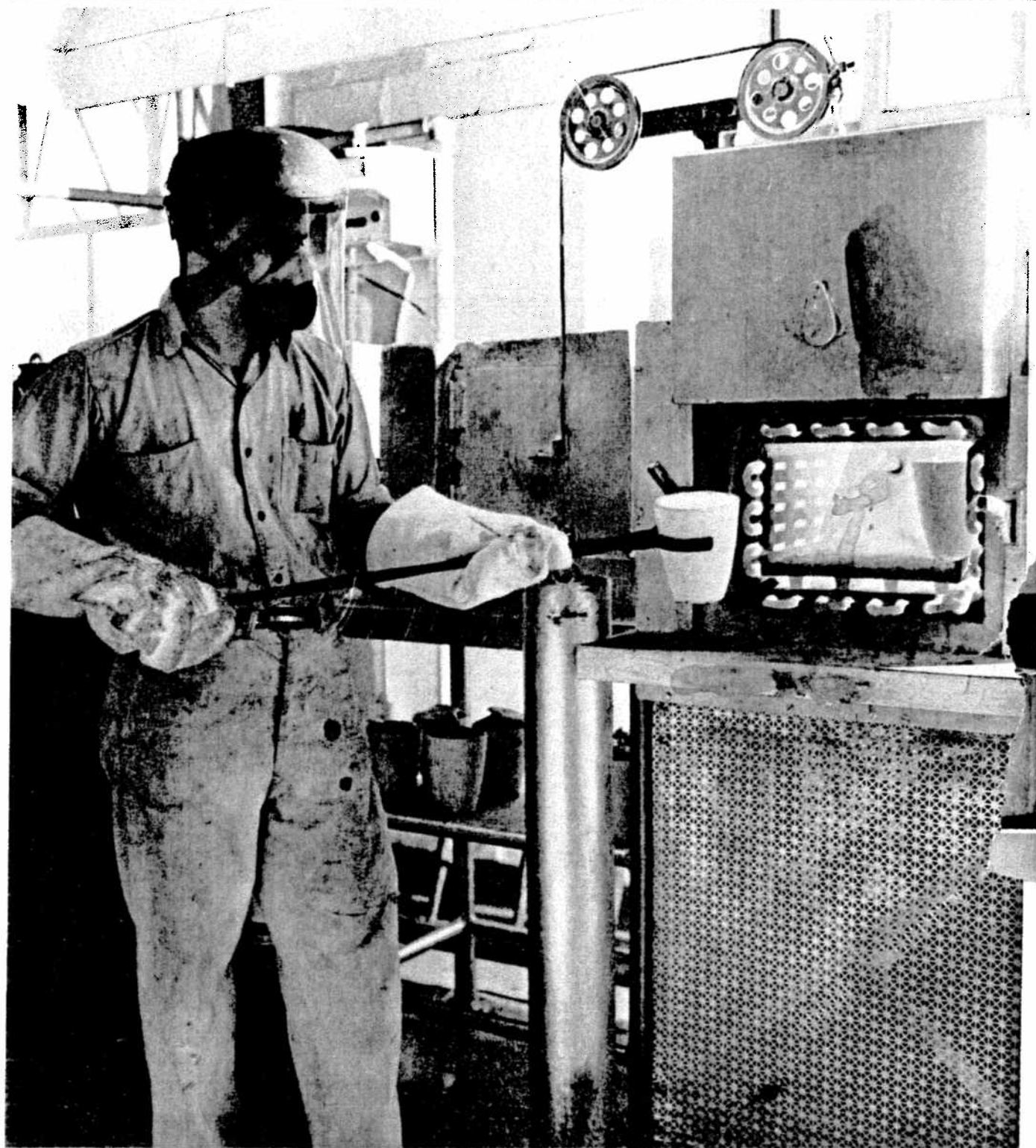




VOLUME 11

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NUMBER 9



Casting Diamond Drill Bits

(STORY ON PAGE 8)



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 Don M. Dunbar, Editor.
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THE Importance of Nickel IN Our Everyday Life

(Winner of one of the four \$2,000 university scholarships offered by Inco in an essay contest to commemorate the 200th anniversary of the discovery of nickel by the Swedish scientist Cronstedt in 1751.)

By EMO RAJCZAK
 Port Colborne

"We can do without any article of luxury we have never had but — it is not in human nature to surrender it voluntarily":

When Judge T. C. Haliburton's clockmaker, Sam Slick, thus philosophized he expressed a universal truth applicable not only to the sale of clocks but also to the Canadian Nickel industry. Until two hundred years ago the world had never heard of nickel, but if to-day we were deprived of the blessings of this wonder metal we would mourn as did the women of America mourn at the bier of Valentino. It is difficult to fathom the vacuum which would result if the great benefits of nickel were suddenly plucked from the natural course of our every day life.

To comprehend nickel's great importance more intelligently it is first necessary to be familiar with the remarkable properties of this element. Nickel is an extremely non-corrosive metal which is ductile, malleable and magnetic. It is strong, tough, and resistant to heat and wear. On combination with other metals it tends not only to impart these qualities to them but in addition creates new properties in the alloy. It is this versatility, permitting a nickel alloy for almost every conceivable use, that causes the discovery of nickel to be ranked as one of the greatest scientific landmarks of our civilization.

The most apparent applications of these properties are, of course, found in the home. The water faucets and other plumbing fixtures are of gleaming nickel silver which will not oxidize readily. The appearance of such kitchen utensils as percolators, toasters, pots and pans is greatly enhanced by silver-plated nickel silver. The trimming on many modern kitchen suites is of nickel-chromium that sparkles with minimum cleaning. It is not difficult to contemplate how devoid of brightness and convenience our lives would be without the nickel we take so much for granted.

However, not all the uses of nickel appear on the surface. We must probe more deeply to discover the greater part of nickel's multitude of uses.

Commercial laundries and dry cleaning establishments rely on machines of a non-oxidizing nickel-copper alloy called Monel to keep our clothes free of rust stains. Monel dyeing machines which resist the acid in dye solutions are responsible for the delicate pastels so popular in the modern wardrobe. Nickel steels have contributed to the manufacture of our shoes and other leather goods. Our soaps and cleaning fluids were processed in vessels of Monel and our salt and sugar refineries use Monel extensively. Few are



A new-fangled gadget that automatically projects a sequence of still photographs on a screen is the feature of the latest display which has been intriguing passersby at the Inco exhibit in the Loblaw building. The pictures show some of the range of the Company's operations. Setting off the display is a relief map of the Sudbury District, showing the location of Inco plants; a make-believe magnifying glass is placed over the shadow box in which the projections appear. Picture of a blast at the Open Pit is seen in this photograph. Views of mining, milling, smelting, and both copper and nickel refining are included in the photographic series. For the Christmas season the Inco window will have a miniature setting of the scene at the birth of Christ.

aware that book plates intended for repeated printings are nickel-plated in order that our literature has clear, easy-to-read type.

Riding the crest of the nickel wave the electrical field has washed up on hitherto unfathomable shores. Our radios, refrigerators and telephones owe their efficiency to a highly magnetic nickel alloy while our thermostats and mechanical thermometers depend on the extremely low co-efficient of expansion of still another alloy. Nickel-chromium wire has become standard in electrical appliances because of its resistance to heat. More recently, the extensive use in plants of the labour-saving "electric eye", which utilizes this wire, has made it possible for us to buy cheaper manufactured commodities through reduced labour costs.

