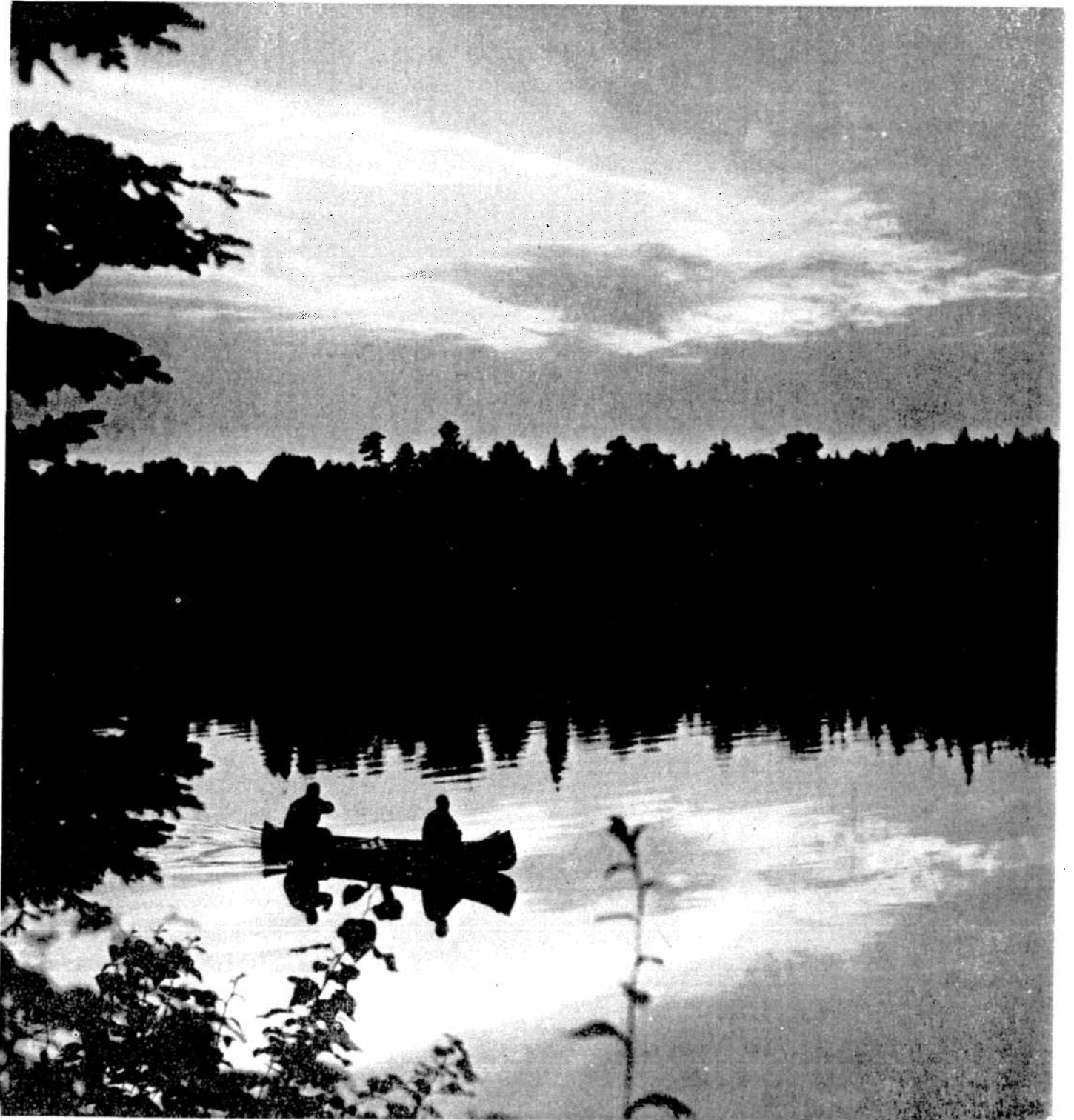




VOLUME 6

COPPER CLIFF, ONTARIO, AUGUST, 1946

NUMBER 5



A SUMMER SUNSET SCENE ON A SUDBURY DISTRICT LAKE



Published for all employees of The International Nickel Company of Canada, Limited.

Don M. Dunbar, Editor

EDITORIAL OFFICE COPPER CLIFF, ONT.

VOLUME 6 AUGUST, 1946 NUMBER 5

Inco Edition

A complete description of plants and operations of the International Nickel Company of Canada, Ltd., is contained in the May, 1946, edition of the Canadian Mining Journal, which reflects much credit on its publishers.

In his introductory remarks Editor R. C. Rowe of the Canadian Mining Journal says with justifiable pride that "it is probably the most complete description ever published of the operations of any company." He thanks the executive officers of the Company for permission to publish the detailed information, and also the members of the staff for preparing the text and illustrations.

In a tribute to Inco's part in the victory of the United Nations. Mr. Rowe wrote, under the heading "Elements of Progress":

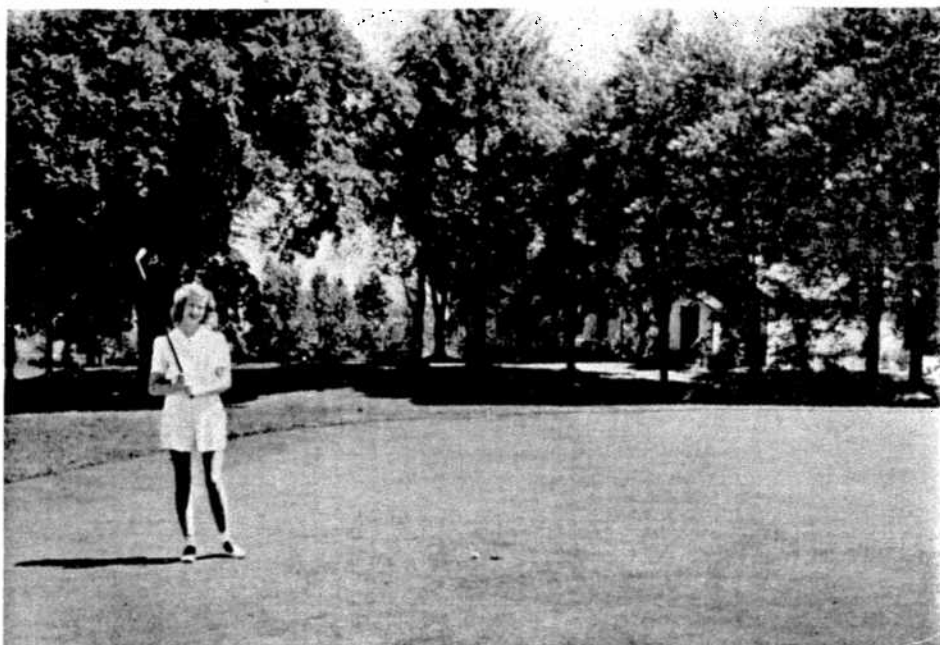
"One of the first to shoulder the extra load was International Nickel Company of Canada, Limited, whose production of nickel, copper and rare metals is so essential to the needs of peace or war. All the executive organizing ability and technical skill of this great Company were turned on the problems created by the extraordinary demands upon its productive capacity, and the pressing needs of the democratic countries who were fighting for their very lives.

"How the company met those problems is told in the following pages, and the record constitutes one of the most striking vindications of private enterprise that could ever be chronicled.

"International Nickel was born of individual initiative, and its essence is private enterprise. For sixty years it has operated in this country until it has become a part of Canadian life and economy, and from it has stemmed nothing but good. Its technicians have advanced the practices of mining and the processes of metallurgy. Its research scientists, in seeking uses and markets for its products, have contributed heavily to the advancement of methods, and the betterment of standards of living, because nickel, contrary to the opinion of the ill-informed, is essentially a metal of peace, and the greatest developments in its use have been in the things of everyday life. The Company has recognized its responsibilities in all fields of endeavour. It has looked after its people, and built up within their ranks a fine loyalty. It has been our privilege to visit most of the operations of the Company in many widely separated places, in Copper Cliff and London; in Toronto and South Wales, in New York and Scotland, in Sudbury and Birmingham. Everywhere we have found pride in the Company, respect for the men directing it, and a splendid internal relationship. There could be no finer record.

"Such things do not happen casually, nor are they the product of accident, they are an integral part of the system of life we have so laboriously developed, which has, as its

At Port Colborne Golf Club



Only girl on the Nickel Refinery Staff at Port Colborne whose favorite sport is golf is Joy Green, seen here adding more than a smidge of eye-appeal to the general scene at the Country Club. In business life she is earning her wings as an angel by being secretary to J. C. S. Wilson, purchasing agent.

Coniston Celebration Sept. 2nd



At a band concert at Coniston two guest entertainers were Mr. and Mrs. Dan Chisholm of Rumford, long-time residents of the district who amazed the crowd with their virtuosity at piano and violin. Mr. Chisholm is an Inco pensioner. Mrs. Chisholm was presented with a bouquet of flowers by young Ronnie Fera (centre). The concert was staged to publicize the big celebration to be staged Sept. 2 by Coniston Community Association, at which some of the main features will be baseball, boxing, and a baby show. Sid Smith is chairman of the Association.

core, the right of men to earn their worth and a deep appreciation of national and human responsibility on the part of the individual. In operations such as are described in the following pages lie all the elements of progress, without which the human race would be little indeed, and in the system which permits men's ideas and enterprise to flourish unfettered so long as they add to the common good, lies all hope for the future.

"Let us guard it zealously."

TOO BIG A BARGAIN

Stern Parent: "Young man, can you support a family?"
Suitor (meekly): "I only wanted Sarah."

Which Is It, Kenney or Harris?



"Which band do you like best, Harris or Kenney?"

That was the burning question at Inco Employees Club in Sudbury the evening of July 25, when Norman Harris and his orchestra, direct from the King Edward Hotel in Toronto, played for a dance that drew a capacity crowd of attractive summer-frocked lasses and their handsome squires.

Kenney Coming August 7

Not to be budged from their opinion were the followers of Harris; equally decisive was the legion of Kenney admirers. Those on the borderline will have another chance to make up their minds when Mart Kenney and his Western Gentlemen return to the Club on Wednesday, August 7.

No matter which of the two nationally popular bands they fancied, Inco Club members and their guests had to admit they were getting the richest possible orchestra fare in the country, despite the long hop from Toronto.

In the first of the two pictures above is a

section of the dance floor the night of July 25 as a tuneful Harris number drew to a close.

Out-of-Town Guests

In the second picture is one of the gay groups attending, including representatives of Inco families from New York, Port Colborne, and Copper Cliff. Seated in front are Mrs. Phil Haney of East Orange, N.J., daughter of Fred C. Allgeier, Assistant Controller of the Company in the New York office and former Copper Cliff resident; another visitor, Mrs. S. Augustine of Port Colborne, daughter of E. C. Lambert, Works Auditor at Copper Cliff; Mrs. George Syer; back row, W. H. Armstrong, George Syer, Mrs. Alex Godfrey, Stewart Augustine of the Accounting Department at Port Colborne; Phil Haney, New Jersey educator; Alex. Godfrey, Mrs. W. H. Armstrong, Mr. and Mrs. W. DeSoto.

There are two days about which nobody should ever worry, and these are yesterday and tomorrow.

Andy Winn Favors A New 36-Hour Day

A "one-man hobby lobby" is Andy Winn of Open Pit, who one of these days is going to have to give up eating and sleeping so he'll have time to keep pace with himself.

Andy's chief hobby is wood-working, and the picture shows him in his little shop in a base-



ment on Borgia St., cutting up as usual. Holding the watching brief is Sam Dukenich of the Nordale carpenter crew, who had dropped in to visit his friend.

Well-Equipped Shop

When he was working in a ski factory at Fort William several years ago, Andy got the urge to have his own wood-working place and now the dream has come true. Piece by piece he accumulated machinery until he now has a splendidly equipped shop with wood lathe, jig saw, circular saw, jointer and planer, drill press and shaper. On order is a band saw and then the outfit will be complete.

All kinds of wood novelties, turned bowls, shelves, sandwich trays, and book-ends are among some of the things Andy produces in his spare time. When the boys at the Frood had trouble during the war getting toys for their annual Christmas Tree for the kiddies, Andy turned out a fleet of brightly painted wooden trucks and cars that filled the bill perfectly.

