



VOLUME 5

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View of Frood-Stobie Open Pit



THE Frood section of Frood-Stobie Open Pit, seen in the above photograph, follows the general shape of the ore body, which outcrops as a gossan-covered ridge, 40 to 90 ft. high, rising abruptly from swamps and low ground. It is 6,500 ft. long, and varies from 250 to 1,370 ft. in width, with an average of 640 ft. Mining has reached a depth of 205 ft. below the general yard level.

As haulage is entirely by truck, road layout has received special attention in the layout of the Pit. There are two roads into the Frood

section, one entering to the north and one to the south of the crushing plant. They are 30 ft. wide, spiral around the sides of the Pit at a grade of 8%, and are surfaced with crushed rock.

Visible in the picture are some of the 26 churn drills, the seven 4¹/₂-yard electric shovels, and the 11 six-wheeled 21-yard trucks used in the Pit operations.

The Stobie section of the Pit, essentially the same in appearance, is elliptical, 1,400 ft. long with a maximum width of 1,800 ft.

Definitely a "war baby" in that it was designed and operated to speed the output of victory-vital nickel and copper, Frood-Stobie Open Pit made a magnificent contribution to the success of the Allies. Up to the end of 1944, from a standing start in 1938, it had produced 23,700,000 tons. As a comparison, and with no disrespect to a justly famous underground mine, the output of the great Frood was 56,300,000 tons to the end of 1944 from 1899.

\$10,000 Windfall Spelt "Happy New Year" To Mr. and Mrs. Roy Basso and Family



JUST before 9 o'clock on New Year's Eve, when old 1945 was tottering on weary legs toward the end of his trail, Lady Luck in her snappy new invisible helicopter circled low over Gatchell subdivision. Air-parking her machine for a minute she reached out and waved her magic wand over a snug little stucco bungalow, No. 21 Demorest St.

At that second, down on the stage of the Capital Theatre, Sudbury Daily Star publisher W. E. Mason reached into a big white drum containing more than 60,000 draw ticket stubs. Electrically driven, the drum had rotated for five minutes; the stubs were well shaken up. Mr. Mason drew out one ticket, smilingly read off the name and number: Mrs. Roy Basso, 13192 BD.

As fast as a car could take them there, a group of men sped to No. 21, Demorest St., gently broke the stunning news to Mrs. Basso: "You have just won \$10,000 in the Kiwanis Club draw!"

In the photo above is the family which Lady Luck crowned with joy at the dawn of a new year: front, left to right, June, who is 12 and is in Grade 6 at Gatchell Public School; Kenny, who will be 3 in March and thinks June is tops even if he's playing hard to get; Doreen, who is 11 and in Grade 5—she had a bad cold New Year's Eve but found that a very speedy cure for the sniffles is to have your mother win \$10,000; behind them, their parents.

Both born in Sundridge, of Scotch and Irish ancestry, Mr. and Mrs. Basso came to reside in Sudbury 12 years ago when Roy joined the Inco force at Copper Cliff. He was a member of the Transportation Department; for eight years and then switched to the Mechanical Department as hoist fireman. His twin brother, Harold, is also an Inco worker, a conductor with the Transportation Department.

When the heady excitement of their good fortune had passed, Mr. and Mrs. Basso said "whoa" to themselves. Sensibly they budgeted their windfall: the small balance owing on their home would be paid up first, then there would be a new refrigerator, a washing machine that's been on order for months, and one or two other electrical appliances. When the new cars are available they'll get one. The rest goes into a nest egg, and stays there. Sales-

men, save your shoe leather—stay away from that door.

Mrs. Basso had been buying draw tickets for years, not only in Sudbury but by mail from many points in Canada. She purchased the winning ticket by mail on Saturday evening, Dec. 29, from the Kiwanis Club office. She and her husband celebrated their 15th wedding anniversary on January 6—and how!



PORT COLBORNE

R. Otterman (Army), P. Marx (Army), C. Burke (Army), F. Fox (Army), C. Davison (Army), R. McIntyre (Army), I. McIntyre (Army), D. Randall (Army), R. Sauer (R.C.A.F.), R. Cochran (R.C.N.V.R.), J. Torok (Army), John Swartz (Army), James Duff (Navy), P. Balon (Army), Bill Seep (Army), J. B. Morrison (R.C.A.F.), Jas. Sibbald (Army), H. Quenneville (Navy), J. Jamieson (Army), Howard Watson (Army), Alfred Eden (Army), O. H. Roy (Army), Robt. White (R.C.A.F.), J. Byng (Army), E. Dunn (R.C.A.F.), Edw. Byng (Navy).

COPPER CLIFF

John M. Pickens (Army), Gordon E. Adams (R.C.N.V.R.), Fiorindu Didone (Army), Phillip Doran (Army), William Fitzsimmons (Army), Gordon J. Hughes (Army), James W. Hughes (Army), Wilmer Hughes (R.C.N.V.R.), Charles W. Linham (Army), James R. MacDonald (R.C.A.F.),

Karl E. McIntosh (R.C.A.F.), William McKinnon (Army), James P. McTaggart (Army), Edward O'Reilly (R.C.N.V.R.), Rene Plouffe (R.C.A.F.), Rudolphe Regimbal (R.C.A.F.), Samuel O. Scott (Army), Harris B. Somers (R.C.N.V.R.), Donald Young (R.C.N.V.R.), John L. Barr (R.C.A.F.), Floyd Cleary (Army), Arthur H. Closs (R.C.A.F.), Norman E. Hives (Army), Harold Hudson (Army), Gordon Kennedy (R.C.N.V.R.), John Lidstone (R.C.A.F.), George R. McConnell (Army), Fred McCue (Army), John Robb (Army), Harry Thompson (R.C.N.V.R.), Nathan Utley (Army), Arthur R. VanAllen (R.C.N.V.R.), John Archibald (R.C.A.F.), Robert Beckett (R.C.N.V.R.), Harry Bertrand (R.C.N.V.R.), Oliver Hill (Army), William H. Marsh (Army).

FROOD

Harry C. Bell (R.C.A.F.), Fernand Brun (R.C.A.F.), Robert P. Charley (R.C.N.V.R.), Jack Dennis (R.C.A.F.), Lloyd G. Johns (R.C.N.V.R.), Andrew Lennie (R.C.N.V.R.), Charles F. Lennie (R.C.N.V.R.), Kenneth A. Maggs (R.C.N.V.R.), Romeo Poulin (Army), Earl Sigurdson (R.C.A.F.), Cyril Varney (R.C.N.V.R.), James A. Brown (R.C.A.F.), Roland Gignac (Army), Onesime Martin (Army), Robert Peacock (R.C.N.V.R.), Maurice J. Simpson (R.C.A.F.), Samuel Davidson (R.C.A.F.), P. A. Greenwell (R.C.A.F.), Ernest V. Horness (Army), Clarence Mulligan (Army), John Shawaga (R.C.N.V.R.).

LEVACK

Peter Beckett (R.C.N.V.R.), George Lockhart (R.C.N.V.R.), Walter Gorham (R.C.A.F.), Harold Gorham (Army), Bruce Hykin (Army), Leon J. Mallette (Army).

MURRAY

James R. Dickson (R.C.N.V.R.), Ernest J. Kilroy (R.C.N.V.R.).

CREIGHTON

Jean Groulx (Army), David Kidd (R.C.A.F.), Reginald MacDonald (Army), Jean P. Chenier (Army), Arthur Hodgins (Army).

OPEN PIT

Gordon Quinn (Army), Overton Davison (Army), John E. Serpell (R.C.N.V.R.).

GARSON

David Wm. Brady (Army).

CONISTON

William Easton (Army).

HURONIAN

James Lawson (R.C.A.F.), COPPER REFINERY

Reginald Hiscock (Army), Helen Ledingham (R.C.A.F.), William C. McBain (R.C.A.F.), Evan Gordon (R.C.A.F.), Bernard McDermott (Army), Joseph Henry Gagne (Army).

TOWN

Murdock MacLennan (R.C.A.F.), Ernest Paul (Army).

GENERAL

George T. Morrison (R.C.N.V.R.), Darcy Meehan (Army), Thomas G. Moore (R.C.A.F.), Kenneth G. Robb (Army).

YULETIDE GREETINGS

Telegrams and cablegrams extending Christmas greetings and good wishes for the New Year to all Inco people in the Sudbury district were received during the Yuletide season from: Robert C. Stanley, New York, president of the Company; Dr. John F. Thompson, New York, executive vice-president; W. T. Griffiths, London, Eng., chairman of the Mond Nickel Co.; H. M. Brown, Huntington, W. Va., general supt. of the Huntington plant; H. W. Walter, Port Colborne, general superintendent of the Nickel Refinery; L. H. Cooper, London, Eng., secretary of the Mond Nickel Co.; C. E. MacDonald, Toronto, manager of Canadian nickel sales.