In automobiles, buses, and locomotives many parts are subjected to great stresses and strains. Here, case-hardened nickel-chromium steels are used for drive-shafts, pistons and engine forgings. The accelerated progress in air travel can be attributed to light but strong aluminum-nickel alloys. Ever increasingly nickel steels have come to the fore in construction work. Their resistive qualities to the corrosive action of sea-water has made them essential in the building of ocean vessels, and commercial fishing equipment. Their phenomenal strength has resulted in extensive uses in structural work and armour plating.

With the evolution of our modern civilization came a successively increasing demand for sanitation. Nickel, and especially Monel, has more than met this demand. Monel equipment in canneries, packing-houses and dairies has ensured us a high degree of cleanliness in our food. Inconel, a heat-resistant nickel-chromium-iron alloy is used for the oven piping in bakeries to avoid rust contamination to our bread. More and more, sparkling, easily cleaned Monel and Inconel are being utilized in stores and restaurants. In hospital kitchens the necessity for absolute sanitation has resulted in Monel sinks, trays, cupboards and automatic dish-washers.

The hospital operating room has become a Monel-studded galaxy. Nickel has become the by-word of large scale sanitation.

In the light of all the progressive achievements of the nickel industry it is an irrefutable fact that this metal has had and will continue to have a deep influence on our normal every day lives. This influence is so deep-seated that if dispossessed of it we would feel its loss most acutely.

A cursory glance leads one to believe that industrial application of nickel's multiform properties is alone responsible for the respect in which this metal is held. However, a deeper consideration will reveal that nickel's greatest significance is in the field of economics. It is axiomatic that the health and world status of our Canadian economy is the very essence of our every day lives and nickel's contribution to that health and status cannot be lightly waived.

Nickel is so far-reaching that it is inextricably interwoven into the economic system of our country. Without it we would most certainly be subjected to a lower living standard. Not only does it provide employment for men in the nickel industry proper, but also in many fields of manufacture which depend vitally on nickel. The vast automobile empires which provide sustenance for millions could never have expanded to such gigantic proportions without the nickel ingredients which have made their product so saleable. Without acid-resistant Monel and Inconel to-day's great drug and chemical works could not have expanded to include so many employees. Directly and indirectly, the Canadian nickel industry has contributed to a salutary employment situation wherein are embraced skilled and unskilled labourers and university graduates.

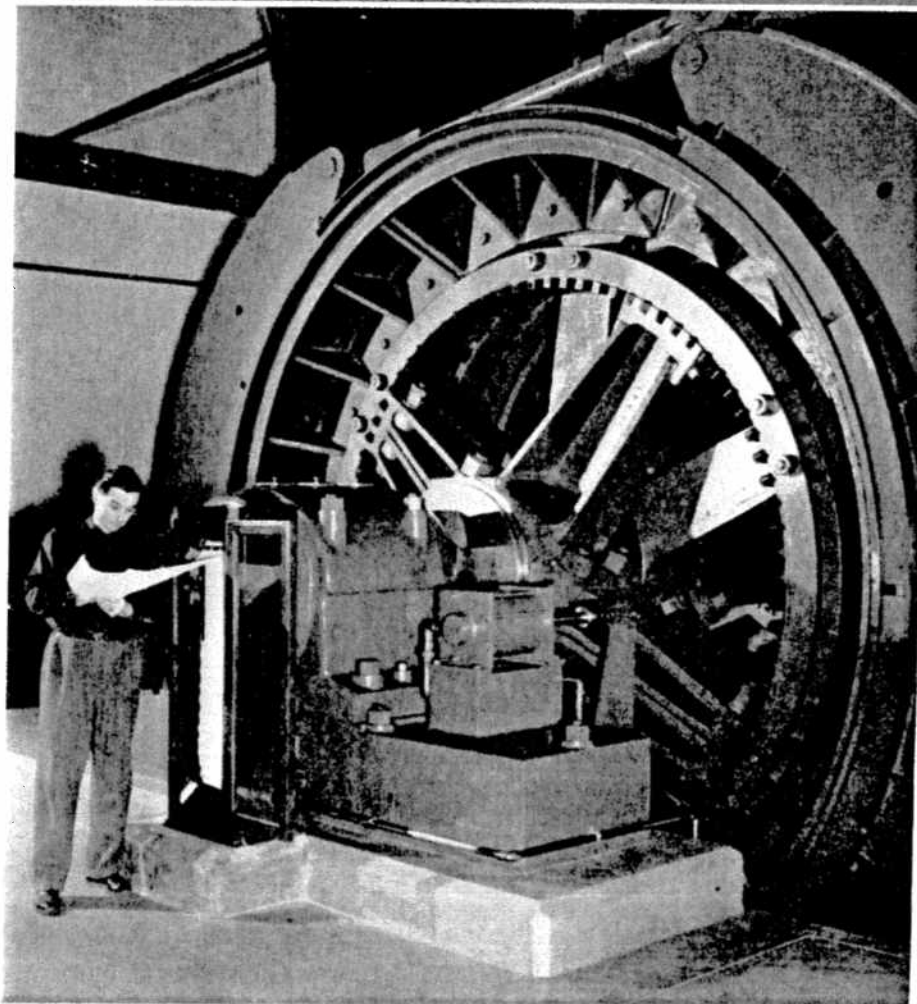
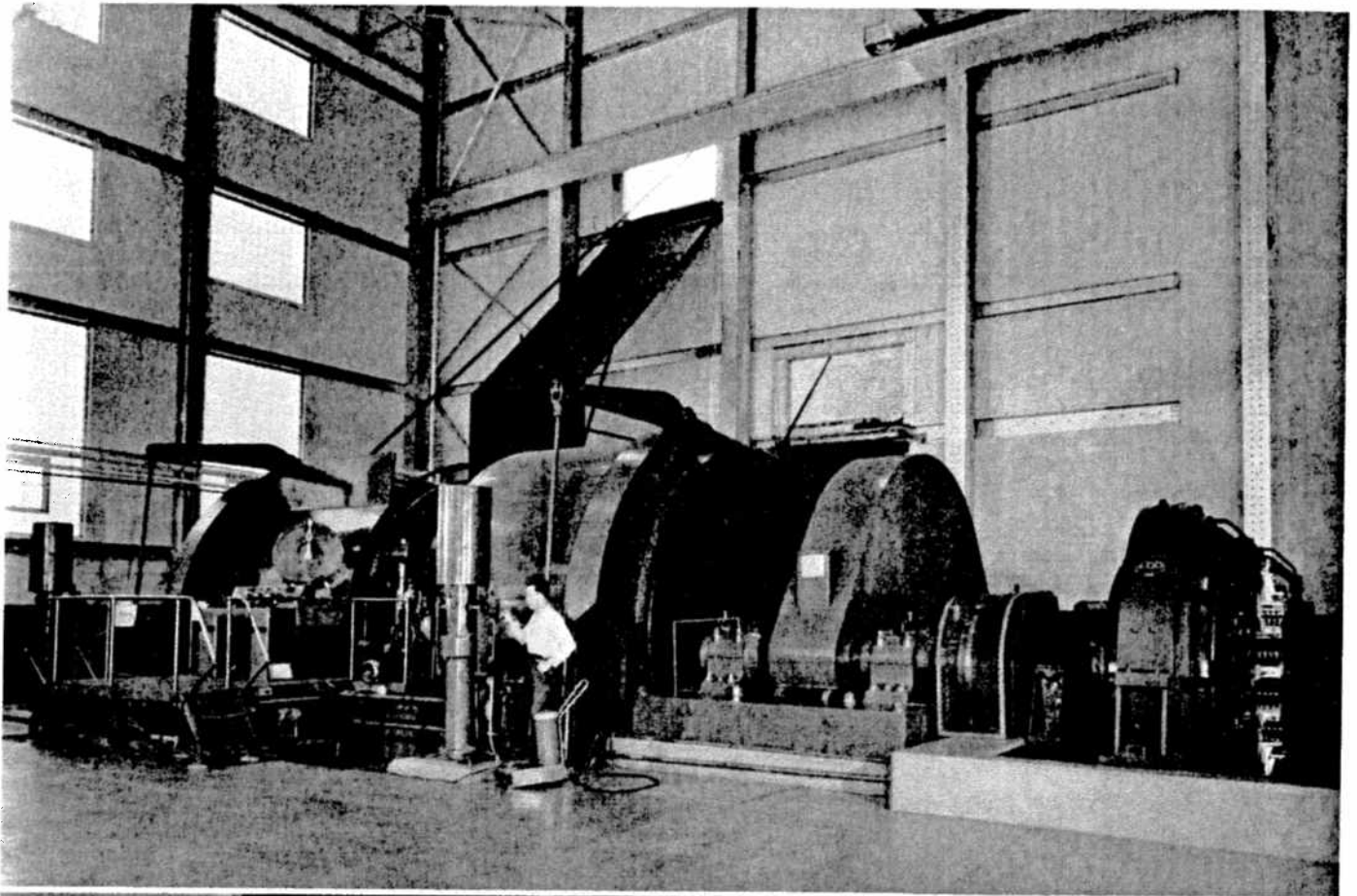
Nickel has a profound beneficial effect on our economy abroad as well as within the borders of Canada. More than ninety percent of the nickel produced in Canada is exported. Much of it goes to the United States while the rest is sold to other countries in return

