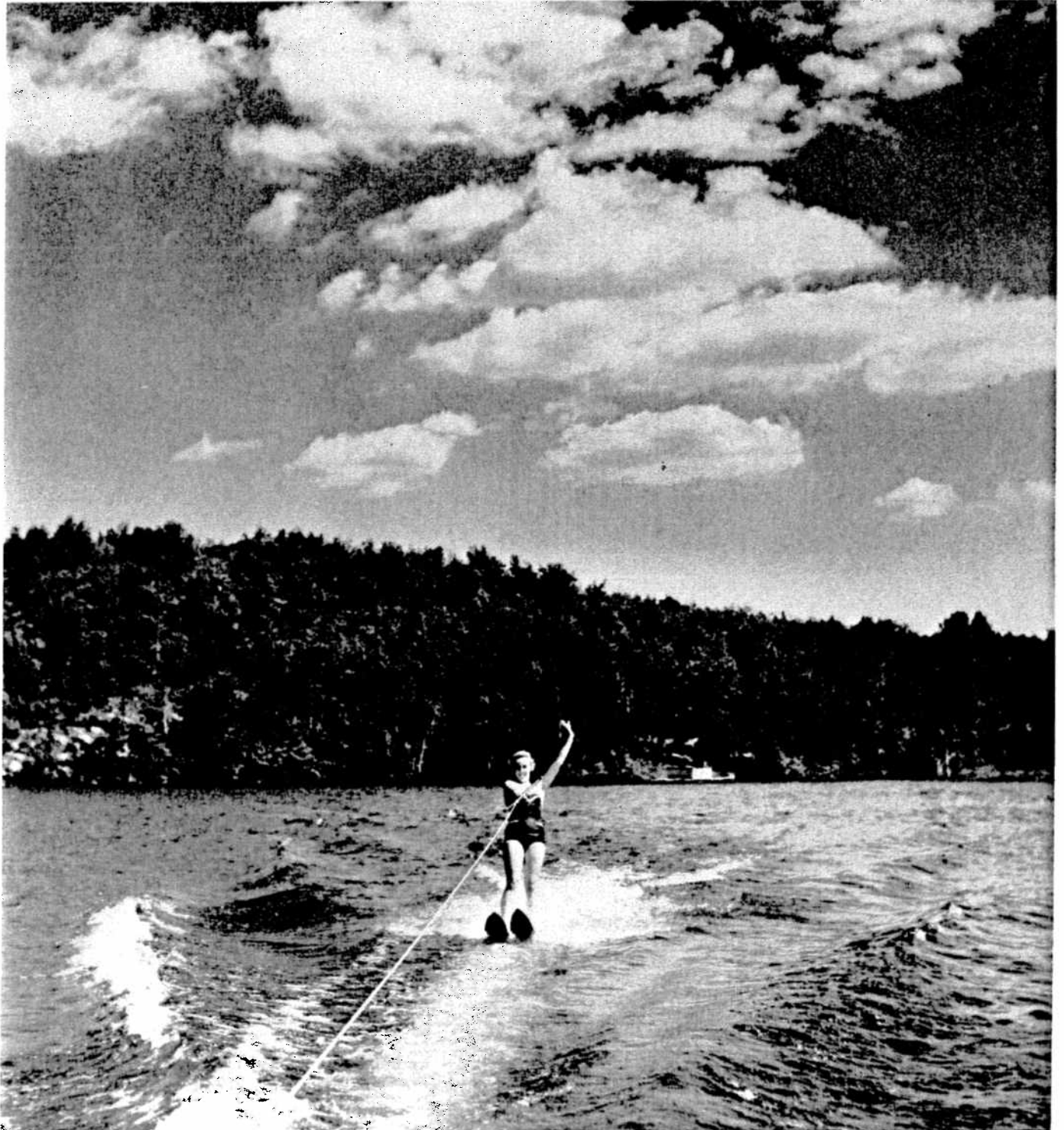


# INCO TRIANGLE

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NUMBER 4



Footloose and Fancy Free



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Don M. Dunbar, Editor.

EDITORIAL OFFICE COPPER CLIFF, ONT.

## Bob McAuley Held In Highest Esteem

A sharp contrast to the modern change-houses at Inco plants is formed by Bob McAuley's recollections of coal mining in England 40 years ago. Then, he recalled, the wife would have water heating at the fire-place for his "tub" after each shift. Dirty coal black he was, too, his wife well remembers, wearing home the same clothes he wore in the mine. Today, as Bob remarked, a fellow can go to and from work in his Sunday best.

Landing in Canada in 1929, Bob came on to Garson almost as soon as he learned there were no mines at Montreal, and handled various jobs on surface. Now, after working at both stope and level occupations for more than a quarter of a century, during which he was held in high esteem by all, he has taken his doctor's advice and retired on disability pension.



MR. AND MRS. BOB McAULEY

Born at Bedlington, England, in 1899, he married Mary Bloy there in 1921. Of their five fine children John is with the RCAF, Margaret is Mrs. Ivan Quackenbush of Garson, Ellen is Mrs. Gosselin of Sudbury, and Mary is a member of the accounting department at Copper Cliff. Joe, their other son, carries on the family's mining tradition at Garson. They have 10 grandchildren.

A dyed-in-the-wool supporter of soccer, Bob was for several years manager of the great Garson team, and some of his fondest associations came about through this connection.

His hundreds of good friends and associates hope he will take good care of himself, and long enjoy his well-earned retirement.

## Lloyd Paul a Mill Man from Start

A job with the contractor who rebuilt the Nickel Club at Coniston in 1923 was Lloyd Paul's first contact with the industry to which he was to give more than 30 years of faithful service. Starting in the concentrator at the Coniston plant in 1924 under the late Ken Clarke, he moved to Copper Cliff when the big new mill went into operation in 1930, became a flotation boss, and there remained



Karl Sommerer

## End of the Line

until his recent retirement on pension, a highly regarded employee.



MR. AND MRS. LLOYD PAUL

Born and raised near Powassan, Lloyd farmed and operated a brickyard in his earlier years. In World War I he had his right arm smashed by a machine gun bullet and was lucky the doctors were able to save it from amputation.

His marriage to Clara Thompson in 1923 he considers the nicest thing that ever happened to him. The joy of their lives are their eight children and eight grandchildren. Of their family Vera, the eldest, is Mrs. McGinn of Ottawa. Gerald is a theological student at Queen's, Lloyd jr. and Donald both work in Sudbury, Eva is Mrs. Camp-

bell of Fort William, and Billy, Carol and Ken are all still in school.

At a big gathering of his old friends in the Italian Hall at Copper Cliff, Lloyd was presented with a power saw and a purse of money, and wished the most of the best in the years of leisure that lie ahead for him and his charming wife.



CONISTON PENSIONER

Gene Tancredi, who retired recently at Coniston, is shown here with his wife. He had been employed in the nickel industry for almost half a century, some 40 years of this time at Coniston.

There are three sets of twins in the fine family of Mr. and Mrs. Joe Murphy of the copper refinery: David and Diane, 15 mos.; Barbara and Bob, 3; and Tommy and Jim, 12. But not to be forgotten are Ann, 9, and Danny, 7.



## INCO FAMILY ALBUM



Mr. and Mrs. R. Lauderante (Coniston) with Susie, 5, Darlene, 4, and Robin, 18 mos.