Born at Fort Francis in 1913, he started with Inco in 1937 at Copper Cliff. He worked with Fraser-Brace and then in both the Transportation and General Offices, after which he did relief duty in the time offices at the various Inco plants. He has been at the Open Pit since 1943, and is employed in the plate shop.

Fine Stamp Collection

Besides his wood-working, Andy keeps busy with a stamp collection which he has been told takes second place in Sudbury only to that of J. W. McVey, the dispatcher-philatelist who is employed by the C.P.R.. The most prized item in his collection is the Falkland Centennial set of 12, issued in 1933.

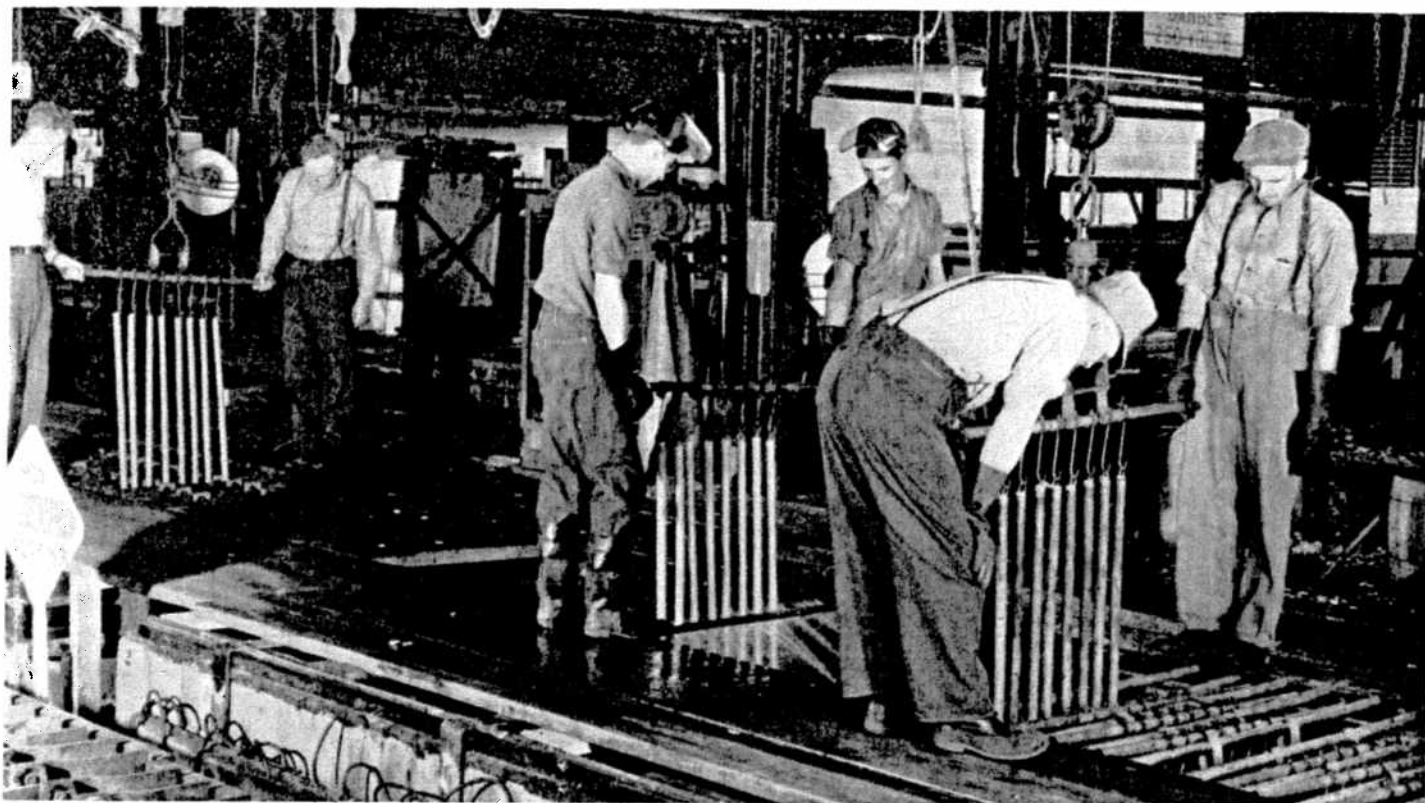
Other hobbies which keep Andy on the hop are badminton, tennis, basketball, memberships in various clubs, and dodging the old matrimonial halter. Yep, he's still single, but says he plans to take the fatal step—just as soon as he gets time.

PLAY FOR MORE TROPHY

Annual golfing test for Incoites at Port Colborne Country Club is the joust for the John More Trophy. Qualifying rounds to determine the 16 mashie-wielders who will fight it out for the 1946 title were played on July 13 and 14.

Special prizes were awarded as follows: low gross, Merl Noyes, 74; 2nd low gross, Glenn Winger, 81; low gross 1st nine, L. Lewis, 39; low gross, 2nd nine, J. Jamieson, 40; low net, Ivan Royal, 91-24—67; 2nd low net, V. A. Lynden, 82-12—70; low net 1st nine, G. B. Graham, 51-18—33; low net 2nd nine, F. Willett, 42-9—33; long drive, M. Noyes 300 yards.

Unusual Use of Nickel at Port Colborne Plant



"What in your opinion is the most unusual use of nickel in Port Colborne Refinery?" was the question the Triangle put to Supt. R. C. McQuire last month. Without hesitation he replied, "For plating copper cathode suspension bars."

Formed Insoluble Compound

And unusual indeed is this application by which nickel pulls itself up by its own bootstraps, so to speak. In 1942, with the advent of sulphate chloride electrolyte as a liquor in the electrolytic tanks at the Nickel Refinery, it was found that the chloride formed an insoluble

copper compound on the copper bars from which the cathodes are suspended in the tanks. The compound did not lend itself to mechanical removal easily, and it raised resistance to the electric current so that the straps suspending the cathodes would burn off and the wooden tops of the tanks would burn also. Here was a crucial problem; it was a sorry sight to see baby bonfires smouldering here and there all over the tankhouse.

The Staff Conquered It

The Port Colborne staff worked out their own solution to the riddle, after much cudgel-

ling of brains. They found that when the copper bars were plated with nickel the attack of the chloride produced a soluble compound which could be easily removed. A "home-made" plating system was promptly rigged up and 25,000 bars were plated with nickel in short order. The innovation is attracting keen interest throughout the refining industry.

In the photograph above are seen the three steps in nickel-plating the copper bars; on the left they are coming out of the anodizing or cleaning bath, in the centre they have been through a water wash, and on the right they are being dropped into the nickel plating bath.

J. F. ROBERTSON 40 YEARS WITH THE INDUSTRY

A long and intimate association with the nickel industry was severed with the retirement of John Fergusson Robertson as chief metallurgist at Copper Cliff.

Beset with adversity as it was in its infancy, harassed by a multitude of problems in the early days of its growth, and faced with the necessity of bold technical and mechanical strategy if it was to measure up to the challenge of more recent years, the development of the industry would have been slow and laborious indeed had it not been for men of the calibre of J. F. Robertson.

Born in "Spud Island"

He was born at Charlottetown, P.E.I., in 1880; his father, connected with a ship-building firm, was for a time minister without portfolio in the provincial government. He attended Prince of Wales College at Charlottetown and then enrolled at McGill in Mining Engineering, graduating in 1903 and attaining his M. Sc. the following year. He was awarded the Dawson Fellowship in Mining.

After lecturing at McGill for three years in

Mining Engineering he went west to become assistant to the consulting engineer in charge of mines for British Columbia Copper Co. From there, in the Fall of 1907, he came to the Sudbury District as smelter superintendent for Mond Nickel Co. at Victoria Mines. He was also placed in charge of construction of the Coniston plant in 1912, and was superintendent there when operations were transferred from Victoria Mines. About a year after the merger of Inco and Mond in 1929 he was appointed chief metallurgist at Copper Cliff.

Family of Three

In 1908 he was married to Miss Ethel Robertson, also of Prince Edward Island, whom he had known since childhood. They have a family of three: John, of Copper Cliff Smelter; Peter, a pilot officer on the R.C.A.F. Reserve who is at present in Munich in charge of U.N.R.R.A. transportation for the American Occupied Zone; Ethel, now Mrs. A. E. Richards of Fort Frances, Ont. There are four grandchildren.

When Mond Nickel commenced operations in 1901 this was a heap roasting and blast furnace country. With limited capital and unlimited reserves the early companies smelted only coarse and comparatively rich ore which could be treated in blast furnaces at a reasonable profit. Flotation was unknown, and to treat fine low grade ore they would have had to develop some form of gravity separation which would have

meant heavy losses and the additional disadvantage of mining large tonnages for small production. On any other basis than the one they had adopted, in the opinion of Mr. Robertson, it is problematical whether the industry could have established itself at that time.

Eventually, however, fines and accumulating flue dust became a problem that had to be faced. Moreover, with the treating of lower grade ores, the percentage of fines that could be handled in the roast yards decreased on account of the higher amount of waste material. Mr. Robertson recalls the time when Inco took the important step of installing a reverberatory furnace to take care of excess fines and accumulated flue dust.

Start Coal Dust Firing

Reverbs in those days were fired with coal on a grate at one end, but David Browne, Inco's chief metallurgist, made a success of coal dust firing. This was a huge step forward in reverberatory practice, reducing by 50% the amount of coal required. Now blast furnaces are almost obsolete except as auxiliaries to smelt scrap, and nickel and copper smelting is done in reverberatories fired with powdered coal. Blast furnaces could never have handled the enormous tonnages of low grade ore which are milled and smelted today.

Another interesting phase in the growth of the nickel industry recalled by Mr. Robertson was the experimental stage of flotation. About

1915 Mond installed a small experimental mill to try out flotation and other processes, adding the concentrates to their sinter plant charge. The experiments were so encouraging that flotation was adopted and the small mill was expanded to treat a portion of the low grade rocky ores, the balance going to the converters as flux. Until it acquired the Frood Extension, Mond had to cope with more low grade material than did Inco, probably accounting for its move to flotation ahead of the Copper Cliff company. The Mond mill produced only one concentrate, except for a few shifts when a separation of copper and nickel was made.

Worked Together

When Inco's mill was started in 1930 it also made only one concentrate, but shortly afterward a copper concentrate was produced to be blown to blister copper for refining at Copper Cliff. Production of the copper concentrate was based on experimental work conducted by the staffs of Inco and Mond, at first separately and then in co-operation.

Closely identified down through the years with improvements in process and major developments in the scope of operations, J. F. Robertson made a great contribution to the growth of the industry with his technical skill and shrewd counsel; these and a whimsical sense of humour were among the fine qualities for which he will long be remembered by his associates.



COPPER CLIFF

Oscar Armitage (R.C.A.F.), Thomas Beckerton (Army), Ricco Castanza (Army), Frank F. Chisholm (Army), Jean P. R. Cousineau (Army), J. Rene Fortier (Army), Victor Grant (Army), James R. Hodgins (Army), Robert M. Hopps (R.C.A.F.), Harvey L. James (Army), Albert Labelle (R.C.A.F.), Roy Longfellow (R.C.N.V.R.), Samuel R. Nadjiwan (R.C.N.V.R.), Gordon R. Prentice (Army), Derno Rondina (Army), Loral Stevenson (Army), Girard Vanier (Army), August De Cicio (R.C.A.F.), Nike Menican (R.C.A.F.), Armas Lampi (R.C.A.F.).

Victor A. Akkanen (Army), Viljo Antonini (Army), Gerald Arnett (R.C.A.F.), Adrien Daoust (R.C.A.F.), Malcolm Dunn (Merch. Navy), Raymond Fraser (R.C.N.R.), Eugene Golden (R.C.A.F.), Raymond Grieve (Army), Albert James (Army), Elmer Laakso (Army), Kenneth Mick (Army), Allan J. Millar (Navy), James Murray (Army), Gerald Paul (Army), Roger Pelland (Army), Arthur N. Pelletier (Army), Denis Thyne (R.C.A.F.), Arthur Young (Army).