(Continued on Page 16)

INCO FAMILY ALBUM

Plans for the best Christmas ever were already in the making when we called around to visit these happy folk: (1) Mr. and Mrs. Adrian Lepage (Port Colborne) and Ronnie, 16, Douglas, 11, and Leon, 14. (2) Mr. and Mrs. Peter Semler (Copper Cliff Concentrator) and George, 6, Ann, 8. (3) Mr. and Mrs. Maurice Dennie (Creighton) and Maurice Jr., 14, Robert, 15, Suzanne, 6, and Pauline, 11. (4) Mr. and Mrs. Ernie Hilton (Levack) and Ricky, 5. (5) Mr. and Mrs. D. Domonsky (Frood-Stobie) and Brian, 1½, Sharon, 2½. (6) Mr. and Mr. E. Shannon (Copper Refinery) and Sandra (whose birthday it was the evening we dropped in) 9. (7) Mr. and Mrs. Alex Bujold (Coniston) and Giles, 6, Guy, 3.





New Creighton Hoist Operates Automatically

Controlled by push button from 2,000 feet underground, the huge hoist on surface at Creighton's new No. 7 Shaft operates automatically to whisk a skipload of 15 tons of ore from the loading pocket at the bottom of the shaft into the bins in the concrete headframe in 90 seconds.

There's nobody on the hoistman's platform. There's no clanging of signal bells. The great drums commence to turn, apparently of their own accord; they whirl faster and faster until they are paying out or taking in the 2-inch wire hoisting rope at a speed of 3,000 feet a minute. They slow down, come gently to a stop, pause briefly while one of the two skips dumps into the headframe bins and the other is filled at the loading pocket far underground, then away they go again.

ABOVE: Hoistman Lionel Gilmour greases the brake regulating mechanism on the massive new hoist at Creighton's No. 7 Shaft.

LEFT: Hoistman Bob Seawright, seen checking a chart on the trip recorder, is dwarfed by one of the hoist's two great drums, 14 ft. in diameter.

Automatic hoists are relatively new in Canada, the one at Creighton being only the second in operation. Measured by peak horsepower demand it is said by its makers, John Bertram and Sons, to be the largest hoist installed to date on the North American continent, with a peak of 9,500 h.p.

The hoist was manufactured by Canadians with 95% Canadian materials. Its two drums, (Continued on Page 16)



Record 360 on Curling Roster

A record roster of 360 members, 12 more than last year's peak enrolment, is up to the ears in fun and fellowship these days at Copper Cliff Curling Club, well away to what promises to be the best season in the organization's history.

The Gordon Event is into the playoffs as we go to press, and the draw has been posted for the Inter-Rink, the latter to be hustled through on a tight schedule so the boys can relax for Christmas.

The ladies' section, with 65 members, and the student league, comprised of 56 high school boys, bring the total of besom an' stane addicts to well over 450. Curling gets underway shortly after 8.00 in the morning when the shift leaguers move in with a whoop and a holler, and continues until almost midnight. It's a rugged routine for Cam Shortts, the rink manager, and his two able assistants, Bill Jessup and Pete Akkanen, but they are more than up to it and the beautiful big recreation spot is always shipshape. "We forget how lucky we are to have a place like this," many a curler has remarked as he steps into the gleaming foyer and sees the smooth ice lanes beckoning him from beyond the observation windows.

Accompanying pictures show a few of the boys and girls in action:

1. Skip Bill Livingstone (right) discusses a bit of strategy with his third man, Lud Ryski.

2. Bill Hudgins comes out of the hack with a nicely delivered stone that was a good one all the way.

3. Mrs. Ruth Harkins and Mrs. P. Dim-

(Continued on Page 16)





Port Colborne Club Receives Its "First Lady"

Madeline Matthews was unanimously accorded the distinction of "First Lady of the Nickel Refinery" last month when she became the first woman member of Port Colborne branch of Inco's Quarter Century Club.

Chairman W. J. Freeman suggested the title in his introduction of Miss Matthews, and the big turnout at the club's annual banquet at Rathfon Inn enthusiastically endorsed this compliment to the pretty and highly efficient cashier.

Another 26 members were enrolled in the Quarter Century Club at the successful dinner meeting.

THE PICTURES

1. Vice-President R. L. Beattie presents Miss Matthews with her membership pin. On the left is W. J. Freeman, asst. supt., who was a witty master of ceremonies, and on the right R. H. Waddington, general supt. of Inco refineries.

2. Receiving congratulations here is good-natured B. Kluchak, who also took an amusing ribbing for his trip to the C.N.E. at Toronto last summer; after driving right to the gate he turned his car around and headed



straight back home; they said he was afraid of getting lost in the crowds.

3. Jim Clarke, the popular night man of the office building, and widely known breeder of the highest class cocker spaniels, is the honored new member in this picture. Seen in the centre, background, is Roy Howard, works auditor and secretary of the Quarter Century Club at Port Colborne.

