

# INCO TRIANGLE

VOLUME 4

COPPER CLIFF, ONTARIO, OCTOBER, 1944

NUMBER 7

*"... and please bring Daddy home again soon."*



In thousands of Canadian homes these nights as the radio newscasts heighten anticipation of Victory, children like Keith and Carolyn ask God to send Daddy home again soon. Their longing for him matches his yearning for them; these have been long years for fathers far from their kiddies and daily facing the spectre of death, and for mothers trying to put aside their anxiety while they shoulder the full responsibility of parenthood. Keith, who is 4, and Carolyn, who is 2, are the children of Mr. and Mrs. John Jamison of Port Colborne. Their Daddy worked with INCO before he enlisted and is now with the Canadian Army in Italy. In his absence their Mother is doing her bit at a wartime job on the Box Floor of the Port Colborne plant. Think of families like this when the Victory Loan salesman approaches you this month.



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Don M. Dunbar, Editor

EDITORIAL OFFICE COPPER CLIFF, ONT.

VOLUME 4 OCTOBER, 1944 NUMBER 7

## Reconsider!

The War Relief Club funds are nearly depleted and an effort is being made to secure sufficient money to carry on this fine work, at least for the duration of the war although it is the general consensus of opinion that there will be many demands on the Club for some time in the post-war period.

To date the response to the appeal has not been up to expectations. The chief criticism, according to one of the men, appears to be that "too much money has been donated to the Red Cross and not enough to the soldiers." Such criticism, we think, is the result of misunderstanding. Eight-five per cent of all money given to the Red Cross goes to general headquarters to pay for the highly diversified service of the organization. The work of the Red Cross for the soldiers is far more extensive and varied than that attempted by any other war charity, and it is a matter of gratitude rather than criticism that the service exists. How else would we reach our men with life-giving blood plasma, prisoner-of-war parcels, and the many other things with which we are so eager to provide them?

It was never intended or suggested from the inception of the War Relief Club that its funds should be used, solely for providing comforts for enlisted INCO employees. These men would be the first to insist that war service must be broader than that.

The support given to the Red Cross by the War Relief Club has been the finest part of its work and it is beyond us to see why any apology should have to be made for it. Is it too much to hope that many employees who have refused to contribute a day's pay to the War Relief Club will reconsider and again assist in placing the Club on a sound financial basis? Cards may be obtained from the time offices at the plants.

## Worthwhile

The magistrate of a western juvenile court once remarked that of 1000 delinquent boy cases not one played any kind of organized sport. "Keep a boy active in sport and he will keep out of trouble" has been proven time and again.

In Copper Cliff the young boys have an opportunity to let off steam in their midget and juvenile baseball and hockey leagues.

October is the big month for all budding hockey players as the doors of Stanley Stadium swing open for another season. Already 130 boys between the ages of 10 and 15 have signed "big league" contracts which stipulate that the players must learn to play honestly and fairly and be good winners on and off the ice. A clause providing for abstinence

from smoking is also in the contract and failure to live up to the pledge may bring suspension for two or more games. Close check is also kept on the boys' school work and throughout their years in the Midget and Juvenile N.H.L. the importance of a good scholastic record is impressed on them. They are all outfitted in N.H.L. uniforms, have their own "farm" system, and play for their own Stanley Cup donated by President R. C. Stanley.

Such organization contributes much to the happiness of the present and builds solidly for the future.

### OFFICIAL VISIT

Making an official visit to Sudbury on their 47th wedding anniversary, Hon. Albert Matthews, Lieutenant Governor of Ontario, and Mrs. Matthews, inspected the INCO plants at Frood Open Pit, Copper Cliff Smelter, and Refinery on Sept. 4.

# ROLL OF HONOUR

THESE HAVE DIED TO PRESERVE  
OUR WAY OF LIFE

- AUBREY A. RODGERS  
Frood Mine
- CLAUDE E. MOORE  
Creighton Mine—Mechanical
- CHAS. M. COMPLIN  
Frood Mine—Mechanical
- DOUGLAS C. FLESHER  
Frood Mine—Mechanical
- JOHN D. DOUGLAS  
Frood Mine
- THOS. D. FOLEY  
Frood Mine
- GEO. E. POSTLETHWAITE  
Frood Mine
- HUBERT LAFRANCE  
Police
- WALLACE IBBOTSON  
Copper Cliff Smelter
- DOUGLAS A. MAY  
Frood Mine
- GEORGE N. MOORE  
Frood Mine
- CHARLES E. BROWN  
Port Colborne
- CLARENCE NICKEL  
Copper Cliff—Mechanical
- LESLIE R. SCOURFIELD  
Copper Cliff—Research
- CLIFFORD G. GRAHAM  
Copper Refinery
- LAWRENCE J. McHUGHEN  
Frood Mine
- WILLIAM T. LANE  
Copper Cliff—Electrical
- LESLIE BUTLER  
Port Colborne
- THOS. F. HYNDMAN  
Copper Cliff Smelter
- BEATTY CAMPBELL  
Frood Mine
- WILLIAM F. JORDAN  
Copper Cliff—Mechanical
- FRANK E. ANDERSON  
Garrison Mine
- JOSEPH H. EVELINE  
Copper Cliff Smelter
- GRAHAM CHABOT  
Coniston Mechanical
- JAMES ANDERSON  
Port Colborne
- MAURICE ONUSKI  
Copper Cliff Smelter
- RUSSEL DAVID MATHERS  
Copper Refinery
- JOSEPH P. SULLIVAN  
Copper Cliff Smelter
- FRED BUCK  
Copper Cliff Mechanical
- ALEX ROY  
Port Colborne
- JOHN MARSH  
Garrison Mine
- STANLEY J. DUBOWSKI  
Copper Cliff Smelter
- RODGER BRUNELLE  
Creighton Mine
- MICHAEL OWENS  
Copper Cliff Smelter
- HENRY GIPSON  
Copper Cliff Mechanical
- ALBERT S. BLANCHARD  
Copper Cliff Mechanical
- FRED GREEN  
Frood Mine
- THOS. B. FORESTELL  
Coniston Electrical
- WILLIAM GORDON  
Port Colborne
- ALEX STALKER  
Coniston Electrical
- F. CAMPBELL BUSHFIELD  
Frood Mine
- PHILIP SOULIERE  
Lerock Mine
- JOHN L. F. LOWN  
Coniston Electrical
- FREDERICK KONIG  
Port Colborne
- MORLEY P. LOYST  
Police
- HARRY MAKI  
Copper Cliff Electrical
- DAN BERNARD  
Copper Cliff Smelter
- CLARENCE J. BAIN  
Copper Cliff Concentrator
- JOHN STEPHEN KITTS  
Open Pit Mechanical
- CLARENCE L. STEVENS  
Frood Mine
- HARRY S. McINTYRE  
Frood Mine
- GEORGE D. LEBB  
Murray Mine Electrical
- DAVID SCOTT  
Port Colborne
- WM. BRODIE ANDERSON  
Creighton Survey
- WILLIAM E. A. McMITCHELL  
Copper Cliff Smelter
- GERALD ANDREWS  
Copper Refinery
- ARCHIE FERGUSON  
Port Colborne
- WILBERT A. HEALEY  
Open Pit
- EDISON MENZIES  
Lerock Mine
- FRANK VID  
Creighton Mine
- VICTOR RANGER  
Creighton Mine
- ROBERT ANDREWS  
Frood Mine
- LEN ROGERS  
Port Colborne
- ALBERT BRANKLEY  
Garrison Mine
- GEORGE A. MITCHELL  
Port Colborne
- C. A. McKINNON  
Copper Refinery
- PATRICK CRAWFORD  
Open Pit
- DONALD A. AUGUSTINE  
Port Colborne
- JAMES SMITH  
Copper Cliff
- J. E. SOULIERE  
Copper Cliff
- J. A. MYRE  
Frood Mine
- C. J. FISHER  
Copper Cliff
- EURWEDD OWEN  
Copper Refinery
- LLOYD KIRSTINE  
Frood Mine
- EARL DAUBNEY  
Port Colborne
- ROBERT L. ANDREWS  
Frood Mine
- ARTHUR F. HOOD  
Creighton Mine
- RICHARD H. FOX  
Frood Mine

Will relatives or friends please forward to The Triangle names omitted from this list of INCO employees who have made the Supreme Sacrifice in the present war.

# AWARD PRIZES FOR GARDENING

Despite a tough winter which took an unusually heavy toll of lawns, the home-makers in INCO towns had some fine exhibits ready for Judge Romeo Leroux, Ontario Agricultural Representative, when he made the rounds to decide awards in the annual garden competitions sponsored by the Company.

All prize winners in this year's competition have been considered eligible for prizes in previous years with the exception of a large group at Creighton Mine who are occupying the new homes constructed there by the Company and have not yet had an opportunity to develop their grounds. Some 70 new houses have been built at Creighton in the past two years. A similar situation exists at Levack where there are about 50 new dwellings.