FROOD

G. Arden Buell (R.C.A.F.), William Gordon Calford (R.C.A.F.), Vasile Dumencu (Army), Anthony Healy (R.C.A.F.), Patrick M. Mullen (Army), Leonard McAvany (R.C.A.F.), Thomas Storey (Army), Joseph G. Tremblay (Army), John Zubatink (Army), Dorval Blais (Army), George Blueman (R.C.N.V.R.), James G. Dure (R.C.A.F.), Charles Shelswell (Army), Henry Landry (Army).

Lorio Baziner (Army), Tom Forman (Army), Hector Grenon (R.C.N.V.R.), David Hamilton (Army), Peter Paul Hollick (Army), Gerald Lavallie (Army), Eddie Page (Army), Michael Primeau (Army), Jos C. Serpel (Army).

OPEN PIT

Joseph Dusick (Army), Bernard N. Mallette (Army), William R. McKnight (Army), Kenneth W. Pollock (Army), Leonard L. Mulligan (Army).

Keith Calford (Army), Joseph Massey (R.C.A.F.), Elvin A. Montgomery (R.C.A.F.), Fran-

Learning It "The Hard Way"



All dolled up in working clothes which would probably make their professors chuckle with satisfaction, their girl friends beam with pride, and their mothers gasp with shock, these university students are among the group spending the summer months on the job at Inco, putting classroom theories into actual practice.

Each year, in co-operation with the universities, the Company employs a number of students to provide them with practical training in the mining and metallurgical professions they are studying at school. Value of this arrangement to the industrial future of Canada is widely recognized.

cis Neville (R.C.A.F.), Robert John Snaith (Army), Thos. J. St. Amond (R.C.A.F.).

CREIGHTON

Germain Brisson (Army), Basil Petryshen (Army), Lionel Thibeault (Army), Dan Van-Cleaf (Army), Valentino Wallace (Army), Vernon Gotro (R.C.A.F.).

Anthony Durkac (R.A.F. and Czech Air Force), Walter G. Wilson (Army).

LEVACK

James W. Allan (Army), Hector L. Barr (Army), Joseph I. Bisson (Army), Rene Brosseau (Army), James Burton (Army), Marcel Filion (Army), Walter Fian (Army), Matti Tuomi (R.C.A.F.).

Hugh Loughridge (Army).

MURRAY

Paul Farmer (Army), Marvin Lewis (Army).

GARSON

William Edward Armstrong (Army), Ulton F. Kelly (Army), Joseph F. Ranger (Army).

CONISTON

Mike Storozyk (R.C.A.F.).

Wm. Maizuk, (Army).

STOBIE

John William Darrach (R.C.A.F.).

GENERAL

John R. Feick (Army), John D. Garrett (Army), Rudolph E. Gross (Army), Maurice Laplante (Army), Leslie Mills (R.C.N.V.R.), James A. Pett (Army), Peter V. Pirskanen (Army), Norman Wadge (Army), William B. Walker (R.C.A.F.).

Wilfred Biron (R.C.A.F.), James N. Grass-

An "Intercollegiate Metallurgical Meet" is in the making among the students in the above picture, all employed in the Copper Cliff Smelter. Front row, left to right, E. Morelli, University of Toronto; T. Kirwan, St. Peter's Seminary; Pat Farrell, Queen's University; back row, R. Laferriere, Laval University; A. Morris, University of Western Ontario; T. Ross, Sir George William's College; G. Reshaur, University of Manitoba; J. Stephenson, St. Michael's College.

Other universities represented by students temporarily employed at various Inco mines and plants are Saskatchewan, McGill, New Brunswick, and Michigan.

by (Army), J. Ross Hawkins (Army), Charles D. Price (Army).

COPPER REFINERY

Louis Gazdic (R.C.A.F.), Glen W. Haner (Army), Harold J. Healy (Army), James A. Nicholson (Army), Joseph Ogloff (R.C.A.F.), Herman W. Tremblay (Army), William Cryerman (Army), Louis Rainville (Army), Harold Koivula (R.C.N.V.R.), George Edwin Terrell (Army).

POLICE

Hugh Grant (Army).

FORT COLBORNE

W. Ruzycki (Army), P. W. Wallace (R.C.A.F.), R. Poitras (Army), S. Keiba (R.C.A.F.).

L. Julien (Army), F. Bucci (Army), L. Kramer (Army), L. Brema (Army), R. Irwin (Army), K. Stallard (Army), L. Parry (Army), R. Dobson (Army), Wm. Roe (U.S. Navy).

JUST AS SENSIBLE

One of the advocates of old-time methods looked at a modern machine which was digging a great trench at a rapid rate.

"How many men with shovels does that machine replace?" he asked the contractor.

"One hundred," was the reply.

"Why don't you junk that machine and put one hundred men with shovels into the trench?" asked the bright, modern thinker.

"I can think of a better one than that," said the contractor. "What's the matter with ten thousand men with teaspoons."

Safety Record Much Improved



A fellow who believes in signs is Fred Langley, who besides other painting assignments is staff artist to the Safety Department at Port Colborne Refinery. Here he's seen turning out another attention-compeller to keep his fellow employees safety-conscious. Nickel Refinery workers are doing a great job of mending their accident fences. Co-operating with a special campaign launched by the Industrial Accident Prevention Association they went through the month of June without a single lost-time accident, the first clear month on record at the plant. Their accident frequency for the year to date is 12.3 per million man hours worked, a big improvement over 1945. Keep up the splendid work there, fellows.

Jimmy Cochrane Now Smelterman

A "war husband" who married a Canadian girl in St. John, N.B. while he was stationed there with the British Navy and she was a member of the C.W.A.C., Jimmy Cochrane has rejoined his wife and young son in Sudbury and is now the proud possessor of a job in Copper Cliff Smelter.

"I don't know anything about smelting but I'm certainly willing to learn," he told Alton Brown of the Personnel Dept. "It's wonderful to be settled down in Canada."

Picture shows Jimmy shortly after his arrival in Sudbury last month, in his apartment with his wife and James Jr., aged 2. That succulent

so Jimmy could join them. Following his demobilization in December of 1945, his wife received no allowance from the British Navy. And, in accordance with British regulations prohibiting export of money, Cochrane was unable to send his wife funds. Nor could he get passage to Canada to support her here.

She was facing eviction, unable to buy groceries, and had a two-year-old baby to support. She produced a stack of correspondence she had had with Ottawa and the British government, none of which held out much hope of immediate relief.

Newspapers Helped

The story was taken up by the Toronto newspapers and by the Daily Express, of London, England. The latter sent a representative to interview Mr. Cochrane in Wales.

"There was a dickens of a row about it over there," says Jimmy.

Finally, authorities gave him a priority, bundling him aboard the liner Georgic on 12 hours notice.

"People here probably do not realize how tough things are in England," he says. "First thing I want to do is get my teeth into a juicy steak . . . You can't get much in England like that, now. Eggs come only once in a blue moon. Even dried eggs are rationed now. You get two ounces of butter a week. And they think they'll have to ration bread, because Britain has been sending so much of her wheat to the Continent."

ZEPHYR THE HEPHYR

A farmer once called his cow "Zephyr"
She seemed such an amiable hephyr.
But when he drew near
She bit off his ear.
And now he is very much dephyr.

QUITE A STUEUE

They had cut off a Chinaman's queue.
And were painting his head a bright blueue;
So the Chinaman said,
As they daubed at his hair:
"When I sueue vueue, vueue'll rueue what
voueue dueue!"

Nobody can think straight who does not work. Idleness warps the mind. Thinking without constructive action becomes a disease.
—Henry Ford.

HOW IS YOUR BRAIN-POWER?

First customer to turn up with the right answer to our July forehead-creaser was Ken Robb, librarian at the Research Lab.

Our private opinion is that anybody who could work that thing out correctly could give Einstein a run for his dough any day in the week.

Here is the sequence of thinking by which Ken and a few others figured that A got hep to the color of the ribbon on his back:

When 'A' went into the room he could see that 'B' and 'C' each bore a white ribbon. Knowing that 'B' and 'C' were just as smart as he was 'A' reasoned thus "'B' can see that 'C' bears a white ribbon and he also knows what kind of ribbon is on my back. Suppose I have a black ribbon. In that case 'B' would say to himself: "'A' has a black ribbon and if I have a black ribbon too 'C' would immediately know that he has a white ribbon because there are only two black ribbons. But 'C' is not saying anything so I must have a white ribbon on.'" "But," reasons 'A,' "'B' is not saying anything either so the ribbon on my back cannot be black. Therefore it must be white."

Now Try This One.

This issue's problem should ring a bell in your head right away or if not it might keep bells ringing in your head for quite a while.

"There was once a bear and this bear walked in a certain direction for a distance of 20 miles. He then made a right angle turn and walked another 60 miles. Making still another right angle turn he walked 20 miles and found himself right back where he started from. What was the color of the bear?" Honestly there is no catch in this problem. Logic will find the answer.

A SMOOTHER APPROACH

Did you hear the one about the couple, blessed by their first child, who didn't get to the hospital quickly enough and the baby was born on the hospital lawn. An itemized bill was finally received and the husband objected strenuously to the item: "Delivery Room \$25.00." He returned the bill for revision. In due time it was returned with the item revised to read: "Green Fees, \$25.00."



HAS LOVELY GARDEN

Pride and joy of Frank Vasco is his beautiful garden at his home on Mitchell St., Port Colborne, which never fails to command the admiration of passersby. An Inco pensioner who retired last December after more than 20 years with the Company, Frank proved he is only 65 years young by bagging a job at the coal docks.



steak was one of the first things he asked for after being in England since January 1945.

Agonizing Separation

The Cochrane family went through an agonizing period of separation before they were reunited, and newspaper stories of their plight undoubtedly helped a great deal to cut red tape

"Operation Egg" Features Refinery's Picnic



Flying Hen Fruit Hard to Handle

"Operation Egg" was a standout feature of the annual picnic staged by the Copper Refinery Athletic Association at Morrison's Farm on July 14.

Contestants as well as spectators were in convulsions of mirth as the air-borne hen fruit crashed and spattered in the hands and sometimes on the faces and clothes of those who failed to treat it with the proper respect.

Flying Cackleberries

In the first of the above pictures are the dauntless couples who entered the lists for the egg-throwing event. Drawn up in two lines, the girls on one side and their males on the other, they tossed uncooked cackleberries back and forth to each other, widening the gap between the lines after each throw at the command of Fred Sheridan, who served as Master of the Yolks.

A wild heave on the part of Charlie Marshall on the 60-foot line was disastrous for Mrs. Marshall, who found the pitch too hot to handle and had to stop it with her chin. In the second picture she is seen just after the baptism, while Charlie gallantly offers his handkerchief and holds his nose.

Winners of the event were T. Caverson of the Mechanical Department and his daughter Dora, who pose in the third picture with their prize and their uncracked although probably slightly scrambled egg. Their final throw was 75 feet. Miss Caverson was on the winning team in the same event last year, making her unchallenged Queen of the Cackleberries.

Despite chilly, windy weather there was a bumper crowd on hand for the well-planned and smoothly conducted picnic. Mrs. Herb Shoveller and Leo Fletcher took first in the Needle & Thread race with Mrs. Nick Scinto and Tony Scinto second. Honors in the Potato Bag race for boys under 10 went to Donald Bryce, with Robert Limoges second and Ronnie Ferlani third, and for boys under 14 to Ronald Gauthier with Gerald Limoges second and Gary Harper third. There was a full program of contests for the youngsters, as well as ice cream and other seasonal delicacies.

ALL MIXED UP

Chinese visitor says: "Funny people, you Americans. You take a glass—you put in sugar to make it sweet and lemon to make it sour; you put in gin to warm you up and ice to keep you cool—you say, 'Here's to you!' and then drink it yourself."

When a man tells you that he knows the exact truth about anything you are safe in inferring that he is an inexact man.

Juvenile League Going Great Guns

The accent is on youth in Nickel Belt baseball this year, with Vic Corbeil's new juvenile league strictly a winner.

Seven teams are competing in this excellent "player farm" setup, and the calibre of play augurs great things for the future of senior ball in the district. Players like young Lefty Barbeau of the Shrine Club will be ready for the big time next year, and the transfusion of new blood will do much to lift the major league out of wartime doldrums in which it is still wallowing.