4. All but six of the 26 new members are seen here: front row, left to right, George Maskaluk, J. Romanovitch, J. Clarke, F. Tamas, Madeline Matthews, Alex Korikos, W. Fogel, L. Forest, and Ronald Clayton; back row, B. Klukach, Robert Cochrane, C. A. Lynden, J. Cook, Wm. Knight, H. E. Hughes, M. H. Cosby, A. F. Prittie, J. Audler, S. Pidsadnuik, and J. Paul. Not shown are G. Strong, E. Royer, R. Childs, C. Rogers, J. Makarewich, P. Turchan.

In his informal remarks before greeting each of the new members, Vice-President Beattie said each passing year brought him deeper appreciation of the long and faithful service represented by the ranks of the Quarter Century Club. The membership was growing rapidly, he observed, as the Company entered a period when many were completing 25 years of steady employment. This long service brought much benefit both to the Company and to the men, particularly in the retirement security accumulated by the latter. He was proud, he said, of the foresight of the Company in establishing its retirement system many years ago.

Chairman W. J. Freeman announced that the Port Colborne representation among the 1,937 members of Inco's Quarter Century Club now stood at 137, of whom 115 were still on the active list. Of all the employees at the Port Colborne plant, 694 had 10 or more years' service, almost 40 per cent. He pointed up the importance of this experience in providing leadership and example to the rest of the force.

R. C. McQuire, supt. of the Nickel Refinery, got a big hand. He admitted he was still in the guest category at the Quarter Century Club banquet, but was looking forward with keen pleasure to becoming a full-fledged member three years hence. He remarked what a grand help it was to have so many longer-service men with him at the plant, and he thanked them warmly for their fine work and co-operation.

"The Quarter Century Club button is a symbol of service and stability," in the opinion of H. W. Walter, former supt. of the plant, who extended the good wishes of the pensioners. Looking fit as the well-known fiddle, Mr. Walter was heard with the respect and confidence with which his opinions were always received when he was on the list of active employees.

R. H. Waddington brought greetings to the club from members in the Mining, Smelting, and Copper Refining divisions, and added his hearty congratulations to Port Colborne's new members.

Fortified with fellowship, fine food in the "Margaret and Eddie" manner, and a program of variety entertainment brought over from Buffalo, the members broke off in high spirits, already looking forward to next year's get-together.

THE RULE OF 3

Three things to govern: temper, tongue and conduct.

Three things to cultivate: courage, affection and gentleness.

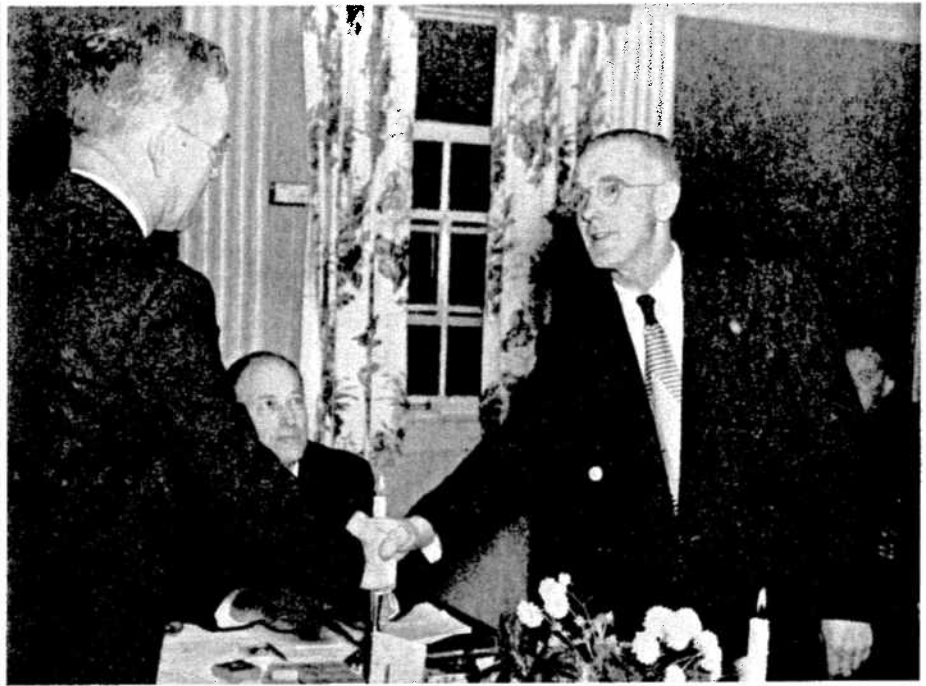
Three things to commend: thrift, industry and promptness.

Three things to despise: cruelty, arrogance and ingratitude.

Three things to admire: dignity, intellectual power and gracefulness.

Three things to give: alms to the needy, comfort to the sad, and appreciation to the worthy—From Priorities.

Bob Cochrane Becomes a Member



Bob Cochrane, well-known shops worker, was one of the 26 new members received in the Port Colborne branch of the Quarter Century Club at the annual dinner last month. He's pictured receiving congratulations from Vice-President R. L. Beattie.

IT'S A LONG DAY

Customer in Restaurant: "Waiter, do you have frog's legs?"

Waiter: "No sir, it's my tired feet that make me walk this way."

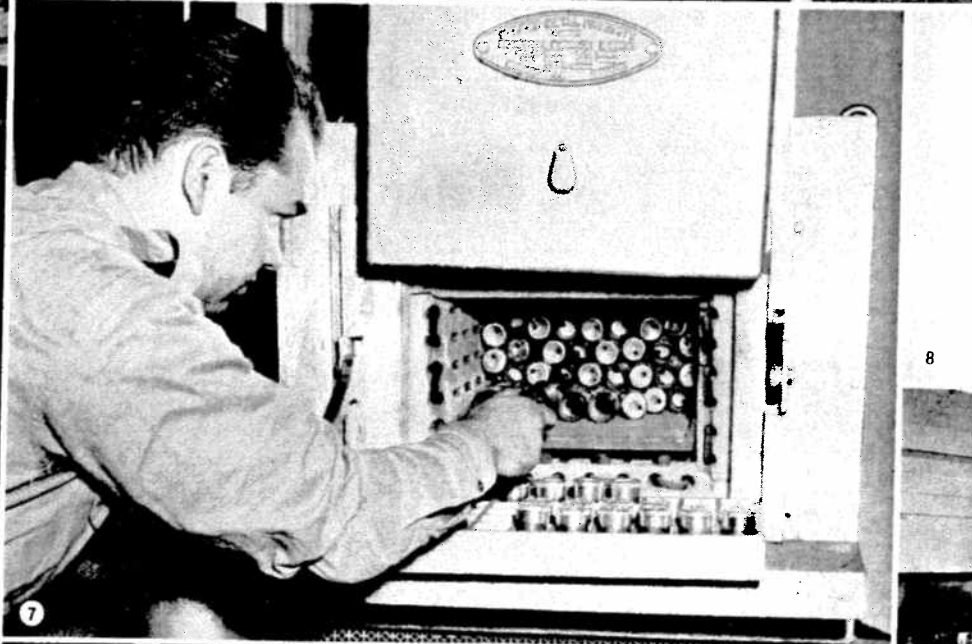
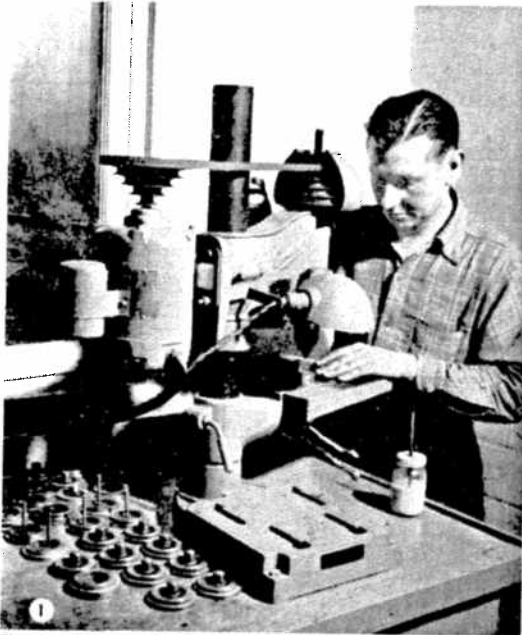
SURE-FIRE METHOD