A long list of prize-winners was announced by C. D. Ferguson of the Company's Agricul-

tural Department, and cheques have been mailed to them.

Top honors in Copper Cliff in the class "most attractive home surroundings through the use of lawn and flower planting" were taken by J. E. McKerrow, at 13 Power St. Second and third places were won by W. T. Balmforth, of 23 Cobalt St., and E. H. Sutherland, of 57 Power St., respectively.

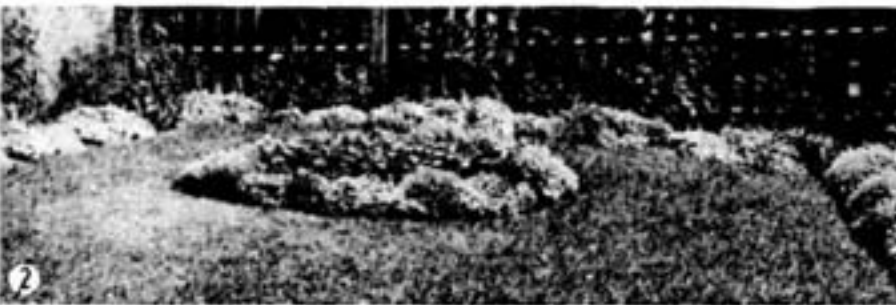
In the class in which the attractiveness was achieved by use of lawn, trees, shrubbery and flowers, the first prize was won by William Acheson, of 15 Power St. Second and third prizes went to W. W. Chapman, of 6 Kent St., and William Chisholm, of 17 Rink St.

Most improved homes in 1944 in Copper Cliff were occupied by Ed Fosten, of 30 Power St.; A. Poulton, of 19 Poplar St., and E. G. Stoneman, of 55 Power St.

Prizes for best home surroundings in Coniston were won by: First, F. M. Aggiss; second, R. Hood, and third, A. B. Sabourin.

Two classes were judged in Creighton. In the most improved in 1944 class in that town, first prize went to E. J. Pitman, while second and third awards went to W. Johnson and Walter Wilson. For the most attractive homes in Creighton, prizes went to C. Drennan, Bruce King and George Daughtrey.

Awards for the most improved home surroundings in 1944 in the community of Levack went to Frank Jenkinson, George Ruller and Bill Gros.



Three home plantings which won awards in the annual gardening competitions in INCO towns are pictured above. Top view is at the home of Mr. and Mrs. W. Chapman, Copper Cliff, where a bright "outdoor living room" has been developed in striking contrast to the drab rock mountain beside it. In the second picture is shown part of the pretty planting in front of the home of Mr. and Mrs. Pitman, Alexander St., Creighton, and in the bottom snap is the new home of Dr. and Mrs. McGruther, Wavell St., Creighton, which already presents a neat and attractive appearance despite its recent construction. This is one of 120 similar new houses erected by the Company at Creighton and Levack.

## Hello Joe . . . What Do You Know?

By F. H. LOWE, Port Colborne

(Answers on Page 5)

1. Locate and name the body of water in which the Atlantic Charter was drawn up. (The Atlantic Ocean not acceptable.)
2. Where can you see oranges, lemons, cherries and plums making the rounds?
3. In the game of baseball, what do Canadian boys call the catcher's mit?
4. As you know, "Two and One" is a well known shoe polish, "Three and One" a well known household lubricant. What's the well known "Four and One"?
5. What well known athlete, in fact known the world over, has the surname Barrow?
6. The British Commonwealth of Nations includes five Dominions? (Get all to score).
7. What method of transportation in current use today furnishes the most free rides? (Not bicycles or hitchhiking).
8. What important piece of fire-fighting apparatus is never used in the Copper Cliff district?
9. Referring back to Question No. 1, name the four important points arrived at in this Conference. (All four to score)
10. What is the name of the small watch pocket at the right near the top of men's trousers.

•It is not luck but logic which in the present and future will win—the careful and logical consideration of what effects come from specific causes.  
—Harlowe Shapley

•I would like to propose a Fifth Freedom—Freedom from Ignorance.  
—George Matthew Adams

•A human being with a settled purpose will accomplish it, and nothing can resist a will which will stake even existence upon its fulfillment.  
—Diarrell





## 417 Volunteers Enrolled in INCO's Snappy Fire Brigades

On the occasion of Fire Prevention Week, which this year is to be observed during October 8 to 14, the Triangle takes off its hat to the men of INCO's fire-fighting force, some 417 employees who volunteer their efforts for the protection of persons and property.

Because of the widespread nature of the Company's operations, full-time fire departments at each plant would obviously be impractical. Consequently all firemen are volunteers and are paid extra for the periods they spend in practice and for the fires at which they serve. Each brigade holds a practice once a month, each man receiving \$1.50 per practice. For fires the payment is \$1.50 or \$3.00, depending upon the work required. It is clear that the success of the system hinges on having men who are willing to serve as firemen. There is no compulsion about the matter. Consequently it is to the credit of those who make up the various plant brigades that they are public-spirited enough and sufficiently interested in the protection of their fellow workers and the maintenance of Company operations to forego personal pleasure and comfort at times when it is necessary to turn out for practices and fires. Salute to the personnel of the Volunteer Fire Brigades!

Compared to other industries the fire losses of International Nickel Company have been satisfactorily small. This is due to a number of factors, the most important of which are: (1) uniform good housekeeping prevalent at all properties; (2) good building construction; (3) liberal distribution of hand fire extinguishers which put out most of the fires before they can gain headway; (4) the fact that most of the plants operate 24 hours a day; (5) good

work of volunteer firemen; (6) inspections which serve to uncover fire hazards. All fires are reported to the Copper Cliff office for investigation where necessary.

In INCO plants of the Sudbury area more than 60,000 feet of fire hose and 1800 fire extinguishers have been provided. Extinguishers are of various types according to the kind of fire likely to be met, and fog nozzle equipment is also available.

Automatic sprinkler systems have been installed in warehouses and timber framing shops, and are being installed in changehouses where clothes are hung from ropes.

Of special interest is the fact that the first smoke detecting system using the electric eye on record in Canada is being installed by the Electrical Department to detect fire in the metal lockers in the men's changehouse at Copper Cliff. Another unusual installation is a system of thermostats for fire detection in Copper Cliff Smelter.

Trailer pumpers have been provided at the two INCO plants where ample water pressure is not available at the hydrants. In addition, all outside plants within reasonable distance of Copper Cliff may obtain additional equipment and pumping capacity from the plant pumper at Copper Cliff, a modern machine capable of pumping 1000 Imperial gallons per minute at 150 lbs. pressure. Another modern pumper of 600 gallons-per-minute capacity stands by in the town fire hall at Copper Cliff. The threads of the 2½-inch fire hose at the INCO plants are the same, allowing prompt interlocking of equipment in case of a large conflagration, and all hose is tested at regular intervals.

To keep all brigades in touch with modern fire-fighting methods, the Company is a member of the National Fire Protection Association of the U.S.A. The monthly magazine, Volunteer Fireman, is sent to the fire chiefs and an extensive library of the Association's publications is available at Copper Cliff.

In charge of INCO's elaborate fire protection system is the Fire Inspector, W. A. H. Humphries. Through periodical inspections, fire conditions at the various plants are examined by him, after which correction of conditions is carried out under orders of the plant superintendents. Fire equipment maintenance at Copper Cliff Plant and the training of the Copper Cliff plant brigades is also part of the work of the Fire Inspector, whose assistant is L. Thomas.

King pins in the organization are the fire chiefs at the various plants, who are also volunteers. At most plants the Master Mechanic is fire chief, and maintenance of fire equipment, sprinkler systems, and water supplies, is handled by the Mechanical Departments. The following are INCO plant fire chiefs: Frood Mine, Fraser Ross; Frood Open Pit, Campbell Girdwood; Creighton Mine and Town, Fred Pentney; Garson Mine and Town, John Greig; Levack Mine, E. Myhill; Levack Town, Mike Tokaryke; Stobie Mine, Fraser Ross (deputy H. Milks); Coniston Plant, Roy Snitch; Coniston Town, J. C. Prevost; Lawson Quarry and Willsville, J. Gregg; Murray Mine, R. McLeod; High Falls, W. Wainman; Copper Refinery, L. Kitchener; Copper Cliff Town, W. W. Chapman; Copper Cliff Plant: general, J. W. Garrow; assistant, W. J. Ripley; Shift Brigade chiefs: (1) General Plant Brigade, H. Fletcher, C. Parker, V. Vaillancourt; (2) Concentrator and Crushing Plant Brigade, E. Stoneman, I. Bowman, E. McMullen.

\*Good will flows irresistibly to the man who successfully manages his own affairs, who is self-reliant and independent, yet who is considerate always of the rights and needs of others.