Similar messages were sent by R. L. Beattie on behalf of Sudbury district employees.



CREIGHTON HONORS ITS WARRIORS

The town of Creighton did itself proud the evening of Jan. 25 with a bang-up welcoming party for its men and women who have returned from the services. Gold signet rings and scrolls were presented to all able to be present, and were accepted by parents or next-of-kin on behalf of those who made the supreme sacrifice or are still overseas. The town sent 93 men and six women in answer to the call of their country.

Supt. Ted Gaetz, as chairman of the program, extended a warm official welcome to the guests of honor, and short addresses were given by Rev. Fr. Regan, Rev. G. Gravenor, Miss U. M. Black, and Jim Devonshire. Officiating at the microphone during the presentations was Wilf Moore. The Army Cadets under Captain Buddy Johnston formed a smart guard of honor, and a group of public school girls, led by Mrs. Victor



Trembley, gave a 15-minute program of songs. Lunch was served the returned personnel and their relatives, and in the accompanying layout are snaps of some of the happy guests at the dining tables.

Dancing completed the evening's entertainment.

Five Creighton families sent 15 men to the war front, with three sons each from the homes of Mr. and Mrs. W. Blackwell, Mr. and Mrs. Wm. Goto, Mr. and Mrs. Nick Kolybaba, Mr. and Mrs. Wm. Peacock and Mr. and Mrs. Walter Wilson.

From the following homes, two sons volunteered for the forces in this last war: Mr. and

Mrs. Ben Davey, Mr. and Mrs. Art Huson, Mr. and Mrs. H. Hodgson, Mr. and Mrs. E. Kivisho, Mr. and Mrs. Orville Simpson, Mr. and Mrs. Nick Wallace, Mr. and Mrs. Dan Dumenco, Mr. and Mrs. R. Alemany and Mrs. Emil Bernier.

Mr. and Mrs. Hugh Simpson had a son and a daughter in the services, and two daughters and a son came from the home of Mr. and Mrs. Barney Cum.

For Miss U. M. Black, principal of Creighton school, the occasion was a particularly happy one. Most of the young men and women who were the honored guests had been

her pupils in school. In her address the popular teacher said, in part:

"Let me welcome you back to Canada and to Creighton—to this land so free from the ravages of war and destruction because you and others like you have defended it so ably; to this land which I hope will offer you peace and opportunity."

"I see before me many familiar faces, who a few short years ago were trudging, often unwillingly it is true, to that hall of learning which tops George St. Hill, and were sitting in the same seats occupied by Creighton children of today."

"Now my mind wanders back to classrooms

and future lessons, and you studying history (how you loved it!), listening to history lessons, writing history notes, copying them over and over in preparation for the final exams.

"That scene has changed. In the past few years you have become the makers of history. You have fought to obtain the peace for us. Your task is not completed—you will have to teach us to keep that peace."

"Your outlook on life has been broadened by your experiences. It follows then that you fought for Truth. It also follows that self and selfish ambitions will have little part in your lives, but the milk of human kindness and charity will nourish your every thought, word, and action."

"May we who stayed behind, by our consideration of the rights of others and our actions toward them, not only in our community but in our country and in all countries, bring about that Brotherhood of Man for which you have fought and others have died."

Two Veterans Have Unique Distinctions

Two outstanding new members of Inco's Quarter Century Club are Bob Mornan, the first Copper Refinery representative to wear the prized 25-year-pin, and Alex Godfrey of the Accounting Department at Copper Cliff, the youngest oldest on the Club's roster. They were received into membership at the meeting on December 12 at the Nickel Range Hotel.

Born in Jamaica, son of a Baptist minister who also served as inspector of schools, Bob Mornan came to Canada in 1909 and promptly landed a job as printer's devil with Southam Press in Montreal. Eventually he graduated into the precious metals game which was to become his life work, taking a post with a firm of manufacturing jewellers. He picked up



BOB MORRAN

some experience in chemistry and analysis with Milon-Hersey, Montreal.

After serving overseas in World War I with the Royal Montreal Regiment, he took his discharge in England and signed up with Mond Nickel Co. at Acton. After 11 years and 11 months there he was transferred in March 1931, to the Copper Refinery, where he is in charge of the Precious Metals Department; gold bricks and bars of silver are old stuff to him.

Married in 1917, Bob is the proud father of a son, Robert J., of Niagara Falls, and two daughters, Mrs. L. A. Bellamy and Mrs. W. McAlpine, both of Sudbury.

Badminton and skiing were his favorite sports up until a few years ago when discretion overtook enthusiasm; now he's long on gardening and fishing. He is a member of the



ALEX GODFREY

Y.M.C.A. board of directors and is a highly valued worker in the Y's Men's Club.

Although he is only 39 years old, Alex Godfrey has the unique distinction of having served the Company for more than 25 years. Starting as a messenger boy in the Port Colborne offices in June, 1920, he is now assistant works auditor at Copper Cliff.

The youngster of the Quarter Century Club was one of a family of four born in Edinburgh, Scotland, which accounts for his nickname, Scotty; his father was a moulder in a steel foundry. In April, 1913, the family came to Canada, residing at Port Colborne where relatives had already located.

Graduating from messenger boy at the Nickel Refinery, Scotty did turns in the file room, on the payrolls, and at the stock desk. When he was transferred to Copper Cliff in Sept. 1928 he was assigned to inventory work with Charlie Dorian, and the following year helped with the interesting job of transferring the Mond Nickel accounting department and assets to Inco when the two companies were merged. Inventory and appraisal of the four Mond plants then operating, Coniston, Levack, Garson, and Frood Extension, was part of the assignment.

During the next few years he gained a broad knowledge of the intricacies of Inco's accounting system. In Feb. 1935, when R. L. Beattie moved up from the Works Auditor's office to become general assistant to the General Manager, J. R. O'Donnell succeeded him and Alex Godfrey was named assistant works auditor.

In his earlier years at Copper Cliff, Scotty was a strong tennis player, teaming with Bert Flynn to form a doubles combination respected throughout the North. Curling and badminton in the winter and an occasional fling at golf in the summer are his sports now. He has been secretary of the Inco General Athletic Committee since Stanley Stadium was built in 1934. Married in June, 1935, he has one son and three daughters, and it takes him all day Sunday to answer the questions they think up during the week.

Scotty's closest rival for "youngest member" honors in the Quarter Century Club is Alf Mub, skimmer in the Converter Building at the Smelter. There's about a year's difference in their ages.

HILLBILLY HILDA'S LAMENT

"Me lov is gone
He dun me dirt
Me never noo he was a flirt
To them hoo lov
Let I forbid
Let they be dood
Like I bin did!"

Underground Crews Improve Accident Frequency 100%

The combined accident prevention efforts underground at Creighton, Garson, Frood, and Levack mines during 1945 resulted in a 100% cut in the number of accidents over those of 1944.

The Mines Mechanical departments at all mines reduced their frequency of accidents by more than 100% and the Electrical Departments at the mines came through with a year clear of accidents.

All supervision and crews should be proud of this fine showing and we compliment them. Especially do we congratulate the underground shift bosses and their crews who went a full 12 months without an accident, and so far the shift bosses whose crews accomplished this fine record:

GARSON: Lorne Mitchell, Ralph Armstrong, Larry Hillman, Grant Baker, Bill Rule, Alex Aff, Albert Boucher, Tom Ballantyne.

LEVACK: Martin Callaghan, Taisto Koula, Alf Armstrong.

FROOD: Dave Fortin, Arnold Maitland, Dave Lennie, Russ Empie, Jack Sunquist, Doug McCowan, Sid Sheehan.

CREIGHTON: Bill O'Neill, Johnny French, Ted McChrany, Gar Green, Eddie Moffatt, Cord Adams, Hugate Finn, Slim Pera, Bill Ahlgren, Toivo Roendahl.

IN MUSK OX PARTY



Lieut. Jim Croll (right), a former Inco man who saw service with the Canadian Navy during the war, is the only naval man selected for the famous Musk-Ox expedition which will travel through the Arctic over a 3,200-mile route from Churchill to Edmonton. Entirely mobile, the expedition will test Canadian military equipment under the most severe weather conditions. It will receive its supplies by air along the route. The trip is expected to take 81 days.

In his navy career Jim rose through the ranks after service on six ships to become a member of the Canadian Inter-Service Research and Development Branch. His wife, the former Barbara Taylor of Copper Cliff, is residing with her parents at Port Hope, Ont.

83-TON "SPARE PART" INSTALLED IN No. 2 CRUSHER AT OPEN PIT



A MAJOR repair job, in which the "spare part" weighed almost 83 tons, was the installation of a new top shell in the 54-in. Traylor gyratory crusher at No. 2 Crushing Plant, Frood-Stobie Open Pit. The big task was completed last week-end by the Mines Mechanical Department. The 83-ton casting was secured in its place on top of the middle frame of the crusher by 24 3½-in. bolts tightened under 10-ton pressure from the auxiliary hoist through a wrench and snatch block arrangement.

