



VOLUME 6

COPPER CLIFF, ONTARIO, DECEMBER, 1946

NUMBER 9



CREIGHTON IS TOP TEAM AS SEASON OPENS

Red Venturi raced down the ice on right wing and rifled a shot at Bill Organ in the Redmen nets. Organ nailed it. Dan Vanclief swooped in, snatched up the rebound from a goal-mouth scramble, and whipped the puck into the twine. At 6:39 of the second period Creighton Eagles were out in front in the final match for the MacAskill Cup.

Creighton All the Way

Lloyd Smith made it 2-0 early in the second stanza when he snared a stray pass and was dead-on with his shot. The Redmen came storming back and cut the lead in half when Zelio Toppazzani took an assist from Ray Caverson and scored from eight feet out; they

The triumphant Creighton crew faces the camera: front row, Norm Silversen, goalie; Mickey McGlashen, defence; Stan Dobson, manager-coach; Earl Mumford, mine super, and president of the hockey club; Pete Bobuk, wing; Warren Thompson, sub-goalie; second row, Dan Vanclief, centre; Norm Flowerday, wing; Mickey Stahan, defence; Lynn Goard, wing; Carmello Flora, wing; Lloyd Smith, wing; R. Duncan, defence; Johnny Mynerich, wing; back row, Paul Theriault, centre; Ontario Basso, wing. The object giving with the gleam at front centre is the highly coveted Donald MacAskill trophy.

kept right on battering away at Silversen and his defence, but Creighton stubbornly weathered the blast. Stahan and Vanclief finally put the verdict on ice for the Eagles with a sweet combination effort that gave Organ no chance.

Under the heading of "Masterful Understatements" would go the remark that Creighton was pleased with its win. The MacAskill Trophy, emblematic of pre-season supremacy, is regarded not only as a tribute to hockey prowess, but also as a pay-off on post-summer condition. The Creighton Eagles were in good shape, made the most of their chances, and gave the business to a crew of younger and zippier opponents. More power to the old guard, said the fans.

But the Copper Cliff kids weren't through,

by no means. Those flying young ones got another crack at the Eagles a week later, and they avenged the MacAskill Cup defeat in no uncertain manner. The score was 10-3 for the Redmen, and no questions asked. Admittedly the Eagles were in a post-victory slump, but there was no denying the flying skates and goal-tapped shots of the younger generation. Stan Dobson says you can take it from him that anything can happen to anyone, even the best of us.

Jim Dewey, the gent with the Gibraltar legs, is coaching the Redmen this year, and with a pardonable har-rumph of pride he predicts great things for them, despite the fact that he's

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Don M. Dunbar, Editor

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A Handy Glossary of MINING TERMS

MINING is the process of obtaining useful minerals from the earth's crust, and includes both underground excavations and surface workings.

PROSPECTING is searching for ore.

EXPLORATION is the work involved in gaining a knowledge of the size, shape, position and value of an orebody. The term is commonly used to describe prospecting operations, such as drilling and drifting in unproven territory.

DEVELOPMENT is the work of driving openings to and in a proved orebody to prepare it for mining and transporting the ore.

A PROSPECT is a mineral property the value of which has not been proved by exploration.

VEIN. A mineralized zone having a more or less regular extension in length, width and depth, to give it a tabular form and commonly inclined at a considerable angle to the horizontal. The term lode is commonly used synonymously for vein.

SHOOT. The valuable minerals are sometimes concentrated in certain portions of a vein. These portions have one dimension much longer than the others. This shoot or "chimney" of ore is usually highly inclined to the horizontal.

BEDDED DEPOSIT. An ore deposit of tabular form that lies horizontally or only slightly inclined to the horizontal, and is commonly parallel to the stratification of the enclosing rocks.

MASSSES. Large orebodies of irregular shape, the long axis of which may extend in any direction.

OUTCROP. Commonly considered as the surface exposure of a mineral deposit.

FLOAT consists of loose pieces of ore or particles of metal and is produced by the weathering of an outcrop.

GOSSAN. Forms the superficial cover over masses of pyrite or other sulphide minerals. It consists mainly of hydrated iron oxide, and it is the result of oxidation of the sulphide minerals at the surface.

DIP. The angle at which a bed, stratum or vein is inclined from the horizontal.

STRIKE. The horizontal course or bearing of an inclined bed, stratum or vein the direction of a horizontal line in the plane of an inclined bed, stratum or vein.

APEX. The top or terminal edge of the vein on the surface or its nearest point to the surface (blind apex).

HANGING WALL. The wall or rock on the upper side of an inclined vein. It is called the roof in bedded deposits.

FOOT WALL. The wall or rock under a vein. It is called the floor in bedded deposits.

SHAFT. A vertical or inclined excavation



MERRY CHRISTMAS AHEAD

Not until he comes home for Christmas vacation from the Ontario School for the Deaf at Belleville will Bruce MacCrindle Jr. of Coniston collect his final dividend on the whopping trout he holds up in this snap. One of them got him a fine trolling rod and reel in the Coniston Fish and Game Association contest, and the prize will be on the Christmas tree at the MacCrindle home. Bruce landed the trout during a fishing trip to Big Bear Lake with his dad, Abe Laderante, and Bert Harmon.

in a mine extending downward from the surface or from some interior point as a principal opening through which the mine is operated. A shaft is provided with a hoisting engine at the top for handling men, rock and supplies, or it may be used only in connection with pumping or ventilating operations.

DRIFT. A horizontal opening in or near an orebody and parallel to the course of the vein or long dimension of the orebody.

CROSSCUT. A horizontal opening driven across the course of a vein or in general across the direction of the main workings. A connection from a shaft to a vein.

LEVEL. Mines are customarily worked from shafts through horizontal passages or drifts called levels. These are commonly spaced at regular intervals in depth and are either numbered from the surface in regular order or designated by their actual elevation below the top of a shaft.

SUMP. An excavation made underground to collect water, from which water is pumped to the surface or to another sump nearer the surface. Sumps are placed at the bottom of a shaft, near the shaft on a level or at some interior point.

WINZE. A vertical or inclined opening sunk from a point inside a mine for the purpose of connecting with a lower level or of exploring the ground for a limited depth below a level.

RAISE. A vertical or inclined opening driven upward from a level to connect with the level above, or to explore the ground for a limited distance above one level. After two levels are connected, the connection may be a winze or a raise, depending upon which level is taken as the point of reference.

STOPE. An excavation from which ore has been or is being extracted. The term stoping is commonly applied to the extraction of ore, but does not include the ore removed in sinking shafts and in driving levels, drifts and other development openings.

TUNNEL. A horizontal or nearly horizon-

tal underground passage that is open to the atmosphere at both ends. The term is loosely applied in many cases to an adit.

ADIT. A horizontal or nearly horizontal passage driven from the surface for the working or unwatering of a mine. If driven through the hill or mountain to the surface on the opposite side it would be a tunnel.

COLLAR. The term applied to the timbering or concrete around the mouth or top of a shaft.

ORE. A mineral deposit that can be worked at a profit under the existing economic conditions.

GANGUE. The worthless minerals that are associated with the valuable minerals in an ore. As much of this gangue as possible is removed by the processes of concentrating and smelting.

COUNTRY ROCK. The rock in which the ore deposit is enclosed. It is the general mass of adjacent rock as distinguished from that of vein, or lode.

WASTE. The barren rock in a mine. It is also applied to the part of the ore deposit that is too low in grade to be of economic value at the time, but this material may be stored separately in the hope that it can be profitably treated later.

The above mining terms are widely accepted in circles of authority in the United States and Canada. In the main they are used in the Department of Mining Engineering of the University of Toronto.