—Thomas E. Dewey

## Bill Faithfully Kept the Steam Up

"You always knew when Bill was on shift, because there was always lots of steam up."

That's a typical tribute among his fellow-workers to the way Bill Wiltshire did his job for 20 years as fireman on the boilers at Garson Mine, and when he retired on pension August 31 they presented him with a fine gold watch in appreciation of his services and comradeship.

The presentation was made by Master Mechanic John Greig at a gathering on Sept. 10. E. A. Collins of Copper Cliff, Assistant to the General Manager, was among the speakers. Bill also received a pouch of money from the



gang, and Mrs. Wiltshire was presented with a handbag.

Born in 1876 in Kent, England, Bill forsook the land of hops in 1906 to come to Canada where he took a job at the Mond Nickel Co.'s Victoria Mine. His first assignment was firing the boilers, the fuel was wood, he worked 12 hours a day, and the pay was \$2.10 per shift. "Some difference," Bill says.

After five years at Victoria Mine Bill returned to England. He went through the Great War with the Imperial Army and then came back in 1920. He was at Victoria Mine until it closed, and in January of 1924 he signed on at Garson Mine.

Married 40 years ago at Tottenham, England, to Miss Emily Isser, Bill has a family of seven. They were all present for a reunion at the old home on September 4, in honor of their dad's retirement: Mrs. Barry Gordon of California, Mrs. Wilfred Adams of Minnow Lake, Gladys of the Women's Army Corps stationed at Aurora, Frank of Windsor, Bill of Creighton Mine, and John and Len of Garson Mine.

Looking forward to his pension years Bill sometime ago purchased a little five-acre farm at Minnow Lake and will fill in his leisure hours there.

## Answers to Quiz

On Page 3

1. The body of water between Iceland and Greenland known as The Strait of Denmark.
2. Slot machines.
3. Decker
4. Five.
5. Joe Louis Barrow.
6. Canada, Australia, New Zealand, Union of South Africa and Eire.
7. Elevators.
8. Fire boat or fire tug.
9. Freedom of Speech, Freedom of Worship, Freedom from Fear, and Freedom from Want.
10. The Fob.

## Pictures of INCO Brigades

### 1—LEVACK MINE

One of E. Myhill's well-trained crews of fire-fighters stages a practice at No. 2 Rockhouse. Frank Jenkinson and Bill Hykin are atop the ladder; Bill Gunn, John Campeau and Frank Leach are on the ladder; other members of this brigade are Earl Adams, Bill Bell, Toivo Kauppinen, Art Moran, Harry Stanley, Dan Paquette, and Jim Smith.

### 2—MURRAY MINE

Hugh Petheran, Eddie Laurin and Harry Fraser are on the nozzle, Joe Freeman and Don Leduc stand near the reel, A. F. Beach is at the coupling, and Art Scamant is at the hydrant. Chief is "Mac" McLeod, left.

### 3—CREIGHTON MINE-TOWN

Directing the hose are Bert Johnson, Johnny McDonald, Leo McLaughlin and Hughie Simpson. On the pumper is Eugene Brouzes, and at the hydrant is Albert Lapointe. Chief is Fred Pentney.

### 4—GARSON MINE-TOWN

Left to right: Leonard Brasseur, Charlie Matson, Sid Kemp, Ross Moir, Edward Gascon, Bill Morreau, Chief John Greig, Arvi Kaskela, Albert Morin, Eino Heino, Oivo Kaattari, Jack Spencer, Kullerno Kenittala.

### 5—HIGH FALLS POWER PLANT

Left to right: John Gosme, J. L. Forsyth, Alex McQuillan, Walter Wainman, Walter Wiseman.

### 6—STOBIE MINE

Left to right: Percy Hall, Wilson Douglas, Charles Morrow, Wm. Oleowski, Deputy Chief Barney Milks, Pat Kelly, Ray Holub, Ed. Staples, and Carl Nesbitt.



# FIRE PREVENTION WEEK OCTOBER 8-14

## Help Conquer the Fire Demon!

The week marking the anniversary of the great Chicago fire of 1871, which was the largest conflagration directly caused by fire recorded in North America, is each year designated by the governments of Canada and the United States as Fire Prevention Week. As an example of what damage one fire can do, this one, in which 17,430 buildings valued at \$168,000,000 (including Mrs. O'Leary's cow barn) were destroyed, has become a classic.

Even in this modern age when better construction and improved fire fighting equipment have helped to reduce fire losses, the figures are nothing to be proud of. The fire loss in Canada in 1943 was \$31,464,710; the previous year, 1942, losses were \$31,182,218. These do not include forest fire losses.

More serious was the death of 319 people caused by fire in Canada during 1943. As a great deal of this loss of life and property can be prevented by simple precautions, it is the object of Fire Prevention Week to give the public information which will help them to reduce these losses by fire.

### Household Fire Hazards

Three things are necessary to produce a fire: (1) Something that will burn; (2) Sufficient heat to start it burning; (3) Oxygen to keep the fire going. Fires may be prevented by keeping these three from joining forces. It is obviously impossible to keep oxygen away from combustible material since the air we breathe has the oxygen, so we must concentrate on keeping (1) and (2) from getting together. The best example may be taken in the handling of rubbish, common waste, excelsior, waste paper and such easily ignited material, and cigarettes. Here again, human nature being what it is, it is easier to make sure that all easily ignited materials as mentioned are removed from our homes, particularly cellars and attics, than it is to be sure that someone won't smoke close to these materials. Hence the reason for emphasizing good housekeeping, which means removing all easily ignited materials or keeping them in metal containers until disposed of. With this fundamental principle of fire prevention in mind let us consider other fire prevention practices which may not be so obvious.

1. Send clothes to the cleaners or use non-explosive cleaning fluids.

Gasoline, benzine and naptha are killers when used in a home for cleaning. Even though you realize that the vapour from any of these mixed with air is explosive, you may consider yourself safe if you do not smoke while using them. But you have little or no control over the conditions that may cause the vapour to ignite from some unforeseen factor such as a spark of static electricity. Besides, the vapour is heavier than air and will settle in the lowest place, the cellar, where it is ready to cause trouble when the conditions are right.

2. The only safe place for gasoline around the home is in the tank of your automobile. If you must keep a gallon of gasoline in an outbuilding, make sure it is not in a glass container which may break, or in an old can which may develop a leak.

3. Have your smoke BEFORE you go to bed.

4. Burn oily rags or paint rags at once or keep them in covered metal cans. The danger here is from spontaneous combustion. A few of the oils which may cause spontaneous heating are listed below: linseed oil, coconut oil, various animal oils, tung oil, turpentine, pine oil and pine tar oil.

5. Use only metal barrels for ashes and rubbish.

6. Replace frayed electric cords and see that the fuses on branch circuits are not over 15 amps.

When the two copper conductors in a flexible cord come together, forming a short circuit,

or when a live conductor in a flexible cord comes in contact with a grounded object, arcs are produced and if conditions are right a fire results. Flexible cords therefore should be treated with respect. When worn or frayed they should be replaced. They should not be hung over metal objects, and they should never be used as a substitute for permanent wiring.

Now a word about fuses. Electrical wiring is made in different sizes to carry specific loads of current. When carrying current the wire becomes heated. When controlled this heat serves a useful purpose but when the current is beyond the limit that the conductor was intended to carry, the conductor or wire becomes overheated and then becomes a hazard: (1) Through the deterioration of the insulation covering the conductor; (2) Through the transfer of heat to a combustible material if present. The fuse, which is the most common overcurrent protection, consists of a fusible metal element, which when heated to a certain temperature melts and opens the circuit interrupting the flow of current. When because of a short circuit or for some other reason, a circuit becomes overheated introducing the danger of fire, the fuses act like safety valves to cut off the flow of current until the difficulty is corrected. For this reason fuses should never be bridged by using pennies or other current jumpers in the fuse box or by bypassing the fuse box. And unless an electrician tells you that the wiring is heavy enough to carry a fuse larger than 15 amperes according to the Electrical Code, only a fuse of 15 amp. size should be used on branch circuits.

Electric irons left connected account for a large number of electrical fires.

7. Use paper and kindling in starting a fire—never kerosene.
8. Keep stoves, furnaces and smokepipes in good repair and have chimneys cleaned at least once a year.
9. Keep matches away from small children.

## LIFE LOSS FROM FIRE

In Canada there were 319 fatalities by fire in 1943, an increase of 13 over 1942.