We're told that if your wife is away on vacation and you want to get her home in a hurry, just send her a copy of the local paper with one item clipped out.

Buying Gifts for 4,000 Youngsters



More than 4,000 youngsters of all ages and sizes, children of employees at Frood-Stobie Mine, will shake hands with Santa Claus and receive a gift at Inco Employees Club in Sudbury on December 23, at the annual Christmas Tree of Frood-Stobie Mine Athletic Association. Picking the presents for a mob like that is a colossal chore. Eldred Dickie and Bert Meredith are seen above in the throes of the assignment; Bert is busy with his books but the playful Eldred can't resist trying out a bow-and-arrow set. Just as the flash bulb went off he let fly with the arrow and scored a clean hit on the noble Meredith nose.



100 Diamond Drill Bits Daily Is Production of Inco Casting Shop

At the rate of 100 a day, diamond drill bits and reaming shells to spearhead Inco's big blasthole mining program are manufactured in the Company's own casting shop, located in the Research Building at Copper Cliff. An important advantage of private manufacture is the opportunity to experiment with diamonds and bit design to fit local conditions.

Bright, commodious quarters, fully modern equipment, and a smoothly arranged operating schedule are features of the casting shop, where some 16 people are employed.

The Triangle's camera toured the shop to follow the manufacture of a bit as seen in the accompanying layout:

1. First step is to prepare the die or mould in which the bit is to be cast. In this picture Marty Quinn is drilling a die plate, which is made of stainless steel and is machined in the casting shop. Tests have determined the most efficient pattern of diamonds for each of the six products turned out in the shop, and a hole is drilled in the die plate where each diamond is to be set.

2. Here "Dixie" Callaghan is working at one of the setting tables. Before her are containers of small diamonds varying in size from 10 to 70 per carat. Due to imperfections they are not good enough to be cut and polished as gem stones, but they are just as hard and thus are suitable for drilling. These imperfect and off-color stones are known as bort. With a glass vacuum pencil "Dixie" picks up the tiny stones singly and places them in position in the die plate, which rests in a metal cup connected to a vacuum line to hold the stones in place. When the setting is completed the stones are fixed in position for casting with a collodion spray.

3. The next stage is casting. In our front cover photograph Stan Rychio is removing a crucible of the alloy matrix from one of the shop's two electric melting furnaces where it has been brought to a temperature of 2,000 deg. F. In this third photo of the layout he is seen pouring a cast. The die plate has been fitted into a mould block along with a blank steel adapter which is threaded to fit standard diamond drilling equipment, and this assembly has been placed in one of the four cups on the casting table. A vacuum holds the units of bort in place while the metal is poured.

4. After being quenched the newly cast bit is freed from the die plate. Doug Bramer and Marty Quinn are photographed here

cleaning excess copper from die plates. Freshly cast bits are seen in the centre of the table.

5. On his 13-inch lathe Bryce Knight is trimming and machining newly cast bits. Due to the nature of the alloy, quenching makes the bit softer and easier to machine instead of harder as in the case of steel. Bryce also makes up and machines die plates.

6. Alex Melnyk is buffing a new bit in the grinding and buffing machine which also cuts the water groove in the bit.

7. Now all neatly trimmed and machined, a batch of new bits is ready for heat treatment. Alex is stacking them in a furnace where they will be age-hardened for three hours in a temperature of 600 deg. F. and then cooled slowly. Here again the nature of alloy is responsible for a reverse result; such treatment would soften steel instead of hardening it.

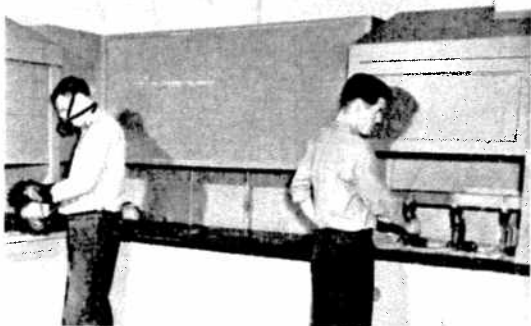
8. Here's a lineup of the various types of bits and shells produced in the casting shop. On the left in the bottom row is a coring bit which, when drilling, cuts a core of rock or ore. In hard or not uniform ground, and also for starting holes in good ground, the coring type of bit is found to be most efficient. It is set with approximately 350 stones and is slightly rounded on the edges to make it less vulnerable. Next in line is a wedge reaming bit, used infrequently, which is adapted for reaming out a hole blocked by pieces of loose ground to clear the hole for loading. It is set with 300 units of bort.

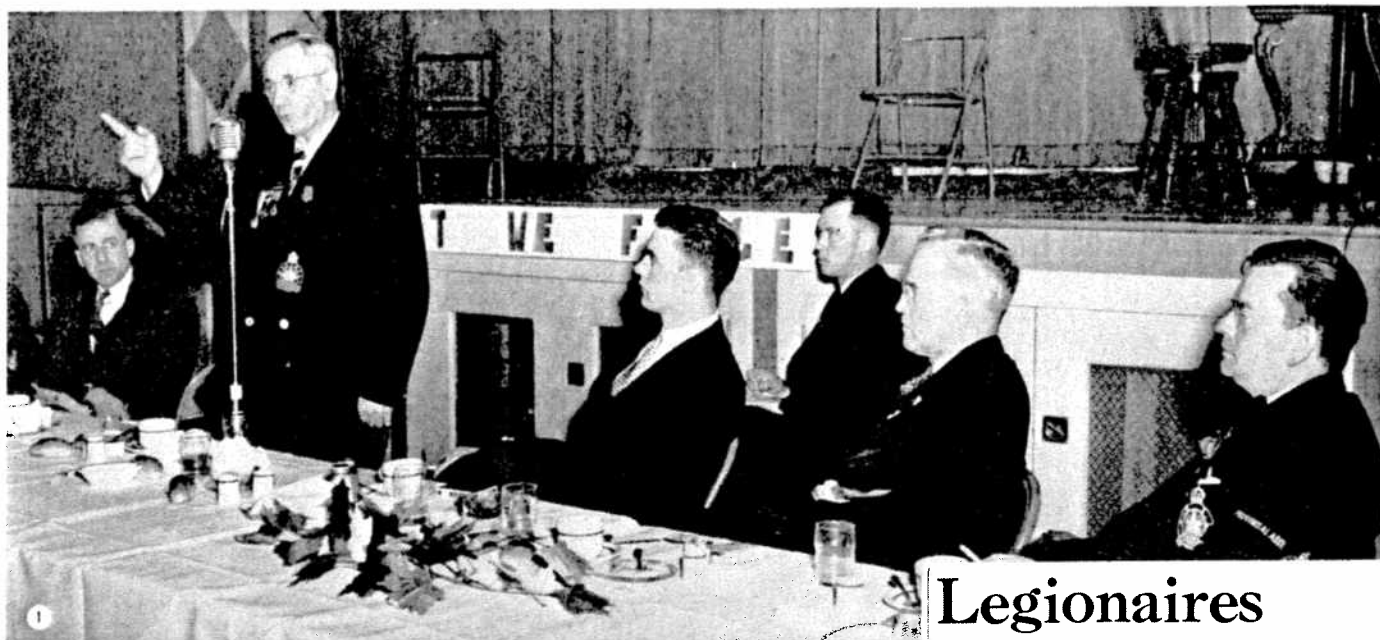
Third in the bottom row is a pilot blast bit. Set with approximately 275 stones, it has a small concave-faced pilot projecting above the main body of the bit which makes it the most economical type for soft ground drilling. Fourth in the lineup is a concave bit, the most commonly used non-coring bit, which is most efficient in medium ground or in fractured soft ground; it has some 300 bort units.