Mr. and Mrs. Allan Leach (police department, Copper Cliff) with Dwight, 3, and Gail, 6 mos.



Mr. and Mrs. P. Demonsky (Frood - Stobie No. 3) with Linda, 7, and Peter jr., 11.

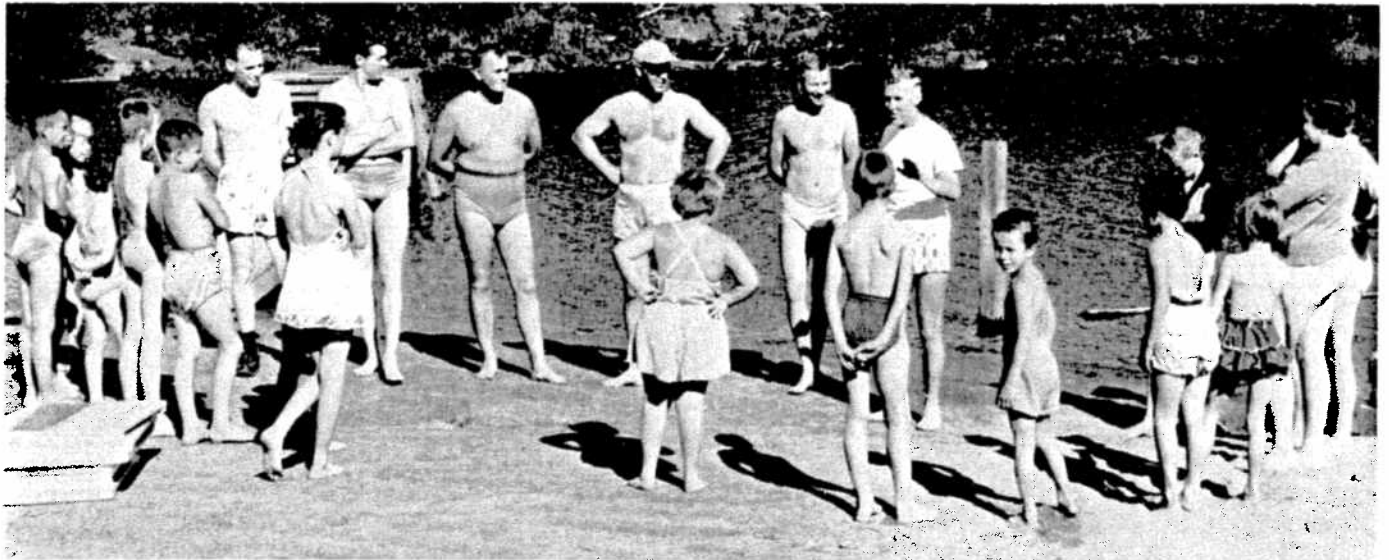


Mr. and Mrs. Jack Rickard (Port Colborne) with John, 13, Sheila, 11, and Elaine, 4.

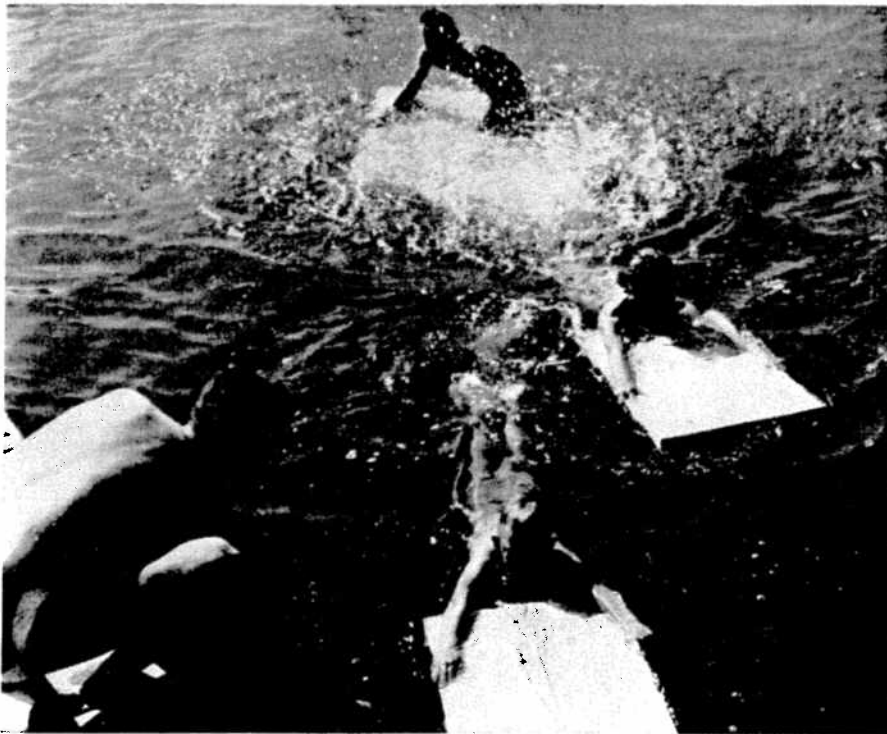


Mr. and Mrs. Carl Critzman (Creighton mine) with Lynne, 13, Randy, 11, Paul, 9, and Danny, 2½.





The opening class of the week-long Learn-to-Swim school at Garson is lined up in the picture above, meeting its instructors and getting a pep talk from John Grey, Sudbury YMCA adult program secretary. On the left, three minnows are busy with their paddle boards under the direction of Les Parr, the chief instructor. The paddle boards are not only useful in teaching the rudiments of swimming, but also help strengthen leg muscles.



## Hundreds of Nickel Belt Kiddies Get Swimming Lessons

A long, powerful stride toward freedom from tragedy was taken in the Nickel Belt during July in the YMCA's Learn-to-Swim campaign. Hundreds of children received lessons from qualified instructors in the concerted drive to make the beach as safe as the back yard.

With its extension program the Y spread through the district the benefits of the swimming school which has long been one of its most effective projects in Sudbury. Levack, Garson, Lively, Burwash and Copper Cliff have all received assistance.



Mrs. Bob Crawford, Garson school nurse, introduces a young applicant at the registration desk, which was in charge of Mrs. Les Parr (centre) with Mrs. L. Matson as assistant. In the picture on the right, Mrs. Crawford discusses the importance to the community of the Learn-to-Swim campaign with Lewis Nicholls, Les Parr, Lovett Baker, and Stan Todd.

## Garson Swimming Pool Scene of Learn-to-Swim School



Two classes of the 200 children who registered for the Learn-to-Swim school at Garson are seen here getting their first lesson at the swimming pool. Equipped with changehouses, swings, teeter totters by the Garson Mine Athletic Association, the pool near the mine is a delightful summer recreation spot. An adjoining area has been seeded to grass and landscaped by Inco, added much to the attractiveness of the layout.

For organization and enthusiasm the course held at Garson in July could hardly have been surpassed. Working in co-operation with the Garson Mine Athletic Association, the Y extension group there staged a week-long series of morning classes with very gratifying results. Almost 200 children over 8 years of age were registered.