During 1943 it is estimated that at least 10,000 lives were lost in the United States. Contrary to general opinion, most of the people who died were not trapped in burning public buildings but lost their lives in or around their homes. A fact not generally known is that many people killed by fire have no burns on their bodies but die from inhaling fire gases. Here are some points to remember when confronted by the emergency of fire:

1. When entering public buildings choose your nearest exit and another exit in case one becomes blocked.
2. If fire breaks out and people in a panic rush for the main exit, keep out of the crowd and try to find some other means of escape. Above all, keep calm.
3. Never enter a burning building to save property. Only the saving of lives justifies taking a personal risk.
4. If you have to remain in a smoke-filled building remember that the air is usually better near the floor. If you must take a dash through smoke or flame, hold your breath.
5. A temporary refuge may be secured behind any door. Even a thin wooden door will stop smoke and flame for several minutes.
6. Do not jump from upper-story windows except as a last resort. Many people have jumped to their death even while firemen were bringing up ladders to rescue them.
7. If your clothes become ignited, the worst possible thing to do is run. Try to smother the flames with some article of clothing or a mat. If these are not available lie down and try to put out the flames by rolling over and over.
8. If burned in a fire report for medical treatment at once. Many burns or smoke inhalations which do not at first seem serious have fatal results.

## Pictures of INCO Brigades

### 1—COPPER CLIFF SMELTER

J. W. Garrow, W. J. Ripley, Charles Stemp, Umberto Signoretto, Howard Fletcher, Anni Nelimarkka, Orlando Frattini, Alphonse McCue, Celeste Tarini, Isaac Klassen.

### 2—COPPER CLIFF CONCENTRATOR

Front row, left to right, Byron Wood, Mike Hlibchuk, Aldege Patry, Pat Fitzgerald, Arne Kauhanen, Norman Pickard, Arney Carrey, Jim Carter; back row, Armand Ribidoux, Ed Bouchard, Joe Price, Chief E. Stoneman, and Driver C. Hobden.

### 3—COPPER CLIFF TOWN

Front row, Charlie Brownlee, Fred Savage, H. Hunter, Fred Lumley, Alex Yandon, Dan Rowe, Noel Shrigley, George Lineham, Chief Wm. Chapman; back row, Lorne Hobden, Gregor Lee, Albert Bray, John Martin, J. R. Clark.

### 4—LAWSON QUARRY

Front row: Chief Jim Greig, Jim Stevens, Walter Glanville, Harvey Wagg, Herman Bonas, Oscar Springer, William Doughty, Herbert Burley, Bob Becks; back row: Supt. Jack McAndrew, Harold Campbell, Deputy Chief Bill Roxburgh, Cameron McLean, Arthur Green, Richard Golden, Charlie White, Roy Spry, Sam Oliver, Charlie Eaton, and Jim Leach.

### 5—CONISTON TOWN

Kneeling: Peter Dabis, A. Sabourin, W. McLaughlin, A. Beauparent; back row, Chief J. C. Prevost; INCO Fire Inspector Bill Humphries, Ed. Albert, P. Chezzi, G. Bloemen, R. Taylor, D. Tancredi.

### 6—FROOD OPEN PIT

Kneeling: Clifford Johnston, Arthur Cumming, Fred Maitland, Mike Shyluk, Clifford Belanger, Dolar Obonawin; back row: Chief Campbell Girdwood, Tom Moore, Albert Morin, Angus McPherson, Bill Moses, Victor Corbell, Malcolm McLennan, Charlie MacKinnon, Alcide Plante.

### 7—CONISTON PLANT

Left to right: Edward Albert, Egziz Gosselin, Ford Mick, E. McHugh, Aime Gosselin, Ira Dale, G. Bloemen, and Roy Snitch.

### 8—COPPER REFINERY

Demonstration of how a fog nozzle speedily suffocates an oil fire. Handling the nozzle are Leo Desilets and Conny Alexiuk, and hoseman is Frank Scott. Members of the brigade watching in the background include: I. Carrey, Assistant Fire Chief; W. Wickenden, Brigade Captain; L. Young, Hydrant-man; T. Kupchank, Fireman; L. Desilets, Fireman; P. Martin, Fireman; H. McPhail, Fire Guard; F. Scott, H. Williams, R. Armiento, H. Greenfield, S. Campbell, C. Atkinson, P. Bobinac, E. Brown, A. Vincent, A. Lange, C. Alexiuk, K. Morning, J. Netzke, L. Carrey, J. Poirier, M. Shoveller, Fire Inspector; Chief L. Kitchener.

### 9—LEVACK TOWN

Back row, left to right: Norman Swain, jeweller; Julian Morel, manager, Northern Catering Co.; Mac McKillop, manager, Bank of Toronto; Constable Art Mott; Doug Shields, service station operator; Chief Mike Tokaryk, dairy manager; kneeling, Eddie Plaskorki, dairy; Jerry Mulvihill, druggist; Daisie Watier, merchant; Gordon Moir, barber. This brigade of volunteers has a particularly fine record of service.

### 10—FROOD MINE

Back row, left to right: Reg Newton, John Eldridge, Wallace McKay, W. C. Gamble, Fred Paul; front row, Earl Passi, R. J. Edmunds, Fred Sloan, Jack Good, Rube Cook, and Chief Fraser Ross.



## THE STORY OF YOUR PAY-CHECK—(3)

# PASSION FOR ACCURACY OBSESSES ACCOUNTANTS

When the time books come in to the Pay Office from the Time Offices at the various plants, the first step is another search for errors. Once again the totals in the time books are checked against the clock cards to make sure every employee is given credit for his full time. All through the pay-check procedure this passion for accuracy is obvious and despite the vast amount of detail in preparing and producing pay checks every week for 15,000 people, the number of errors is amazingly small.

Checked and double-checked, the time books are sent to the Tabulating Room, a chamber where the most intricate mathematical miracles are performed with a great deal less fuss than we kick up when we have to add the month's grocery bills.

First operation is performed by the key punch machines, one of which is shown in the top picture of the accompanying layout. With these machines the operators punch holes in cards, thus recording the required information from the time books. (See reproduction of a typical card on opposite page). When the punching of each card is completed the machine automatically ejects the card and feeds in a new one for the next man. As the nimble fingers of the operator flash over the keys, the card swiftly picks up the complete story of a man's earnings for the week—the date, plant where he works, his number, the hours he has worked, his occupation, his wage rate, and his overtime allowance. There are three of these key punch machines and on each an operator can whip out about 500 cards per hour.

Then the punched cards are fed to the Multiplier, that modest-looking piece of equipment seen in the second photograph. Let's call it "The Brain." Inside this mechanical marvel "fingers" scan each card, "reading" the legend of the punch holes; then, quicker than Rover can roll over, "The Brain" multiplies the number of hours by the rate of pay and punches new holes in the card to indicate the total earnings. Multiplying is only one of "The Brain's" little tricks. It can also add or subtract any information desired from the punch cards, depending on how the plugs are arranged in the control panel you see in the front of it. "The Brain" handles 1200 cards an hour and never needs an aspirin.

But if the Multiplier is "The Brain," then the Alphabetic Printer, which takes care of the next step in the pay-check procedure, is "The Master Mind." As it "reads" the punch cards it calculates and prints the total hours and total earnings for each occupation in Company operations (there could be 25 different occupations at one wage rate, for instance) and this information is then used to check up on "The Brain's" handiwork. If the figures don't jibe, the operators go back through the punch cards to see where the mistake was made.

Having got this little chore off its chest "The Master Mind" proceeds to write the payroll. This is a very sweet piece of mechanical accounting. The punch cards are combined with bonus cards and also master cards indicating each employee's income tax group, and these are fed to "The Master Mind" at the rate of about 1200 an hour. (See Picture 3). On a roll of paper the machine prints each man's employment number, occupation, rate, hours at each rate, overtime allowance and bonus, etc. As it does this it also accumulates and prints the totals for each plant under the various headings, as well as the grand total. At the same time, believe it or not, "The Master Mind" telegraphs electrical impulses through the heavy cable seen in the foreground,

to a Summary Punch which stands beside it and this machine punches a new card for each employee on which is summarized all the detailed information fed to the parent unit. These new punch cards are used for the actual printing of the pay-checks, which will be described in a later issue of Triangle.

When "The Master Mind" has written the payroll for the week, and the totals have been checked, the entire list goes back to the Pay Office for a final comparison with the time books (see Picture 4) to make certain that each employee's number and hours worked have been correctly punched. These people in the Accounting Department must all be from Missouri; they won't even take "The Master Mind's" word for it!

## NAMES OMITTED

To the list of men and women who went from INCO to the services in this war should be added the following, unfortunately omitted when the original list of more than 3800 names was compiled:

Albert Landry, Froid Open Pit; Jerry Ovens, Copper Cliff Concentrator; Charlie M. Walker, Coniston; and the following from Port Colborne: Arthur Wilson, Eugene Fay, Edward O'Farrell, Romuald Poiras, W. Belanger, J. Stephanchuk, G. Smith, A. Cloutier, E. Brown, K. Johnson, F. Bucci, E. Minor, V. Caron.