The top shell of the huge crusher, all parts of which total 420 tons, had cracked once before. This was in Feb., 1943, and three crews of six welders each worked for 10 days to patch it, using more than two tons of welding rod. In order that the war effort might not be endangered by further breakdowns, an order for a standby shell was promptly placed with the Traylor people. Only half a dozen foundries on the continent were equipped to produce a casting of such size, and these were all glutted with orders for war material, but the Open Pit job got top priority.

Owing to its height and weight the casting was three weeks in transit from the foundry at Pittsburgh to the Traylor plant at Allentown, Pa., where it was machined. A special "well" type railroad car had to be supplied for shipping it to Copper Cliff; to pass under bridges and through tunnels it had to be slung only five inches above the ball of rail. Passing Frood Rockhouse it had only three inches clearance under the trolley wires, which were strung long before anybody thought of handling "spare parts" 17 ft. 10 in. in diameter,

8 ft. high, and heavier than 1,000 men.

Until it was called into service last week the spare shell was stored in a temporary shelter near the Crushing Plant. The old shell will be repaired and kept as a standby.

In the accompanying photo the new shell is seen as it was hoisted for installation in the crusher. Cruteman on the job is Cliff Belanger; the two riggers on the top of the casting are "Dusty" Barrett and Harry Nelson. Standing at left are Jim Miles, master mechanic; Jack Parry, crusher plant foreman; George Wilson, crusher operator. On the right are Romeo Chatelain, maintenance mechanic, and Leo Sabourin, trimmerman.

HE LIKES IT THAT WAY

The drunk sitting at his favorite bar was startled when a horse entered the establishment and in clear, understandable English ordered two Martinis with two olives in each.

After the bartender had mixed 'em up, flipped two olives in each cocktail glass and poured 'em out, the horse swallowed his drinks

in quick succession, paid his bill, and "Good afternoon, gentlemen," and walked out.

"Say," said the drunk, "isn't that a bit unusual?"

"No," replied the bartender, "I frequently put two olives in a Martini."

New Blood Puts More Pep Into Curling at Cliff

With about 25 new members, and several former faithfuls returned from the wars, Copper Cliff Curling Club is in the midst of a banner season.

Besides the usual run of pick-up games, five competitions are scheduled for completion before the ice goes out: the inter-rink contest, which is now into the final round; the Collins Cup, in which play is well advanced; the senior skip event for the Waterbury Trophy; the celtic contest for the Henry Trophy; the single rink, only knockout event on the list.

Clarence Harrison is the "hot" skip as the Triangle goes to press, with seven wins out of eight matches in the inter-rink and four straight in the Collins Cup. Stan Spratt, in his third curling year, is showing great generalship as a substitute skip.

Among the curlers welcomed back from the services are Ted Harber, Wally Urwin, Harold Hudson, Scotty Grigg, Arnold Ross, Carl Wilson, Bill McKay, George Charland, and Jim Rae; new members from the services include Clarence Meaden, W. Flowers, and George Chisholm.

Other enthusiasts making their debut this year are Alex Crossgrove, N. Meaden, V. Johnson, Mel Luck, Alan Boyd, S. Merla, K. Manner, G. Nowlan, L. Brooks, Ed. Sutherland, W. Currie, "Doc" Bennett, R. H. Clark, W. "Termite" Craven, J. McDonald, P. H. Montgomery, B. Wood, R. Chambers, Don Fraser.

Archie Guthrie, an Inco pensioner, is staging a triumphant comeback after 20 years away from the game. Another prodigal son who has returned to the roost is Dan Thomas, absent for three years.

Bill Jessup is providing first class ice again this year, and also shares the referee assignment with George Hudson; competition is keen and some evenings they are called on for as many as a dozen decisions.

Charlie Tuttle is back at his post behind the refreshment counter.

Have Respect for Cleaning Liquids

Here's another word of caution from W. A. Humphries, Inco Fire Inspector:

"It should be unnecessary to state that gasoline is an extremely dangerous cleaning liquid and should never be used for this purpose by householders. However, commercial cleaning liquids are sold under various trade names, although it should not be assumed that these are safe under all conditions just because they are sold as cleaners.

"Of these, more than 100 cleaning liquids used in the U.S. and Canada are classed with kerosene (coal oil) in respect to fire hazard by Underwriters' Laboratories. There are probably many more in use whose fire characteristics are not classified. Among those which ignite and burn as readily as kerosene are Varsol, Stoddard Solvent, Shell Solvent, Shell-Sol, Sinclair Solvent, Sovasol No. 5, and B.A. Dry Cleaners Solvent.

"The surest way to find out how readily a cleaning liquid burns is to ignite a little of it outside the house. If it burns at all it should be treated with respect."

Miss Nightingale Really Started Something!



A MONTH or so ago a Triangle reader wrote in to tell us about his operation. He used one short paragraph to describe what the doctors did to him, and three long paragraphs to describe the nurses. So we dropped in at the Copper Cliff Hospital to check on his story—strictly in the interests of honest reporting, you understand. We came away quietly cursing the robust health of our appendix, gall bladder, thyroid, etc., etc.

There is a picture up above of the nurses at the Copper Cliff Hospital, but a camera has its limitations.

Now, fellows, here's the gist:

Back row, left to right: Miss Betty Hughes of Capreol, trained at Hamilton General Hospital; Miss Helen Blackwell of Copper Cliff, trained at Hamilton General Hospital; Miss Gladys Burnside of Massey, trained at Plummer Memorial Hospital, Sault Ste. Marie; Miss Dorothy King, Massey, Plummer Memorial Hospital, Sault; Miss Gertrude Charlton, Little Current, Ottawa Civic Hospital; Miss Margaret Rennie, Niagara Falls, Toronto General Hospital; Miss Winnifred Shreeve, Coniston, Toronto General; Miss Cleila Cayton, Sundridge, St. Michael's Hospital, Toronto; Miss Grace Davey, Durham, Owen Sound General and Marine Hospital.

Front row: Miss Mary Tongue of North Bay, trained at St. Michael's Hospital, Toronto; Miss Beth Davidson, Regina, Saskatchewan, Hamilton General Hospital; Miss Nell Shames, Espanola, St. Michael's Hospital; Miss Allegra Walker, Superintendent of Nurses, Strathroy, Western General Hospital, Toronto; Miss Muriel Daly, Capreol, St. Michael's Hospital; Miss Joan Stannard, North Battleford, Saskatchewan, Toronto General Hospital; Miss Phyllis Brown-Cadman, New Liskeard, Ottawa Civic Hospital.

Anyone who has been a patient in Copper Cliff Hospital knows the expert care and bright, cheerful, health-restoring attention which this talented staff provides; anyone who has not been a patient in Copper Cliff Hospital should find something wrong with himself as soon as possible.

Ow, that lumbago is bothering us again!

HEIGHT OF TACT

A diplomat is a person who can tell you to go to the devil, so pleasantly that you're rarin' to get started.

HAS FINE RECORD



Seen here making out his daily report is Eddie Moffat, a shift boss at No. 5 Shaft, Creighton Mine, who at the end of 1945 had led his men through 68,000 shifts without a lost-time accident. Since he became a shift boss in May of 1941 Eddie hasn't had an I.R.A. to report, a record of which he is naturally very proud.

He was born on a farm near Alliston, Ont., and started at Creighton as a driller in June of 1937. His wife is the former Amy McNab of Alliston and they have three "G-men" in their family, Gregg, Gary, and Grant.

Eddie has his eye on the 100,000-safe-shifts mark, and if he gets the splendid co-operation from his men in the future that he has had in the past, he'll make it with colors flying.

Wolves—Legion Likely Finalists

It looks like the showdown for Nickel Belt hockey laurels this year will find Sudbury Wolves pitted against Legion in a well-matched duel that should produce some pretty exciting entertainment.

A preview of the probable league final will be seen at Stanley Stadium on Feb. 8, when these two teams tangle in a regular scheduled engagement.

Wolves, whose roster includes Wilf Lemieux and Jim Dewey from last year's Open Pic lineup, and shifty George Hastie of Falconbridge, are on top in the league standing, with Legion second, Copper Cliff Redmen third, and Creighton fourth.