A large local staff of volunteer instructors was headed up by Les Parr, a shift boss at the mine, who is as adept as a swimming teacher as he is at giving skiing lessons. Members of the staff were Joe Carriere, John McKinnon, Ollie Matson, Morris Joly, Jack Ferguson, Lorraine Hebner, Bob Ferguson, Leon Matson, Tom Lee, Jim Muir, Lovett Baker, Ernie Ashick, Lewis Nicholls Ray Gresham, Joe Malley, Clayton Spencer, Tom Armstrong, Sally and Joan Crawford, and Oria Pajunen. Assisting them with the beginner classes was John Grey, adult program secretary of the Y in Sudbury. Chairman of the committee in charge was Stan Todd, who as a newcomer to town was much impressed by the way the community got behind the project and made such a whacking success of it.

The classes were held each morning at the Garson swimming pool, delightful summer recreation spot developed by the Garson Mine Athletic Association with the help of Inco. At the end of the week's course tests were held and certificates were issued to the high percentage of children who qualified for them.

"We were certainly pleased with the progress the kiddies made," Les Parr told the Triangle. "A lot of them who would hardly



Life guard at the Garson swimming pool, Oria Pajunen, is seen here on the job in his lookout.

duck their heads at the start were swimming around like fish at the end of the week.

"I hope we've laid the foundation for a program that will continue from year to year. My feeling is that the youngster who has learned to swim a little is even more in need of teaching than the one who can't swim at all because he knows enough to get himself into difficulty. So I think we should

plan each year to have classes for advanced swimmers as well as for the beginners.

"I would like to thank all those who helped with the instructing at Garson. I think they did a fine job."

## Quick Canadian Quiz

1. What proportion of Canadian homes have electricity, running water, radios, mechanical refrigerators, television sets?
2. On the average, to move one ton of freight one mile by railway in Canada does it cost 1.5 cents, 4.7 cents, 7.4 cents?
3. Who is the only Canadian ever to win the United States amateur golf championship?
4. Where in Canada are the mountain ranges known as the Blue Hills of Coteau, the Kamajets, the Appalachians, the Selkirks?
5. What is the daily capacity of the Edmonton-Sarnia crude oil pipe line?

ANSWERS: 3. Sandy Somerville, at Baltimore in 1932. 1. Electricity, 94%; running water, 80%; radios, 96%; refrigerators, 76%; television, 31%. 5. 217,000 barrels a day out of Edmonton. 2. 1.5 cents per mile. 4. The Blue Hills and Kamajets are in Newfoundland, the Appalachians in Quebec, the Selkirks in British Columbia.

(Material prepared by the editors of Quick Canadian Facts.)

Youth is not a time of life, it is a state of mind.

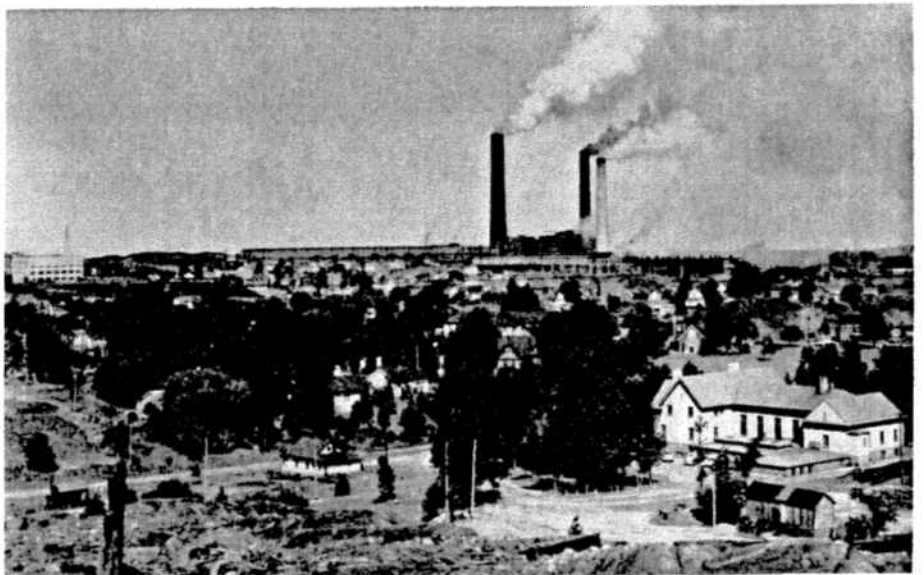
## The Town of Copper Cliff in 1903 and the Same View Today



One of the most interesting pictures of early Copper Cliff, especially when it is compared with the same view as it is today, is the one above from the greatly prized collection of John W. Garrow.

Taken in 1903 from a vantage point on the rocky hills behind the site of the Copper Cliff Club, it gives a particularly good impression of the bleak but bustling little mining camp that was destined to become the hub of the world's nickel industry. At the right is a picture taken recently from the same position, showing part of the great plants that have grown from the humble beginnings of little more than half a century ago.

The long trestle seen in this fading souvenir carried trains of "jimmy cars" or ore from No. 2 mine to the West smelter. Beyond the houses in the right foreground, which were later moved up to Cliff Street, are seen the shop buildings which of course are now located beside the reduction plants. At the right is the police station, construction of which had just been completed. The building in the centre of the picture was the general manager's residence, and its original log walls are part of the home of the Company's vice-president and general manager today.



## 75-Ton Nickel Steel Ingot Shipped Hot

Local history was made recently when three huge ingots weighing a total of 139 tons, the largest 75 tons, were shipped hot from Sydney to Trenton, N.S., by Dominion Steel and Coal Corporation.

All three were shipped at temperatures approximating 1800 degrees F in highly insulated railway boxes and upon arrival at Trenton showed a heat loss of only about 150 degrees.

The big shipment of solidified hot steel by rail over the CNR and the Canso Causeway aroused interest particularly because the heat contained nearly 3½% nickel. Never had an ingot of such size with such a high nickel content been shipped hot from the Sydney steel plant. Nearly seven tons of nickel, produced by International Nickel and supplied by John Bertram & Sons of Montreal, was used in the heat, along with other special alloys.

Prior to completion of the Canso Causeway, the load limit of the ferries plying the Strait of Canso restricted the weight of ingots to 65 tons.

The ingots were shipped to Trenton Indus-

tries Limited for forging by Canada's biggest press, a 7,000-ton giant. Once landed at Trenton they are put in furnaces where they regain the few hundred degrees of heat lost in transit and are brought up to the temperature required for forging.

Shipping of ingots hot, to eliminate some of the cost of reheating and to improve the quality, was devised in 1951 by Dosco with the cooperation of CNR officials and engineers. It attracted the attention of steel officials all over the continent and was the subject of feature articles in many publications, including Life Magazine.

A foot on the brake is worth two in the grave.





Sid Woodley conducts the Sudbury Band in one of its eight annual open-air evening concerts at Bell Park.

## Members of Sudbury Band Make Fine Contribution to Life of Community

A wonderful asset to any community is a band. Its big, buoyant music bolsters civic pride, starts the spirits and imaginations of the youngsters racing, sends the thoughts of their elders strolling back down memory's lane. There are few things that quicken the community pulse and strengthen the bonds of citizenship like good band music with its perennially warm and friendly appeal to all.

Sudbury is particularly fortunate in the calibre of the musicians who play in its band and their unselfish devotion to their hobby. Among the Inco people who follow this pleasantly rewarding way of community service is Sid Woodley, miner at Frood-Stobie for 19 years, who has been bandmaster of the Sudbury Band since 1954.