THE RANGE OF NICKEL USES

Although the majority of people think of nickel as a coin through name and everyday usage, less than three per cent of the world's output is used in coinage. For example our five-cent piece known as the "nickel" contains only 25% nickel, the other ingredient being copper. The principal nickel consumer is the steel industry, while the electroplating field and non-ferrous rolling mill products, including Monel and Inconel, are also large users of this metal. Nickel is used primarily as an alloying element and applications of alloys containing nickel range from the giant forged gate stems at Boulder Dam down to wire drawn to split-hair diameters and tubing finer than a mosquito's stinger.



DIANNE AND ANGELA

Daughters of Mr. and Mrs. Elgin Brown, Old Coniston Road, are Dianne, 2½, and Angela, 14 months, and it goes without saying that their parents are mighty proud of them. Known on the job as "Al", their dad is crushing plant boss at Open Pit.



Lenore and Her Dad Team Up to Win November's \$10 Picture Contest Award

AN amateur photographer with many a fine picture to his credit is the winner of the November "Picture of the Month" Contest. He is W. G. Beaver, of the substation at Copper Cliff, and his \$10-winning entry is on the left in the above group.

Bill tells the Triangle that he took the picture with a Kodak Vigilant, using three No. 1 flash bulbs. The film was Verichrome, the aperture f18, and the shutter speed 1/10 of a second. The "cover girl" model was his attractive daughter Lenore, and, with all due respect for Bill's prowess as a cameraman, we think she deserves at least half of that 10 bucks.

Pleasant Pastime, Sez Mel

Guest judge for the November contest was Mel McMullan, staff photographer of the Sudbury Daily Star. Judging pictures, Mel discovered, can be a genuine pleasure especially when you have entries like Bill's to study.

The striking silhouette reproduced at top right was submitted by Bill Thorpe of the purchasing department at Copper Cliff. It gets honorable mention and an award of \$1.00. The hunter in the picture is Bill's father, Tom Thorpe of Sudbury, district forester, and the snap was taken up near the mouth of the Spanish.

Once again Port Colborne figures in the contest awards. A \$1.00 prize for honorable mention is picked off by Bert Richardson of the engineering department at Port for his delightful camera study of his infant son Robbie, who is five months old. Bert not only took the picture but also printed it in his home-built enlarger. He titles it "What's Up, Doc?"

Early Closing Date

Camera fans will please note that all entries for the December "Picture of the Month" Contest must be filed by Thursday, December 14, since the publication date of the January issue is being advanced as usual to before Christmas.

Judge of the December contest will be S. W. Andrews, manager of the Capitol Theatre, Sudbury.

Frank H. Lowe Is New Inco Pensioner



"Good luck and good quizzing" could have been the message received by Frank Lowe (left) as he said so-long to Tom Reid in the electrolytic department at Port Colborne Refinery.

Retiring at the end of November, Frank Lowe had a total of more than 40 years with the Company. He graduated in June of 1905 from Pennsylvania State College and went straight to a job with International Nickel at Camden, N.J. He came to Port Colborne in 1922 as "super" of the electrolytic department. The plant in those days had a capacity of

100,000 lbs. of refined nickel per month; today its capacity is 18,000,000 lbs.

He was married in 1909 to Miss Estella Lissner.

Quiz programs have been his hobby for about 12 years. He not only follows them closely on the radio but also conducts contests himself, and has a great variety of odd bits of information at his command with which he delights to test the wits of his friends.

To Mr. and Mrs. Lowe in their retirement the Triangle extends best wishes for many more years of happiness. They will reside in Port Colborne.

A PRAYER

This is a prayer said to have been found in Lancashire, England, on the wall of an old inn:

Give us, Lord, a bit o' sun,
A bit o' work and a bit o' fun;
Give us all, in the struggle and splutter,
Our daily bread and a bit o' butter;
Give us health, our keep to make,
An' a bit to spare for poor folks' sake,
Give us sense, for we're some of us duffers,
An' a heart to feel for all that suffers.
Give us, too, a bit of song,
An' a tale, and a book to help us along,
An' give us our share o' sorrow's lesson,
That we may prove how grief's a blessing.
Give us, Lord, a chance to be
Our goodly best, brave, wise and free,
Our goodly best for ourself and others,
Till all men learn to live as brothers.

THE GLAD EYE

The glances that over cocktails seem so sweet,
May be less charming over shredded wheat . . .

LONELY

A story going the rounds concerns a little man who bought a ferocious tiger at an auction, outbidding several circus proprietors. "What are you gonna do with that man-eating beast?" he was asked by one of the circus men. "Going into competition with us?"

"Oh, no," said the little man, "it isn't that. But my poor wife died last week and I'm lonely."

Modern New Fire Alarm System at the Cliff



(SEE OPPOSITE PAGE FOR STORY ON THIS PHOTO LAYOUT)

SIX MILES OF WIRE HOOKS UP ALL SECTIONS OF THE WORKS

AT the risk of startling even some of the old hands who know every nook and cranny of the place, we're going to state on the indisputable authority of the engineering department that there are 3,000,000 square feet of floor space in the reduction plant at Copper Cliff, which includes the crushing plant, the concentrator, the smelter, and shops.

Translated into terms of fire risk, considering the large number of human characters which inhabit the works and the nature of the operations which are taking place, that adds up to one very substantial headache as far as Inco's fire inspector, Bill Humphries, is concerned. (Not to mention the insurance underwriters).

But the furrows in Bill's brow are due for slackening, because installation is now being completed of an alarm system which is calculated to nip an embryo blaze almost before it has drawn the breath of conflagration.

Last Word in Equipment

Modern as they make 'em in fire-fighting circles, the new alarm system hooks up all departments of the sprawling Copper Cliff reduction works. It took six miles of wire to do the job.

An idea of how the system works can be gleaned from the accompanying photographic layout.

For the benefit of the men in the plant, Bill Humphries says: "There are only two things to remember in order to be able to operate the system. First, the firemen will come to the box which has been operated. Second, if you operate a box by means of a control station you must still go to the box to inform the firemen where the fire is. The location of the box belonging to each control station has been marked inside the cover of each of the control stations. Employees are urged to memorize the locations of the boxes and the control stations."

R. Eadie is photographed in No. 1 of the layout on the opposite page, operating one of the new fire stations on the top floor, west end, of the primary crushing plant. This station electrically transmits the location of the fire through Box 42, which is placed in front of Door No. 44, between the crushing plant and the concentrator.

Having buzzed his control station, Eadie at once goes to Box 42 and awaits the arrival of the plant fire brigade.

At The Fire Hall

For the second picture of the sequence we move over to the plant fire hall and see what happened when Eadie pulled the control station. Transmitted through Box 42 went an electrical impulse which operated a recording set in the fire hall. The driver of the fire pumper, N. Temple, sees that the tape in the recording set has been perforated four and two, showing that Box 42 has been operated. He checks his map for the location of Box 42, then leaps to the wheel of his pumper.

In the meantime sirens in the Orford and Converter buildings have notified the firemen that there is trouble afoot, and they come at once to the fire hall. The brigade then proceeds to Box 42, where in No. 3 of the layout Eadie is telling the shift fire chief, H. Fletcher, where the fire is.

In addition to relaying the fire message to the fire hall, Box 42 also sends it to the shift foreman's office. There another recording set perforates a tape with the four and two code, and an indicator, in this case 9, comes up to advise the shift foreman that the control station which Eadie has pulled is at the head of 4B conveyor in the crushing plant. Checking his map of the plant in Picture No. 4, Shift Boss H. McGinn is ready to go straight to the trouble centre.