On the left in the top row is a reaming shell employed in all diamond drilling. Attached to whichever type of bit is being used, it follows through to maintain the gauge of the hole. It has about 120 stones.

On the right is a pipe bit, which is of the coring type, rounded at the edges and set with 114 stones. It is used for drilling through fractured ground at the collar of a hole to allow insertion of a 1½-inch pipe

(Continued on Page 16)





Legionaires Keep the Faith

As if the passing of another year had served to sharpen rather than dim the memory of the supreme sacrifice paid by their comrades, renewed dignity and solemnity marked the observance of Remembrance Day the week-end of November 11 by members of Sudbury and Copper Cliff branches of the Canadian Legion.

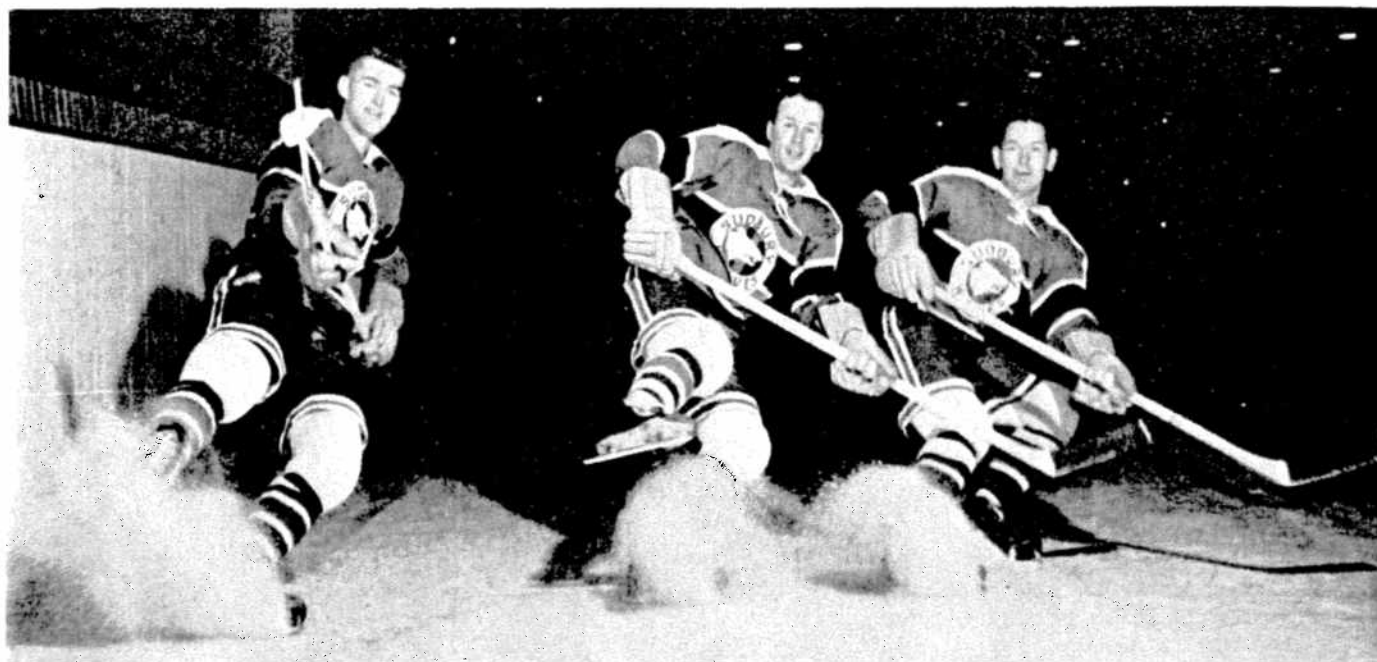
At Copper Cliff the annual Remembrance Day gathering at the Italian Hall was told by Frank Threadgold of Whitby, vice-chairman of the provincial command, that one way to keep faith with the warrior dead was to be eternally vigilant for the welfare of their loved ones, wherever they may be. He is seen addressing the meeting in No. 1 of the accompanying pictures. On his right is Mac Forsythe, past president of the branch; on his left are Jack Dunn, President Arnold Boyd, R. L. Beattie, and President Ned Brunton of the Sudbury Branch.

An impressive memorial setting was arranged on the stage for the Copper Cliff meeting by "Wave" Tyers. It is seen in the second photograph.

Silver Cross Mothers and Legionaires are shown in No. 3 as they took part in the brief ceremony at the cenotaph in Sudbury the morning of November 11. A largely attended memorial service was held that afternoon in the Sudbury Canadian Legion Hall.

Legionaires enjoying the banquet at Copper Cliff are seen in No. 4. More than 150 attended.





WOLVES: ANDY MILNE, GORDIE HEALE and MAURICE VAILLANCOURT

Wolves Are Not So Fierce And Neither Are Greyhounds

Oh Brother! Did Maxie Silverman's Wolves ever jolt Caruso Miners in their first tilt which marked the unofficial opening of the handsome new Sudbury Arena. The score was 7-0, and nobody the Triangle talked to wanted to give any explanation why. But the Caruso Miners came roaring back the following Monday to whup the snarling Wolves, and the pattern of purely local hockey was established for the season. It was obvious that the teams were fairly

evenly matched, and any time again that they got in one another's Tonis the fans could ease back and expect a full night's entertainment.

A fellow from Montreal saw that second game and he said, "Boy, I wish I lived in Sudbury."

The real convincer for Nickel Belt fans who have been wondering just what calibre of hockey they can expect for their money this winter came on the evening of Novem-

ber 27, when the Sudbury Wolves snapped the undefeated streak of the Soo Greyhounds with a very convincing 6-3 triumph. The uneasy feeling that the Soo was too tough for the rest of the league was thus dispelled, and everybody took a firm hold.