West Ends and Copper Cliff are showing the way in the league standing as Triangle goes to press, with lots of argument from C.Y.O., Shrine Club, Creighton, Donovan, and Garson. A handsome trophy donated by George Fouriezios, will be awarded to the winning team, and the most valuable player of the season will get a cup from the Sudbury Fire Fighters Association.

President of the League is Father Skillen, and secretary is Gil McGee.

Prosperity is only an instrument to be used; not a deity to be worshipped.

—Calvin Coolidge.



SLICK SCRAPER SYSTEM HAULS SAND FILL TO GARSON RAISE

WHEN the war ended almost a year ago, Inco had produced for the United Nations one and a half billion pounds of nickel. Although astronomical figures have become commonplace in recent years, the magnitude of this contribution to victory is not easy to dismiss. Without nickel, and lots of it, the war could not have been won.

It should be remembered, too, that the nickel output of the Company was far from comprising its total production. Copper to the tune

of 875,000 tons, and platinum metals which exceeded 1,800,000 ounces, poured into industrial arsenals during the same six-year period.

To produce this enormous quantity of metals naturally called for a great expansion of all facilities. As a measuring stick, it is interesting to note that the ore mined by Inco over the six war years was equal in amount to the ore mined during the previous 54 years.

One problem which increased in stature commensurate with the amount of ore produced was the supplying of fill for the stopes which had been mined out. At Garson Mine the problem was effectively solved by utilizing a deposit of glacial gravel and sand which lies atop the property. By sinking a shaft through the bed of the sand to meet a raise coming up from the 200-foot level of the mine, provision was made to gravity-feed the fill into the mine. Pillar raises, connected to this sand raise, take the fill into the stopes which lie between the 200-foot and 1,200-foot levels.

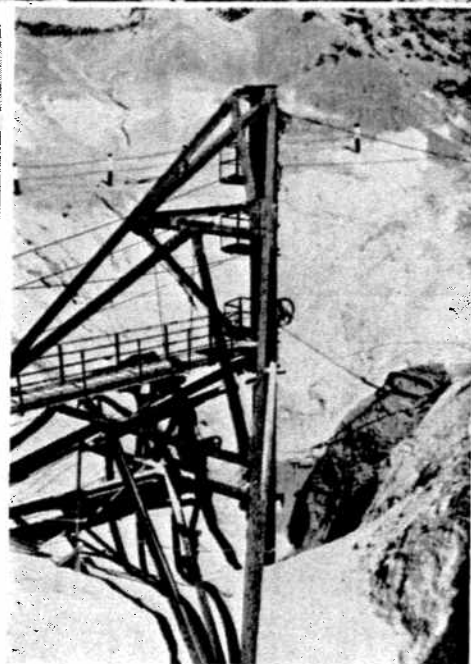
The bed of sand and gravel in places reaches a depth of 125 feet, and of this approximately 80 feet is recoverable, the balance being below water level.

To dig and haul the sand from the sides of the pit down to the opening of the fill raise, a Sauerman power drag scraper was installed, using a 4-yard crescent bucket. A three-drum Sauerman roller bearing hoist, powered by a 150-h.p. motor, operates the bucket.

An outstanding feature of the installation is the elevated bridle arrangement for shifting of the tail block which directs the course of the bucket. Consisting of two light but strong towers, mounted on skids for convenient relocation, with the bridle cables between, the system is motor-driven by the third drum on the main hoist.

The hoist for the power drag scraper and shifting device is housed in a concrete building. The operator, working in a tower above the house, has full visibility for all operations.

In the first of the accompanying pictures the crescent bucket is seen being hauled down the side of the sand pit toward the opening of the fill raise, which is at the foot of the cable mast. In the second photo the bucket is dumping into the raise.



KNOWS HIS STUFF



Not without good reason is "Rube" Cook, Frood rockhouse foreman, recognized as a very capable character with a fishing rod. For instance, one evening last month he packed the family into the old car and took a little trip out into the country. Parking his jalopy at the roadside, he barged through the bush to one of his favorite trout pools and was back in record time with a catch of speckleds to make your mouth water and your palate say Uncle. Pictured are Mr. and Mrs. Cook with one of his everyday run-of-the-stream catches.

"Where do you get 'em, 'Rube'?" we enquired casually as we cocked the camera shutter.

"Rube" didn't say.

Maciver's Clan in the Lead at Garson

Still undefeated on the season's play, Jock Maciver's lineup from the lower levels rule the roost in the shift softball league at Garson and, according to their Scottish skipper, have no intention of vacating that position.

Surface team, led by Rocci Devono, is locked in a death grip with Ed Mills' squad from the upper levels of the mine for second spot in the three-team loop.

Effective twirling by Cecil Ace makes the Maciver clan tough to beat, and led by Jim Armstrong and Arnold King the team is hitting well in the pinches.

Champions of the league take the Todd Cup, won last year by Surface. Sponsors of the popular sport are Garson Mine Athletic Association, of which George Secker is president.

FANCY MEETING YOU HERE!

"Yes, my dear," said a woman of many activities, to a friend, "for months I wondered where my husband was spending his evenings, until one night I arrived home early . . . and here he was!"



INCO TEAM TIED FOR TOP SPOT IN PORT COLBORNE SOFTBALL

The Inco team, last year's champs in Port Colborne softball, are facing much sterner opposition in their quest of this season's league laurels but they are confident that they can repeat. Pictured here is the 1946 edition of the team: back row, left to right, "Babe" Noble, "Dauber" Clark, Don Gallinger, Vince Upper, Ray Brown (captain), "Moe" Walker; front row, Joe Luke, "Fritz" O'Neill, Jack Holmes, Bill Zuck, "Red" Grist, Umbo Concessi (manager and coach); absent, Herb Haun, Bill Pruder, Jack Cochrane.

Other teams in the league, particularly Canada Furnace, have strengthened their lineups considerably this year and Port Colborne softball fans are due for some sparkling ball before the season's end.

Playing Coach Umbo Concessi believes that the Incoites' well-known batting power, plus steady pitching, will get them the nod. The lineup spells hitting power from top to bottom, led by that evergreen star of many a classy club, Vince Upper. For pitching the Incos have Umbo Concessi and Don Gallinger, the latter of Boston Bruins' hockey fame, and these strong hurlers are ably handled by the hustling and colorful "Red" Grist. Both Gallinger and Concessi take turns in the outfield when not on the mound.

At present the Incos are tied for first place with Canada Furnace, but stoutly maintain that this is only a temporary condition.

Hot Contest in Cliff Softball

Although they've dropped only one game so far this season (making a total of two they've lost in three years) Ross Grooms' Orford team seem certain to run into some very heavy weather in the playoffs for the championship of the Copper Cliff softball league.

Four teams are closely bunched for second spot in the league standing, and any one of the quartet is capable of extending Orford to the limit when the big chips are on the table. Vaticans, led by Popeye Didone, occupy No. 2 berth as Triangle goes to press, hotly pressed by Warren Thompson's Engineers, Terry Roupoli's Boilermakers new to the loop, and Dave Aubin's Electrons. Sixth team, lagging at present, are the Vesa lineup managed by Al Ristimaki. Concentrators dropped out after the first half of the loop schedule had been played.

Mitts Make a Difference

It's a tougher league than last year, with everybody sticking strictly to the rule book and playing heads-up softball. Use of gloves has cut down on errors and generally improved the brand of ball. The umpires, most active of whom are Joe Kelly and Art Prince, are doing a fine job but certainly have to stay on top of the play if they want to keep out of hot water.

Typical of the scrappy, hard-fought duels the league is producing was the game on July 26 in which Orford defeated Engineers 4-3. The Engineers were leading 3-2 when Eddie

Panke of Orfords cut loose with a solid biff and drove in the two runs that meant victory. A hot argument over a close decision at first base resulted in a brief rough-and-tumble fed to the spectators at no extra charge.

Boulet Still Dynamite

Back to the Reverbs from the Army, Johnny Wallace, brother of Gerry, is effective on the mound for Electrons, and Mickey McGuire, also recently out of the Forces, is doing some stellar chucking for Engineers although he's not in shape yet to go the full nine innings at his best. Several other players returned from the Services have stepped up the calibre of play.

Laurie Boulet, Orford's ace hurler, is still displaying his old mastery and cunning. The one game his team dropped this season was played while he was on the sidelines with a sprained ankle.

President of the league is Wib Job, vice president is Maurice Kinkley, and Lud Ryski has added the duties of secretary to his position of treasurer since Wilf Craven left for Bolivia, where he has joined a mining company. League playoffs start the third week in August.

THE HONOR OF THE THING

An old Springfield friend of Lincoln, after an evening at the White House, asked, "How does it feel to be President of the United States?"

"You have heard," said Lincoln, "about the man tarred and feathered and ridden out of town on a rail? A man in the crowd asked him how he liked it, and his reply was that, if it wasn't for the honor of the thing, he would rather walk."

Coniston Again Team To Beat

When playoffs get underway in Nickel Belt baseball on August 18, the team to beat again this year will be Sam Cresswell's Coniston crew. In first place in the league race, and playing smooth ball in every department, Coniston looms large.

Frood and Creighton are scrapping it out for second place, and Copper Cliff is very much in the picture. Despite good talent and lots of fight, Henry Dunn's Shamrocks seem doomed to the cellar.

Return of many good players from the Services, and the rise of several junior stars, have boosted the brand of play considerably over last year. By next season, when the first crop is cut in the juvenile league, senior baseball followers can expect to see some really hot action.

Joe Lora, Unk Longfellow, Fox Didone, Bus Paquette, Don Price, Herk Flynn, Bert Plouffe, Snel Blake, Hreljac, the Blackwell brothers, Davey, and Phil Nazar are some of the releases from the forces who have pepped up the league.

Johnny Vaillancourt, Frood catcher; Art Carboni, Creighton shortstop; and Bill Solski, Coniston pitcher, are three of the young players who are showing great improvement.

Despite some "basketball" scores, perhaps accounted for by looser work than usual in the infield, and a flock of scratch hits, the brand of baseball is definitely better than in 1945. It's a hitting league and that pleases the spectators.

VERY DIM FUTURE

The problems of her particular post-war future had been weighing heavily on five-year-old Janie. She decided to consult her mother. "If I get married someday," she asked, "will I have a husband like papa?"

"Yes, dear," was the answer.

"And if I don't get married will I be an old maid like Aunt Susan?"

"Yes."

"Well," Janie murmured to herself, "I am in a fix!"

LESSON IN FIRST AID

"Insignificant," said the employee, cutting himself.

"Inattention," said the foreman.

"Inflammation," said the hospital.

"Incurable," said the surgeon.

"Incredible," said the mourners.

"Interred," said the undertaker.

"In peace," said the tombstone.

To James Bay in 16-Foot Boat Was 1946 Holiday for Ken Clark

SOMEWHERE among the branches of K. S. Clark's family tree there must be at least one healthy limb representing a tribe of intrepid explorers whose great joy in life was to sail over uncharted waters and venture into unknown lands. That tradition is being staunchly carried on by the Copper Cliff chief of the clan, who almost every summer for the past 35 years has spent his holidays travelling far from beaten paths in the vastness of Northern Ontario.

He has crossed the Georgian Bay a number of times in his little boat, and he has cruised along the North Shore of mighty Lake Superior between Heron Bay and Michipicoten, and these are both jaunts he wants to repeat, but he has yet to find a more enjoyable trip than the one he took 26 years ago. That was a 280-mile journey on the Missisagi from Biscotasing to Blind River, through virgin timber country before the pine was cut.

Started on Pagwa River

For his 1946 holiday Mr. Clark shipped his boat by rail via Nakina on the C.N.R. to Pagwa River, a Hudson's Bay Co. post about 75 miles on the way to Hearst. There he bought his supplies, securing an extra 10 days' provisions in case of emergency, and listened carefully to the advice of local guides and trappers on danger spots to avoid on his trip. Then, alone in the 16-foot outboard which he himself built some years ago, he was away down the Pagwa, bound for James Bay.

His route took him 50 miles on the Pagwa, then 110 miles down the English River, or Kenogami as it appears on the map, and finally 160 miles on the Albany to the point where it enters James Bay. Before the T. & N. O. was built this was the route over which supplies were floated in barges to the Hudson's Bay Co. posts down the rivers and on James Bay. In the old days approximately 1,000 tons of supplies were transported in this manner each spring; this year five barges carried 100 tons, the rest going by rail.