How Town System Works

The fifth photo shows how the general alarm for town fires is sent out from the First

Aid Room in the smelter "dry". Toby Armistage has received a telephone call from a home in Copper Cliff and has sent out the alarm to the town firemen over the automatic telephone. He is then seen in the act of turning in the general alarm on the new horn which has been erected on top of the smelter. Selecting a wheel corresponding to the map area in which the fire is located, he has placed it on the instrument. When he pulls down the handle the correct fire signal for that area will be blown on the horn.

Harold Fullerton is Feted on Departure From Garson Mine

Harold Fullerton, the pilot who charted the course over which the good ship Garson sailed last year to Canadian metal mining's highest safety award, the Ryan Trophy, found out on the evening of Nov. 24 just what his fellow workers think of him. It was good, all of it.

On the occasion of his departure for Blind

River, where he enters a garage partnership with his brother, Harold was feted at a stag party in the Garson schoolhouse. One speaker after another lauded his record as mine safety engineer, active community worker, and good neighbor. Supt. Foster Todd even paid him the supreme accolade of saying that he grew the biggest and best tomatoes in Garson; no man could ask higher distinction, considering such competition as Gemmell, Mills, Gomoll, Marsh, Norris, et al.

General Foreman Archie Massey, making the presentation, said that Harold possessed all the qualifications of a good safety engineer, among which were mining experience, personality, leadership, and the ability to make men work "not for you, not against you, but with you." He presented the guest of honor with a travelling bag and a brief case; the latter was attractively lined with greenbacks — they don't fool, over there at Garson.

Enjoyable Variety Program

Ralph Gomoll was chairman of the gathering, which was large considering the inclement weather. Fred Desjardins, the tireless top-lander, m.c.'d a miscellaneous program of enjoyable numbers which included violin selections and step dances by D. Thompson, piano accordion solos by M. Daskoch, an Irish lullaby by Rodger Ballantyne of Coniston, vocal solos by A. Bowen, and several snappy numbers by Fred and the orchestra. A lunch was served.

Harold, who has been with Inco at Garson for 10 years, will in future handle sales and first aid for cars made by Henry you-know-who: the best of luck to him!

CREIGHTON

(Continued from Page 1)

also a mainstay of the Sudbury Wolves. In Wolf games against the Redmen Jim just doesn't play, to keep the record straight.

Lots of Youth Left

A considerable section of fandom thought the Redmen wouldn't be up to much this season, what with the vacancies left by sundry persons who have departed for the big time, but early-season performances indicate that there's lots of stuff left. Dewey has Bill Organ in goal, with Toby Lapilla as an understudy. He has Tug Perry, Specs Telford, Rondie Rinaldi, and Tim Horton for defence. And for forwards he has his choice of Yacker Flynn, Tatter McClelland, Sambo Bettio, Ray Calverton, Fatty Rivolatta, Zelio Toppazzini, George Armstrong, Vic Smerk, Red McCarthy, Vip Poladini, and Gino Pollasino. Count on James to make the most of that sort of material.

An interesting situation has cropped up in this season's edition of the Nickel Belt Hockey League. Doubtless convinced that there is little or no future for him as a golf player, after grievous treatment on the links at the hands of person or persons unknown, Red Stuart has returned to his old love. The curly-headed coach of two Allan Cup teams has taken over the master-minding of the Sudbury Wolves. This pits his wits against two of his former star pupils, Frankie Graham who is No. 1 with the Sudbury Legion entry, and Jarring James Dewey who has undertaken a Jekyll-Hyde role as chief sharpshooter of Stuart's Wolves and also brain-truster of the rival Redmen. How will these three erstwhile buddies fare in open conflict? The answer, says Stan Dobson, the modest mite from Creighton, will be reckoned in terms of Eagles.

All in all, brethren, it looks like a tidy season for us railbirds.

NOW HE'S A HOMEBODY

Helen: "How did you stop your husband from staying out late?"

Mabel: "When he came in late I called out — 'That you, Jack?'"

Helen: "But how did that stop him?"

Mabel: "My husband's name is Dick."



TOP: Archie Massey makes the presentation to Harold Fullerton. BELOW: The guest of honor replies.

Attractive Displays Arranged for Mom's and Dad's Night at the School



A vastly exciting event, particularly for the proud little pupils in the junior grades, is the annual Parents' Night at the school. Weeks in advance of the great day, the boys and girls go through their scholastic paces thinking that their work had better be particularly good because Mom and Dad are going to see it.

The Sand-Box Fairyland

These pictures were taken at Copper Cliff public school just before Parents' night on Nov. 7th. In the top scene are some of Miss Beryl Draper's young charges in the kindergarten, standing behind their sand box Fairy-

land. Left to right they are Bobby Harkins, Heimo Nupponen, Joyce Didone, Judy Burdell, George Flynn, and Richard Hickey. Many a favorite fairy tale or nursery rhyme is cleverly illustrated in the sand box; on the left you can see the beautiful castle where the Princess had her Big Sleep, and in the background is the candy house from Hansel and Gretel; near the front perhaps you can make out the old cow hopping friskily over the moon, and so on.

The kindergarten's Fairy Flower Shop is the feature in the center picture; it's a colorful

riot of delicate floral designs, achieved with painted weeds and seed pods which the boys and girls mounted in plasticine baskets. Grouped in front of the flower shop are: seated, Norma Camillucci, Gail Hashey, Grant McPhail, Ronald Zinko, Brenton Hazlewood; standing, Tommy Finlayson and Nicky Polano.

Display of Pioneering Life

Three of the lads up in Room 15, where Miss Tilly Ballantyne is the teacher, are seen in the third picture with some of the craft work completed in time for Parents' Night. Byron Wood stands beside the spinning wheel which was his first project of the term, while Pat Lowney and Jim McGauley put the finishing touches on an old log cabin and other farm buildings past which winds a corduroy road typical of Sudbury District's early days. The craft work was part of a display of pioneering life, done in connection with the students' social studies.

In each of the school's 17 classrooms there were attractive exhibits of the term's work to date. Principal A. G. Orr and his staff were pleased and encouraged by the number of parents who turned out to see the display and chat with the teachers about the problems and progress of their young hopefuls; more than 400 registered, an increase of some 50 over last year.

HOW IS YOUR BRAIN-POWER?

First reader to furnish the right answer to last month's brain-twister was Bert Bond of the Accounting Dept. at Copper Cliff.

"The guy was buying numbers for the front of his house," said Bert, with the gleam of the conqueror in his eye.

Others who phoned in the solution soon after the paper was distributed were Frank Scott of Copper Refinery, Ralph Brown of Open Pit, Mrs. W. W. Chapman of Copper Cliff, and H. Kent of McFarlane Lake Rd., Sudbury.

Scotty Ferguson of the Cliff, editor and publisher of "The Big Talk," struggled manfully with the riddle, and even resorted to an attempt at bribery, but finally had to toss in the sponge when we wouldn't be bought. Editors aren't much good at intelligence tests, Scotty; we know.

Now here's the puzzle for December, but don't let it interfere with your Merry Christmas:

There is a well-known animal which almost everybody has seen, either in pictures or in the flesh. If every one of its kind were killed, and it was thus wiped right out of existence, we could still have more of them. What's the name of the animal?

(No fair biting in the clinches, or telephoning us after midnight.)

NO MORE FLOODED BATHROOMS

How many times have you taken a shower in a tub without realizing that water was rapidly flooding the bathroom floor due to a shower curtain which just would not stay in place. A solution for that has appeared in the form of alnico magnets which can be sewed into the bottom of the shower curtain so that when you are using the shower the curtain will be magnetically drawn toward the tub walls. Concealed beneath the visible proclama of your tub is cast iron or steel. Alnico is a cast alloy composed of aluminum, nickel, cobalt and iron which when magnetized is far more powerful than any of the older permanent magnet materials and has a much greater resistance to demagnetization.