It might not be amiss at this time to urge every hockey fan, as well as all those who should be hockey fans, to line up staunchly behind the team of their choice and turn out to the games. Hockey players don't play to the gallery, but they play better when a gallery is watching them.

SEA OF MATRIMONY

Sailor's wife: Remember when we were first married—you used to say I had a shape like a beautiful ship?"

Sailor: "Yeah, but your cargo has shifted."



CARUSO MINERS: SID SMITH, "RED" MCCARTHY and LOUIS PRETE



EARNED REFINERY'S THIRD STRAIGHT VICTORY: The Carrey Shift, 1951 Inco inter-plant champions of non-pumper fire brigades: back row, left to right, S. Mitchell, L. Young, A. Rebellato, J. Carrey (asst. fire chief), W. Lukey, P. Blais, R. Miller; front row, J. Nadeau, J. Belbeck, L. Piche, F. Netzke, O. Roseborough, and J. Storey. Not shown, P. Mladuovic.

Fire-Fighting Titles Awarded

Inco's inter-plant fire-fighting championships have been decided for 1951, with Coniston Town taking the honors among pumper brigades and Copper Refinery's Carrey Shift scoring highest among non-pumper outfits.

"It was a very closely fought competition again this year, in fact one of the best we've had," Fire Inspector Bill Humphries told the Triangle. "Most of the teams were right on their toes and showed good training."

(Continued Next Page)



CONISTON TOWN BRIGADE BACK ON THRONE: Regaining the Inco pumper brigade championship for Coniston Town this year was the above lineup: kneeling, Tom Hoare, Gene Gobbo, Wesley Best, Aime Blake, Art Gobbo; back row, Albert Sabourin, Hector Gervais, Leo Pilon, Nick Todd, Joe Laprairie, Bill McLaughlin (chief), Ralph Taylor, Pasquale Cherzi. Not shown, Omer Laprairie, Leo Oliver, Leonard Belanger, Felix Belanger.

Triple Champs of Sudbury Football



Members of the Ukrainian Sitch team won all three trophies in S.D.F.A. competition last season. Shown above are: front row, I. Onufryk, Walter Hirnyj, M. Kobryn, H. Saar, M. Szybko; back row, Joe Szrmdwert, Mike Kolomygac, Myron Chayka, M. Waler (manager), E. Makarucha, O. Sorokiwsky. Unable to attend the presentation party were A. Gallins, M. Kushnir, V. Masina, D. Melnik, M. Symoczko, R. Harasym, W. Dyczka. All but one are employees of Inco.

Soccer Had a Banner Year

Undisputed rulers of Sudbury District football last season were the Ukrainian Sitch team, who played undefeated throughout the long schedule and made a clean sweep of the trophies. They won the Anderson Cup for the league championship, the Charity Cup, and the Star Cup, emblematic of Northern Ontario soccer supremacy.

President Harry Andrews of the S.D.F.A. presented individual trophies to the Ukrainian team at a well-attended banquet and



MOST VALUABLE PLAYER

Individual star and winner of the Barlow Trophy was Enrico Trevisiol of the Caruso Club.

dance in the Ryan Club. He warmly congratulated the triple champs on their skill and sportsmanship. "Football made great strides in the past season," he said, "and has come into its own as a major sporting attraction. Let's keep it that way." He spoke appreciatively of the co-operation the league had received, particularly from the Parks Commission and its employees.

Bill Gaylor, another inveterate soccer supporter, both as player and executive, was master of ceremonies.

Out of the 146 players in the league Enrico Trevisiol of the Caruso Club was selected as 1951 winner of the coveted Barlow Trophy for sportsmanship and value to his team. The trophy and a miniature were presented to him by the donor, Hugh Barlow, long-time booster of district soccer. Runners-up for this high individual distinction were Bob Elliott of Ryan Club, Myron Chayka of Ukrainians, Sid Kemp of Mine-Mill, and Jeff Wilkinson of Ryans.

Toward a Merry Fire-Safe Christmas

By W. H. HUMPHRIES
Inco Fire Inspector

To be reminded of the dangers of fire on Christmas may dampen expectation of "The Day of Days" but for the sake of the children whose day it is the following suggestions are important to every parent:

The Christmas Tree

While the tree is in the house reduce its flammability by setting it in water. Cut off the base of the tree at an angle, at least one inch above the original cut, and rest it in a tub or can of water. Keep the water level up because the tree will take in considerable water.

Your tree should be well supported and away from sources of heat (fireplaces, etc.),

and it should be so placed that, standing or fallen, it cannot block exits in case of fire.

Christmas Lighting

Use electric lights approved by the Canadian Standards Association or Underwriters' Laboratories, and check before using for frayed wire, loose connections, and broken sockets. Be sure your circuits are not overloaded. Make certain all lighting is turned off before retiring or leaving the house.

Your fireplace is almost certain to be used during the holidays. Guard against flying sparks with a substantial screen.

Christmas Decorations

Flameproofed materials can be obtained if ordered soon enough. In any public place flameproofed decorations are absolutely essential—no other type of decoration should be used.

Christmas Toys

Power toys should be operated under Dad's supervision if he doesn't move in and take over operation as well as supervision. Toys requiring alcohol, kerosene or gasoline to generate power are dangerous. Electrical toys should bear an approval label from Underwriters' Laboratories or Canadian Standards Association.

In Public Places

Smoking and flammable decorations should not be allowed. Waste materials should be removed at once. Wax candles at church candlelight services should be replaced with electric candles which are a great deal safer.

Firefighters

(Continued from Page 12)

Coniston Town brigade stage a real comeback to cop this year's honors. They won in 1949 but were nosed out in 1950 by a classy Creighton crew. Determined to get back on the throne, they buckled right down to business at their practice sessions, and as a result had what it took when the chips were down. Their lineup is composed of aggressive veterans who fight hard for every point in every event. A big share of the credit for their success is due their chief, Bill McLaughlin.

Six other brigades, three from Copper Cliff Smelter, one from Coniston Plant, one from Levack, and one from Creighton, also took part in the pumper contest.

For the third year in succession one of the Copper Refinery teams walked off with the glory in the competition for brigades not operating with pumpers, although only five of the 14 men on the victorious Carrey Shift lineup were members of the winning Refinery team last year.

Expert use of hand extinguishers on a difficult running gasoline fire provided the winning margin for Refinery. Coniston Plant's McLean Shift, which was runner-up, was only one second slower in putting out this type of fire and wound up within five points of the winner. Total possible points was 100, made up of 25 for an evolution selected by lot, 25 for the fire, 25 for drill in the use of oxygen-breathing apparatus, and 25 for a problem. L. F. Kiichener, fire chief of the Copper Refining Division, was an important factor in the triumph of the Carrey Shift brigade.

Nine other teams took part in the non-pumper brigade competition: Open Pit (Wickie), Coniston Plant (Blake), Coniston Plant (Geoffrey), Garson, Copper Refinery (Clare), Open Pit (Kilby), Copper Refinery (Wickenden), Froid-Stobie, High Falls, Murray, Creighton No. 5 Shaft.

OTHER SIDE OF THE STORY

Wife: "How helpless you men are! What would you do if there were no women to sew on your buttons for you?"

Husband: "Has it occurred to you, my dear, that if there were no women we men would need no buttons?"