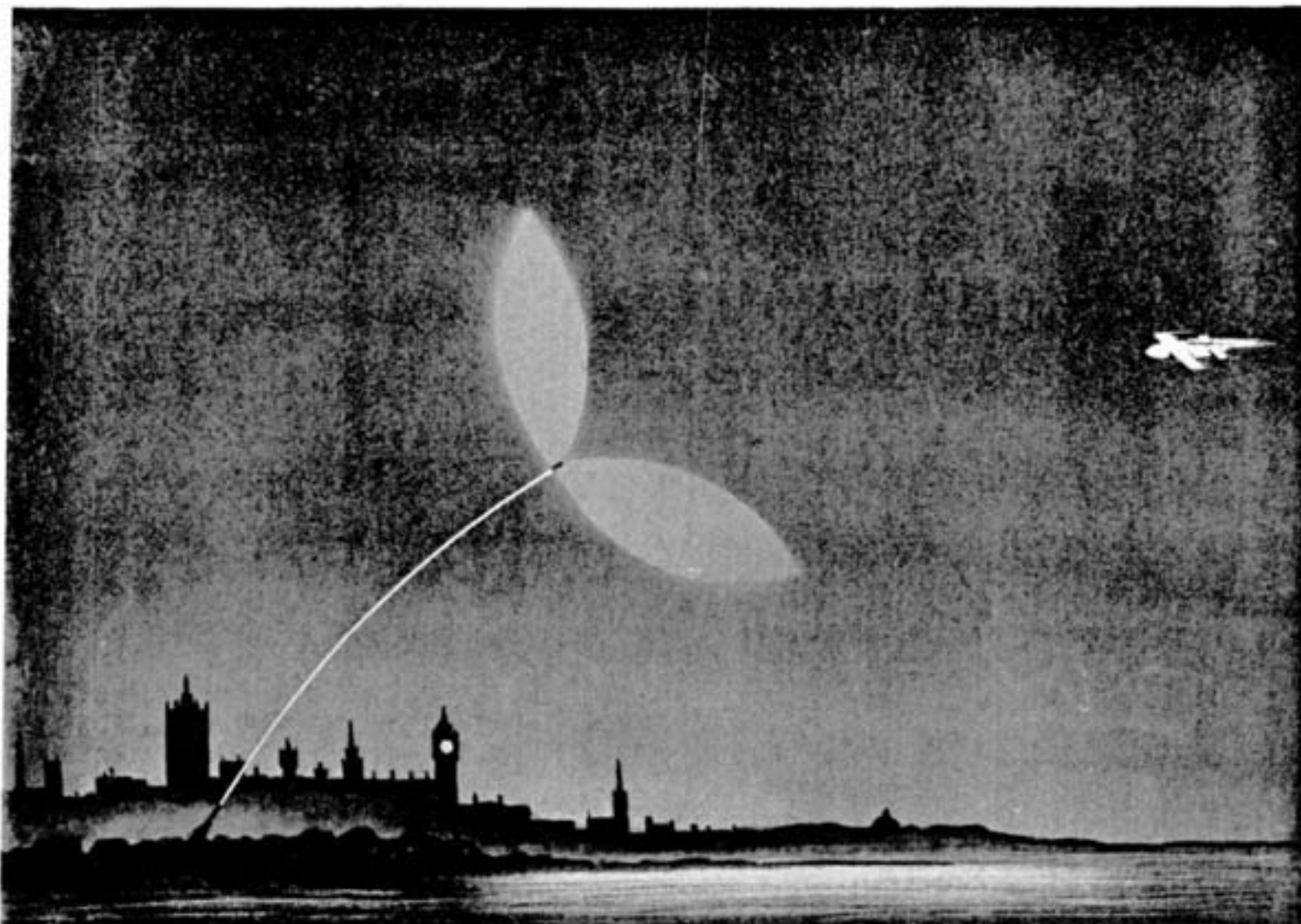
Redmen, mostly very promising juniors who have come up from the Cliff midjet loop, have been giving a good account of themselves in the fast senior company. Gordie Heale and the McClellan-Flynn-Cooney line are standouts on the team. Creighton has found it tough going this season, but will undoubtedly be back next year with a stronger lineup.

Some mighty fine hockey is being played in the Scholastic League, in which the standing of the teams at press-time was: Copper Cliff High School, Sacred Heart College, Sudbury High, and Tech. As in the Nickel Belt, the two leading teams are excellently matched and really make the fur fly.

Booming now in Sudbury as well as Copper Cliff and Falconbridge, and soon to be operating in Garson, the Midjet N.H.L. setup is giving hundreds of boys the benefits of good coaching and properly organized competition.

THE LADY KNOWN AS FLU

A bunch of germs were hitting it up in a bronchial saloon; Two bugs on the edge of the larva Were jazzing a ragtime tune, While back of the teeth, in a solo game, Sat Dangerous Dan Kerchoo, And watching his pulse was his light of love, The lady that's known as Flu.



After leaving the gun, the tiny radio set in the fuze begins to send out a tulip-like pattern of radio waves.

RADIO TUBES SHOT

CANUCKS HELPED DEVELOP IT

Toronto, Jan. 22—Assistance in development of the "proximity fuze"—commonly ranked second in importance to the atomic bomb in weapons developed during the war just passed—was given by a crew of professors and scientists at University of Toronto, it was revealed here by Dr. C. J. Mackenzie, president of the National Research Council at Ottawa.

The proximity fuze was described as "a little broadcasting and receiving station within the nose of the shell, which explodes the shell when it is within 100 feet of the target."

Though the spectacular effects of the atomic bomb together with the implications it holds for the future has taken a greater grasp upon popular imagination, another secret weapon played at least an equal part in winning the war. Possibly its results—since they were felt earlier—were even greater in contributing to victory.

This weapon is the VT (variable time) fuze—also known as the proximity fuze, a device that literally can see the target it is sent to destroy and explode its shell automatically when that target comes within its "sight."

It is one of the outstanding examples of how electronics has jumped ahead in the war years and an example that promises to bring into industry and the home devices whose potential achievements seem to have few limitations.

Actually the fuze consists of a tiny radio sending and receiving set, together with complementary safety devices and detonating equipment. After leaving the gun the set starts to send out a tulip-like pattern of radio

waves. When the shell carrying the fuze reaches from 30 to 100 feet of the target, the waves reflected back to the fuze are sufficiently intense to trip an electronic switch and explode the shell. The deadly fragments from the shell form a barrage. This virtually eliminates the fundamental weaknesses of both the contact fuze, which, like a rifle bullet, depends upon direct contact with a target for effect, and the time fuze, in which efficiency is subject to errors in calculation that can be caused by so many mechanical and human factors, as well as by the movement of the target or the contour of the land.

Effectiveness of the fuze, measured by many combats on land, sea, and in the air, is estimated conservatively to increase the fire power of one gun to equal that of three or four guns firing shells equipped with time or contact fuzes.

Fired at robot bombs directed against England, in the first week VT-fuzed shells destroyed 24 percent of all targets engaged. This rose to 46 percent the second week, 67



At the moment the target enters the wave field, the waves are reflected back to the fuze and detonate the shell.

THRU A GUN

percent the third week, and 79 percent the fourth week. In the Pacific they virtually destroyed the value of the Kamikaze, or suicide planes.

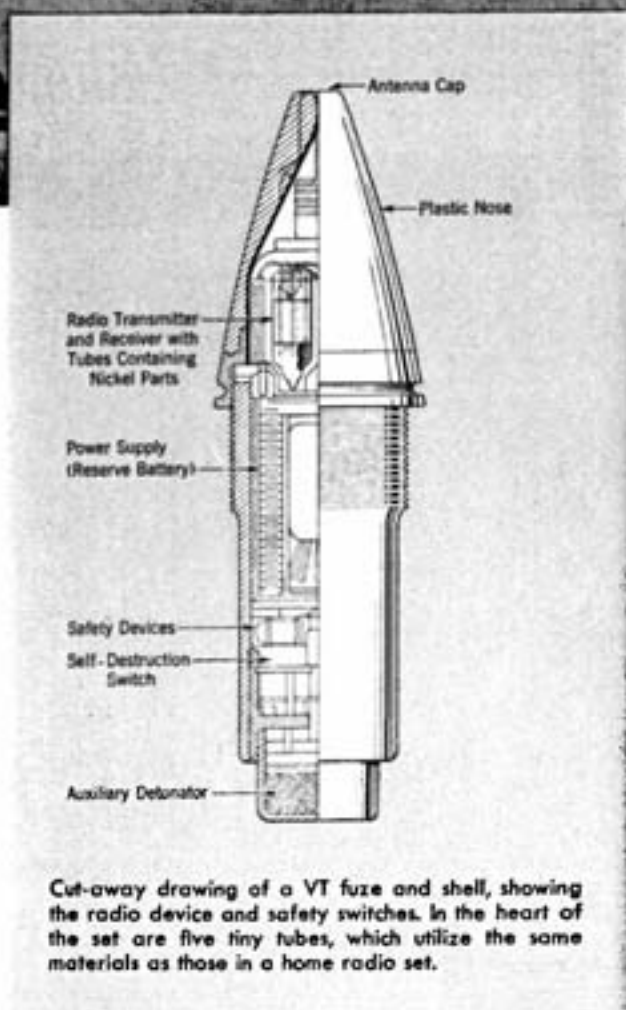
The fuze originally was a U.S. Navy project, designed by section T of the Office of Scientific Research and Development with the co-operation of leading radio tube producers, to defeat aerial attack against surface ships.