PRESENTATIONS MADE TO CLIFF SOFTBALLERS AT BIG BANQUET

With a bang-up banquet in the Nickel Range Hotel the Copper Cliff softball league wrote an official finish to a season which produced some of the hottest competition in the history of the loop.

Grand finale to the Cliff's softball schedule was its all-star team's triumph in the inter-planetary round robin for the W. E. Gillespie Cup. Members of the team who attended the banquet are seen in the top picture: front row, Red Maltby, Moon Carroll, Lauri Boulet, Al McEwen, Super Bertuzzi, and Lud Ryski; back row, Bill Treize, Vern Johnson, Ross Grooms, Louise Scanlon, Ed Panke, Gino Canapini.

C.C.A.A. Proud of League

In the first picture of the lower panel Mac Forsythe, pinch-hitter for W. E. Gillespie who was out of town on business, presents the Gillespie Cup to Captain Al McEwen of the Cliff All-Stars. In his congratulatory remarks Mac mentioned the keen satisfaction of Copper Cliff Athletic Association with the softball league, which it sponsors.

Donors of the trophy won by Orford again this year for the regular schedule of the Cliff league are Racicot-Darrach, and in the second panel shot Bill Darrach turns over his firm's trophy to Ross Grooms, long-time captain of

the long-time league champs. In the third picture of the panel he presents an individual player's prize to the team's star pitcher, Laurie Boulet.

Special entertainment features wound up an evening of good fellowship.

LOOK OUT FOR HIS CLAWS!

The novice at fishing had hooked a very small trout from a little lake in the Canadian wilds. He wound it in excitedly until it was rammed against the end of his rod. Then he turned inquiringly to the guide and said: "What do I do now?"

The guide drawled, "Climb up the rod and stab it with your hunting knife."

DID YOU KNOW?

Four and a half times as much energy is required to work at a table or sink that is too low as one of correct height.—Predictions of the weatherman are correct 85 per cent of the time.—1/4 of Canada's pulp and paper is exported; every second newspaper page in the world is printed on Canadian paper.—History records only one indispensable man: Adam.



COPPER CLIFF

Kenneth Glynn (Army), Arthur W. Hein (Army), Wm. E. Hughes (R.C.A.F.), Roger J. Joly (Army), Wm. F. Jones (R.C.A.F.), Arthur McDowell (Army), Julien Verreault (Army).

FROOD

Edgar Benard (Army), Donald E. Bush (Army), Walter Coveyduck (Army), Wm. Laporte (Army), Wilfred Sauve (Army).

OPEN PIT

Lloyd J. Bush (Army), Lucien Leduc (Army).

LEVACK

Isadore R. Coutu (Army), Walter M. Taylor (Army).

CREIGHTON

Russel Hobden (Army), Forrest Hodgins (Army), Alex Kalmakoff (Army).

COPPER REFINERY

Arthur Marshall (Army).

Badminton Revival Booming at Inco Employees Clubs



With a Nickel Belt League thriving again as in the days of yore, badminton is definitely on the uptake. At all Inco employees clubs time on the courts is at a premium but the enthusiasm is most noticeable at the Sudbury recreation hub, where more than 100 regular players are smacking the bird.

Some of the Sudbury club performers were caught by the camera, above: (1) Joe Fajcz, Miss Irene Savard, and Mr. and Mrs. Vern Johnston; (2) Hattie McCrea, Velma Roy, Irene Piggott, and Helen

Ledingham; (3) Jim Harrower, Mrs. R. Gallagher, Mrs. Jerry Bradley, and Jim Bulloch.

At Port Colborne, with an eye to the future, younger enthusiasts are being brought along at the game. In No. 4 Archie Saville, veteran Inco ace, explains fine points to: kneeling, Nelson Boyer, Zoltan Bendes, Alex Bendes; standing, Jim Kocsis, Lorne Grist, Bill Colville, and Norm Cowper.



Local Abners Get Annual Innings

Reversing the time-honored order of things, the gals do the pleading on Sadie Hawkins Day. At the annual Sadie Hawkins dance at Copper Cliff High School, Daisy Mae and Little Abner were all over the place, and there were even pictures of Lena the Hyena here and there for more authentic Yokum background. At the left Harold Tremblay spurns the advances (or what are we saying) of Pat Bell, and on the right Arthur Jonasson is playing distant to Geeta Faddick. In the centre are Edith Salo and Sambo Bettio. In the background a couple of swains have completely lost their heads over Maureen Lowney and Mary Moraska, but in all fairness to the boys we must admit it was the camera's fault.

TOUGH ON THE OLD MAN

Pop had just returned from a tough day at the office. Little Quentin was in an inquiring mood and kept asking questions until Pop finally lost patience. "Look, Junior," he growled, "if you must ask questions, ask some I can answer!"

"That kind," Quentin answered coldly, "I can answer myself."

COPPER CLIFF SAYS GOODBYE TO HERB ROSE

Herb Rose took off from Copper Cliff last month, heading for Michigan to add still another chapter to a life already sparkling with achievement in a broad range of activities.

As a consulting expert on milling problems he will tackle his first big assignment at the new White Pine Mine of the Copper Range Co., and will reside at Painesdale, Michigan. It is characteristic of him that this undertaking is admittedly one of the most difficult he has selected in his distinguished career at taming balky ores and coaxing metal values from their dirty hearts. He likes his milling mysteries definitely on the tough side.

Learned Telegraphy As a Boy

Out-of-the-ordinary things started happening to Herb Rose when he was just a little gaffer in Kinsley, Kansas. His father, who was a telegrapher on the Santa Fe, died when Herb was five, and his mother took over the wire key. Herb learned his dots and dashes along with his ABC's; his introduction to geography was the nomadic life of the telegraph agent.

His early schooling he acquired along the way, in Kansas, Texas, and Colorado. Prior to his marriage he lived in no place for more than three years. On the side he developed a flair for newspaper work, learning how to stick type by hand as well as how to turn out a good story. He often kids himself that he is a "frustrated journalist".

As a telegrapher, a printer, or a reporter, depending upon which of these talents was best suited to the opportunities at hand, he put himself through the University of Kansas, graduating in chemical engineering.

At the beginning of his senior year he married Miss Lucille Collins, whom he had known in high school and also at university. She was a student in bacteriology, and he says she found him squirming under her microscope one day. They have a son, George, and a daughter, Miriam, who came along just about the Commencement Day on which Herb got his diploma, a very nice graduation gift indeed. She is now Mrs. Donald MacAskill of Trail, B.C., and has a little daughter of her own.

Helped Develop Direction Finder

Herb's university course was delayed by the

Honor Memory of Warrior Dead



Despite frigid weather there was a tremendous gathering in front of the Sudbury cenotaph on the morning of Nov. 11 to honor the memory of the fallen in World Wars 1 and 2. Top photo shows representatives of Sudbury organizations placing wreaths at the base of the memorial.

Copper Cliff veterans attended a dinner party in Memorial Community Hall at which the speaker, George Collins, urged them to take full and active part in development of the nation for whose freedom so many of their comrades died. He is seen on the right during his address. Beside him are J. R. Gordon, who was chairman, and D. Finlayson, president of the Copper Cliff Legion.

In a world so ridden with doubt and misunderstanding, worry over the future could easily replace a pause in respect for the past, but people of the Nickel Belt showed by their actions on another Remembrance week-end that their warriors are not forgotten.



FAVORITE RETREAT

Herb Rose and his son George, "going native" at their summer camp at Birch Island.

First Great War. He served with the Intelligence Branch of the Signal Corps, intercepting code messages from foreign radio stations. He was also a member of the group which developed the direction finder at the Bureau of Standards in Washington.