## The Pictures

1. Anne Johnston poised for action at the key-punch machine in the Tabulating Department.

2. The Multiplier, a mechanical marvel which has a lot to do with the preparation of your pay-check.

3. There are more than three miles of fine wire in the intricate interior of the Alphabetic Printer, shown here. El Umpherson is feeding blank punch-cards to the Summary Punch, which the Printer operates by remote control.

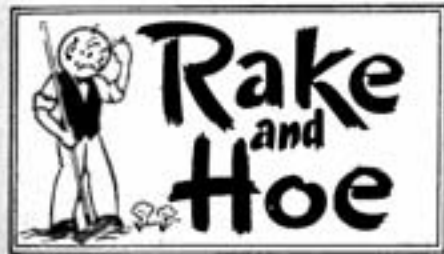
4. Mrs. I. Pogue and Mrs. L. Childerhose check the payroll with the time books, one of the many precautions taken during the pay-check procedure to ensure accuracy.



OCC. NO.	RATE	HOURS WORKED	REGULAR EARNINGS	OVERTIME ALLOWANCE	PRODUCTION BONUS	C. OF L. BONUS		TOTAL EARNINGS	SERIAL NO.	UNEMPL. INSC.		TOTAL TAX	SAVINGS PORTION	PERSONAL SAVINGS	NET SAVINGS	NET TAX	NET AMOUNT
						DAYS	AMOUNT			DAYS	AMT.						
00	00	00	00.00	0.00	0.00	00	00	00.00	00	00	00	00.00	00.00	00.00	00.00	00.00	00.00
11	11	11	11.11	1.11	1.11	11	11	11.11	11	11	11	11.11	11.11	11.11	11.11	11.11	11.11
22	22	22	22.22	2.22	2.22	22	22	22.22	22	22	22	22.22	22.22	22.22	22.22	22.22	22.22
33	33	33	33.33	3.33	3.33	33	33	33.33	33	33	33	33.33	33.33	33.33	33.33	33.33	33.33
44	44	44	44.44	4.44	4.44	44	44	44.44	44	44	44	44.44	44.44	44.44	44.44	44.44	44.44
55	55	55	55.55	5.55	5.55	55	55	55.55	55	55	55	55.55	55.55	55.55	55.55	55.55	55.55
66	66	66	66.66	6.66	6.66	66	66	66.66	66	66	66	66.66	66.66	66.66	66.66	66.66	66.66
77	77	77	77.77	7.77	7.77	77	77	77.77	77	77	77	77.77	77.77	77.77	77.77	77.77	77.77
88	88	88	88.88	8.88	8.88	88	88	88.88	88	88	88	88.88	88.88	88.88	88.88	88.88	88.88
99	99	99	99.99	9.99	9.99	99	99	99.99	99	99	99	99.99	99.99	99.99	99.99	99.99	99.99

RECORD OF EARNINGS (INCO 83167) (INCO 83167) (INCO 83167)

Here's a typical punch card after the Tabulating Department has wrought its mechanical miracles. If you're in the know (which we aren't, despite the superhuman efforts of Harry Van Dyke to pound it into our noggin) those little rectangular holes will tell you the following things: the employee's number is 2750 and his occupation code number is 180 at Copper Cliff; he gets 69c an hour, worked 56 hours in this certain week, receives \$38.64 as regular earnings plus an overtime allowance of \$2.76, and his total earnings are \$41.40; his unemployment insurance classification is 7, and his contribution is 36 cents; he is in income tax group 9, which means he is married and has three children; his tax deduction is \$1.50 and the net amount of his earnings after unemployment insurance and income tax deductions is \$39.54. In the pay-check procedure a card like this is punched for every employee every week. Whew! (See story on opposite page).



(By C.A.Y.)

Just before we put away our garden tools and pen for the season, how about looking over the garden with a critical eye and jotting down a note on how not to do things. I am taking for granted that all humans are afflicted as I am, and as such try a few things that are not according to the book. Possibly this year you had your rows too close and you couldn't get in to pull your carrots or pick beans, etc., without tramping down a lot of produce, or maybe your tomatoes were shaded by your corn or your glads weren't in the right spot. Now is the time to reflect a bit and while this season's experiences are fresh in mind, make your plans for next year.

This year our bean crop was very poor, largely because I tried to grow too many in one row. In this case the lush top growth prevented proper air circulation and only very small pods developed. I also planted a row of onions too close to a row of potatoes and they were properly smothered out. I mention these to show that we are all prone to try anything once.

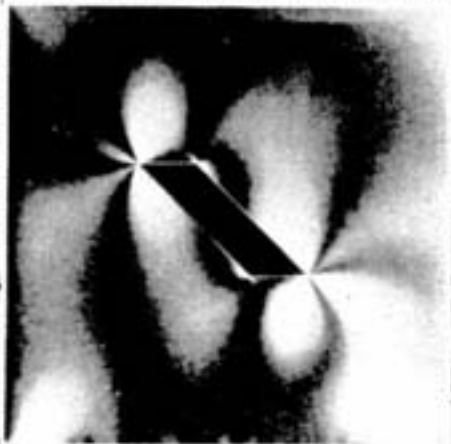
How are your onions this year? The scarcity of last winter prompted many people to grow onions for the first time and I hope that their efforts met with success. Too many turkeys were stuffed with too few onions last Christmas. A good Scotch gardener gave me an onion that scaled 16 inches around the middle. There might be larger ones but in this case I'll elect to be from Missouri.

Manure is very hard to get these days but if you are fortunate to have some there is no better practice than to spread it on your garden and flower borders and turn it in before freeze up. This will greatly lessen heavy work in the spring and the soil will benefit from the action of frost.

Before storing your garden tools, how about cleaning them and giving them a coat of grease or oil. They will handle much easier next Spring.

## TAKE MOVIE OF ROCK PRESSURES

The accompanying photograph might be a camera study of a cubin's hangover, or it might be an artist's impression of our wallet the day



before pay-day, but it isn't. It's the result of a highly ingenious experiment by a group of INCO men who thereby have made an important contribution to modern mining methods.

Continuing their studies of the stresses in rocks around underground openings, INCO's Geological Department under the direction of the Chief Geologist, Dr. A. B. Yates, hit upon the scheme of cutting small-scale models of mine openings in sheets of a plastic substance known as plexiglass and then subjecting the plastic to pressures of from 800 to 1200 lbs. per square inch in the hydraulic tension machine at the Research Laboratory. By this method the model mine openings in the plastic were

brought under conditions akin to underground rock stresses.

Then the geologists found that by illuminating the plastic model with polarized light (in which all light rays have been eliminated except those vibrating in one particular direction) it was actually possible to study and photograph the distribution of pressure in the area of mine openings.

The picture shows one of a hundred such experiments and clearly proves the existence of "domes" or "arches" of accumulated stresses which had long been supposed to exist but had never before been definitely shown.

Now it is possible by this means to study in advance of mining operations where dangerous rock stresses will occur and how to control or avoid them. Further, shapes of drifts, crosscuts and shafts may be designed to distribute pressures evenly all around these mine openings and prevent their concentration at any points unable to withstand them.

The rectangle in the centre of the photograph is a plastic model of a section of an inclined stope, under pressure in the hydraulic tension machine. Two small "domes" of stress appear, one at the top and one at the bottom, and two larger "domes" are also evident, one over the hangingwall side and one under the footwall side. The bright spots appearing within the domes indicate the areas of unequal stress and are the result of distortion in the polarized light rays. The dark arches clearly show the boundaries of the stress areas.

This system of studying rock stresses is an adaptation by INCO engineers of a method recently developed by universities and research laboratories to determine stresses in machinery parts. Carrying through with the experiment the INCO men proceeded to make motion pictures of stresses developing in plastic sheets while typical mine openings were cut in them by a high-speed hand drill. This enterprise was very successful and the resulting "movie" has proven of absorbing interest to mining men wherever it has been shown. It was produced under the auspices of the Ontario Mining Association and will be shown at the big National Safety Congress in Chicago this month by INCO's General Safety Engineer, George S. Jurett.





## Cullen's Shift Aspires to New Record at Frood

### SAFE WORKING PAYS DIVIDENDS

On these two pages are pictured the men of Jack Cullen's shift at Frood Mine, a safe-working crew of miners who are determined to do their part in upholding the good name of the Frood in safety competition with Creighton and the other INCO mines, and are to be congratulated on their achievements.

Record for the Frood was established in 1941 by Harry Smith's shift, which went 137 days without a lost-time accident despite the fact that shifts were much larger in those days and consequently the record represented a considerably bigger total of man-shifts-worked. The Cullen brigade, smaller but undaunted, have their sights set on a new mark nevertheless, and here's hoping they make the grade. Close co-operation and careful attention to standard safety practices on the part of everyone will do the trick.