The present band, Sid informed the Triangle, consists of 50 members, about half of them teen-agers of whom several also take part in another very fine organization, the High School Band.

The band collects no membership dues but requires that newcomers turn out to practice faithfully for three months before they may become full-fledged members. In that period two prime requirements, good citizenship and good musicianship, can be determined.

Last year the band held 54 rehearsals and played 32 engagements, in addition to individual and group practice sessions and Saturday morning music classes. All members are pardonably proud of the fact that their services, from the bandmaster down, are given without pay, which speaks highly of their desire to contribute to the cultural wealth of their city.

The band is housed in its own little building overlooking the Sudbury subway, where the blaring horns of the railway diesel locomotives that go thundering by provide pretty stiff competition for the modest toots of the tubas. Tucked away on a back street, this old building has absorbed many hundreds of dollars and hours of volunteer

spare-time work to put it in shape, but now it's a comfortable home for the band with its hall, balcony, music rooms, kitchen, washrooms, and basement. Maintenance, heating, lights, etc. make regular inroads on the band's delicate bank account, but, typical of musicians, as long as there's enough income to cover the outgo everyone is happy.

Sid pointed out to the Triangle that few people realize the expense involved in equipping and maintaining a band of this size. Most of the larger and some of the smaller instruments are owned by the band, their total value being in the neighborhood of \$10,000. Recently \$540 was spent for a new euphonium, an odd double-shaped brass horn, but even this item was small compared to the cost of an "oomph-ah" or sousaphone. One of these big, brass tubas, which gets its name from the famous bandmaster John Phillips Sousa, makes the purchaser say "oomph" to the tune of \$1,200. A good trumpet costs \$400, as does a baritone, a saxophone comes at \$300, and so on. Uniforms run about \$100 each, and the extensive musical library required, presently valued at more than \$2,000, must be added to regularly.

Under the heading of receipts in the band's ledger the main item is the City of Sudbury's annual grant in return for eight Sunday evening concerts at Bell Park. This happy arrangement has been in effect since 1943, and has brought untold pleasure to uncounted thousands. Other concerts and performances also help to sweeten the kitty so that, while dreams of a larger, more modern establishment and a larger band seem remote at the moment, current commitments are promptly met, a tribute to the band's good management and co-operative endeavor on the part of all the members.

Born and raised in Saskatoon, Sid Woodley showed at an early age an aptness and fondness for music, particularly band music and choral work. Joining the Salvation Army band at 14, he soon became a com-

petent horn, baritone, and brass player, and today strongly recommends the training he received there, both musically and otherwise, to any prospective bandsman. His musical background was broadened when, at the age of 18, he also assumed charge of the Salvation Army choir, making him certainly one of the youngest choirmasters Canada has ever had.

Arriving in Sudbury and a job at Frood Mine in 1937, Sid took only sporadic interest in horn tootling until 1944 when he joined the Sudbury Band. This organization, dating back to the turn of the century, had folded up in the late '30's after many colorful years of ups and downs. Revived in 1942 at the hands of Lawrence Hunt and a small group of fellow musicians, it was already well on the way to becoming an institution of which any city could be proud. Always an ardent worker as well as a gifted musician, Sid was soon prevailed upon to assume various responsible posts in the band which culminated in his appointment as bandmaster in 1954. His broad talents and persuasive personality make him a natural for the job, a favorite of both players and public.

While Sid admits that band work takes up two or three nights a week of his time, rehearsing, choosing music for concerts, and other chores, it's also quite evident that he loves every minute of it. The enthusiasm with which he discusses the band, and the animation he shows while conducting it, are ample evidence that band work is definitely for Sydney.

Other interests? He admits to several but points out that he hasn't too much time to indulge them. He was an active Barber-shopper for several years, but his real hankering is always for a good game of bridge, and this sometimes even vies in popularity with the band.

In common with many thousands of district music-lovers the Triangle extends its appreciation to all members of the band and in particular to their personable leader, for dedicating so much of their leisure time to the benefit and enjoyment of their fellow citizens.

## Paul Gravelle Honored



Surrounded by some of his buddies, Paul Gravelle is seen on the left in this picture as he received a gift of a well-filled wallet and an ash tray stand from Ray Forth at the retirement party they gave for him in the Oddfellows Hall at Sudbury. A calcineman in the roster department at Copper Cliff for many years, Paul was given a rousing sendoff as he joined the ranks of Inco's service pensioners.

# Mine Geology Organization Acts As Radar System in Inco's Ore Recovery

Like a radar system, geology acts as eyes and ears to keep the mining program "on the beam."

It reveals where orebodies are hidden in the vast rock-ribbed vaults of the Sudbury Basin, determines their size, shape, and value, and points the way to their efficient recovery.

Inco's geological department, with headquarters at Copper Cliff, comprises two closely co-operating divisions under the direction of the chief geologist, mine geology which serves all operating mines, and exploration and research which handles all surface and laboratory work. This article will describe the mine geology division.

This branch of the geological work is directed by the mines geologist. At Copper Cliff he and staff assistants maintain the files of essential operational and graphic records of mine geology, propose new exploration, make exploration layouts, review engineering aspects with the mines engineering department, and submit recommendations to the mines superintendent.

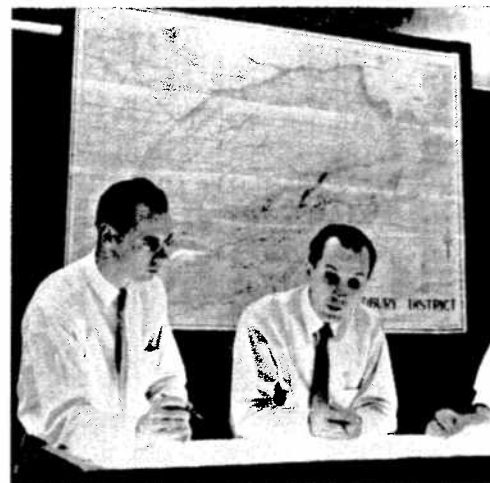
The geological staff at each of the mines consists of a mine geologist and the staff of assistants required for the amount of exploration and development in progress and

the number, size, and regularity of stopes in operation. They are responsible to the mines geologist and to the superintendent of the mine.

The duties of the geological staff at each mine are threefold: to provide the necessary geological information required for the efficient and complete removal of ore from producing areas, to supervise current exploration, to discover new facts governing the control of ore deposition and, in conjunction with the geological organization as a whole, to use the new information in the search for ore in the mine.

For carrying out these duties each assistant geologist is made responsible for accomplishment within an assigned portion of the mine. Through the mine geologist he provides the operating, engineering, and efficiency departments with projections and general geological information covering the extent and types of ore and rock to be encountered and the kind of ground conditions to be anticipated. He also maintains the office records, including geological plans and sections for the area under his control. It is customary to map each working place in the mine either

(Continued on Page 14)



Charting further Inco exploration in the map of which hangs behind them, are Gordon Zurbrigg (chief geologist) and Bert Souch.



Development exploration drilling at Frood-S is discussed by mine geologist Herb Brownell, H. Stewart, mine engineer Bob Hall.



At Frood-Stobie No. 3 shaft geologists Don Stephenson and Nick Koropatnick examine a mineralized specimen from a quartz vein in a square-set stope, to determine the mine-ability of the north pillar wall.