After graduation he became an assayer for Phelps Dodge Corporation in New Mexico. When the plant closed down he did a turn in the Peet soap factory in Kansas — the same Peet of today's Colgate-Palmolive-Peet. Then he went to Colorado Fuel and Iron as an assistant efficiency engineer, which he says in those times was the title cloaking the goings and comings of a chort boy.

He returned to Phelps Dodge as metallurgist at their plant at Nacozari, Mexico, and took another step up the ladder when he was sent to the Patino Mines in Bolivia for a two-year hitch as mill superintendent. Back at Nacozari, he became mill superintendent, and remained at that post until 1930. Then he answered the call from Copper Cliff, where the new mill had just opened under W. T. MacDonald. When the latter retired in 1936 Herb became mill superintendent. In 1944 he took charge of an extensive program of plant research which dealt, among other things, with the uses to which nickel is put in Inco's own operations.

Authored Many Articles

His skill and wide experience in the mineral dressing profession have kept him in constant

demand as the author of technical articles, and in 1945-46 he was accorded the signal honor of the chairmanship of the A.I.M.M.E. committee on milling methods. Plenty of hard work went along with the distinction but that was right down his alley, even at the risk of his health, and milling men say he has made a great contribution to the welfare of the profession.

Writing continues to be a hobby with him as well as part of his work, and his contributions have been accepted by such diversified publications as American Lawn Tennis Magazine, Printer's Ink, Field and Stream, and Sunset.

He became a top-notch amateur movie photographer, and on 24th of May celebration in Copper Cliff was complete without his camera record of the day's events, usually screened at a later date in the community hall to the intense delight of the town's small fry. He was active in the organization of the Figure Skating Club, and was its first president; he has also used the torch of his enthusiasm to kindle livelier community interest in the madrigal hockey league.

His holiday retreat was the camp he bought at Birch Island in 1918, and he plans many more restful summer vacations there.

To Herb and his wife and son in their new home, their host of friends in Copper Cliff extends best wishes for happiness and success.



A SECRETARY WRITES ABOUT SECRETARIES

A secretary is a person, usually female, whom the boss often tells everybody but her that he couldn't do without.

A secretary must know how to translate the boss's rambling dictation into statements which are crisp and straightforward and yet have plenty of loopholes and side exits, so that he is pretty proud of himself when he reads what he thinks he dictated.

If the boss doesn't know something, he asks his secretary; if she doesn't know, she is dumb. The boss is not dumb for not knowing, on account of what has he got a secretary for?

No man is a hero to his valet, and no boss is a hero to his secretary. When a secretary realizes that her boss wouldn't be worth fifteen dollars a week without her, she has to console herself with the fact that she wouldn't get her thirty-five per without him.

If secretaries didn't need their jobs, half the bosses in the country would be washed up. If secretaries published their bosses' confidential notes, they'd all be washed up.

A secretary must know where her boss is every minute, so she can tell the right people the wrong place.

An office boy starts at the bottom and works up. A secretary starts as secretary and works up.

SUN IS LIGHTHOUSE-KEEPER

An ingenious device, developed some years ago and now widely used, is the sun valve that lights gas or electric lamps in lighthouses and buoys at sunset, even when fog obscures the rays of the sun, and extinguishes them at sunrise. The valve or contact is worked by a delicate mechanism extremely sensitive to heat rays of the sun. Monel and other nickel alloys are used to prevent salt water corrosion of important parts which would result in failure of operation.

COPPER REFINERY MECHANICAL DEPT. HOLDS ANNUAL BANQUET

ALMOST 100 attended the annual banquet of the Copper Refinery's mechanical department, held at the Nickel Range Hotel the evening of Nov. 2, and Dave Duncan, who chairmanned the event, was accepting congratulations all around on a very fine show.

Caught by the camera in the good old-fashioned act of having a good time were: top picture, foreground, L. Bedard, Joe Lupek, John Sorgine; facing camera, seated, right to left, Paul Dow, Bill Noble, Tony Despot, Evan Gordon, Walter Scott, Dave Duncan Jr., Bob Duncan, Johnny Armiento, L. Levesque; standing, left to right, Johnny Clare, Bill Lukey, B. McKay, Joe Sinto, Bill Jones, Bill Palandro.

Facing the camera in the bottom picture are, left to right, Harold Koivula, Harry Lipscombe, Jack Crawford, Stewart Smythe, Mike Shamley, Bill Otley; from right to left at the head table are Supt. Russ Hewgill, Bob Rodger, Warren Koth, and Harry Clemens.

Shops Sextette Performs

The Shops Sextette once again scored a musical triumph under the leadership of veteran violinist Matt Bell; other members of the group were Paul Dow, guitar; Tony Despot, banjo; Barney Graham, electric guitar; Leo Bedard, banjo; and Johnny Clare, violin.

Warren Koth and Gerry Mahon sang a homespun parody in which a lot of secret information concerning various Refinery notables was revealed. A spirited reply by the

victims, in which Messrs. Koth and Mahon were soundly castigated in return, left the score about even.

Mechanical Supt. Al Weiblund presented four-year apprenticeship certificates to Johnny Abbott, Aldege Lalonde, and Morris Keaney, who are now full-fledged mechanics.

Matt Bell distinguished himself with a masterful violin rendition of the Poet and Peasant Overture, accompanied on the piano by Bill Yeo. The latter also contributed a vocal selection. George Black was there with the pipes, and played "Road to the Isles". Blakely McKay gave a reading from Kipling, Barney Graham and George Rensud played a guitar duet, and Gerry Mahon and Frank Scott shared the leadership of the community singing.

Department Is Praised

High praise for the mechanical department's fine services to the plant as a whole, and the spirit of co-operation in which they are carried out, was expressed by Supt. Hewgill in a brief address.

Altogether the boys had themselves a large evening.



CREIGHTON MASQUERADE

Against an artistic background which was the work of George Crymer, steward of the club, Creighton employees enjoyed a fine Halloween masquerade dance this year. Winner of the prize for the best lady's costume was Mrs. Cliff Paquette, photographed above.

The 1175-Foot Dam at Big Eddy



Inco Water Storage Around Bisco Has System of 11 Dams

The water which thunders through the penstocks to generate 25-cycle power at the Inco plants at Big Eddy and High Falls, and 60-cycle "juice" at Nairn Falls, is gathered from 2,500 square miles of drainage area at the head of the Spanish River.

To equalize the flow of the Spanish in periods of high and low run-off, a system of 11 dams is maintained by the Company on seven of the large lakes at the headwaters of the river.

System Acquired in 1912

Dams were originally built in the area, some 40 miles north-west of Sudbury, by lumbermen who floated their logs down to a sawmill at Bisco. This network of crib dams was acquired by the Canadian Copper Co. back about 1912 to guarantee a steady supply of water to its No. 1 plant, 75 miles down the Spanish at High Falls, which was completed in 1905 and furnished the first hydro-electric power to be used by the mining industry in Northern Ontario.

Largest of the seven lakes whose water is conserved and regulated by the system of dams is Ramsay Lake, 26 miles long. Next in size is Biscotasing, 25 miles long, and smallest is Canoe Lake, seven miles long.

Main Dam Is At Bisco

It is at the end of Biscotasing Lake, or Bisco as it is more familiarly known, that the Spanish River gets its start, and that is the location of the main outlet dam of the system. There are two other dams on Bisco, two on Ramsay Lake, two on Indian Lake, and one each on Moeha-

biggest of the dams at the four Inco power plants on the Spanish River at Big Eddy, High Falls, and Nairn Falls, is the Big Eddy dam, seen in the above aerial view with the generating plant in the foreground. Completed in 1920, it is of concrete construction, 1175 feet long with a maximum height of 146 feet. It has three 72-inch Johnson valves, each capable of discharging 1270 cubic feet of water per second at a head of 100 feet. This dam creates a lake 25 miles long and known as Agnew Lake. Now under construction at Big Eddy is a new log slide to handle pulpwood cut for the K. V. P. which recently commenced operations at Espanola.

bong, Canoe, Armstrong, and Miniatic. The entire storage system, when filled, contains approximately 500 square-mile-feet of water.