Cullen's shift represents all working levels at Frood Mine from 1,400 to 3,300, and includes about 400 men. Jack Cullen himself is seen in the centre of the top picture on the opposite page, looking more than a little proud and pleased with his crew. The pictures were taken as the men came on afternoon shift, and had to be hustled through to prevent any interference with the cage schedule. Most of the boys seemed to get a kick out of the performance, and one or two even managed to appear before the camera a second time, perhaps just to make sure the Hollywood scouts don't miss them.

Keep up the stellar work, you Cullens! Safety is one of the best investments on the market, paying its dividends in health, happiness, and security.

#### C'EST LA GUERRE

Visitor (in war plant)—"Look at that youngster, the one with the cropped hair, the cigarette, and trousers on. It's hard to tell whether it's a boy or a girl."

War Worker: "She's a girl and she's my daughter."

Visitor: "My dear sir, do forgive me. I would never have been so outspoken if I had known you were her father."

War Worker: "I'm not her father, I'm her mother."

## League Title Is Creighton's

Well, it's all over.

Normie Hann's well-coached Creighton club hammered their way to the Nickel Belt senior baseball championship and fully deserved their triumph after trimming Copper Cliff three games out of four in the finals before record-breaking crowds at Queen's Athletic Field. Best the Cliffites could do was a spirited victory in the third tilt of the series; after that they bowed out as gracefully as they could before the inspired pitching of Gordie Luck and the general fielding and hitting superiority of the men from Red McLaughlin's town.

The showdown series between Creighton and the Cliff stirred up more fan interest and controversy than has rippled the Nickel Belt baseball puddle in many a year. Why this sudden stimulus?

Maybe it was Sunday baseball, which certainly drew the gates. Maybe it was because the past season produced the closest race in Nickel Belt history—it wasn't until the 45th game of a 46-game schedule had been played that the team standings were determined. Or maybe it was because the fans turned more than ever to baseball for relaxation and enjoyment in these juncry times. Whatever was the reason, the 1944 season will go down in history for its

obvious success as a public-pleaser and also for the heroic efforts of the master minds to keep the show going despite bleak early-season prospects and many an operating headache.

Let's glance back behind the scenes. At the first league meeting only two teams were definite entries, Frood and Copper Cliff. Creighton was undecided and Conison was getting geared just for junior baseball. Out of several huddles the four-team loop finally emerged, the bottom of the baseball barrel was scraped clean as a hound's tooth for player prospects, old-timers were coaxed to come out of retirement and juniors were hastily dried behind the ears and plumped into senior company. The show went on.

As the season progressed injuries and players going active left gaps in the ranks but somehow these were plugged and the teams kept punching. A major problem was the shortage of baseballs, and Secretary Gordon Alcott's frantic quest for leather spheroids brought offerings from such distant spots as Moose Jaw, Toronto, London and Kirkland Lake. The show went on.

All in all the calibre of ball played wasn't so dusty, not even to the most critical bleacher generals. Only three games went into double figures. Four games were extra-inning draws, a diamond oddity. Six games were extra-inning affairs and 19 games were decided by a one-run margin. Contests as close as that spilled fan excitement aplenty.

As the last potout was scored in the chilly shades of a September twilight the crowds turned away from the grand old game for another season, satisfied that they'd had their money's worth. Baseball had carried on.

#### NOVEL CONTEST

Novel feature of the Kiwanis celebration on Labor Day was the contest in which 11 entrants each carried a 100-lb. bag of sand on his back from the Sudbury post office corner to Queen's Athletic Field. Winner of the \$25.00 first prize was Stobie's well-known athlete, Mickey Doyle.







### 1—Typical L-M Committee

Labor-Management Committees have been organized at all INCO plants, as reported in the September issue of The Triangle, with the objective of improving and increasing production of victory-vital nickel and copper. Photo shows a typical Labor-Management Committee gathered to study ideas which have been received from employees under the "INCO Employees' Suggestion Plan." This committee is at Creighton and its members are, left to right around the table: Fred Pentney (M) Cliff Biggs (L), Earl Mumford (M), George Biggs (L), Mine Supt. T. M. Gaetz (chairman), and Al Collins (L).

### 2—Quarry in Lovely Setting

The gorgeous scenery of the Bay of Islands district surrounds Lawson Quarry, INCO's quartz-mining operation about 20 miles from Espanola on the road to Little Current. Far as the eye can reach spread majestic views reminiscent of the highlands of Scotland. Picture was taken from the top of the 130-foot hill where strip-mining is producing about 2000 tons a day of quartz, most of which is shipped to Copper Cliff Smelter. Hauled from the pit to the edge of the hill in 15-ton Euclid dump trucks the muck runs down a slide cut in the hillside and is gobbled up by a 42 x 60-inch jaw crusher which reduces it in size to a maximum of four inches. Then it passes through two batteries of Symons cone crushers where it is ground to minus-1 inch. In the loading bins, which it reaches by conveyors, it is screened to two sizes before shipping. New building under construction at top left when the picture was made will be a garage.

### 3—Shift Banquets Are Popular

Maybe we'll have to get Dorothy Dix or Dr. Einstein or somebody like that to explain it to us, but we'd like to know the secret of the "esprit de corps" which the girls in the Company plants develop among one another. They seem to create that "let's get together off the job" spirit in a much greater degree than do men. Here's a couple of first class examples, these pictures, both taken at banquets in the Nickel Range Hotel with Maitre d'Hotel Al Rouleau bending over backwards to please the two bevy of beauty: (3) in the layout are Mrs. Busby's shift from the Concentrator, and included in the group are:

A. M. Busby, matron, E. Halko, B. Tyson, F. Haggarty, V. Bertuzzi, V. Champagne, C. Castonquay, P. Camilucci, R. Simionati, R. Kruk, L. Conte, D. Cormier, N. Brannonier, J. Fox, E. Edmond, S. Lamontagne, D. Smith, J. Hayes, C. Sabourin, E. Chiapponi, M. De Sotti, M. Hocak, V. Sanchions, M. Walberg, M. Philion, M. Davidson, A. Rivard; (4) shows Mrs. Busby's shift in the Crushing Plant, and among them are: C. Roy, G. Munro, E. Catford, V. McLaren, J. McCauley, S. Laroque, E. Neckoporenko, V. Souebrei, V. Moroso, M. Campbell, M. Potts, F. Debassize, S. Nichols, R. Dimel, H. Jones, N. Houle, F. McClelland, J. Schur, B. Micholski, R. Baker, E. Branell, A. M. Busby, matron.

### 5—Golf Enjoyed Good Season

At both Sudbury and Idylewyld golf clubs a highly successful season is drawing to a close. Highlight of the Sudbury club's

program was an annual Seagram tournament, with Sammy Rothschild doing the honors in his usual affable way. Dan Seack, former INCOite now with the Air Force, had wings on his drives and one-point landings on his approach shots, and shot a one-over-par 35 on the extra nine holes to vanquish the very promising young Dave Morland of North Bay and they'd both tallied 224 for the scheduled 54 holes. Bob Tomlinson took Roy Herne of Open Pit in the final for the Sudbury club championship. At Idylewyld Murray Dennis, husband of Rita Price who used to be on the General Office staff, was too much for Mansel Robinson in the championship race, and also was in a class by himself in the annual joust between Idylewyld and Sault Ste. Marie. In the gruelling 108-hole grind Murray never faltered and wound up with 317; Art Silver of Creighton was second with 329 and Grant Hyland of the Sault third with 334. Murray's opening 18, only three over par, left the field far behind. The picture (5 in the layout) was taken the day of the Idylewyld tourney. In the foreground on the tricky 7th green are President Ben Merwin under whose all-out leadership Idylewyld has enjoyed an outstanding year, Art Silver, and E. C. Lambert of Copper Cliff, the young-oldest who will probably shoot 36 holes and swim Ramsey Lake on Resurrection Day.

George Harrison of Froid and Bob Duncan of Copper Cliff warehouse showed up well in pro matches over both golf courses, particularly at Sudbury against shoemakers like Phil Farley and Bobbie Gray of Toronto. Idylewyld retained the Donald MacAskill Trophy by defeating Sudbury 46-35 on the round in the annual inter-club matches for which a set of rules were drawn up by E. A. Collins and W. E. Mason.

### 6—Larry a Husky Lad

Larry is the name of the husky young son whom Mr. and Mrs. Gerard Marcotte proudly display in this family photograph. Hailing from Torquay, Saskatchewan, Gerard joined the INCO forces in January of 1941 and is a scoreman at Froid Open Pit. Mrs. Marcotte was formerly Miss Margaret Madigan of Ceylon, Sask.