Rapids Not So Rapid

Most arduous part of Mr. Clark's trip was on the last 20 miles of the Pagwa before it joins the English. In this area the country rock becomes limestone and the rapids are merely shallow water where the river is wide and runs over the flat, smooth limestone bed. Along most of this stretch his motor was useless, and he spent back-breaking hours pushing, tugging, poling, and cussing to get his 500-lb. boat through the shallow stretches.

Once into the deeper waters of the English, however, the trip became pure delight for an outdoorsman. The banks of the river were strata of grey clay and red limestone, with grey limestone below, and this color scheme was set off by heavy woods of black spruce, poplar and white birch. The weather was ideal, and only twice on his trip did Mr. Clark have to make camp on shore. Often he cut out his motor and drifted in the current, studying his maps, reading a copy of John Buchan's "Green Mantle" he had brought along for company, casting for pickerel, or just loafing in the sunshine and marvelling at the immensity and complete solitude of the country which spread far and away about him.

Careful Navigation Needed

During the last 75 miles of his journey down the Albany the river banks were low and often lined with ice even in late June, hangovers from the spring break-up. The final 50 miles was covered by a maze of islands, and the traveller heeded the advice given him back at Pagwa River to stick to the south channels lest he get lost.

So finally Mr. Clark arrived at the Albany Post of the Hudson's Bay Co. and there, by a stroke of good fortune, met Dr. Orford, the government doctor for the Indians, Eskimo, and Missions of Hudson Bay, who had also arrived that day in his 70-foot motor cruiser with a nurse and a constable of the R.C.M.P. Arctic Patrol. The party was proceeding at

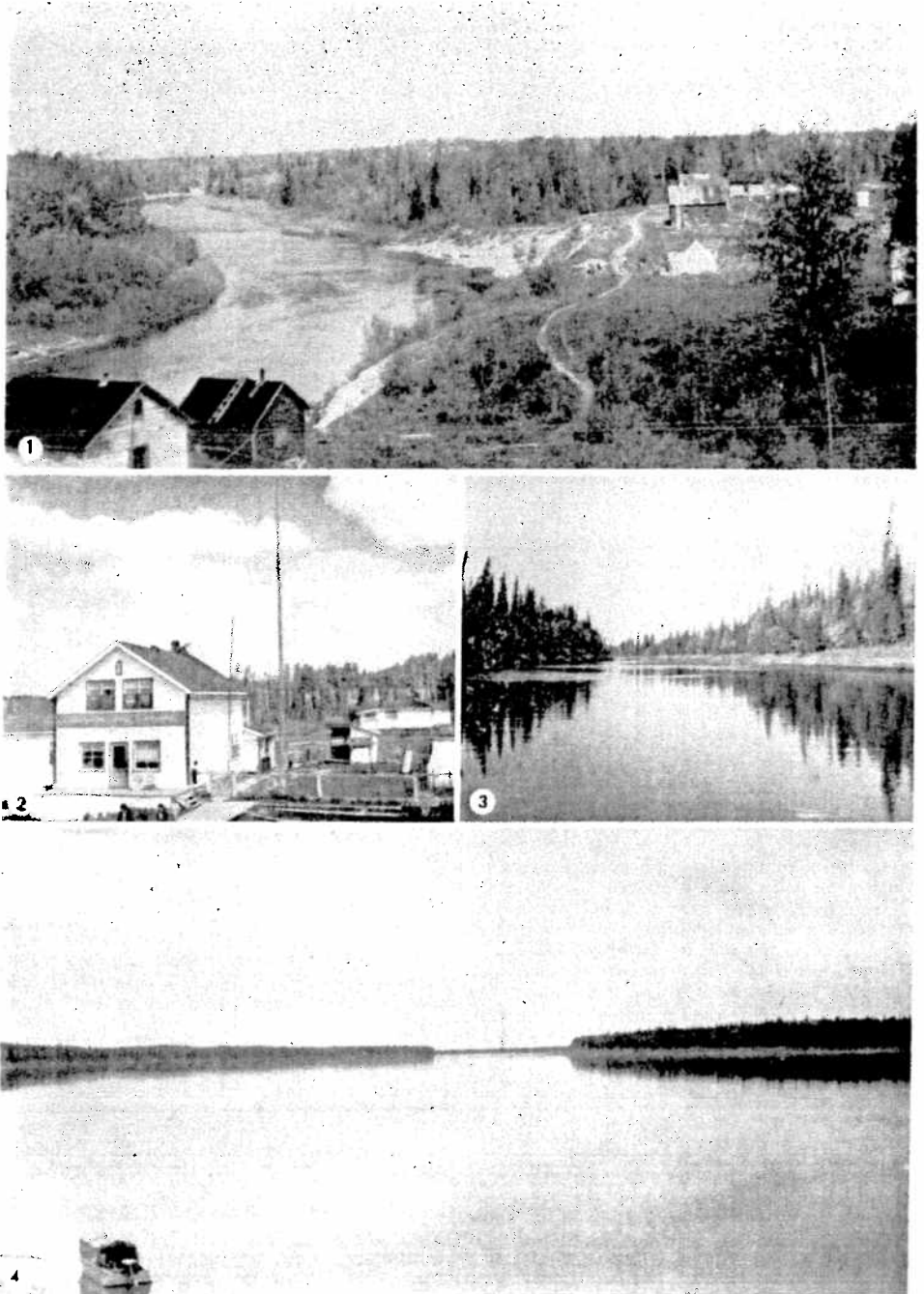
dawn to Moosonee and invited Mr. Clark to come along, which with considerable alacrity

he agreed to do. Until daylight at about 2.30 a.m. the group sat around the H.B.C. post, swapping yarns of the northland with the factor. Then they pulled out on the tide and made the trip down the coast of James Bay, passing some 75 miles of ice floes and hummocks and arriving at Moosonee at 1.30 p.m. Mr. Clark's boat and equipment were shipped to Copper Cliff from Albany Post, and he completed the journey home by rail after visiting for a day with Bishop Renneau, famed administrator of Moosonee Diocese.

Use Your Head, That's All

For those who might have qualms about setting off alone in a 16-foot boat on a voyage such as he took this summer, Mr. Clark has a hearty pooh-pooh. "Easiest thing in the world," he says. "All you have to do is adjust

ALONG K. S. CLARK'S HOLIDAY ROUTE



Pictured in No. 1 is the scene from the bridge overlooking the Pagwa River where K. S. Clark started his two-week waterway holiday to James Bay. In No. 2 is the Hudson's Bay Co. post at Pagwa River where he bought his supplies for the lonely 320-mile boat trip to the mouth of the Albany River where it enters James Bay. Typical of the black spruce country is this scene (No. 3) along his route. His boat, which he made himself, lies at anchor in No. 4 at Ghost River Post on the Albany River.



KENNETH S. CLARK

yourself to the conditions of the country, keep your wits about you, and realize that people are doing that sort of thing every day." He's 61 years old, but he looks forward to many more such holiday jaunts before he resigns himself to prosaic annual sessions at summer resorts where somebody else does the cooking and your bed is cooped under a roof instead of out beneath the pines and stars.

Widely recognized as a conservationist and supporter of wild life preservation, Mr. Clark was the logical choice as first chairman of the newly formed Northern Ontario Fish and Game Protective Federation (South Zone), organized at North Bay on July 3. The aim of the federation is to establish more local clubs dedicated to the gospel of conservation of fish, wild life, and the forest wealth of the North, and to give these clubs a united voice in pressing for necessary government action.

"There are still too many misconceptions harbored about the North in Southern Ontario," he says, "and we must overcome these if Northern Ontario's wild life is to be preserved." Strong support of all sportsmen is expected for the movement.

Mr. Clark is assistant superintendent at the Concentrator, Copper Cliff.

WHO SAID FISH??

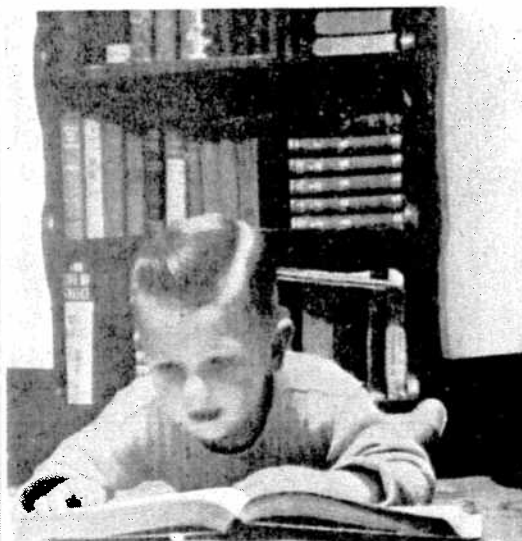


Kookagaming Lake has given up some mighty hefty catches of fish but few to equal the mess of lake trout reeled in one day last month by a quintet of expert Sudbury fishermen.

On the left is Barney Brady of the C.P.R., holding the "baby" of the catch, a modest 9-pounder; next is Bill Dixon, Sudbury tonsorial artist, with his 10-pounder. Okley Storms, for 11 years a member of the Copper Refinery force, proudly displays a trout which tipped the scales at 24½ lbs. The one held by Gilbert Dixon, Frood employee for the past ten years, weighed 20½ lbs., and the Daddy of them all, held by Art Dixon of Copper Cliff street car station, lifted 31 lbs.

First Winners in Triangle's "Picture of Month" Contest

WALTER DYDYK of the Mines Engineering Department at Copper Cliff won the \$10.00 award in Triangle's first "Picture of the Month" contest. His snapshot of his 4-year-old son Barry, reading bedtime stories, was declared best of the entries by W. E. Mason, publisher of the Sudbury Daily Star, who was kind enough to serve as a guest judge for the July contest.



Second best entry in the contest was a picture of a clump of pines on an island in Lake Ramsay, taken by G. R. Ardagh, who works in the Silver Building at the Copper Refinery. He receives honorable mention and a \$1.00 award.

Honorable mention and an award of \$1.00 also went to Art Gauthier, pillar leader underground at Frood Mine, for his snap of a fine mess of trout he caught in Lake Kookagaming while on his holidays. In the letter accompanying his entry Art said that the big lake trout weighed 23½ lbs., and two of the other were 15 and 14 lbs, respectively.

Congratulations to these first winners, and thanks for their interest. Cheques for their awards have been mailed to them.

Two snaps which were close contenders for prize money were submitted by Lloyd A. Walford, of the police force at Creighton, and H. Boyd, another Creighton employee.

Entries received up to and including August 17 will be eligible for the August contest. Each picture must be taken by the person who enters it, but developing and finishing need not be done by him. All employees of Inco may compete. Entries must be accompanied by the name of the employee, employment number, name of plant at which he works, and necessary descriptive detail of the picture.

There are no restrictions on subject matter. So, as we said in announcing the contest last month: "Get out the old Brownie and 'shoot' the kids playing in the back yard, or that fine string of fish, or a pretty bit of scenery, or Ma helping change a tire on the holiday trip, or whatever you like. Then send in the snap to Inco Triangle, Copper Cliff."

Guest judge for the August contest will be W. G. Couture of the Couture Studio, Sudbury.

Those who give too much attention to trifling things become, generally, incapable of great things.—Rochefoucauld.

If you confer a benefit, never remember it; if you receive one, never forget it.—Chilon.



