purchases of various fuels during the past year. Some idea of the enormity of these purchases may be gleaned from the following: 190,000 tons of coal were delivered to the Company's docks on Torch Lake by lake steamships.

Over 3,300 tons of coke breeze also were unloaded at the dock.

Over 759,100 pounds of coke were delivered in 13 railroad cars.

Nineteen carloads of charcoal totaled 513,000 pounds.

Thirty-eight tank cars were required to deliver 280,000 gallons of fuel oil, and 6 tank cars to supply the Company with 60,000 gallons of gasoline.

We know a gentleman who divorced his wife because she was getting indifferent—getting in different mens arms.



"Colder tonight and warmer tomorrow followed by freezing temperatures and snow flurries." Reads like a typical March day in Michigan, doesn't it?

That's what makes it a treacherous time for Motoring. Here in Michigan we have been fortunate for years in having fine highways, well maintained. Day or night highway workers are on the job during every snowstorm to make driving safe and restore normal conditions as quickly as possible.

However, these alternate thaws and freezing are hard for even an efficient highway department to keep up with and sometimes, when we have just become accustomed to dry pavements we find ourselves on slippery ice.

And how many of us have had the unpleasant experience of running into a snowstorm on our return trip after dark, following a balmy Sunday afternoon's drive to another city?

This brings up a cardinal point of safety to keep in mind:

"Always keep your car under control and never drive faster than conditions warrant."

It may take you a few minutes longer to get back, but you WILL get back and under your own power if you follow this rule of safety.

Bowling League Board of Governors



Harry Bennetts, League Secretary; Irving Sincock, President; Rudy Hellner; Bill Yeo, Assistant Secretary.

Ahmeek Mine Surface Team, Second Place Winners



Carl Bickle, Captain; Ernie Orchard, Wes. Seighman, Russ. Williams, Rudy Daavettila, George Tuomala.

To the Editor

Calumet and Hecla News-Views:

Our beautiful Keweenaw has been stricken with a disease which has affected our pine trees. This disease is known as White Pine Blister Rust (Cronartium rebicola Diet) is a fungus disease destructive to five needled white pine trees.

The commonly called cultivated black currant spreads White Pine Blister Rust. The European black current is a nurse plant for White Pine Blister Rust. So extremely susceptible is this species to the white pine blister rust disease that the United States Department of Agriculture recognizes the cultivated black currant as a distinct menace to the white pine timber supply of the country. It is so serious a danger to the production of white pine timber as to make this kind of currant a public nuisance in all states where five needled white pines grow. Evidence of this disease in Keweenaw is common near Ojibway and is found even alongside the state highway. Through different surveys on my own account I can prove these statements. You who own camping lots and others who are proud of their home surroundings of lovely pines, I am appealing to you to have your pine trees on your property checked next fall. I am willing to assist anyone interested as time will allow.

Alfred Hahn
269 Phoenix St.
Mohawk, Mich.

To the Editor:

My News-Views came this week and speaking of it to a friend, now our grocery man, who worked in No. 11 shaft about 1900, and learned I came from up there so we chat over the old locations and now he wants the News-Views sent him.

I think your story of the Railroad was especially interesting. I started there in 1887 and Mr. Childs in 1866 to 1916 as Supt. He started as Rodman for Mr. Agassiz when surveying from Calumet to Lake Linden for the railroad, after his return from the Civil War.

Thanks for the favor.
Yours truly,
O. D. Gardner

"Do You Know" Answers

(On Page 3)

1. No. 3 Ahmeek, which has an incline depth of 7,043 feet. This would be 4,547 feet vertically below the collar of the shaft.

2. 1,264,836 tons of rock were stamped at the Ahmeek Mill in 1946.

3. On March 17, the employees of the Calumet Electrical Department had completed a safety record of 6,037 days. Their last compensable accident was on September 5, 1930.

4. At the Calumet Waterworks, pumping 24 hours, there are 2,750,000 gallons of water pumped, while at the Tamarack Waterworks pumping 16 hours a day, there are 912,000 gallons of water pumped.

5. According to the 1940 census figures, the population of Houghton County is 47,631.

Be Alert—Don't Get Hurt.