During the past few years most of the old crib dams have been replaced by concrete, and supervision of this laborious and difficult construction work was handled by Tom Pickering.

When he joined the Company 11 years ago Tom Pickering had a background of a quarter-century in the lumbering game at Blind River and Little Current. He was put in charge of

Inco's storage system at the headwaters of the Spanish, and, when the time came to replace the crib dams with concrete, the ingenuity of the pioneer lumberman stood him in good stead. Among many novel schemes he utilized was to take along a team of horses to haul heavy materials over portages; on the lakes between the portages the logs were transported on a platform built over two canoes.

Also Makes Timber Checks

In addition to his roving assignment as watch-dog of the dams, Tom makes a periodical check of the timber in the yards at the various Inco mines, and also inspects timber shipments while they are still in the suppliers' yards.

Regulation of the dams, and minor repairs, are carried out by C. C. Phillips, a member of the Company's Quarter Century Club, who headquarters at Biscotasing.

None the less vital because it is seldom heard of, the Bisco water storage is another example of the far-flung activities necessary to keep an operation the size of Inco functioning.

NO TROUBLE

Mama Skunk was worried because she could never keep track of her two children. They were named In and Out, and whenever In was in, Out was out, and if Out was in, In was out.

One day she called Out to her and told him to go out and bring In in. So Out went out and in no time at all he brought In in.

"Wonderful!" said Mama Skunk. "How in all this great forest could you find In in so short a time?"

"It was very easy," said Out. "Instinct."



TOM PICKERING



BOWLING STILL TOPS LIST OF ACTIVITIES

As usual, the end of another year finds bowling at the top of the list of Inco employees activities. The timber is toppling with drumbeat regularity on every alley available to Incoites at their recreation clubs, and in addition many super-enthusiasts take part in outside leagues.

For a glimpse of some inveterate bowlers the Triangle camera caught the four accompanying shots:

(1) At Port Colborne: back row, Freeman, Brennan, Ed. Seeman, G. Henderson, A. Jordan, A. Domenicucci, A. Lungul, O. Geddy; middle row, L. Cognigni, W. Ursaki, R. Booker, R. Dobson, C. Shanessy, F. Buccini; front row, D. McNeil, C. Lynden, F. O'Neil, W. Page, E. Hildebrand, M. Pine, R. Anderson, F. Porter.

(2) At Levack: front row, V. Hall, O. Penman, F. Crome, C. Shailer, D. Simpson, W. Clarke; back row, P. Yuill, W. Lawton, L. Ehler, S. Snider, D. Wright, F. Spencer, J. Jovsch, Miss Burton, Mrs. Mallette.

(3) At Creighton: front row, Mr. and Mrs. Baker, Mrs. Cretzmann, Frank Donnelly, Eddie Cretzmann, Bill Peacock, Mrs. Mosher; back row, Mrs. Groulx, Mrs. Donnelly, Mrs. Stahan, Red Bruce, Miss Stephenson, Mrs. Peacock, Mrs. Flora, Mrs. Gallagher.

(4) From Murray: these two teams take part in the Frood League at the Inco Club in Sudbury, part of the Froodian loop's policy being to make scheduled bowling available to trundlers from the smaller plants not otherwise organized: front row, S. O'Hagan, W. G. Armstrong, W. Vaananen, H. Fraser, N. Koropatnik; back row, P. Fredrickson, S. Claus, L. Obunsawin, J. Pigott, C. B. Ferguson, A. F. Beach.

Now for a "who's who" of teams and captains in the various Inco leagues.

PORT COLBORNE

5 Pins

Ramblers, W. Page; Basement, S. Kovacich; Bridges, J. Porter; Carpenters, C. Lynden; Ironworkers, J. Rogers; Electricians, W. Crabbe; Pipe Shop, O. Geddy; Office, Don Horne; "B" Shift, L. LeBlanc; Scores, J. Marshall; Mastic, W. Roach; "C" Shift, C. Burke; Bricklayers, F. Sunday.

10 Pins

Bridges, R. Booker; Calciners "C", J. McIntyre; Yard, R. Thompson; Ironworkers, S. Shymansky; Office, G. Winger; Research, H. Boyer; No. 4 Bldg. "A", E. Kowalsky; No. 4 Bldg. "C", L. Connessi; Machinists, O. Sales; No. 1 Bldg. R. Morrison; All Stars, V. Lynden; Scrappers, W. Roach; No. 5 Bldg. "A", A. Sidev.

LEVACK

Men's Division

Kauppinen, Weslake, Mallette, Lehto, Beli, Lahay, Smith, McIvor, Mitchell, Dixon, Seorev, Simpson, Riutta, Moir, LaFleur, Beaudry, White, Cecchetto.

Women's Division

Mrs. Stephenson, Mrs. Petersen, Mrs. Moir, Mrs. French, Mrs. Snider, Miss Gauvre, Mrs. Puro, Mrs. Ledams, Mrs. Holmes, Mrs. Shess.

CREIGHTON

Major League

Narasnek, Seawright, Hreljstic, Bruce, Trilak, Dumencu, McPhee, Mitroff.

"B" League

Moore, Melissac, Cassell, Flora, Whiting, Blackwell, Silver.

Ladies' League

J. Maki, Seawright, Cassell, Brooks, McPhee, Dumencu, Starkey, L. Maki.

(Continued on Page 13)

School Thespians Stage Play at Commencement



INCO ANGLERS GET KNOW-HOW FROM EXPERT

With a quick flick of his wrist the expert cast a plug accurately a distance of 75 feet. The audience of fishing enthusiasts at Inco Employees' Club murmured their appreciation of his skill, watched other demonstrations, gathered around to ply him with questions.

He was Herbert A. Telfer of Toronto, advertising executive, and in the accompanying picture he's seen passing on a few pointers to



Jim Oliver, who had invited him to give a demonstration at the Club, Don Morrison, and Bill Dever.

Member of the Toronto Anglers and Hunters Association, H. A. Telfer is interested in the pure sport of fishing, and also in seeing it developed along lines to preserve the fishing waters of the North.

He told his Inco Club audiences on Nov. 16 and 17 that selection of either a steel or a bamboo rod was purely a matter of individual preference, but mastering the overhead cast was absolutely essential both for accuracy and for safety.

Other keenly appreciated highlights of Mr. Telfer's informal discourse:

In overhead casting the back cast should stop at about 30 degrees. The forward impulse was given by the spring of the rod.

The use of lines not exceeding 12 lbs. test strength was advocated in preference to the generally-used lines of 18, 20, 25 or 30 lbs. strength. Heavy lines were too bulky on the reel and were quite unnecessary to land the catch. The light-line sportsman acquired more skill and derived more pleasure.

The use of a leader about the same length as a rod improved action, saved wear on the line through guides, and also produced better fishing results.

Fly fishing and casting was for the more experienced years of the angler's development, and study and experiment was needed to become conversant with the best type of rods, lines, leaders and flies. Every angler owed it to himself and to the betterment of the sport to be familiar with the standard list of flies.

BOWLING

(Continued from Page 12)

Mixed League

McPhee, Sjungar, Seawright, Peacock, Sime, Donnelly, Dumencu, Connors, Curry, Cassell.

INCO CLUB, SUDBURY

Flood A

Stone, Boal, Simon, Eppick, Branning, Watkins, Munro, Bimm, Dunn, S. O'Hagan, F. O'Hagan, Armstrong.