CLINIC GOING STRONG

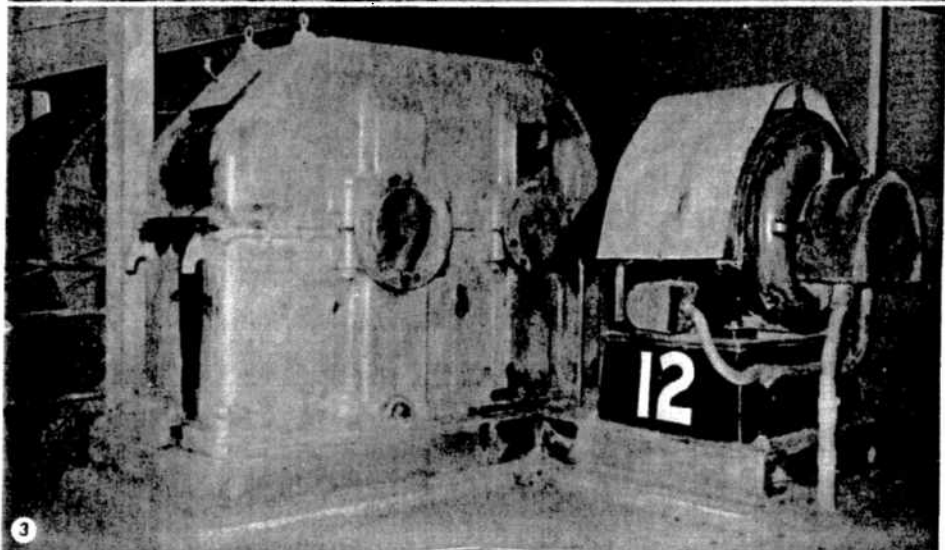
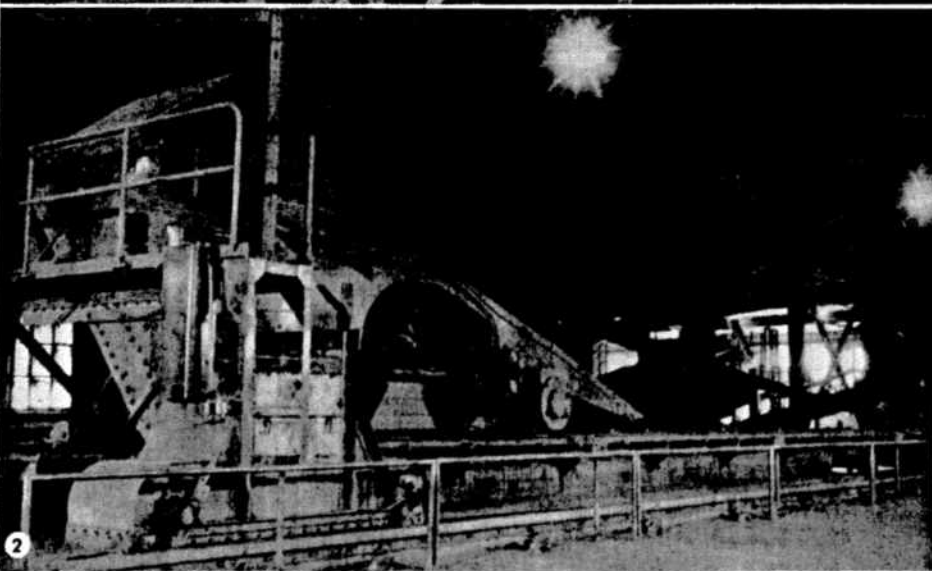
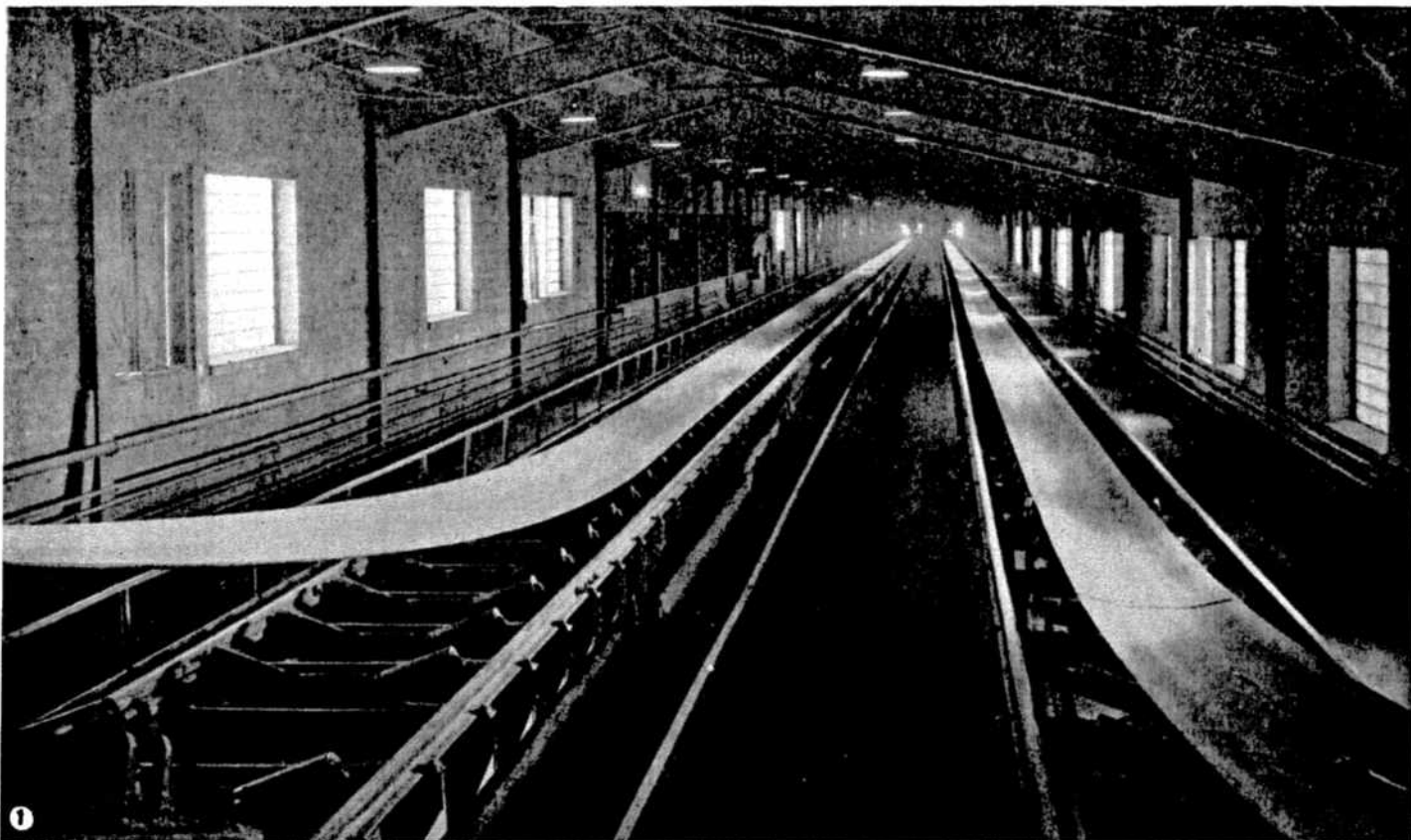
Very little slackening off in attendance, despite the hot weather, is reported from the Well-Baby Clinic at the Inco Medical Centre in Sudbury.

Mothers continue to take full advantage of this splendid opportunity to protect the health of their pre-school age children, and even larger attendances are expected in the fall when a series of demonstrations will be given of preparing formulae for new-born children.

In the picture little Geraldine Keast gets the "once-over" from Dr. Paul Kyle while her



mother looks on. She is the daughter of Mr. and Mrs. Clifford Keast and her dad works in Copper Cliff Smelter.



Conveyors Add Up to 19,000 Ft.

Literally a maze of moving belts, the Crushing Plant at Copper Cliff Concentrator has a total of 41 conveyors, the shortest 42 feet and the longest 1800 feet. Widths vary from 36 to 60 inches.

Transporting the ore from the bins to the crushers, then to the screens and rolls, and finally to the Mill where they undergo grinding and flotation, the Crushing Plant conveyors have a total length of some 19,000 feet. Which in terms of rubber adds up to a lot of tires.

Speed of the conveyors varies from 100 feet per minute to 557 feet per minute. Greatest vertical lift is on No. 19, which rises a total of 78 feet 6 inches in its course; the steepest slope is that of No. 18, almost 20 degrees.

An Ore-Scarred Veteran

No. 12 conveyor handles a total of 3000 tons per hour, but for long and faithful service the pearl-handled toothpick goes to the old veteran, No. 21, which was installed in June of 1939. Since then No. 21 has been lengthened but part of the original belt is still in service after carrying a total of almost 43 million tons. Other belts have handled up to 30 million tons.

Another interesting figure dished up by the boys at the Crushing Plant: the total number of bearings in the troughing idlers and return rolls is 10,868.

In the first of the accompanying pictures are seen No. 20 and No. 21 conveyor belts, 1795 and 1800 feet long respectively. Located above the Mill bins, these long-drawn operators carry the ore to its final resting place before it goes into the Mill circuit.

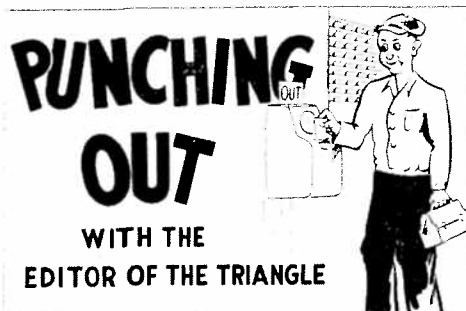
In the second picture is No. 7 tripper, one of six of similar size which dump the ore off the conveyor into whichever bin it is assigned to. Driven by a 10 h.p. motor, No. 7 reaches more than 6 feet between rails and has a total weight of 29,400 pounds.

Not Exactly a Trinket

In the third picture of this spectacular Crushing Plant equipment is No. 12 conveyor drive, just an example of the powerful type of instal-

lation necessary to speed Inco ores on their way from mine to mill. This baby has a 400-h.p. 750-r.p.m. 2200-volt motor which weighs 9000 pounds. Ratio of the speed reducer is 26.5 to 1 and its weight is 108,405 pounds. No. 12 conveyor belt, driven by this electrical giant, is 1018 feet long, weighs 19,324 pounds, has a speed of 550 feet per minute, and with approximately 50 tons on it at any one time carries a total of about 3000 tons per hour.

The next time your wife puts the B on you to lug that trunk up to the attic, think of No. 12 and say nothing.



In this corner, weighing in at whatever they happen to be worth, you will in future find odds and ends from the editorial desk which are still "on the loose" as we punch out to go to press.

SOMEBODY was asking the name of that good-looking family which appeared in the centre of the Circus Crowd picture layout in the July Triangle. They're Mr. and Mrs. Freddie O'Hagan, with daughter Dianne, aged 2, and son Eddie, aged 4½. Freddie is a drill boss at the Open Pit, and was on his holidays when the big show came to town. He got a barrel of fun out of the reactions of his two youngsters to their first circus.

Any time you have a newsy note you think would fit into this column, send it along. But PLEASE sign your name and address because we just can't print unsigned items. Life is short enough as it is.

THINKS WE'RE OKAY

BOBBIE BURNS wrote: "Oh, wad some power the giftie gie us, to see ourselves as ithers see us." Were the Inco family to see themselves and their industry through the eyes of Frank A. Ayer, the view might make them blush with modesty. On a visit to the Nickel Belt, Mr. Ayer was deeply impressed with the scope and magnitude of mining and smelting operations carried on by Inco, and said so in glowing terms. He was head of the copper division of the U. S. War Production Board for four years, and now is vice president of the Copper Range Co. in Michigan.

Peeker From Penage

Our Penage Correspondent the other day picked up a definition which he forwards for publication: "Golf is a game in which a ball 1½ inches in diameter is placed on a ball 8000 miles in diameter. The object is to hit the one and not the other." That fellow must have been peeking the other night when we were doing our earnest best to transform the second fairway at Idylwyde into a reasonable facsimile of the Open Pit.

Doing Well in Girls' Baseball

ETHEL WARMESLEY, Copper Cliff hello girl, gets interesting letters from her sister Jo, who is playing her first season in the All-American Girls' Baseball League. A former Nickel Belt softball star, Jo is catcher with the Racine (Wisconsin) Belles in an 8-team league which plays full-fledged big-time baseball and draws capacity crowds. When they travel to more distant points in the loop the girls ride the airways. They

have a practice session every morning and play a game every night, with double-headers on Sundays. Jo's team is second in the league standing at present. She expects to return to her home in Sudbury about the middle of September.

SMART PUBLICITY STUNT

ALREADY launched on plans and preparations for Sudbury's 1947 Winter Carnival, Wally Armstrong, general manager of the big snow show, will buy up all the blueberries and bear meat he can get his hands on. They'll be quickly frozen and stored away until Carnival time. Then restaurants and hotels will co-operate by serving native Northern dishes like blueberry pie and bear steaks, and visitors from down South will be knocked for the proverbial loop.