At a surface exploration diamond drilling Levack area, boxes of drill core are examined by geologists Jim Hatch and Waldo Clarke.





Basin, a  
ve, H. F.  
These Creighton geologists await their daily trip underground to map mining progress: Bruce Dunlop, Gene Marcon, Tom Gribble (trainee), Jim McGregor, Don Bailey.



Mine geologist Ron Lake and mine engineer Earl Gilchrist study a model to plan a drill program for outlining an irregular block in one of the Levack ore bodies.



3 shaft,  
endent C.  
At Creighton the mine geologist, Paul Bugg (centre) explains to W. Wheaton and W. Newman, shift bosses, a revised timbering procedure in a diamond drill station.



Don Meredith, Garson mine geologist, reads an acid test to check the inclination of drill hole with Leo Dufour, drill foreman, and Dorice Pelletier, driller.



in the  
ed by  
In the core room at Murray, Gordon Merriam and Bruce Gerhard take a color picture of diamond drill core. These transparencies, made at all Inco mines, are filed for study and reference.



Here Gord Merriam is checking the rock type and grade of core from 3,000 level at Murray, and Bruce Gerhard is splitting core specimens for the files at Copper Cliff.

## Wishing Happiness to Lily Kauppi in Her New Career



Popular and efficient secretary of the insurance department for five of the seven years she was a member of the general office staff at Copper Cliff, Miss Lily Kauppi was honored on her leavetaking to be married July 28 to Andy Kurkimaki of Sudbury, R. A. Corless wished her much happiness in her new career and presented her with an electric tea kettle on behalf of his department and with an automatic toaster and a blanket on behalf of the girls in the various other departments, many of whom gathered around her for the above picture.

## Sheath Building In Stainless Steel

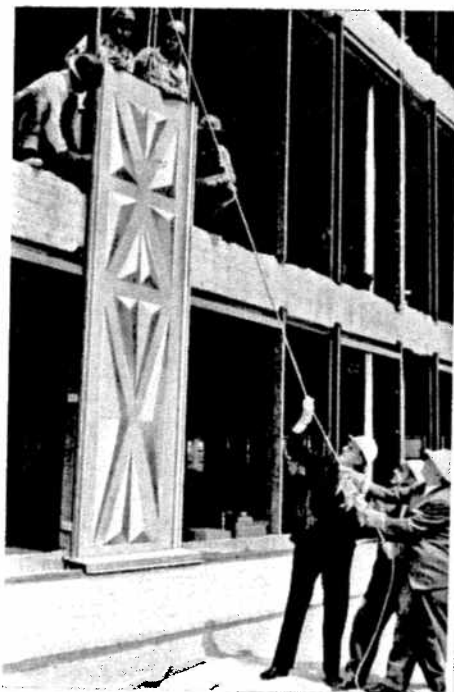
Though dwarfed in height by other buildings, the 45-storey Socony Mobil structure, when completed, will be the world's largest metal-clad building and the largest fully air-conditioned commercial building ever constructed. Covering a full block at 42nd and Lexington Avenue, it is New York's first building sheathed in stainless steel.

of 20 gauge steel, 1/32 of an inch thick.

Because of its facing of stainless steel, backed with only 4 inches of masonry, the walls of the Socony Mobil building will weigh about 40 pounds per square foot, as against 140 pounds per square foot for the conventional wall of 10 to 12 inches of masonry. The 6 to 8 inches saved means a great deal in terms of rentable floor space in a building of this size, and is quite a commercial advantage where income is directly related to floor area.

The decision to use nickel-containing stainless steel instead of masonry was made by the builders' principals after considering the metal's superior resistance to corrosion and fire. An additional factor was the lower maintenance costs of stainless, which eliminates the necessity of repeated chemical cleaning or sand blasting to maintain its gleaming beauty through the years.

The maintenance economies of the steel were increased by the unusual design of the stainless steel window frames.



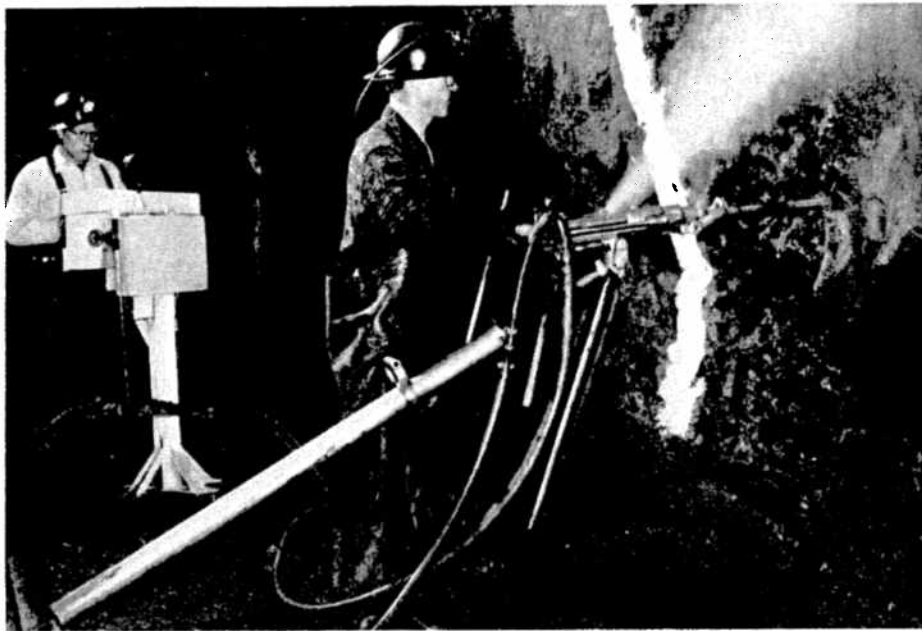
The first of more than 7,000 chromium-nickel stainless steel panels is hoisted into place by the building's owners.

Of the panels that will enclose the building in a sheath of stainless steel, 3,261 will be window panels, with a height of 6 feet 7 inches, and holding 22 square feet of clear glass. The rest of the panels, except for a small number of special size, will measure almost 12 feet in height and slightly more than 4 feet wide. All of the panels are

## Staged Sparkling Performance at Highland Games



Four firsts, five seconds, and two thirds was the remarkable achievement of these six young lassies of the winning ways in the dancing at the annual Highland Games at Sault Ste. Marie. From the left they are: Carol Hutchison, whose father George is a shift boss in the separation plant at Copper Cliff; Brenda Buchanan (she scored three firsts) whose dad Tommy is an Inco locomotive engineer; Heather Murray, whose dad Murdoch is a well-known Copper Cliff fitter; Leona Howard, whose father Dick, also a locomotive engineer, joins Inco's Quarter Century Club this year; Patricia, daughter of Jack McPhail of the Inco police department; Diane Godfrey, whose dad Alex is camp chief of Copper Cliff Scots.



In the steel testing station at Frood-Stobie No. 7 shaft Vic Freelandt is seen as he maintains an even air pressure of 85 p.s.i. on the drill operated by Mickey Banks and keeps a performance record of the steel being used. The broad white line down the breast is the dividing line between two of the six panels in the station. At the right are shown some of the hundreds of holes drilled with various types of steel submitted by the manufacturers for testing.