The possibility of a T-fuzed shell falling into the hands of the enemy and thus revealing its secrets at first prevented its use over enemy-held land. However, it was later released for this purpose and played a decisive part in the Battle of the Bulge when fired in shells from land guns, and in many of the battles for the Pacific islands when fired in naval shells.

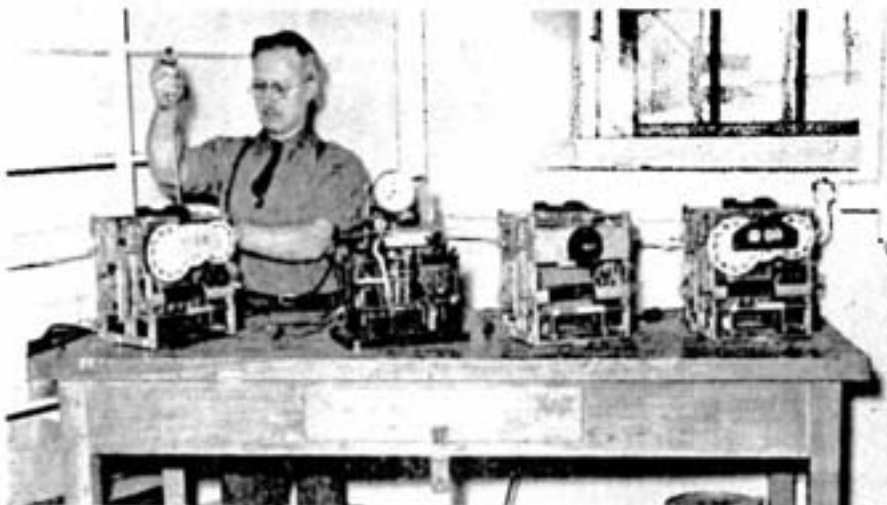
Many highly complicated circuits and intricate devices make up the VT-fuzed shell. Their development for operation under normal conditions would be difficult. But when these elements must be engineered to withstand the terrific acceleration, the impact and centrifugal forces involved when they are fired through a gun, the problem is magnified many times.

The most critical elements are the five tiny tubes that form the heart of the radio set. These tubes are similar in appearance to those in many home radio sets except that they are much smaller—less than two-thirds the size of a man's little finger. Yet, despite their minute dimensions, these tubes withstand an acceleration of over 20,000 times gravity (or 20,000G.) where a mass of one pound will be subjected to a force of 16 tons. An acceleration of 9 to 10 times gravity (9-10G.) will black out an airplane pilot.

(Continued on Page 101)



Cut-away drawing of a VT fuze and shell, showing the radio device and safety switches. In the heart of the set are five tiny tubes, which utilize the same materials as those in a home radio set.



There's 1000 Parts in That Clock You Punch Every Day

You take a time clock, now.

No, you take it.

No, YOU take it.

Well, if nobody will take it, let's send it to Tony Smythe. He'll take it apart.

Tony likes time clocks, which is a good thing because the Mining and Smelting Division has 57 of them and he overhauls each one about every two months. Above is a picture of him in his workshop in the General Office building.

Of the 57 clocks eight are of the older type, key-wound and spring driven, and are usually installed on construction jobs or similar spots where an electrical hook-up is not handy. The remainder are the modern electric type; each has about 1,000 parts and it takes eight hours for an overhaul job. A great improvement over the old hand-operated style, the automatic electric clock will punch out 100 men a minute, as against 25 for its predecessor, a mighty important thing when a fellow is in a hurry to get home to his panache.

An interesting feature of the automatic clock is the program drum, an ingenious device which can be set so that at a specified time, through special connections, doors can be locked or unlocked, whistles blown, or bells rung. Tony is working on a combination for the program drum whereby it will fry a mess of bacon and eggs, shovel the snow off the front walk, and take out the ashes.

Before he joined Inco in June of 1930, Tony had a highly varied career. Born at Columbus, Ont., near Whitby, in 1902, he had been among other things an ignition service mechanic in Buffalo. He was a member of Ben Hoke's Hawaiian orchestra; to qualify as a full-blooded Hawaiian he assumed the name of Tony Koniama, took a bath in cocoa powder every two weeks, hung a lei around his neck, and played the saxophone. After two and a half years of this he repented and signed on with the Addressograph people in Toronto, where he spent almost five years as a service mechanic.

With Inco he handled many assignments, backtracking on the reverbs, crane-man, roaster operator, feeling man, and watchman. Then, in 1939, he was appointed time clock doctor, trouble shooter in the stencil room, and platemaster in charge of numbering all Inco equipment for inventory purposes.

He was married in 1910 at Sudbury to Miss Edna Buisson, whose father was patrolman for the Haronian Co. for 21 years. They have a son, Raymond, who is a member of the Maple Leaf team in the Copper Cliff Midget Hockey

League, and a daughter, Patsy Ann, aged four and a half.

An inveterate sports booster, Tony often helps out at baseball and hockey events by taking tickets at the gate, with a cheerful word for every customer. His hobby is keeping tropical fish, in a 15-gallon tank which is low on occupants just now because somebody is always coming along and persuading him to part with a few finny beauties.

RADIO TUBES SHOT THRU A GUN

(Continued from Page 9)

The acceleration force to which tubes are subjected in firing is somewhat less than 2,000G. But to allow a sustainable margin of safety every tube produced by Sylvania Electric Products, Inc., producers of approximately 96 percent of those used in VT fuses, was spun in a centrifuge to an acceleration in excess of this figure.

Despite the service for which these tubes were designed they do not show any startling differences from the conventional tubes used in home radios, and they utilize the same materials. This exceptional ruggedness testifies to the strength which can be built into even the smallest units by the application of advanced engineering design, manufacturing ingenuity, and modern materials.

As in conventional tubes, metal elements in many types of fuse tubes—most of them measured in thousandths of an inch—were made of nickel and high nickel alloys, though in some types molybdenum or molybdenum-nickel alloy were used for certain metallic parts.

The requirements imposed upon nickel in these small tubes are even more stringent than those in larger tubes for radio and other conventional purposes. There is the common need for a metal with a low gas content to avoid trouble during evacuation and impairment of vacuum during use. The need for minimum gas content in the metal parts becomes more acute as the tubes become smaller, since the area of the tube wall which is covered by barium vaporized from the "getter" becomes progressively smaller. This thin coating of barium, sometimes, plus magnesium or other metals, which is volatilized from a small nickel envelope, produces the mirror-like coat-

ing on most radio tubes. It is this coating or "getter" which absorbs the traces of residual gas.

In addition to low gas content, there is the requirement for a metal that will resist deterioration in fabrication and withstand without distortion the high temperatures which internal parts attain during evacuation.

High mechanical properties and amenability to forming and other fabricating operations are additional requirements. In addition, a whole gamut of special electrical and expansion properties are required.

Ability of the radio industry to produce these tubes and produce them fast is indicated by the fact that a peak demand production of the small tubes at Sylvania's plants alone reached 485,000 a day. The normal production of radio tubes for home and other peacetime uses by all American tube producers was 600,000 a day.

IT WILL UNDERSTAND

"Darling," she confided, "if I marry you, I'll lose my job."

"But why can't we keep our marriage a secret?" protested the ardent though practical swain.

"We could—but suppose we should have a baby?"

"Oh, we can tell the baby of course."

COLLECTS \$605 FOR AN IDEA



The highest award paid so far in the Reduction Section of Inco operations under the Employees Suggestion Plan went last month to a Copper Cliff Smelter worker, Eddie Young. For his idea on how to improve the practice of breaking cast matte in the Smelter, Eddie drew \$605 in Victory Bonds and War Savings Certificates.

Seen in the above picture at his job of pluggerman, Eddie is a comparative newcomer to Inco, having worked in the smelter for a year and a half after a three-month stint at Frood Mine. During the war he was employed in the D.I.L. plant at Nobel as an instructor in the gun cotton department. He was married at his home town, Cache Bay, on Aug. 12, 1935, to Miss Lucille Cayer of Ottawa, and they have four children, two boys and two girls.

Eddie thinks the Suggestion Plan is a great incentive to a man who likes his work and takes a pride in doing it well. He also thinks \$605 is a very nice piece of change.



6,500 Kiddies Entertained at Xmas Parties

More than 6,500 children were treated to Christmas Tree entertainments and gifts by the athletic associations of Inco plants during the Yuletide season.

In the accompanying photographs are scenes at some of the happy parties as the throngs of kiddies got a thrilling closeup of good old Saint Nick and received individual presents from the beautifully decorated Christmas trees.

Committees in charge had done their work well; the parties were smoothly organized and handled with a minimum of confusion considering how excited a gang of youngsters can get under the magic spell of Christmas.

At most of the entertainments motion pictures furnished by Inco Employees' Club were enjoyed by the audiences.