Believe It or Not

When "Bill" Makolin of the Calumet Construction Department saw the pictures of the skaters in the February issue of the News-Views he said that he would be ice skating next year.

Clarence Geiger of the Smelter, who resides in Calumet, said the only reason that he works is to wear out his old clothes.

"Jim" Waara of Ahmeek Mine, who resides in Mohawk and is only 63 years old, challenges anybody regardless of size, weight or age to a 15-yard dash to be held on July 4th.

Fred "Swede" Mattson of Ahmeek Mine is an expert on raising chickens.

Joe Kline of the Calumet Motive Power said that when it comes to hockey, Gordon Pinch sure knows cricket.

Arvid "Fire Chief" Hansen of Ahmeek Mine was seen throwing snow balls on Fifth Street in Calumet.

Good safety records depend on you Francis Pflugi of the Lake Linden Reclamation said, "If you enjoy outdoor life then you are in condition to enjoy the winters in Lake Linden."

Ed. Petermann of Ahmeek Mine developed quite an interest in skating, especially fancy skating, this past winter. He also acted as an instructor in skating, giving lessons to his niece and nephew.

Joe Limback, Calumet office yardman, said he left a recent safety party at 10 o'clock and went right home.

Jack Stephens of the Ahmeek Mill Power Plant was carrying a cap at the Lake Linden-Calumet High School basketball game.

Frank Brula of the Tamarack Reclamation recently built a hay rack that will hold 5 tons of hay.

ANSWER TO "GUESS WHO" (On Page 2)

Walter Wilmers as he appeared in 1936 when he won the amateur middle weight boxing championship of the State of Wisconsin and Northern Michigan at a tournament held in Milwaukee, Wisconsin. "Walt" is an employee of the Calumet Construction Department

Seneca No. 2 Shaft House



Girl Scouts Enjoy Sleigh Ride Party



Members of Brownies of the Calumet Girl Scouts, Troops 9 and 10, ready to leave on a sleigh ride party. Looks as though some of the "young men" would like to join the party.

390 Years of Safety

Employees of Ahmeek Mine, No. 3 Allouez and the Engineering Department.



Front Row (left to right): Frear "Billy" Watt, 16 years without a compensable accident; Paul Mrosz, 18 years; Matt Belobraidich, 15 years; Waino Kauppila, 20 years; William Dower, 35 years; "Kenny" Gillis, 44 years; John Waara, 17 years; Yalmer Uusitalo, 17 years.

Rear Row: "Nick" Crnkovich, 20 years; Robert Korby, 15 years; Jonas Wahtola, 20 years; Walter Kline 25 years; Howard MacLeod, 27 years; William Lehto, 21 years; Peter Lukonich, 15 years; Gardner Edwards, 35 years; Eino Kujala, 15 years; Louis Uzman, 15 years.

DYNAMITE PLAYS IMPORTANT ROLL IN C. & H. MINING

If all of the dynamite purchased by the Calumet and Hecla during the past year was exploded in a single blast, it might create a disturbance similar to the Atom Bomb blast at Bikini. Imagine, if you can, what would happen if 1,500,000 pounds of dynamite exploded in your neighborhood. Well, don't worry about it. It cannot happen. This million and a half pounds of explosives was handled without a single mishap.

This 750 TONS of explosives was used in the underground operations of the mine to blast out the rock from which copper is recovered.

In order to detonate dynamite, blasting caps and fuse must be used. The Company purchased 560,000 of these caps during the year. Some of the caps were of the electrically fired type and the rest were fuse-type.

The enormity of the blasting operations is further emphasized by the fact that Calumet and Hecla purchased two carloads of fuse during the year. Two carloads is a lot of fuse, in fact it is 4,800,000 feet of fuse, nearly 1,000 miles of fuse, enough to reach from Calumet to Chicago and back again.

TIMBER FOR MINING IS PURCHASED LOCALLY

Local lumbering companies sold Calumet and Hecla over 1,320,000 feet of mine timber during the past year. In addition to this the Company purchased 25 carloads of Fir totaling more than 700,000 feet. All of this lumber was used in connection with the Company's operations in this district.