## New Drill Steels Given Tough Testing In Frood-Stobie Underground Station

Inco's never-ending search for better materials, tools or machines to improve the efficiency of its operations is illustrated by the steel testing station on 2,400 level at Frood-Stobie No. 7 shaft. Here samples of drill steel submitted by various manufacturers are put through their paces to see how they measure up against the material in use at present.

At the testing station, located in hard greenstone so that a good evaluation of all the properties of the sample may be obtained, the drilling area is marked off in six panels. The testing is spread out over the panels so that comparative tests in identical ground

can be carried on over a number of years. When a test is to be made a vertical row of 20 five-foot holes is drilled in the preliminary panel, using the  $\frac{7}{8}$ -inch hexagonal steel now standard throughout the Company's mines except for longhole drilling, and records are kept of its performance under specific controlled conditions. Inches drilled, minutes drilled, drill speed per hole, sharpenings, dullness and height of the tungsten carbide insert, are all carefully checked and recorded. Then, in a 20-hole series right beside it, the sample of steel under test is put through a similar performance. If the comparison is not favorable no further tests are made but, if

the sample approaches the results of the regulation steel, much more exhaustive tests are carried out under varying conditions in the other five panels.

One outcome of experiments carried out at the steel testing station has been a substantial increase in the footage obtained with drill steel through a change in sharpening technique.

### CONCERT MUCH ENJOYED

Under the baton of its conductor, Dan Totino, the Coniston Band played a very fine concert in Nickel Park at Copper Cliff the evening of July 18th.

### THE VULNERABLE ONES

Inquiring Schoolboy: "Daddy, what effect does the moon have on the tide?"

Dad (from the depths of his newspaper): "Not any, son. Only on the untied."



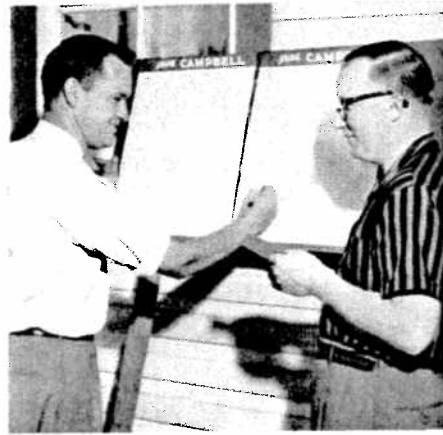
In the first of these pictures a dullness gauge is being used by the test driller to measure the amount of wear on the tungsten carbide bit insert of the steel. In the second picture test driller Vic Freelandt operates the powered grinder that sharpens the steel. In the third picture Mickey Banks, another test driller, is checking his steel preparatory to drilling. Each piece of steel in the rack is tagged and numbered so that a complete record may be kept of its behavior under test.



## Merle Noyes Wins Nickel Refinery's Annual Golfing



An adventure in frustration for some but in good fellowship for all was the annual Inco golf tourney held at Port Colborne's beautiful country club. Although the big turnout of nickel refinery workers cheerfully succeeded in giving a spectacular exhibition of golf in all its ramifications from bad to worse, they also balanced the performance by producing some very fine shotmaking. In the smiling quartet of divoteers shown on the left above are: Jerry Hackett, Al Miller, Carl Roy and Julius Kanyo. Another foursome photographed for the Triangle was made up of Walter Nigh, Jack Grace, Bill Conley and Cliff Sider.



Merle Noyes, long rated one of the topnotch golfers of the Niagara peninsula, was the Tourney's best scorer. He's seen on the left receiving the Inco championship cup from W. J. Freeman, assistant manager of the nickel refining division. Paul Wegrich and Les Lewis, who guided the tournament to its successful conclusion, are busy at the scoreboard in the centre picture. On the right, W. J. Freeman presents the John More cup to Jerry Hackett, who had the lowest net for the 18 holes.

## Started with Inco at Creighton in 1928

R. D. Parker was superintendent at Creighton when he started working there in 1928. Louis Debelak recalled recently. Taking his ease on a comfortable service pension, Louis enjoys discussing the old days with Inco.



MR. and MRS. LOUIS DEBELAK

Coming to Canada in 1924 from Yugoslavia, where he had been both farmer and miner, Louis tried to farm, bush and railroad before discovering how much better the mining

conditions were in this country. Then he promptly hired on at Levack, remaining there for two years before moving to Creighton. Most of his work was on tramping or as an ore pass tender although he spent the latter years as a steel sharpener.

Louis lived in Creighton from 1928 until last year when he purchased a home in Gatchell in preparation for his retirement. While living in Creighton his house on Kitchener street was almost completely destroyed when struck by lightning. Fortunately no one was injured but his dog has been terrified of electric storms since then.

Louis remarried in 1937, his first wife having died in 1932, and has a family of four: Betty is Mrs. Goddard of Toronto, Louise married John Zecker of Garson, Tony works at Creighton No. 3 shaft and Mary is with the Department of Lands and Forests in Sudbury.

Both being very fond of animals, the Debelaks are at present entertaining two dogs and a cat in a manner befitting royalty. Between caring for them, gardening and keeping his house in trim Louis is pressed for time to spend at his basement work bench. And that is exactly how his many friends hope he continues — too busy to fit everything into one day.



### PURCHASING MEN MEET

When Vic Lynden (right), purchasing agent at the nickel refinery in Port Colborne, visited Copper Cliff recently, one of the people he most enjoyed meeting was Mac Forsythe, general purchasing agent. Mills Austin, works auditor at Copper Cliff, who has a pretty fair line on them both, made the introduction.

## This Was Where All The Excitement Started Back in '83



A group of 22 students from the Michigan School of Mines, making a two-day field trip to the Sudbury district, were photographed by the Triangle as they listened to Inco geologist Jack Holloway (facing camera) describe what happened at the historic spot on which they were standing near Murray Mine. This was the discovery outcrop of the copper-nickel deposits of the great Sudbury Basin, he told them. It was revealed back in 1883 when a Canadian Pacific construction crew was cutting its way through to lay the steel for the transcontinental railway. Noticing the "red mud" on the wagon road nearby, and struck by the appearance of mineral in the rock-cut, Thomas and William Murray, Henry Abbott, and John Loughran applied for the lot at the statutory price of \$1 per acre, or a total of \$310. Later they sold it to the H. H. Vivian Co., and when that firm ceased operations in 1894 it was bought by J. R. Booth, the lumber king, for a reported \$75,000. Booth sold it to the British America Nickel Co., and it subsequently became Inco property.

## Co-ordinate Mining Of Jointly-Owned Levack Orebody

A unique agreement designed to attain the most efficient mining of an important orebody owned jointly by the world's two largest nickel producers has received warm commendation from the Hon. Philip T. Kelly, provincial minister of mines.

Lying partly in the Levack property of International Nickel Company and partly in the Fecunis Lake property of Falconbridge Nickel Mines, about 30 miles from Sudbury, the orebody has been set up by the two companies in a block for a co-ordinated mining operation.

Mining of other orebodies in the vicinity but outside the Levack-Fecunis block will be done separately by the two companies.

Engineering staffs of Inco and Falconbridge are now working out the details of the unusual mining operation.

Exploration and development of the Fecunis section will be continued under Falconbridge supervision, but when stoping operations commence, probably early in 1958, they will be carried out in the Fecunis section as well as the Levack section by International Nickel.