Copper Cliff Athletic Association as usual had a "double-header" on its hands, staging a party at the Inco Employees' Club for 1,450 children of its members residing in Sudbury, and another at Memorial Community Hall for 800 Copper Cliff kiddies. Gifts and treats left over were sent to the Salvation Army, the Children's Shelter, and the Orphanage.

Garson Athletic Association made 500 of its town's rising generation happy; Creighton Athletic Association entertained 500 children, many of whom brought their parents to see the fun; Copper Refinery Athletic Association had gifts and treats for 575 of its members' young ones.

At Levack the Children's Christmas Tree Fund, administered by Lloyd Davis and Guy Innis with assistance from several Athletic Association workers, staged a fine party for 450 youngsters.

Besides entertaining 1,700 kiddies of its members, Frood Mine Athletic Association invited 65 children from Murray and another 65 from Scobie.

Open Pit Athletic Association had gifts for 700 kiddies and also "spread themselves" by serving pop and hot dogs to everybody.



H. W. Walter Had Interesting Career with the Company



RETIRING GEN. SUPT. IN HIS OFFICE

The man who directed production of refined nickel to toughen the sinews of the Allied war effort, and one of the high officers who put it to such good use in the field, were born on the same day. January 26, 1880, was the eventful date, and the two lusty infants tagged then by destiny were Herbert Winfred Walter, at Odessa, Minn., and Douglas MacArthur, at Little Rock, Arkansas. Each, it goes without saying, did his full part in the long and bitter fight for freedom.

After more than 36 years of intimate association with the refining end of the nickel industry, H. W. Walter retired on January 31 as General Superintendent of Port Colborne Refinery. Fellow employees in all ranks of the Company's service who have been associated with him are unanimous in their good wishes for the happiness and contentment of this highly respected Inco veteran and his charming wife.

When he was eight years old Herb Walter's people moved to a farm near Odessa, and there for the next 10 years he divided his attention between school, growing wheat, and raising Shorthorn cattle; he liked the wheat end of the game best, for a variety of reasons.

In 1901 he graduated from high school at Ortonville, Minn., where he resided with his brother, and then took his freshman year at the University of Minnesota, Minneapolis. He was still of an open mind as to what profession he would follow, and when his chum, Justice Mathews, decided to study mining engineering, Herb said that would do for him too. By the time he graduated from Washington State College in 1905, however, his enthusiasm for the transit and tape of the mining engineer had been supplanted by a keen interest in the how and why of metals. After two and a half years in charge of the Water Improvement Co. at Clifton, Arizona, barding with the San Francisco River which periodically went on a rampage and playfully blanketed the town with a four-foot layer of nice mucky tailings from the nearby Detroit Copper Co. mill, he was convinced he was "in the right church but the wrong pew." Packing his trunk with his mining diploma on the bottom, he headed for Columbia University, and by 1909 had his degree in metallurgical engineering. In August of that year he joined the staff of International Nickel Co.'s Bayonne plant, where R. R. Maffet was general superintendent. R. C. Stanley was assistant general superintendent, and Dr. J. F. Thompson was in charge of the physical laboratory.

Feed to the Bayonne plant was bessemer matte from the Copper Cliff smelter. Nickel sulphide produced by the Orford Process was calcined to nickel oxide, reduced to metal in open hearth furnaces, and cast in pig or ingot form in hand-trammed moulds.

Herb Walter's first job was in the physical laboratory, polishing sections, making tensile tests, taking microphotographs, etc. At that time R. C. Stanley had got his historic hunch that the ore from Creighton Mine, approximately two thirds nickel and one third copper, formed a natural alloy of highly desirable qualities. Production of this new metal, christened Monel after Ambrose Monell, president of the Company, was going through arduous growing pains, the chief trouble being in perfecting a heat treatment which would make it possible to roll the sheets without having to place them between two blankets of steel, which had a nasty habit of fusing with the Monel into one solid slab. The yard was piled high with rejects. Then a chance to provide a Monel roof for the new Pennsylvania Station in New York City spurred the pioneers to herculean efforts; the problem was conquered, and the contract landed. As proof that the Company really "had something" in the Stanley discovery, that roof is still in service, good as new.

With Monel established, a separate shed was built for refining the new metal, and Herb Walter was installed there, becoming a foreman in a short time. His next position was as assistant to Arthur Shoffstall, who was supervising the rolling of Monel at the West Penn Steel plant at Brackenridge, Pa.

In 1911, on the death of R. R. Maffet, changes in personnel brought Herb to the Company's works at Camden, N. J., as superintendent. There residues from the old "cobalt plant" of the Ontario Smelting Works at Copper Cliff were refined to produce nickel salts, cobalt oxide, and copper sulphate; sponge platinum and electrolytic palladium

were also obtained from Bayonne residues. When the Camden plant was shut down in 1912 he went back to Bayonne and took charge of electrolytic refining of nickel, which was being done on a small scale, and also production of nickel salts and precious metals. His experience was being steadily broadened, and to it in 1914 was added his first contact with smelting when he became superintendent of the cupolas and copper converters used in the Orford Process. At the same time he collaborated on plans for the new nickel refinery which was completed in 1918 at Port Colborne, Ont. In 1922, when all Bayonne activities were transferred to the new refinery, he had become assistant general superintendent, and it was in this capacity that he went to Port Colborne in August of that year. The following January 1st, on the retirement of John More, he took full charge.

At that time only a small percentage of nickel was being refined electrolytically but in 1926 the Hybomene electrolytic process was adopted and the present system was launched. By 1930 almost all pig nickel production had been eliminated. Greater purity of the product, and capacity to handle larger tonnages, were the chief advantages gained by the change-over.

In his time H. W. Walter has seen the Port Colborne plant grow to 12 times its original capacity. Crowning his long and interesting career with the Company was the opportunity to lead the nickel refining division through the greatly accelerated program of the war years, when every pound of product was precious to the Allied cause. Everyone knows he did it well. He was due for retirement on January 26, 1945, but preferred to see his war assignment through to the victory.

In 1911 Mr. Walter was married to Miss Ethel Robinson of Kingston, Ont. They have one son James, at present on Guam with the U. S. military government as a naval lieutenant (j.g.), whose daughter Linda is the apple of her grandpappy's eye.

Mr. Walter has been a good citizen of Port Colborne in many ways, including service as president of the Red Cross Society, the Lions Club, and the Golf and Country Club. He has been a member of the Welland Hospital Board since 1924.

He and Mrs. Walter have a summer place at Camelot Beach, near Port Colborne, and a fishing cottage on Salmon Lake, about 25 miles from Madoc in Hastings County, near the iron ore deposits which first attracted Samuel J. Ritchie to this country and led to his organizing of the Canadian Copper Company. After spending the remainder of the winter in Florida they plan to return to Port Colborne, and will build a new home on Tennessee Ave., overlooking Lake Erie, where a warm welcome will always await their friends.

GENERAL OFFICE ADDITIONS

Construction of additions to the General Offices at Copper Cliff is proceeding as rapidly as the supply of materials will permit. A long-felt necessity, the extra accommodation had to be postponed on account of wartime restrictions.

An extension to the section of the building in which the Paymaster's Department is located will be occupied by the Personnel Department. On the ground floor of a second extension offices will be provided for the Metallurgical and Smelting Departments, and on the second floor there will be accommodation for the Mines Department. There will be various other changes when "moving day" rolls around.

WASTED VIRTUE

Two old gentlemen were sitting comfortably in their easy chairs at the club enjoying an after-dinner cigar.

Said one to the other:

"Every time I come here my wife thinks I'm out chasing women. Gad—I wish she was right!"



Returned Men at Levack Enjoyed Informal Party

An enjoyable function at Levack one evening last month was an informal gathering of some of the Incoites recently returned from the armed services. The boys spent a couple of hours swapping combat reminiscences, and were served a tasty lunch by the Women's Auxiliary in the Employees' Club.

Ed. McGill, Veterans' Personnel Officer for the Company, was invited to attend, and found the gathering an excellent opportunity to renew contacts with the men and learn how they are getting along on Civvy Street. He brought a bundle of the handsome leather wallets which the Company is presenting to all its returned personnel as a handy container for discharge papers, etc. As occasion permits, he plans to visit returned personnel at the other Inco plants, presenting a wallet to each man who has not yet received one. In the meantime, he says, the latching is always out at his office in the Personnel Department, Employees' Club, Sudbury, and returned men are invited to drop in any time to discuss their problems.

In the first of the accompanying pictures Bill Sproule (centre) is displaying his new wallet to Ed. Kauppinen (right) while Ed.



McGill looks on. Kauppinen had just come back from R.A.F. service overseas and had not yet returned to his job with Inco.

In the second photo are: seated, left to right, Peter Beckett, Bill Lockhart and his son George, and Supr. Charlie Liveley; back row, Ambrose MacDonald, Bill Lawton, Phil Kearns, and Casey Jones, underground supt.