Flood B

Zaitz, Martin, Gamble, Wolfgram, Doucet, Deschene, Ross, Thompson, Boyd, Lavoie, Hamlin, Kuzmaki, Johnston.

Copper Cliff

Edwards, Browne, Zinkse, Bronson, Beals, Vanderburg, Graham, Longfellow, Seguin, Trotter, Orasi, Bertuzzi, Irvine, Stevens, Rutherford, Duncan, Lawrence.

Refinery

Nomads, Lab, Sienos, Terriers, Shop No. 1, Shop No. 2, Scores, Labettes, Wire Bar, Anode, Office, Millwrights, Engineers, Yard, Casting, Sil. Ref.

Ladies' League

Walmesley, Zinkse, McCrea, Dinnes, Bell, Coagie, Branning, Sharp, O'Hagan, McKain.

COPPER CLIFF CLUB

10 Pins — Group I

Electrical, L. Hamilton; Town, J. Spalding; Accounting, A. Godfrey; Refinery, C. Beach;

Under the clever direction of Miss Gertrude Wilson, a member of the teaching staff, students of Copper Cliff High School delighted large audiences with a play at the annual Commencement Exercises held in Memorial Community Hall on the evenings of Nov. 20th and 21st.

The four-act comedy, "Quality Street", had its setting in England during the Napoleonic Wars. Miss Susan Throssel (Margaret Mowat), and Miss Phoebe Throssel (Margaret Sauve), were the two quaint characters around whom the amusing story evolved. Stage sets, costumes, makeup all added to the professional tone of the performance.

Cast is Photographed

The cast is pictured above: left to right, seated, Joy Meeks, Garwood Shields, Shirley Austin, Annette Gastien, Maureen Farrell, Margaret Sauve, Jim Chapman, Margaret Mowat, Ross McGauley, Barry Baine, Dorothy Sinclair; standing, Helen Martel, Aline Buck, Veronica Sauriol, Edith Salo, Bernard Pappin, Lydia Canapini, Ruth Watson, Mary Seppenson, Bill Prince; not in the group, Jim Gordon.

Another entertainment feature of the Commencement Exercises were the Girls' and Boys' Glee Clubs, whose keenly enjoyed selections reflected capable training by Miss J. O'Sullivan.

George Norman Valedictorian

Presentation of diplomas by K. S. Clarke, chairman of the High School Board, and of the Inco scholarships by J. R. Gordon, assistant to the vice president of the Company, highlighted the long program of awards for scholastic and athletic distinction. George Norman, who obtained the highest academic honors in his concluding year at the school, gave the valedictory address.

Orford, B. O'Brien; Combines, A. McEwan.

10 Pins — Group II

Efficiency, C. Nute; Winders, W. Beckett; Metallurgy, W. Armstrong; Safety, T. Crowthers; Process, C. Stemp.

Mixed 5 Pins

Group I

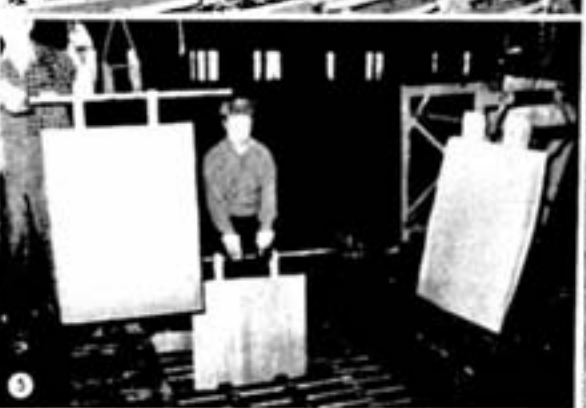
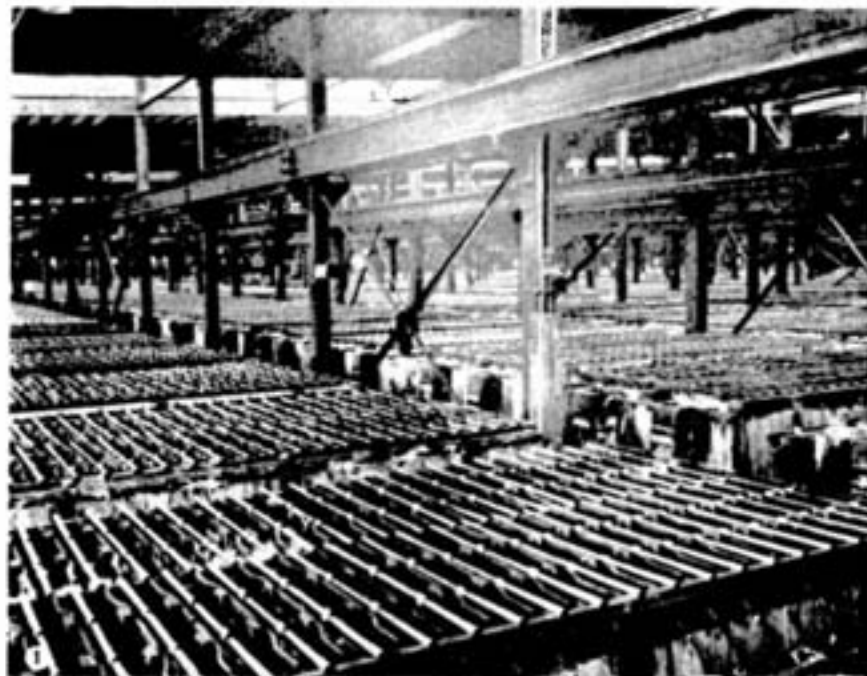
A. MacEwan, L. Montgomery, H. Flynn, T. Crowther, R. Longfellow, C. Coe, D. Ferguson, W. DeSoto.

Group II

C. Seemp, B. Hughes, T. Birney, H. Thompson, R. Crouse, J. Chapman, H. Graham, G. Harry.

Group III

W. Van Allen, E. Saunders, L. Hamilton, C. Beach, G. Thomson, M. Forsythe, B. Flynn, Dr. Seppens.



Interesting Cycle of Duties in Operation of Electrolytic Units

The whispering gallery of electrolytic magic at Port Colborne Refinery, where ore from the Sudbury District finally emerges in the form of gleaming silvery cathodes of nickel 99.9% pure, occupies almost 188,000 square feet of floor space.

Lined up in precision like soldiers on parade over that vast area are the 1638 tanks in which the magic of electrolysis is worked. In the first picture of the accompanying layout is a view of the new section of No. 5 Building at the Nickel Refinery. Watching over all those tanks 24 hours a day, to maintain maximum production and high quality product, involves a variety of operations which are as interesting as they are important.

Feeding The Anodes To The Circuit

In No. 2 of the layout the "raw material" is being introduced into one of the electrolytic tanks. Every 30 days is the cycle on which the anodes from the furnaces in No. 4 Building are fed to the circuit which dissolves the pure nickel for redepositing, leaving other metal values and waste material for subsequent handling. With the hoist on one of the 22 "bridges" which service the tanks Abel Crawford lowers a 500-lb. anode which Bill Booker directs into position in an electrolytic tank. At the end of 30 days three quarters of the anode will have gone into the process; the balance goes back to the furnaces.

It takes about 10 days for a full-grown cathode to build up on the pure nickel starting sheet which is the anode's "alter ego" in the electrolytic tank. On the day before the finished cathode, or "production" as the boys on the front line call it, is to be removed from the tank, an electrolytic unit man gives it a pry with his bar to make certain it is free of any entanglements and ready to be pulled. This facilitates the work of the bridgemen in gathering the ripe cathodes from the tanks. Unit man performing this operation at the left in No. 3 is Olivo Piagno.