All ore from each company's property will be delivered to that company for processing. Thus ore from the Fecunis section, it is understood, will be delivered by Inco to the ore passes at Falconbridge's Fecunis No. 1 shaft.

While the total tonnage has not been disclosed, the terms of the agreement call for complete mining of the Fecunis deposit over a period of years.

The minister of mines expressed gratification with the agreement which he said will

result in maximum utilization of the orebody by avoiding the necessity of leaving boundary walls between the two properties. Among other advantages of the integrated operation, he said, would be closer co-ordination of the safety program, which he felt was of great importance.

## Chart Identifies Fish For Amateur Anglers

To assist anglers in identifying Ontario's game fish, Ontario's Lands and Forests department has issued a chart showing 21 varieties in full natural colour. The chart, which has gone into its second printing, is available at \$1 by writing to the Department of Lands and Forests, Parliament Buildings, Toronto.

Here's a sort of thumbnail identification offered by some experts:

"Light, irregular spots on a dark background indicate the pike. The maskinonge has dark coloured vertical bars on a light background with a bronze sheen over the shoulders. Two main species of bass are the large and small mouth. Imagine a vertical line drawn through the back edge of the eye. If the mouth parts forward of this line, the fish is a small mouth; if the mouth parts back of this line, it is a large mouth.

"Speckled trout have square tails or with a very shallow fork, small, round, blue-ringed crimson spots on the sides and white leading edge on the fins.

The rainbow trout has a tail shaped like that of the speckled trout, tiny black spots on the back, sides and tail; a wide red band along the lateral line during the spawning season in the spring. The 'rainbow' streak is missing frequently at other seasons.

"The brown trout has a square tail, medium

black spots on the back and sides as far as the lateral line, medium large red spots surrounded by light coloured rings on sides both above and below the lateral line.

"Deeply forked tail indicates the lake trout, which also has pale irregular spots on varying shades of a grey background.

"The 'splake' or 'wendigo', a 'cross' developed by scientists, follows the lake trout in general appearance but has a square tail and white leading edge on the fins.

"Of 142 species of freshwater fish in eastern Canada, 131 are reported in Ontario."



### LONG-TIME LEADERS

Familiar figures in Froid-Stobie bowling ever since its inception, Eldred Dickie, secretary of the athletic association and Albert Stone, statistician of the bowling league, exchange congratulations on another highly successful season.

## Six McLaughlins Work at Creighton



This payday lineup at the wicket of Creighton No. 3 shaft time office is strictly a family affair. Heading the procession is Creighton's baseball sage, Leo McLaughlin, and standing behind him are five of his sons, also all Inco employees at the same mine, Dick, Bob, Bill, Larry, and Leo jr. There are two more sons at home who'll be Creighton men when they're of the age, Leo says. In addition to his seven sons Leo has five daughters. "They're cheaper by the dozen," he explains philosophically, and he's one man who should know.

## Mine Geology

(Continued from Page 8)

two or three times weekly, depending on the rate of advance.

Supervision of diamond drilling is an important feature of the geological assignment at each mine. Surveys, transportation of equipment, and air and water facilities must be arranged, the setting of the drill checked, the core photographed, tagged and sampled, the drill holes plotted on plans and sections, and the drilling records written up.

Mine exploration programs fall into three categories, reconnaissance exploration, development exploration, and routine exploration. The first two require both driving and diamond drilling, but the principal and in many cases the only purpose of the driving is to provide an opening from which to diamond drill. Reconnaissance exploration has as its major purpose the testing for extensions of known orebodies, usually down pitch below the deepest level of the mine, but it also includes lateral exploration for new orebodies. These programs ordinarily require an exploration drift in the hangingwall vertically above the ore zone to be explored, from which diamond drilling will be done. The spacing of the drill stations varies with the mine. In most cases both a vertical and one or more shorter inclined holes are drilled from each station.

Development exploration is carried on to outline, in the detail required for mining, the new orebodies established by reconnaissance drilling. It usually consists of drifts at frequent levels parallel to and for the full length of the orebody, from which horizontal and inclined holes are drilled at regular intervals across the orebody.

Exploratory work not falling in the categories of reconnaissance or development is of the routine type. It consists of miscellaneous diamond drilling, in particular that done to outline irregularities in the orebody disclosed in the course of stoping. The programs involve one or more holes which may be drilled from stopes, raises, or level workings.

In maintaining mine records, all shafts, cross-outs, drifts, stopes and some raises are mapped geologically. Ore and rock contacts,

faults, shear zones, slips, strong joints and water courses are noted. Square-set, cut-and-fill, and shrinkage stopes are mapped on every floor or cut, and geology in blast-hole stopes is determined from preliminary drilling, development, and inspection of the core from blastholes as mining progresses. Information required for the mining of pillars is largely obtained from stope maps, reducing the amount of pillar mapping.

Inco's exploration diamond drilling in the Sudbury Basin last year, for example, totalled more than half a million feet. The number of drills in operation averaged 43.

An ever-broadening horizon faces the mine

geology division as developments and improvements in mining and metallurgical methods take place. Grades of ore previously considered uneconomical may be brought within the range of profitable operation, so that mineralized areas heretofore left unexplored can now be regarded as potential orebodies to be investigated in detail. Improvements in diamond drilling techniques and equipment also widen the sphere of the geologists by making possible exploration at greater depths.

"We've found out a lot about this old Sudbury Basin over the years, but we still have plenty to learn," said mines geologist Bert Souch, to which Gordon Colgrove, in charge of Inco's surface diamond drilling in the Sudbury district, added a very definite amen.

An interesting method of recording and studying diamond drilling results was adopted by the mine geology division in 1950 when installations were made in the core rooms at the mines for photographing all core from underground exploration drilling. Besides providing a complete permanent record, the color transparencies make it possible to confirm grade estimates made by the geologists at the mines in advance of receiving the results of sample assays. A study of shearing and joints clearly visible in the pictures of the core also helps in placing development openings when it comes time to start stoping operations in a new block of ground.

### DULL ANIMAL!

A fellow was relating his experience while riding and falling off a horse and breaking a leg. The horse, he said, picked him up with its teeth, then flung him into the saddle, galloped home, put him to bed and got a doctor.

"Smart horse," a friend remarked.  
"Not so smart," the fellow said. "Darned fool got a horse doctor."

### THIS DAY AND AGE!!

Baby Sitter (reading): "And after Goldilocks ate the porridge she went upstairs and saw three beds."

Junior: "Jeepers! That porridge must have been spiked."