The group in the third picture: left to right, Dick Lawrence, Gordon McCue, Bruce Hykin, Leon Mallette, and Personnel Director Wes Peterson. The latter, a very popular member of the community, was spending his last evening on the job; the next day he left to go back to his old trade of papermaking at Espanola.

Vocal numbers by Mrs. Betty Adam and selections by Jim McCoy's orchestra were much appreciated by the boys.

and while it has operated only two nights since its organization over a month ago, has already received the acclaim of the teen-agers of the community and the commendation of the authorities. For a nominal fee, which gives the club control and insures proper behaviour, the Inco Recreation club and its excellent facilities are thrown open to the teen-age boys and girls every other Saturday night for bowling, volleyball, checkers, darts and other games with dancing to the music of a juke box or recordings. The nominal fee includes a lunch and additional refreshments may be had at the club canteen. The only other charge is for bowling.

"While still in the experimental stage, the Teen-Age Canteen already seems an assured success, with 250 boys and girls attending each of its first two evenings. There are no strings attached, all teen-agers are welcomed, so long as they conduct themselves in a proper manner. The canteen is helping to fill a long-felt need in the community where there were too few activities of a desirable nature available to them. They are being encouraged to arrange their own programs, selecting what appeals to the majority.

"The Inco Recreation club deserves high commendation for organizing this activity. Progress of the canteen will undoubtedly be watched with interest by parents and others who have at times been somewhat concerned as to how the young people were spending their leisure time."

The Teen Age Canteen idea has been adopted in Copper Cliff at the Italian Society Hall and at Memorial Community Hall, and also at Creighton at the Employees' Club.

THAT SMALL VOICE

Young Thing: "Oh, Doctor, I've been misbehaving and my conscience is bothering me."

Doctor: "M-m-m, I suppose I should give you something to strengthen your willpower—"

Y. T.: "Oh, no, Doctor—how about something to weaken my conscience?"

161,000 SAFE SHIFTS



The only foreman at the Port Colborne Refinery whose men went through 1945 without a lost-time accident was Rene Madere, shown here on the right checking his record with Don Ott in the Sinter Building office.

The last lost-time accident on Rene's shift occurred on Nov. 20, 1944; he now has more than 161,000 safe shifts to his credit, a splendid record.

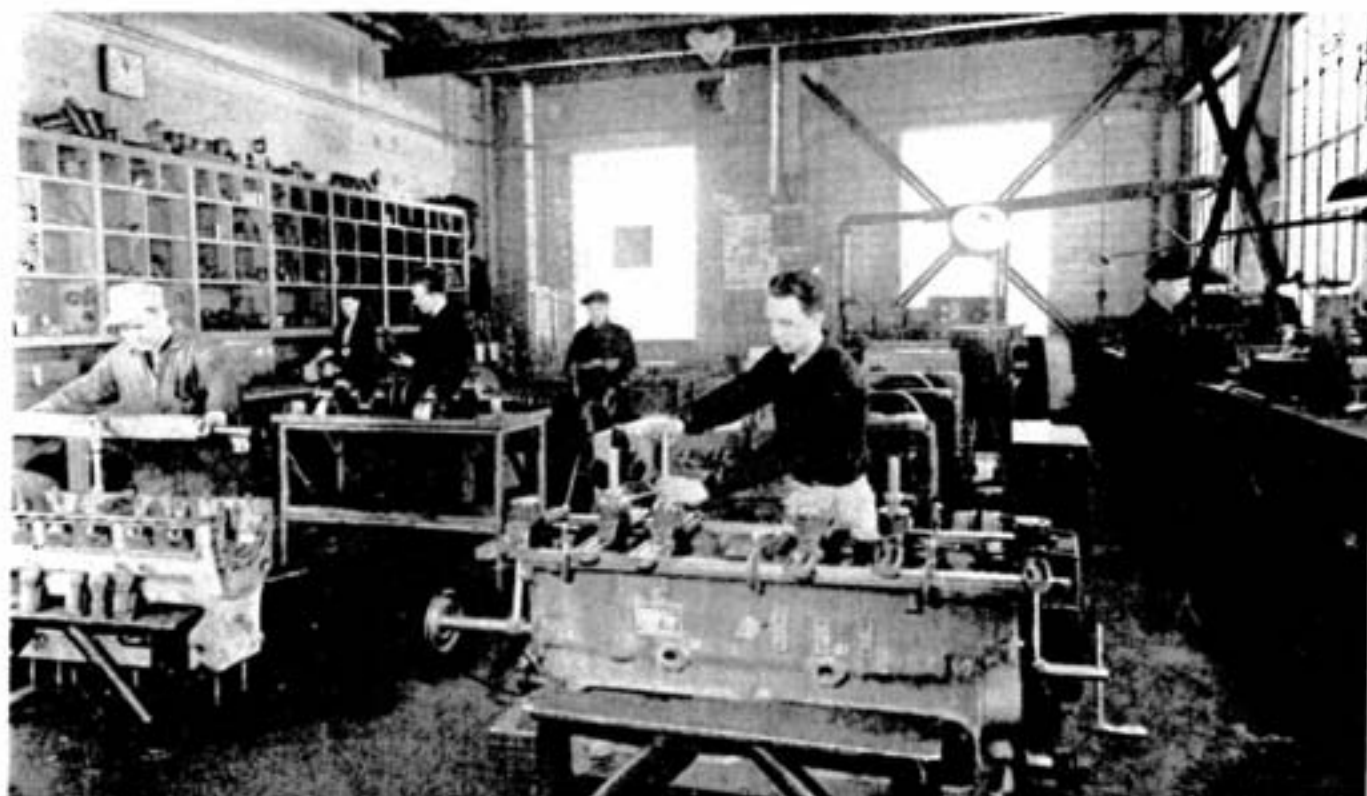
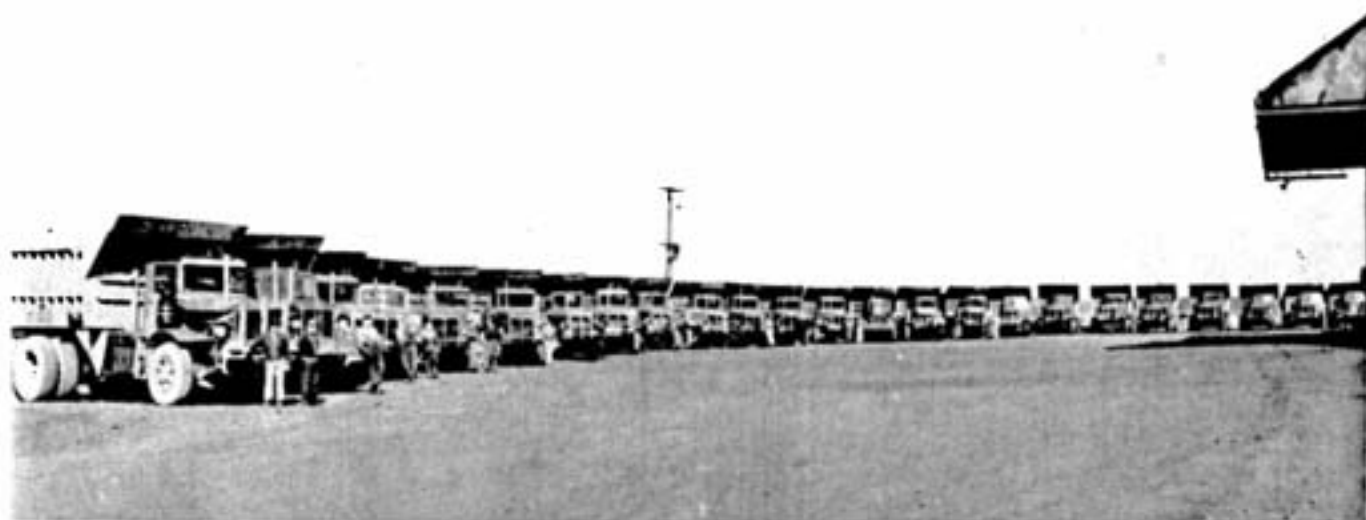
Teen Age Canteen Draws Compliments From Public, Press

The Teen-Age Canteen at Port Colborne, featured in the January issue of The Triangle, has drawn highly complimentary references from officials of the town and from the press.

The Town Council passed a motion commending the Inco Athletic Association for "their work in forming a Teen Age Canteen for the youth of this district." The Council expressed its appreciation of "this very fine endeavor" and offered its assistance in any way.

The Welland-Port Colborne Evening Tribune said editorially, in part, on Jan. 11:

"The Inco Teen-Age Canteen, sponsored by Inco Recreation Club and supervised by its entertainment committee, is now functioning every other Saturday night in the comfortable and inviting Inco Recreation club building,



Highly Specialized Equipment Used by Open Pit Mechanics

Thirty-three 6-cylinder diesel engines, ranging from 225 to 275 h.p., which drive the big dump trucks at Frood-Stobie Open Pit, are overhauled regularly in the engine room of the Pit garage. Particularly during the latter years of the war, when the daily Pit production reached a maximum of 37,500 tons of ore and waste, the job of keeping those engines running smoothly was of paramount importance.