ENDORSES TAX INCREASE

C. & H., the largest taxpayer in Houghton County, endorses the proposed tax increase of 3 mills for purchasing County snow removal equipment, to be voted on April 7. General Manager Wohlrab expressed the Company's support for the increase in a letter to the Road Commission.

Coming Events

SAFETY PARTIES

April 12

Employees of the Tamarack Reclamation.

April 19

Employees of the Tamarack Reclamation who could not attend the party of April 12. Employees of O. Rjoorn's and O. Jurmu's shifts at Iroquois shaft. (These employees were formerly under the supervision of H. Abrahamson.) Centennial pumpmen and shaft maintenance men who are under the supervision of Captain F. Shaltz. Ahmeek Surface men who could not attend the Ahmeek Mine Surface party of March 22. The employees of N. Tommason's shift, Centennial Mine.

New Arrivals

Mr. and Mrs. George Klipa are the proud parents of a son born to them recently. George is employed at the Smelter Refinery.

A daughter was born, February 17, to Mr. and Mrs. Gerald Herbert. The father is a member of the Smelter force.

The Edward Seppala family has a new daughter, born February 24. Ed is employed underground at the Ahmeek mine.

Mr. and Mrs. Leo Fretter have a new daughter, born to them on February 24. Mr. Fretter is a trammer at the Centennial mine.

The new arrival at the home of Mr. and Mrs. Hillary Godin is a girl. Hillary is employed at the Ahmeek Mill.

Joe Sheringer, of the Machine Shop, is all smiles. Mrs. Sheringer presented him with another son on February 27.

The Arthur Gariepy family now includes a daughter, born on March 4. Art works at the Smelter.

Leslie Penpraze, drill sharpener at the Ahmeek, is a happy fellow these days, the reason being that Mrs. Penpraze and their new daughter are enjoying the best of health.

March 9 will be the birthday from now on for the new son of Mr. and Mrs. Henry DeRoche of the Torch Lake district. The father is a laborer at the Smelting plant.

COMPENSABLE ACCIDENTS February

No. 3 Ahmeek

January 24—Oscar Kaura, miner. Going through chute, pole turned and he fell, twisting his leg on a rock on the level. Fracture of left fibula. Estimated lost time, three

months. Foreman, W. Paull.

No. 3 Allouez

February 12—Joseph Szuch, trammer. Going up in chute, a rock fell on his leg. Fracture of left tibia and fibula. Estimated lost time, four months. Foreman, G. Maynard.

Centennial

February 13—Kenneth Korri, a trammer. While riding on motor, dirt entered his eye. Conjunctivitis of right eye. Lost time, 14 days. Foreman, J. Hammes.

Iroquois

February 7—Matt W. Peterson, trammer. Rock rolled down stope and struck his leg. Fracture of left tibia. Estimated time lost, three months. Foreman, H. Abrahamson.

Fire Department

February 7—Albert C. Sincok, Fireman. Bon Ton fire, Laurium. Carrying hose up an icy ladder, foot slipped between rungs of ladder. Abrasion of left leg and contusion of right leg. Time lost, five weeks. Foreman, N. LaBonte.

Installing the Drum of Seneca No. 2 Hoist



AHMEEK BRIEFS

At one of the pinochle sessions sponsored by the Keweenaw Band, every Monday evening at the Ahmeek Mine Office, George Nordstrom dealt four flushes in different suits, to four men, in one hand. On another occasion Thomas Rapson held seven kings, incidently the eight kings would have meant 800 points. For the benefit of those interested, a double flush in the same suit counts 1,500 points; 8 aces 1,000 points; 8 kings 800 points; 8 Queens 600 points; 8 jacks 400 points.

William Simula, of the Ahmeek Machine Shop, went ice fishing at Jacobsville and returned with his usual luck, "no fish."

"Jack" Clayton Mugford, of the Ahmeek Mine Office, bowled 184 for three games in succession at Miller's alleys in Laurium.

Clarence Kristo, of the Ahmeek Machine Shop, spent a week in Detroit transacting business recently.

Calumet and Hecla Mill Boys, 1896.