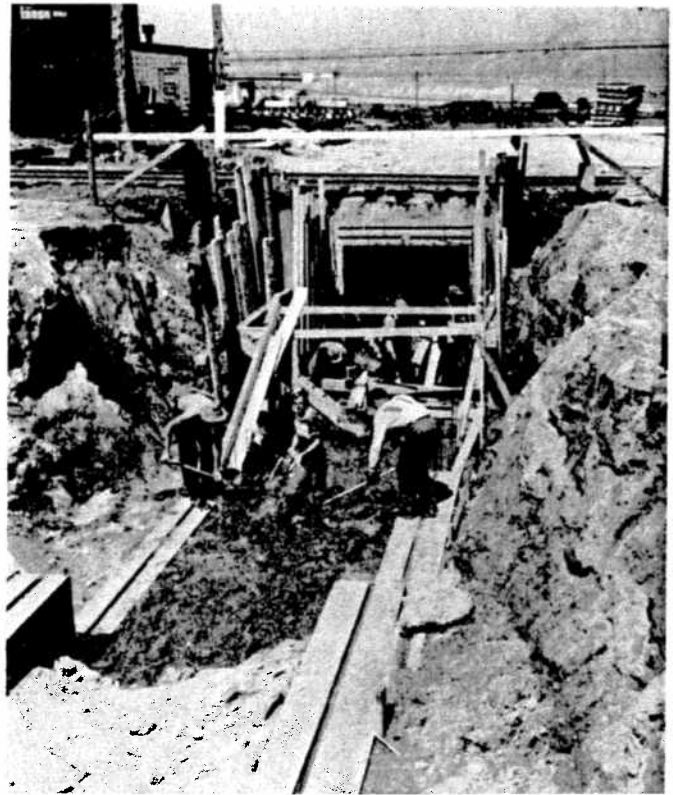
## At Doings for Jim Hudson and Attilio Beltrame



Since one retirement at the concentrator is the signal for a party of at least "single whammy" proportions, it was no surprise that when two honored members of that fraternity retired recently the doings the boys whopped up were the closest thing this side of Dogpatch to one of Marryin' Sam's \$25 weddings. Jim Hudson and Attilio Beltrame were the lads in the limelight, and with such redoubtables as Jack Garrow and Bill Ripley handling the presentations and burly Bill Bray as master of ceremonies, everyone agreed after the smoke and fog had cleared somewhat that she was going to be a hard party to beat. Jim and Attilio each received a set of handsome travelling bags.



# Mysterious Tunnel Will Be Entrance to New Changehouse



The purpose of a concrete tunnel under the yard tracks at the copper refinery may have mystified some passersby. Seen above as it nears completion, it will be the entrance to a fine new 700-locker changehouse. Under-roof dispersal of the men to the various departments of the plant from the new dry will be an advantage of its location between the shops and the tankhouse. An office section at one end will be occupied by the time office, first aid, and personnel departments, and clock alley. On the second floor will be a new control laboratory containing the most modern innovations and equipment and replacing the present lab on the second floor of the general office building.

## Eddie Mulcahey Lost In Bush for Two Days

Two nights spent alone in the bush with no food, plenty of rain, and very little sleep did nothing to dim the ardor of Eddie



Ed (right) and his fishing pal, Bob Brydges.

Mulcahey for outings piscatorial. If anything the experience just made him a more devoted fisherman than ever.

Eddie, familiar level boss at Frood-Stobie

No. 3 shaft on the graveyard shift, became separated from his fishing companion Bob Brydges one Saturday recently and remained in the bush until the following Monday morning.

After fishing a small lake near Sandcherry Creek with Bob, Ed set out alone to try another pothole about half a mile distant. He never did hit it and by dusk realized that he was lost. Lighting a fire, he camped for the night, making himself as comfortable as possible. Sunday dawned a very bleak, foggy, wet day so Ed stayed close to his fire. The flies weren't bad and since visibility was poor he decided there was no purpose in further wandering.

Another night of fitful sleep brought a bright Monday morning so Eddie took a bearing on the sun and started off in what he hoped was the right direction. The accuracy of his woods sense was shown by the fact that he was within 100 yards of the road when two members of the search party found him.

Meeting Bob shortly afterward, Ed's first words were, "I found five more nice little lakes for us to fish!"

After a square meal and a good sleep the undaunted angler started right in waiting for the next week-end to roll around so he could get at his new lakes. Worried about being lost? He scoffed at the suggestion, saying the only thing that worried him during his enforced stay in the wilds was that others might get lost while searching for him.

His partner's reactions were just the opposite. Bob says he never put in a worse two days. The haunting thought of his friend being lost, the difficult search of the bush with flashlights on the Saturday night, the wet, fruitless search on Sunday and then the second night with still no results, were an ordeal he'll never forget. Knowing Ed

as a capable man in the bush, Bob couldn't escape the growing conviction that he had been hurt and was lying out there someplace helpless. The happiest fellow in the whole search party, upon Ed's return, was his pal Bob.

Fish? Well, Bob did get a couple but Ed admits that all he caught was a big sucker.

## Izzy Carrey Retires

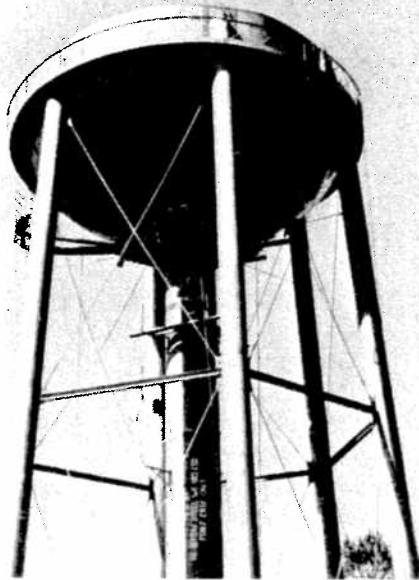


When Izzy Carrey retired recently after 26 years of service at the copper refinery, his many friends joined to give him a royal farewell. He's shown on the left here as Len Kitchener presents him with a gold watch, to which was added a well-padded wallet presented by Dave Young.



With a fine program of contests and races for the kiddies, and a well-manned midway of games of skill and chance topped off with a dance at night for their elders, Lively Athletic Association's annual Dominion Day celebration made the welkin ring both loud and long. The picture on the left shows a few of the players at the steadily patronized bingo booth. On the right Jim Dewey, president of the athletic association, makes a midday check on the receipts. With him and Fern Roberts (right) are some of the Lively teenagers who pitched in to help run the celebration, Garry Nadeau, Billy Gibson, Danny Laplant (president of the Lively teen-age council), Ray Fortier, Don Laplante, and Bob Blake. Over \$600 was raised for the association's ambitious program of playground activities.

## SNAPSHOTS OF LIFE WITH INCO



Already a familiar sight to Lively residents is the huge mushroom-like silhouette appearing on the town's northern skyline where a 208,000-gallon water tank is in the course of erection. Similar in design to the one on Regent Street hill in Sudbury, it will be more than 100 feet high. At its base will be a treatment house in which all the water will be chlorinated before being pumped into the tank. A new pumphouse is also being constructed at Meatbird Lake to service the tank. Two 1,000-gallon pumps (one operating and one spare) will be installed there and will assure a constant water supply for Lively residents. Indications are that the installation will be completed by mid-September.



Speaker at Coniston Continuation School's annual commencement exercises was Dr. Walter Curlock, a brilliant graduate of the school who went on to obtain his master's degree at the University of Toronto and his doctorate in science from the University of London, England, and is now a member of Inco's research department at Copper Cliff. He is shown as he autographed programs for some pretty members of the graduating class, Beverley Leclair, Velma Argentin, Diana Santi, Elaine Koppo, Carol Geoffrey, and Corinne James.



When Alf Simmons, fitter foreman in the separation building, was honored at a retirement banquet recently, he was presented with a tool chest and a wallet loaded with lettuce (folding variety). The popular Alf is seen here (front centre) with some of his separation plant pals: back row, Chick Forest, F. Chirka, Ed. Gibbons, John Lineham, F. Milson; front row, Sam Madjiwan, Mike Carrey, John Camalucci, Ed Bellmore.