Besides stepping up demands on the Pit's production capacity, the war made it extremely difficult to secure spare parts, and the engine room brigade was called on to handle many unique assignments such as renewing the thrust ring on a crankshaft, or welding broken engine blocks which might otherwise have been considered beyond repair.

In the first of the two accompanying photos are seen 24 of the 33 Mack trucks, capacity

30 tons, in the Open Pit fleet, and in the second picture is a view of the room where first aid is administered to their engines. Highly specialized equipment features this key department of Pit operations.

In the right foreground Roy Campbell is working on the line boring bar on which main bearings and cam shaft bearings are line bored. On this machine engine blocks which have

warped, or which may be two or three thousandths of an inch out of line after repairing, are fitted with semi-finished bearings and then line bored to fit the crankshaft. To the right behind him Ed Wolfgram is busy at the valve-refacing machine.

At front left Bill Oliver handles the torque wrench which, with a capacity of 600 ft.-lbs., is used to tighten all nuts exactly according to the manufacturer's specifications. Each group of nuts has its own particular torque to avoid strain or distortion.

Back of Bill Oliver is Bill Lox, checking a crankshaft with a 6-in. micrometer to detect out-of-roundness. If it is too much out-of-round it will be reground; if not it will be installed with other used parts in what is termed a "second class" overhaul, thus assuring the maximum amount of wear before discard.

At the rear, left to right, are Lou Gunther, firing up an engine oil pump, and Ed Peattie, installing the crankshaft in one of the service truck engines.

Other unusual equipment provided for the

Mechanics in the engine room include a bearing insert boring machine, a fuel pump and injector test bench where tests are made under actual operating conditions, a Zygo lamp for detecting structural flaws, and a run-in motor stand on which the engines are run in for 16 hours after overhaul before being replaced in the trucks.

In the earlier days of the Pit a haulage truck engine was usually overhauled every 4,000

hours, in addition to the regular inspections. As the big hole went deeper and the trucks had more climbing to do, engines had to be overhauled more frequently; now they're done after each 2,500 hours of operating time.

Engine room records include a complete clinical history of every truck and its parts, cataloguing all ailments from stoppage of the gaspape to falling of the transmission.

Mend Fractured Leg With Monel Plate

The ingenuity of engineering officers aboard a Coast Guard-manned transport in devising a Monel plate to hold together fractured leg bones is resulting in an injured sailor's complete recovery, it was announced recently by the U.S. Coast Guard.

The need for the Monel metal plate arose when the transport was plowing through a heavy sea in the Indian Ocean. A Coast Guardsman, while securing loose gear at the bow, was hit by a wave and washed against a bulkhead. Both bones were splintered above the left ankle. To secure the bones firmly, a metal plate was needed which the sick bay lacked.

In keeping with the Coast Guard's 135-year tradition of service, three engineering officers volunteered to make such a plate. They obtained a spare Monel motor shaft and for the next 12 hours—while a rough sea pounded the ship—they labored to get the plate down to the specified dimensions. The finished plate measured 4½ inches long, a half inch wide, and 3/32 of an inch thick. The screws were made of Monel rods removed from one of the ship's coffee urns.

When the plate and screws were ready, the ship's surgeon completed the operation successfully.

WRONG STRATEGY

Two soldiers had arranged for the pair of beauties they'd met in the day coach to dine with them, but when they arrived in the diner there were only two vacant seats at a table where two elderly ladies were taking their time about eating.

Pondering the situation, the boys decided to take the two seats and, with their scheme, eject the loafers.

As soon as they were seated, one of the boys said, "You know, I haven't had a bath in three months."

The second one replied with, "That's nothing, I haven't had a bath in over a year."

When they looked at their tablemates to see how they were taking it, one of the old gals piped up with, "Well, Stinky, now that you have that out of your system, how about passing me the salt?"

GARSON YOUNGSTERS



A group of Garson youngsters warmly clad for a romp in the snow: seated, James Patrick Sullivan himself, aged 4; Monica (6) on the left, and Kathleen (8) on the right, who with James Patrick make up the family of Mr. and Mrs. George Sullivan; Virginia (11), daughter of Mr. and Mrs. Foster Todd, in the centre.

Make Annual Visits to Pensioners at Copper Cliff and Port Colborne



Maintaining the practice instituted some years ago by President R. C. Stanley, the Company makes an annual check on the health and happiness of all Inco pensioners, just to be certain that all goes well with them.

At the end of 1945 there were 168 living pensioners of the Mining and Smelting Division at Copper Cliff, of whom 124 reside in the district. These received a personal visit during January from E. A. Collins, assistant to the vice-president. To the 44 residing outside the district he wrote letters extending best wishes for the New Year.

In the top photograph Mr. Collins is seen visiting with Tommy Linton, retired Freed worker, who has launched a little rehabilitation project all his own in the form of a machine shop in Sudbury which gives employment to four young men. Left to right: Tommy Linton, E. A. Collins, John Stanley, Gordon Mc-

Kenzie, Albert Wilkes, and Sid Linton, Tommy's son. Albert Wilkes did five years in the Army and Sid Linton was three years in the Navy.

In the lower photograph W. J. Freeman, on the right, extends the Company's greetings to a disability pensioner, Bill Schwarzkopf, one of the 20 former Port Colborne employees visited last month. He had been with Inco for 14 years and nine months when he retired in August, 1943. His son, Steve has worked in No. 5 Building since 1928.

CAUSE AND EFFECT

P.O.: "Chief, there's an applicant here who said he used to make his living by sticking his right arm into a lion's mouth."

C.P.O.: "What's his name?"

P.O.: "Lefty."

Toronto Incoites Enjoy Happy Christmas Get-together



Personnel from the Inco office at 25 King St. W., Toronto, and from Alloy Metal Sales, Bay St., held a Christmas party on Dec. 20 which turned out to be an unqualified success. Santa had himself a wonderful time, for reasons quite obvious in the above photograph. Left to right: 1st Row: A. Langley, C. White, G. H. Hevey, H. Kimball, J. Asling; 2nd Row: L. MacFarquhar, M. McLeod, D. McLean, J. Noble, V. Butterworth, D. Macdonald, L. Albert, L. C. Wright, M. Underhill, F. Blackwell, M. Coyne; 3rd Row: B. Stewart, K. H. Clarke, G. Cawthorpe, J. B. Barron, B. Bachelor, D. Gibson, W. Dobbin, J. G. Near, D. Dickson, H. Belfry, H. Watson, H. S. Smith, S. Walters, T. Dodgson, H. J. Butterill; 4th Row: C. E. Macdonald, D. McCaig, A. H. Galley, J. Totton, A. S. Tuttle.

Inco Club's 1946 Boxing Team



Deacon Allen, the Toronto fights promoter, says you can always count on the boxers from Port Colborne being in tip-top condition. This is another feather in the cap of Alex Davis, the veteran Inco Club coach and trainer, whose 1946 "stable" of finely conditioned young leather-pushers is pictured here: left to right, Henry "King" George, Al Queffelec, Larry Johnson, Billy Seep, Jim McIntyre, Gasperino Buscarino, Ray Leavere. The boys are having an active winter, appearing on boxing cards in Port Colborne, Buffalo, Hamilton, and Toronto. They also assist in the programs at the Port Colborne and Humberstone Safety Club which Chief Fred Davies has organized to give boys some place to go in the evenings besides the street corners.

MUST WAIT UNTIL MARCH FOR DECISION

Until the Ryan award committee at Toronto reviews all the details and makes its decisions known, the name of the plant which wins the 1945 safety championship of Canada will not be known.

Whether or not an Inco mine carries off this honor, even the final standing of our plants is in doubt until the committee rules on a couple of unusual cases.

On December 31, based on the number of accidents for each 1,000 men employed, this was the way Inco mines rated in the annual contest for Canada's most coveted safety recognition:

Creighton	6.48
Garrison	6.69
Frood	10.63
Levack	18.05

In 1944 Dominion-wide honors went to the Madawana Mine with a frequency of 10.7, which was bettered by three Inco plants in 1945.

Whoever wins, it was a great year for Safety. Announcement of the Ryan Award results will probably be made some time in March.

In the meantime, let's really put the safety pressure on for 1946, and that means every single employee, personally.

ONE THING AT A TIME

Grandpa had been sitting in the corner for hours working away with a pencil stub and a wad of paper. Suddenly he let out a whoop of joy. "Doggone," said he rapturously. "If I ain't learned to write!"

Grandma galloped over and studied the scribbles and scratches. "That's wonderful, Grandpa. What do it say?"

"How should I know, woman? You know I can't read!"