Performing a Public Service

It may be like carrying coals to Newcastle but here's Orchids to the Company's Agricultural Department for the fine job they're doing of transforming the badlands east of Copper Cliff into lush green pastures pleasing to the eye and soothing to the mind. These boys are worth encouraging: anybody who can raise a crop on those barren slopes of clay could make hair grow on a billiard ball or you-know-where. The line forms to the right for all men with high foreheads.

PRIZE WINNING SONS

TWO chesty Inco dads last month were Dr. C. C. Evans of the Medical Centre in Sudbury and J. A. Beaudry of Copper Cliff Mechanical. The former's son Peter won the I.O.D.E. English literature award in written examinations of the Sudbury High School Entrance Board, and the latter's son Harold the similar award for separate school students. The McCrea medal for the highest marks in the entrance exams went to Barbara Scott, whose father Jim was formerly a member of the Inco police force and was stationed at Garson.

Cheer Up Polly, Don't You Cry—Here's How to Make a Shoo-fly-pie.

A June bride (name of Polly) phoned a 4-alarm call to the Triangle's Domestic Science Department the other day for the recipe for Shoo Fly pie. Seems that her new hubby (name of George) is going slightly wacky listening to the tune on the radio and not being able to taste it. Get out that brand new frilly apron and that unscarred rolling pin, Polly, because here's the how:

You need: flaky pastry, ¾ cup sifted all-purpose flour, ½ cup brown sugar, ⅛ teaspoon nutmeg, ⅛ teaspoon ginger, ⅛ teaspoon cloves, ½ teaspoon cinnamon, ¾ teaspoon salt, 3 tablespoons butter, 1½ teaspoons baking soda, ¼ cup hot water, ½ cup molasses, 1 egg yolk, beaten.

Then you line a 9-inch pie plate with pastry. Set in refrigerator to chill. Meanwhile, mix together all dry ingredients. Then, with back of spoon, rub butter into dry ingredients to form crumbs. Dissolve baking soda in hot water. Combine liquid ingredients. Sprinkle a layer of crumbs in pie plate. Spoon in enough of the liquid ingredients to form a layer, and repeat forming layers of crumbs and molasses until ingredients are all used up, ending with a layer of crumbs on top. Bake in hot oven of 450 deg. F for 10 minutes. Reduce heat to 350 deg. F. and bake 20 minutes.

If George smiles after second bite, put finger on him for new fur coat. If George turns light green after second bite, phone for Doc Ferguson and run for your life.

DID YOU make a note of the Triangle's new phone number—22192? And by the way, if there's no answer, please call 2411.

YES, MY DARLING DAUGHTER

... BUT DON'T GO NEAR THE WATER!

PETERSON'S Magazine for August, 1956, gave some directions for making bathing dresses. The dress, they said, consists of a pair of drawers and a skirt, the latter reaching to about three inches above the ankle. The drawers are confined at the ankle by a band, finished with a ruffle, and are fastened in such a way that, even if the skirt washes up, the person cannot possibly be exposed. The dress is plaited down to the waist and confined with a belt. Many wear a small talma or cape of the same material as the dress, as this, in some degree, hides the figure. The sleeves should be confined about the wrist by a band, and have a deep ruffle falling over the hand which protects the wrists from the sun. A pair of large lisle thread gloves to protect the hands, an oil cloth cap, and a straw hat, are necessary to complete a bathing toilet. Some whose feet are tender always wear gum overshoes into the surf, but we think them cumbersome.

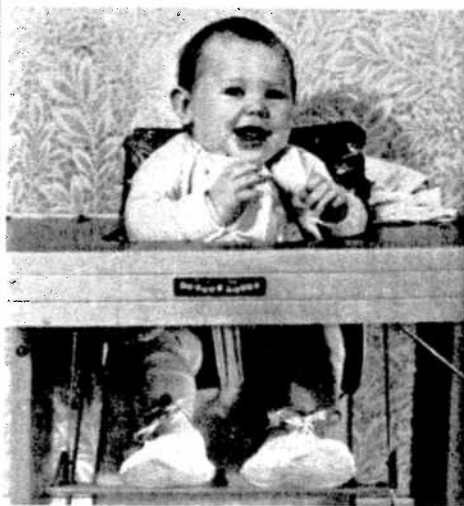
Ah, them wuz the days!

THE BOYS at the Open Pit had their eyes fixed lovingly on those 100,000-Safe-Shifts pins last November. With 95,000 safe shifts behind them, the award seemed practically in the bag. Then, bingo! A freak accident came along and put them right smack back where they started. It was tough luck but they just put on the safety pressure harder than ever. To date, even with the reduced force at the Pit, they have rolled up more than 52,000 safe shifts again. Let's hope they get over the 100,000 hump this time for sure.

Old Issue to be Settled?

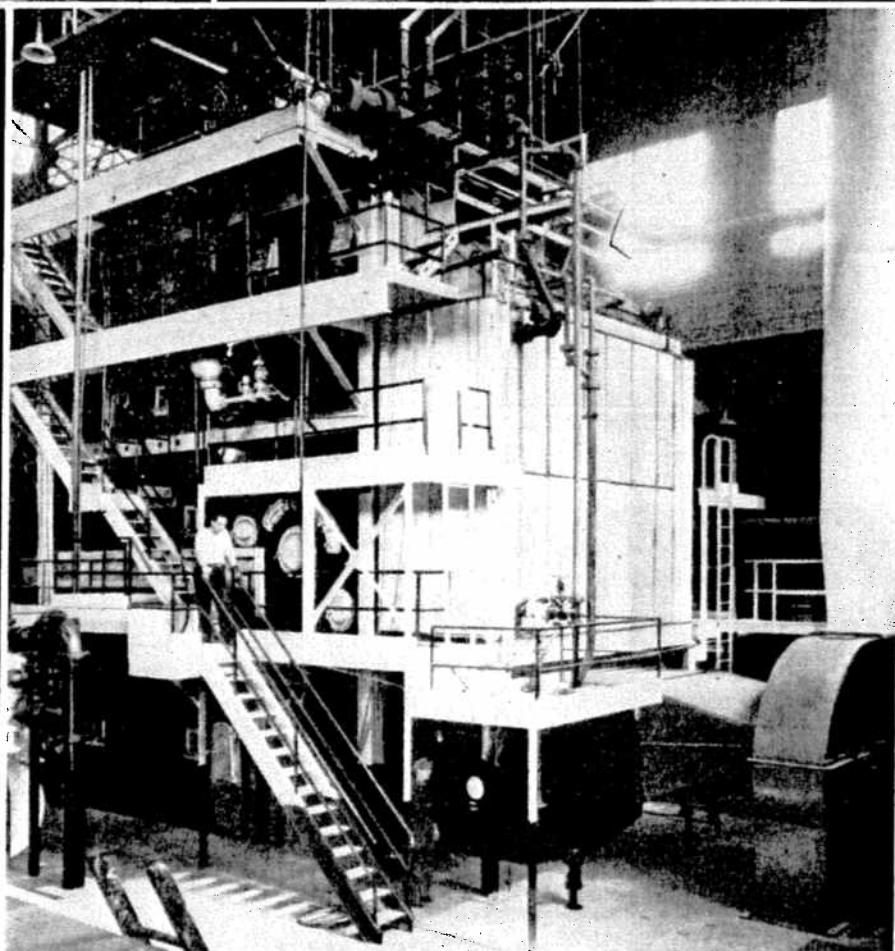
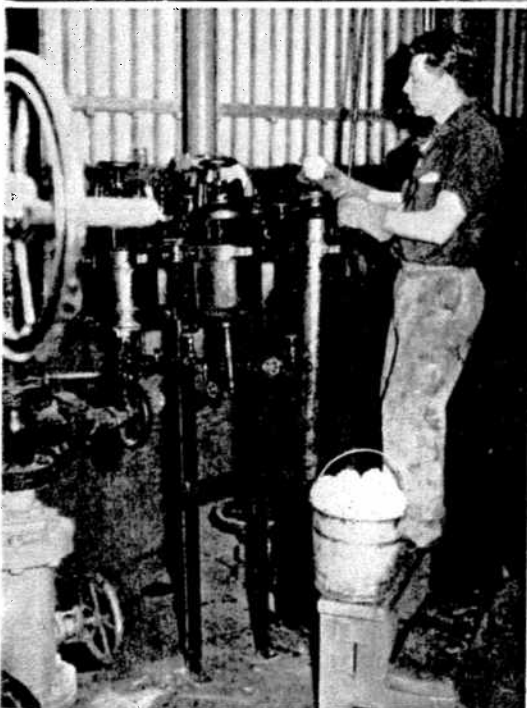
Port Colborne Lions Club, in which many Incoites are active workers, is staging a Popularity Contest and Frolic on August 22-24. Unique feature of the Popularity Contest is that contestants are not limited to age, sex, or place of residence. Looks like a good old-fashioned knock-'em-down-drag-'em-out Battle of the Sexes is in the making. Hop to it, guys and gals; the superiority of the male over female, or vice versa, is still a matter of doubt in some quarters, and this is a good chance to settle the question once and for all.

ANSWERING: YES, The Triangle is mailed every month to all Inco pensioners. Some of the most welcome letters to the editorial desk are from former employees now living in comfortable retirement, many in far distant places, who get pleasure out of happy reminiscences prompted by news of doings in the Inco family.



ELIZABETH ROBB

Very young men with an eye to the future should jot down a memo of this: Elizabeth Ruth Robb, aged 10 months, daughter of Mr. and Mrs. George Robb of Copper Cliff. (Her dad took the picture.)



50 Million Lbs. Of Steam Per Month Produced

The boiler plant at Inco's Copper Refinery is an important contributory installation which furnishes the large quantity of steam used at high and low pressures for the various plant processes and for heating buildings.

Steam is produced at 180 lbs. pressure, at a rate of approximately 50,000,000 lbs. per month, by one 1,000-h.p. auxiliary boiler, one 645-h.p. wire bar waste heat boiler converted to auxiliary service, and three 645-h.p. waste heat boilers located above the anode reverberatory furnaces. The two auxiliary units are fired direct with pulverized coal, while the three latter units utilize the waste heat in the exit gases from the pulverized coal fired reverberatory furnaces. All boilers are four-drum Stirling type and are equipped with superheaters and economizers. Standard equipment also includes primary, secondary and induced draft fans; soot blowers and feed-water regulators. Metering and control are provided for by steam flow and pressure recording instruments; draft recorders; and feed-water flow, pressure and

temperature recording meters.

200,000 Gallons Per Day

Boiler water is pumped from Kelly Lake, about one mile east of the Refinery, through a 12-inch main to the water treating plant. About 200,000 gallons of water are used per day for boiler feed. This quantity is filtered through pressure filters and is then softened by zeolite treatment. In Photo No. 1 Pat Morris is seen operating the discharge valve of No. 1 Softener. This treatment removes the lime and magnesia present in the raw water, which otherwise would cause undesirable build-up of scale in the boilers. Regeneration of the zeolites and removal of the scale forming constituents is accomplished by flushing the tanks with common salt solution from the saturator. By this means, the purification cycle may be repeated over and over.