### 7—Frank Harper's Family

It's more than four years since Frank Harper left his job in the Copper Refinery power department to enter the Royal Canadian Navy, where he is now a Leading Stoker. His fine family has been doing some growing since then, and we thought maybe Frank would like a glimpse of them as they rallied 'round the other evening to hear Mrs. Harper read them the latest letter from their dad. Here's four of them, Frank; Gary, Bobbie, Lloyd, Douglas, and Miss Joan, who's getting to be quite a young lady, we can tell you. Blackie, the dog, insisted on horning in on the picture. Donald, who's 14 now, was out when we called. Nice outfit, Frank.

### 8—Oct. Cook-of-the-Month

Mrs. Albert Beach, who lives in one of the attractive new Company houses at Murray Mine, has two children. Milton, aged 13, attends school in Sudbury and Jeannine, aged three, is her mother's right-hand helper at home. Mrs. Beach likes Fibber McGee and

Molly the best of the radio programs, prefers Jeanette McDonald in the movies, and likes historical novels for reading. When it comes to cooking she gets fine results from these two recipes, and her husband Albert, who is electrician at Murray, would be the first to testify to their goodness:

#### JELLY ROLL

Beat two eggs separately, add half a cup of sugar and beat all together; add half a cup of flour, which has been sifted twice, with one teaspoon of baking powder and a pinch of salt. Flavour with vanilla. Put in a well-buttered pan 10 x 7 inches. When cooked, which will be a few minutes, turn out on sugared paper, spread with jam, and roll immediately.

#### PEACH AND PEAR PUDDING

Six tablespoons flour.  
Four tablespoons brown sugar.  
Two tablespoons butter.  
Three peaches, three pears.

Peel the peaches and slice both peaches and pears into baking dish. Mix flour and sugar together and spread over fruit in baking dish. Bake in oven 15 minutes at 400 degrees F.

Thanks, Mrs. Beach. We can hardly wait to get home to the kitchen and superintend operations while the missus puts these ideas into effect.

### 9-10—Levack Shift Baseball

First shift league to declare a winner in softball or baseball this season was the loop at Levack, where Lejambe's Surface lineup emerged as champions after defeating Frank Dixon's Underground crew two straight, 9-5 and 8-4. Ennis was captain of the third team in the league, which had a 16-game schedule. Pictures show the two finalist lineups: (9) The Winnahs, left to right, back row, E. Mosier, A. Mallette, E. Marcon, E. Armstrong, M. Cragg, A. Westlake; front row, B. Mallette, R. Gross, L. Lejambe, D. White, J. Bell, W. Adams; absent, G. Thrall, G. Russell; (10) The Runner-ups, back row, H. Bolton, W. Hall, J. Tuzoski, E. Bethune, P. Marychuk; front row, F. Swiddle, E. Dubois, S. Sanson, F. Dixon, A. Frank, W. Wancheluk.

### 11—Picked off \$268 Award

Illness has dogged Pat Downey on and off for the past two years, and the old doctor bills were mounting up. Like a kiss from Providence, then, was the news he got a couple of weeks ago—an idea he had submitted under the Suggestion Plan had clicked and he was due to receive \$268 for it. You don't blame him for wearing a six-inch grin as he posed for the Triangle camera beside a working model of his suggestion.

The feed to each of the 48 Deister tables in Copper Cliff Concentrator is pumped through an iron pipe in which there is a 90 degree bend just before it enters the feed box. Due to the abrasive nature of the feed the pipe frequently wore out at the bend and had to be replaced. Pat, a member of the carpenter crew, suggested that a vertical wooden launder be used instead of the bent section of pipe. A trial showed this method to be highly satisfactory since the wooden launders require less frequent replacement and are cheaper to install.

Pat has been with INCO for nine years, coming to Copper Cliff from Calgary. He was married in 1926 at Creston, B.C., to Miss Jean Wood, and they have six children. Two of their sons, Gordon and Donald, played in the Copper Cliff Midger Hockey League last year.

Asked to make a statement for publication just after he had learned of his \$268 windfall, Pat said: "Yippeee!"

\*'Tis the business of little minds to shrink, but he whose heart is firm, and whose conscience approves his conduct, will pursue his principles unto death.

—Thomas Paine





# Triangle's Camera Pays Visit to Levack Hotels

At Levack, as at Creighton, INCO has erected and equipped large hotel buildings for the accommodation of the men. The Levack hotels are operated by an up-and-coming concern known as Northern Catering and Supply Co., headquartered in Sudbury and wise in the ways of hungry men through its experience at various lumber camps of the North.

Recently the Triangle camera focused for an hour or so on life in the Levack hotels and had the pictures on the opposite page for its story:

**1**—After the evening meal a bunch of the boys gathered in the rotunda for a "jam" session. The musicians, who are much in demand for impromptu programs either individually or as a group, were, left to right: Yvan Lemieux, guitar; Tony Kuz, violin; Denis Landry, sax; Roman Kuchma, guitar; Maurice Paradis, mandolin. Paul Jusulenka has the reserved seat in the orchestra, and the lads who are tuned in at the back are Albert Lavigne, Alfred Hartley, Ken Belter, Emmanuel Holmes, Oscar Lavallee, Eugene Kyshynski, Arcade Langis and Bill Kelly.

**2**—As each man leaves the dining hall the checker at the door lists his number so a charge for the meal will be made on his bill. Checkers are chosen for their powers of memory as well as their good looks. One of the Levack checkers, Viola Mantha, can remember 400 men just as well by their employment numbers as by their names, never has to ask a man his number once she's heard it once, can even tell in a flash what shift any man is working. Checker in the picture is Florence Lapiere and the "customer" is Joe Sajatovich.

**3**—A couple of corners in the big dining hall during a major operation, the evening meal. The Levack hotels can accommodate 400 men and will probably be filled to capacity during the winter months. The men get all they want to eat of the best food obtainable. In the first six months of this year, for example, they put away 4,510 lbs. of butter, 112,000 eggs, 10,584 lbs. of lard, 9,410 lbs. of chicken, 78,000 lbs. of meat. That's packing away the groceries but the manager, Julian Morel, took it with a smile until one day a new arrival wolfed 14 cackles at a single session. Then Mr. Morel said: "Aw gee, mister, have a heart."

**4**—Just a group of the boys waiting in the rotunda for the dinner bell. The cameraman said: "Fellows, think about your income tax," then snapped the picture. Note the various expressions.

**5**—Recent installation by the Company of an electric dishwasher, which stands in the back-ground, has speeded up operations in the hotel kitchen. All the attendants have to do now is clear off the plates, stack them on trays, and forget about "dishpan hands." An addition to the kitchen, an electric potato peeler, and an extra frigidaire for cold storage, are other recent improvements in the service.

**6**—Frank Ayotte and his apprentice, Alex Noble of Warren, hold forth on the night shift in the hotel bakeshop, cooking the pastry for the next day. Frank was formerly with McFadden Lumber Co. and knows how to make pies that stick to a man's ribs.

**7**—In the kitchen the cooks are heaping up the dinner plates. Head chef, on the right, is Paul Uhlman; the two assistants are Jim Cook (centre) and Sylvio Allain. Menus are carefully balanced to produce "that skin you love so touch" and no time is lost in order that the food is served appetizingly hot.

**8**—Familiar sight in the rotundas are salesmen from Sudbury, displaying their wares and writing fat orders. Here Vic Tousignant and Maynard Bushey give the once-over to some suit samples shown by Harry Ansara of Sudbury.

**9**—Down in the basement the storerooms are jammed with name-brand staples, fresh fruits in season, vegetables, etc. Shipments of fresh supplies are received daily from Sudbury.

**10**—Tena Biselli is seen here at the counter of the hotel commissary, waiting for Bill Sadkivsky to make up his mind about a new necktie. Besides tobaccos, soft drinks, and nut bars the commissary carries a surprisingly large and varied stock of clothing and other necessities for the convenience of the men when an emergency arises.

And that, briefly, is an hour's picture visit to the Levack hotels. No hotel is as good as home, but we came away with the idea that the boys in that busy little mining camp are enjoying a pretty good substitute.

### CHANGES OF ADDRESSES

Considerable difficulty is experienced in keeping track of changes of addresses for INCO men and women overseas in the Services, with the result that some may not receive gifts intended for them. Relatives or friends who know of such changes will confer a favor by reporting them to Secretary James Hazelden, War Relief Club, General Office, INCO, Copper Cliff.

### CREIGHTON COUPLE



Mr. and Mrs. Ross snapped at a supper dance at the Copper Cliff Club. Ross has been at Creighton since 1922, is chief of the engineering department there. They have one daughter, Eleanor, a Wren in the R.C.N. stationed at Halifax.



A fishing trip to the teeming waters of the Manitoulin yielded fine returns for Clyde Dunsmore of the Garson warehouse (left) and his brother Ken, who are seen with two of a catch of about 40 muskies. Ken's young son obligingly stood in to demonstrate the size of the fish. The one Clyde is holding weighed 14½ lbs. far above the 8 lb. average for Manitoulin. Ken's tipped the scale at 13½ lbs. And now, to tell the truth at the expense of Clyde's prestige, that 14½-pounder was really caught by Mrs. Clyde. (The Ladies, God bless 'em!)