The man on the right in No. 3 with the gadget in his hand is Orron Leroy. He's performing a task which is done daily on every growing cathode in the place—that of "clocking" to locate any sheets which are causing a short circuit through some form of growth and are thus hogging the current intended for the whole tank. When he finds a "short" he puts a wedge under the cathode to take it out of circulation until the cathode is removed.

And that's what is taking place in No. 4 of the photo layout. A unit man, in this case Julius Bodner, has spotted the wedged cathode and has withdrawn it from the circuit. In its place he introduces a new box and a young cathode which has been given a four-day incubator growth. In the background is George Williams, ready with the carrier on which he has brought the new box.

Pulling The Finished Cathode

Pay-off in the electrolytic department is pulling the finished cathode of pure nickel, the operation seen in No. 5 with Andy Cohoe removing the cathode from the tank while Don Randell operates the hoist on the bridge.

Other details of electrolytic unit operation include the task of the tank cleaners. Every four months each tank is stripped down and washed; the slimes which have gathered in the bottom of the tank are sludged to a hopper for further treatment; the mastic lining of the tank is repaired where necessary.

Add to all this the constant inspection to ensure that all goes well in the metamorphosis from anode to cathode, and you have some idea of what is involved in the day-by-day operation of the 1638 tanks in No. 5 Building at the Port, particularly if you remember that each tank contains 10 cathodes and 11 anodes.

Spent a Year at Famous Eldorado; Glad to Be Back

One thousand air miles north of Edmonton, and three hundred air miles north of Yellowknife on the shores of Great Bear Lake, is Labine Point, the site of Eldorado Mines. Long famous as a source of radium, Eldorado has taken on new importance with the coming of the atomic age and the urgent need of the uranium content of its large pitchblende deposits.

Spent A Year Up There

Bill McNeill, who returned to Levack last month after a year's employment at Eldorado, has some interesting sidelights to give on life in the rim of the Arctic circle.

Pitchblende, says Bill, is lustrous like coal but is harder and heavier. The vein often varies to a width of 18 inches, but even if it's only an inch wide it must come out—pitchblende is scarce stuff.

Approximately half of Eldorado's 200 men work underground, two shifts hoisting about 150 tons of ore daily. On the surface, ore is sorted and milled, and the resulting concentrate is packed in 100-lb. bags and shipped out during the summer months to Port Hope, Ont., for refining.

Transportation is Eldorado's major problem, Bill McNeill states. Light emergency supplies and perishable foods are flown in by company-owned planes, but much the greater part of the mine's requirements must be brought from Edmonton during the short summer naviga-



BILL MCNEILL

tional season . . . 1,800 miles by train, truck, and barge . . . a trip during which every pound of material is handled 16 times.

Oil is brought in some 350 miles from Norman Wells; an eight-mile portage is bridged by a pipe line, but the balance of the trip is by tanker scows.

Movies Are Flown In

For five months of the year it's steady darkness in that far-northern settlement, and for five months it's nothing but daylight. Fishing in the summer and skiing during the winter are the chief sports. Movies are flown in from Edmonton once a week; there's bowling and billiards in the community hall. Private homes house the 12 married couples and there are three bunk houses for single men.

Bill found it a pretty lonesome spot after the novelty had worn off, and he's tickled to be back at Levack with his wife, two sons, and laughter. One thing he doesn't miss for sure is the winter temperature at Eldorado—the mercury ducks down as low as 70 degrees there sometimes.

A crisis creates the energy to conquer it.—William Feather.

He Got 16 Suns in One Photograph



MIDNIGHT AT GREAT BEAR LAKE

This striking picture from the Land of the Midnight Sun was brought back last month by Bill McNeill, who has returned to Levack after a year of employment at Eldorado Mines. To take the picture Bill set his camera on a tripod and started his series of exposures at 11.45 p.m., making them at about 10-minute intervals. In the foreground is Crossfall Lake and in the background is Great Bear Lake.

Did You Get Yours?



A little too warm during the early part of the season for ideal conditions, and short on snow for tracking, deer hunting in the Sudbury District this fall nevertheless produced a better-than-average return for the nimrods who took to the bush for their favorite annual outing. There were few complaints when the curtain rang down on the season; those who got their deer modestly admitted success; the few who had no luck naturally weren't advertising the fact. The fine big buck in the picture isn't taking a cosy siesta; the stick to prop up his head is all that makes him look like that, because he's deadlier than a Sunday afternoon in Toronto.

Frood Football Lineup Which Won Star Cup



Transportation Workers Honored



A total of 170 years and 10 months of service with Inco was represented in the group of six transportation dept. employees who were honored by their fellow-workers at a social evening in the curling clubhouse at Copper Cliff Nov. 1.

Dean of the group, all of whom have retired on Company pension within the past year, was John Switch, who was employed by Inco in September of 1907 and had accrued service of 36 years and 11 months. Married, he is the father of a family of six. He was pensioned last July.

Left to right in the picture are the new pensioners, chatting with the superintendent of the transportation dept.: Tito Amento (35 years), John Switch, Supt. R. A. Elliott, James Rossi (27 years, three months), Sid Blackwell (28 years, three months), Joseph Denomme (26 years, six months). Sixth to retire, Kuusi Kajanen, who was unable to attend, had served 16 years and 11 months.

Cheques were presented to the guests of honor by Supt. Elliott, and an impromptu entertainment was thoroughly enjoyed, followed by refreshments.

PRINTED IN CANADA

After languishing in the Sudbury District for five years, football came back strong during the past summer and re-established itself in the Nickel Belt spotlight.

Final standing in the four-team league was: 1, Garson; 2, Frood; 3, Falconbridge; 4, Canadian Legion. The McCrea Cup was won by Garson and the Evans Cup by Falconbridge.

In the final match of the season on Sept. 22 Frood defeated Garson 1-0, and this, coupled with a 3-1 victory two weeks previously, gave them possession of the Star Cup.

Members of the Frood team are seen in the above picture; left to right, standing, R. Ellen, J. Harrower (trainer), J. Jardine (vice pres.), D. Hamilton, R. Seawright, W. Seawright, A. Rayne, A. MacDonald (manager), W. Gaylor, H. Harrower, A. Grassam (captain), C. Goodward, G. Freeland (president); kneeling, D. Parker, R. Elliott, B. Kemp, R. Houle, W. Young, J. Nemis, T. Thompson; in front, three youthful followers of the team, R. MacDonald, C. Young, W. Gaylor.

THE GUM-CHEWER

In Johannesburg, South Africa, an old lady sitting opposite a gum-chewing soldier in a suburban train smiled amicably, finally leaned forward and said apologetically:

"It's very kind of you to talk to me, wubur I am stone-deaf."

GETTING HIS PEP BACK

The word from Hot Springs, New Mexico, is that Bob Boehmer is winning his long fight back to health. The former Concentrator shift boss recently pitched into a one-man campaign to get a hospital for U.S. Army casualties located at Hot Springs. He has lobbied almost every big-wig in the land by mail, and has had the satisfaction of seeing the American Legion National Convention at San Francisco endorse his scheme without reservations.

HONEST CONFESSION

Do you remember the grease-monkey who, when asked what he'd done with his wages, answered: "Part went for liquor, part for women, and the rest I spent foolishly."

NATURE IS WONDERFUL

Ever hear of the cow with hiccoughs that churns its own butter.

CAREFUL SHOPPER

Young and inexperienced father, gazing at triplets the nurse had just brought out—"We'll take the one in the middle."



MONTY AND PERKY

Real chums are Monty Dale White and his dog Perky. The snap was taken during holidays last summer. Monty is the son of Mr. and Mrs. David White of Levack.