Frequent control tests of the water during all phases of the treatment and usage are neces-

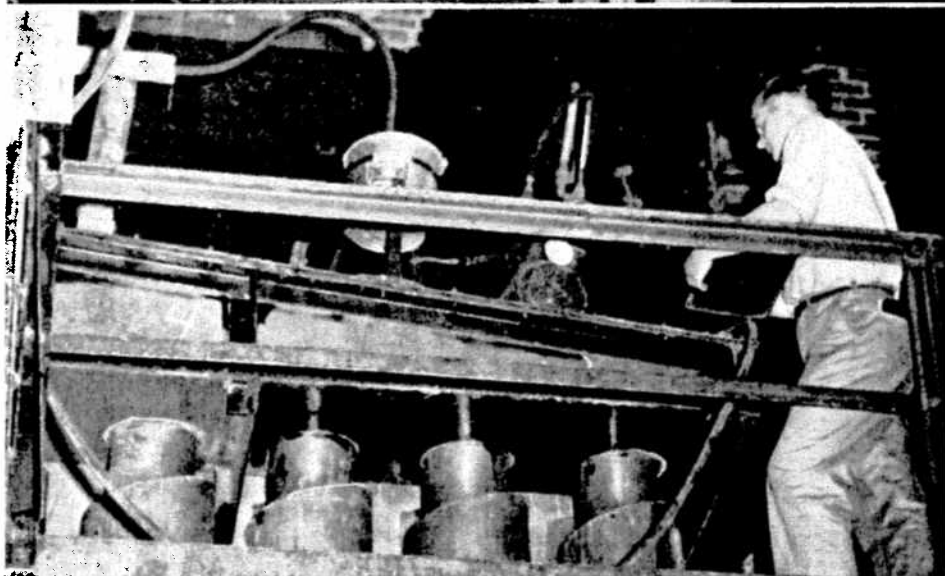
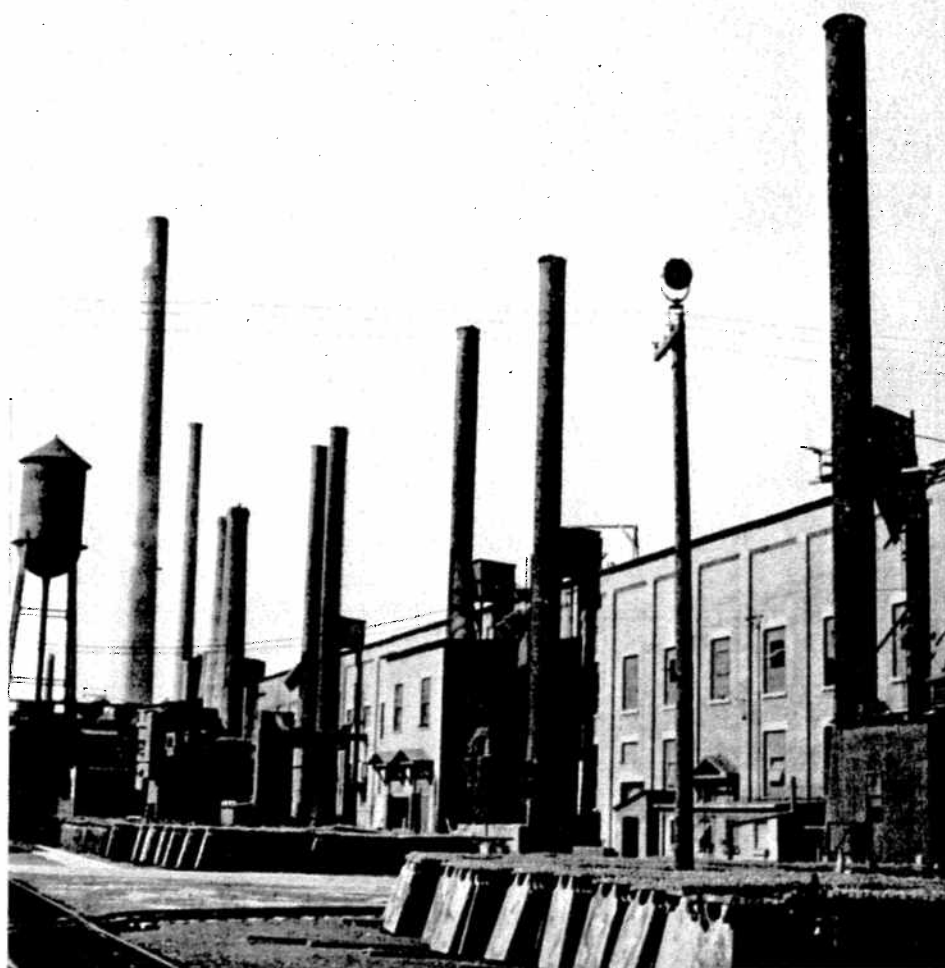
sary to ensure efficient and safe operation of boilers and equipment. These tests are performed at the water treating plant. Thomas Carrey is shown in Photo No. 2 checking the density of a typical sample.

Further Conditioning

After softening, the water is further conditioned by supplementary chemical treatment. Caustic is used to increase the alkalinity and phosphate, organic and sulphite chemicals are added to the water after heating and deaeration. Each chemical serves a specific purpose for maintenance of boiler water quality. Photo No. 3 shows Frank Scott adding the chemicals in briquette form to one of the three feeders.

The 1,000-h.p. auxiliary boiler, which is the largest unit in the Refinery installation and a major user of the conditioned water, is shown in Photo No. 4. Stan Mitchell is seen at the flow-meter and that's Ken Dowdall on the stairway.

No Spot for Vacuum Cleaner!



Dust collection at Port Colborne Refinery is something more than a lick and a promise with a damp cloth or a hasty hike around the place with a vacuum cleaner. From the stacks serving the anode furnaces, seen in the top picture, from the precious metals department, and in the wire hung dust chamber through which pass gases from the calcining and sintering operations, a reasonable recovery of dust must be made to complete efficient operation.

Dust collectors are at work day and night, recovering from the tremendous volume of gases, metal values which otherwise would be lost. Both dry and wet cyclone collectors are in use, in addition to the wire hung chamber handling gases from calcining and sintering. Frequent tests determine the efficiency of the dust collectors, and in the second picture Bert Lindenias is taking a reading from the wet cyclone unit which gathers dust from precious metals department gases.

A second-generation Incoite, Bert is the son of Ivor Lindenias, furnaceman, who has been with the Company since 1926. He was born in Finland but came to Canada with his mother and sister to join his father in 1929. Graduating in metallurgy in 1945 from Queens, he worked at Copper Cliff for six months on Smelter Research under George Norman, and then went to Port as Dust Loss Testing Engineer. He married Elizabeth Curtis of Kingston and they have a daughter five months old. Wonder if Bert does the dusting at home?

Chairman of Mond Knighthood by King for Public Services

Dr. William T. Griffiths, Chairman and Managing Director of The Mond Nickel Company, Limited, and a Vice-President of its parent company, The International Nickel Company of Canada, Limited, was among those knighted by King George on July 23rd. Knighthood was bestowed upon Sir William in recognition of his public services, particularly during the war, when he was a Metallurgical Consultant to the British Services and Production Ministries and a member of several important metallurgical, research and materials committees.

With Mond Since 1926

Sir William became associated with the Mond Nickel Company in 1926, and was Manager of its Development and Research Department from 1928 to 1945, when he was made Chairman and Managing Director, succeeding in the latter capacities the late David Owen Evans, Member of Parliament for Cardiganshire, Wales. In November 1945, he was elected Vice-President in charge of operations in Great Britain and European activities and a member of the Board of Directors of The International Nickel Company of Canada, Limited.

Sir William's home is in Kenley, Surrey, England. He graduated at the Cardiff College of the University of Wales and later received the Doctor of Science degree of that University. During World War I he served for three years in France in the Corps of Royal Engineers and was later appointed to the staff of the Army and Navy Research Department at Woolwich. During World War II he was concerned with measures for the economic and efficient use of supplies of nickel available to the United Nations and with the exchange of information in metallurgical science, technology and practice used in armament design and construction.

High Qualifications

Sir William's professional qualifications include Fellowships of the Royal Institute of Chemistry, the Institute of Physics and the Institution of Metallurgists. He has just completed two years in office as President of the Institute of Metals of Great Britain.

COMBINES ARE AHEAD

Behind the powerful pitching of Mike Shambley, who is also having a great season with the willow, Jack Crawford's Combines are out in front in the Copper Refinery softball league.

Shops, chartered by Bob Price, and Tankhouse, led by Leo Desilets, are providing the Combines with plenty of opposition however, and the fans are reaping some first-class entertainment. Although he's out of action with a toe injury at present, Paul Dow is starring for Shops in centre field and at the bat, while Charlie Marshall, shortstop, is a standout for Tankhouse.

President of the league is Leo Desilets and secretary is Frank Scott.

WHY HUSBANDS GO GRAY

"Why is Smith pacing up and down in front of his house like that?"

"He's awfully worried about his wife."

"Is that so? What's she got?"

"The car."



INCO DIVOT-DIGGERS COMPETE IN TOURNAMENT AUGUST 17

IDYLYWYLDE Golf and Country Club will be the scene of an Inco golf tournament on Saturday, August 17. The clubhouse, pictured above, has been enlarged and redecorated this year and is a very attractive sports and social rendezvous in its typically Northern setting. The carefully groomed 9th green, closely guarded by traps, is at the right.

All Are Invited

All Inco employees are invited to take part in the tourney on August 17. The Inter-Plant competition for 4-man teams for the R. L. Beattie Trophy will be renewed after a lapse of six years due to the war. Copper Refinery won the trophy in 1939.

As well as those taking part in the Inter-Plant team event, all Inco golfers will play 18 holes to qualify for the Non-Handicap and Handicap championships of Inco plants in the Sudbury District. Prizes will be awarded winners and runners-up. Entries are to be in by Thursday evening, August 15. A banquet in the Idylwyld clubhouse will follow the tournament. It is expected that about 50 golfers will take part.

Port Colborne Powerful

Considerable interest is already being shown in the outcome of the Inter-Plant team event. Port Colborne Refinery, which has half a dozen very hot golfers, is regarded as a likely contender and will be a tough nut for the Northerners to crack.

In both the Seagram tournament at Sudbury Golf Club on July 29 and 30, and the N.O.G.A. tourney at Idylwyld on August 1, 2, and 3, Inco golfers were prominent among the low scorers.

Garson Unlikely to Seek Dominion Cup

Nobody would deny Garson football team a top-flight chance of taking the Canadian championship this year but it looks as if the booters from the Ryan Award bailiwick will not get a crack at the Dominion Cup in 1946. Arrangements for Garson's entry appear to have fallen through, and you can bet your bottom farthing that a few teams like Ulster United are breathing a good deal easier thereby.

Undeclared in League play, Garson's great team took the Anderson Cup and look like a

cinch to annex the McCrea Trophy too. It's been a banner year for such old reliables as Taffy Davis, Art Thorburn, Billy Armstrong, Ollie Matson, Hughie Rorison, and Andy Muir, and the rest of the gang. Manager Syd Gemmell and Coach Bob McCauley have every right to be proud of their squad.

Playing inspired football sparked by Jimmy Wallace, Falconbridge pulled the upset of the season when they trimmed Garson 3-2 on the road for the Evans Cup.

Frood and Legion, the other two teams taking part in a highly successful revival of Nickel Belt football, have turned in some splendid performances during the season.

MOTHER, HOW COULD YOU!

The little boy and his mother stood looking at the dentist's showcase. The boy, pointing, said, "If I had to have false teeth, Mother, I'd like to have that set."

"Hush, Junior, haven't I told you not to pick your teeth in public?"

"Missed the Boat" And Very Glad of it

A lot of people hate to "miss the boat" but Alex McNay of Port Colborne thinks that sometimes it's not a bad idea.

Asked to transfer to the Navy as a welfare officer in the Second Great War, he was delayed en route to his ship, an aircraft carrier, and it left without him. It was sunk by enemy action.

Born at Ayrshire, Scotland, in 1896, son of a coal mine manager, Alex served with the Queen's Own Cameron Highlanders in the First Great War and suffered a broken leg at Hill 70 in 1916.

When he came to Canada his first job was with a fruit company in Hamilton, then he went on the road for a packing house. He went to Port Colborne in 1926 to open a chain grocery store and three years later signed on with Inco, starting in the sinter plant. His pleasing personality and administrative ability tagged him

for contract work and from 1931 to 1936 he was loaned by the Company to the Town of Port Colborne to handle welfare and relief work. On his return to the plant he naturally gravitated to personnel duties.

Enlisting in 1942 he went overseas with the Army to Italy, and eventually was asked to make



the transfer in which he fortunately "missed the boat." Thereafter he was posted to the North of Ireland with the Navy, supplying recreational equipment and handling various personnel assignments for ships docking there. The corvettes Port Colborne, Humberstone, Copper Cliff and Sudbury were among those he contacted.

On his return from overseas in time for Christmas of 1945 he was appointed supervisor of recreation at the Inco Recreation Club in Port Colborne, a job for which he is a "natural."

He was married at Hamilton in 1924 to Miss Jean Shedden and they have three children, Jean, Sandy, and Christine.



His old pals in the Reverb Department at Copper Cliff Smelter will hardly recognize Joe Workman, who is putting his pension hours to good use as this snap clearly testifies. The fish is a 10-lb. lake trout which Joe hauled out of Lake Kokagaming last month. Pictures like this make a fellow feel that retirement can't come around soon enough.