### WORKED AT CREIGHTON, FROOD

To the Editor: R.C.A.F., Overseas. I was pleasantly surprised when Helen Ledingham handed me the May and June copies of The Triangle. To me the most interesting article was the one in the May issue on the underground hoistrooms at Creighton Mine. I worked there, and when I left in 1941 they were still pouring concrete. I don't think they had made a start on the second hoistroom but they had collared the shaft.

I have enlisted twice in this war. First I joined up from Frood Open Pit with the Grey and Simcoe Forresters. Then I returned to INCO with a compassionate release from the Army and went to work as a motorman on 52 level at Creighton. And later I enlisted again. A few days ago I met Scotby Cummings from Garson. We worked together on 2,400 at Frood. About a year ago I met Johnny Ross in London. He is doing O.K. as a P.T.I. with the Army. Have also met Rev. Lautenslager, who is quite well known in Sudbury.

Before closing let me congratulate the Company on the good work in keeping up a paper like the INCO Triangle.

A. V. Horsley.

## Maybe This is Why You Missed

With the deer-hunting season at hand INCOite sportsmen who are readying their trusty muskets for action may be interested in the table published below. With the following rifles sighted to hit centre on a target at 100 yards, the bullets will hit low or high, at the ranges listed, by approximately the number of inches shown:

Calibre	Bullet Weight	Muzzle Velocity (Ft. Per Sec.)	High at 50 Yards	Low at 200 Yards	Low at 300 Yards
250-3000 Savage	87 grains	3000	0.5 in.	3.5 in.	14.5 in.
	100	2790	0.6 in.	4.5 in.	16.0 in.
10-30	170	2200	1.0 in.	7.5 in.	28.0 in.
10 Remington	170	2200	1.1 in.	7.5 in.	29.5 in.
300 Savage	150	2850	0.7 in.	4.5 in.	17.5 in.
	180	2380	0.9 in.	7.5 in.	26.5 in.
103 Savage	190	1960	1.3 in.	7.5 in.	35.0 in.
10 Govt. '06	180	2710	0.7 in.	4.5 in.	16.5 in.
32 Special	170	2260	1.0 in.	7.5 in.	28.5 in.
	32-40	1440	2.6 in.	19.5 in.	66.0 in.
44 Winchester	200	1300	3.3 in.	31.0 in.	91.0 in.
	38-55	1320	3.0 in.	22.0 in.	76.0 in.
303 British	180	2480	0.8 in.	5.5 in.	22.5 in.

## FULL PROGRAM OF ACTIVITIES FOR FALL AND WINTER AT CLUB

Fall and winter activities have moved into the spotlight at INCO Employees Club in Sudbury this month and the big recreational hub will be as busy as a bee—which is more truth than nature study because the whole program is an action-packed series of Bs: Bridge, Badminton, Bowling, Billiards, Boxing, Bingo, Basketball, and Boogie-Woogie.

Every Monday evening the bridge and 500 fans go into action in the downstairs game room with Al Northwood as host. Cash prizes are awarded. On the evening of Dec. 18 there'll be a Turkey Bridge.

The four badminton courts will be open for play on Tuesday and Thursday evenings and Sundays, and also on Friday evenings when that date is clear on the Club calendar. An inter-plant league is blossoming under the leadership of Frood; Wally McIntosh, Open Pit; Dave Duncan, Copper Cliff; Larry O'Brien, Refinery. It looks like a big year for badminton. Given reasonable care the Club's war-pinched supply of birds should be able to meet the demand.

Bowling will of course be a major activity. Leagues are now in full swing, and players are finding the Club's newly sanded and shellacked alleys much to their liking. Dates and secretaries of the various loops are: Frood, Tuesday and Friday evenings, Albert Stone; Copper Cliff, Monday and Friday evenings, Jim Oliver; Open Pit, Wednesday evenings, Bill Poulson; Refinery, Thursday evenings, Bill Tolek. A ladies' league is also being organized, with Henry Dunn as chief conciliator; it is open to all privilege card holders.

Billiard tournaments will be staged periodically during the season, with cash booty for the winners. New talent is expected to provide more opposition for such old hands as Chick Williams, Wes Eby, Tony Mahon, and Hughie Munroe.

Crowds averaging 1200 fans continue to pack the big auditorium for the boxing and wrestling shows. Promoter Vern Tupling announces that the next card will be staged on Wednesday, Oct. 11, with Mickey Doyle of Stobie matched in the headliner against Herb Beckert of Pickering, the former Levack slugger whose brother Cliff has fought many a hectic main bout at the Club. Another show is booked for Nov. 15, and they'll be monthly throughout the winter.

Plenty of boogie-woogie is billed for the season. The next dances take place on Oct. 6 and 20, and the annual Hallowe'en Dance will be staged Tuesday evening, Oct. 31. The New Year's Eve party will commence at midnight of Dec. 31.

Every Wednesday evening except boxing nights the auditorium is turned over to the

bingo brigade. This unflinching crowd-pleaser invariably draws at least 700 eager card-holders, and prizes run from \$4.00 to \$15.00 on every play with the jackpot building up to \$30.00 if nobody is lucky enough to pick it off in the meantime. The Turkey Bingo events this year will come on Dec. 13 and 20, and about 25 plump gobblers will be given away each night in anticipation of the festive season.

Directors of the Club are delighted with the prospects for a successful basketball season. As we go to press a four-team league is shaping up between Frood, Copper Cliff, Open Pit and Refinery. Organizers at these plants are Jack Surtie, Ken Lichty, Nick Choma and Ron Heale respectively, and anyone interested in the game should contact them. The loopsters will have the auditorium floor on Saturdays for practice, and league games will be played Monday evenings.

Two Christmas Tree dates have already been booked. The annual Frood Yuletide party will be held Dec. 10, and the Refinery affair will be on Dec. 17.

All in all it's a pretty fine program, with a full measure of entertainment and recreation for every taste, and those in charge of the Club are to be congratulated on it.

## Invasion Costs Money

Even before the soldier landed on the beach, expensive equipment had to make way for him. The softening up process by bombers and naval guns meant an initial cost running into millions of dollars. Heavy bombers cost about \$300,000, medium bombers about \$110,000 and fighter planes about \$50,000. To make one medium bomber takes about 13,000 man hours. Food from 20 acres is needed to feed the workers who turn out one bomber. Large bombers take about 27,000 man hours.

The expenditure is not in planes alone. Bombs weighing up to 4,000 pounds cost about \$875. Another detail, such as oxygen masks for the crew of a Lancaster Bomber, cost about \$40. To each mask is attached a regulator costing \$60, and a \$25 oxygen cylinder from which the flyer draws his breath of life.

In one day of combat, an infantry division can expend 300 tons of ammunition.

Ten .50 caliber machine guns firing at a maximum rate of fire for two hours and five minutes would use one million rounds of ammunition. It takes 1,832 workers to produce this number of rounds in one day.

In one hour of firing, a 75 mm. gun on Canadian Sherman tanks expends 7,250 pounds of copper, 3,000 pounds of zinc and 42,750 pounds of steel.

A 105 mm. cannon can shoot out more than three tons of steel in one hour of firing. The cost of the cannon, without the shells it uses, is about \$13,000.

Maintenance alone of a single soldier overseas requires about 65 pounds of supplies per man per day. For every 100 men overseas with 100 rifles, 60 more rifles must be shipped each year to replace those that are lost or damaged. For every 100 machine-guns, 85 replacements must be sent.

And now, on the home front comes the command—back up our fighting men with the biggest Victory Loan of all. Our duty is clear . . .

"Buy extra bonds in the coming Campaign." Whoever you are, wherever you may be, ask yourself this question: "What have I done today that some mother's son should die for me tonight?" Then put your extra \$100—\$200— or \$300 into Victory Bonds. It's for Victory!



## The Pictures

Four of the "B" activities at INCO Employees Club are illustrated here:

1. Warming up for the winter season in the Bowling leagues are: left to right, Roy Jeffrey, Lorraine Tyson, Jack Mayer, Andy Winn, and Bettie Tyson.

2. Two Badminton enthusiasts who will be prominent during the winter's play: Mrs. Ann Saari, popular member of the Club staff, and Joe Eby of Frood Open Pit.

3. Bridge addicts hold sway in the Club's game room, where 500, cribbage, and other table games are also organized. In the studios foursome closest to the camera Mr. and Mrs. Earl Pami are matching wits with Mr. and Mrs. Kilroy. Kibitzing is Mrs. T. Dionne.

4. Cue artists keep the Billiard tables going steadily in the winter evenings at the Club. In this game of Russian Billiards Mike Shamley, Refinery is at bat and Phil Forester of Copper Cliff Smelter is on deck.