Frood-Stobie Softball Champions



A memorably rollicking do at the Sampo Hall wound up Frood-Stobie softball activities for the season. In this group shot are some of the members of the victorious lineup, with Captain Walter Skawarek receiving the championship trophy from O. E. Penman, the donor. Walter's hotshots were H. Vendette, R. Houle, J. Sauve, L. Thompson, E. Blanchard, R. Woollacott, D. Tobin, S. Jones, L. Campbell, D. O'Brien, N. Glagoloz, J. Bratanich, and J. Moncion.



CONISTON TENNIS ACE

A smooth looker as well as a good player is Mary Venturi, seen here getting away a serve. In the Coniston tennis club, which had a most successful season under Art Miron's leadership, she was acknowledged ace of the ladies' section.

NOT ME, LADY!

It was one of mother's most hectic days. Her small son, who had been playing outside, came in with his pants torn.

"You go right in, remove your pants, and mend them yourself."

Some time later she went to see how he was getting along. The torn pants were lying on the chair. The door to the cellar, usually closed, was open, and she called loudly and sternly: "Are you running around down there without your pants on?"

"No, Madam, I am reading the gas meter."

OLD STUFF

Willie: "Gee, Pop, there's a man at the circus who jumps on a horse's back, slips underneath, catches hold of its tail and finishes up on the horse's neck!"

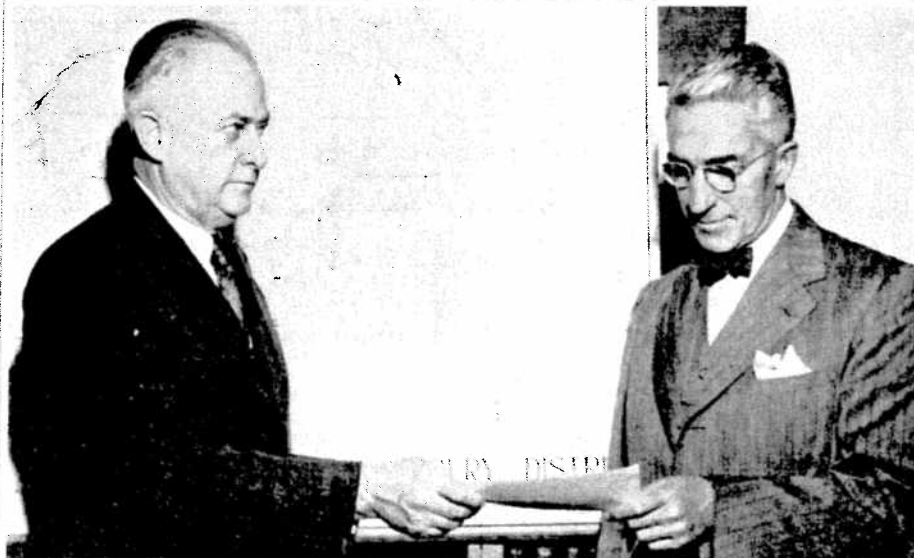
Dad: "That's easy: I did all that the first time I ever rode a horse."

COMPETITION

Employee (approaching manager): Could you give me a raise in salary? Three other companies are after me.

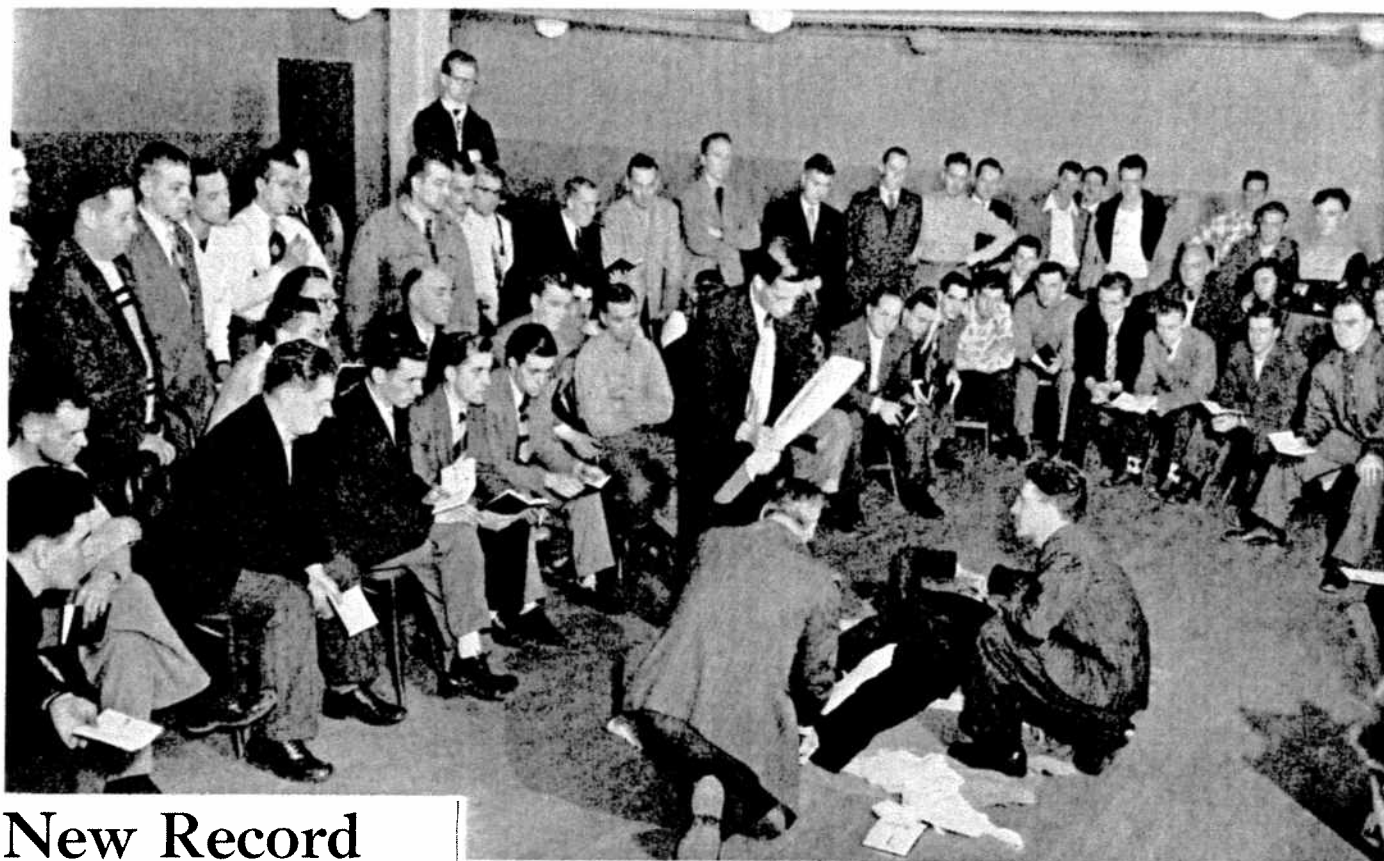
Manager: What companies?

Employee: Gas, electric and coal, sir.



Inco Gives \$100,000 to Sanatorium

"International Nickel Company's interest in the welfare of not only its own employees but the people of Sudbury District as a whole is shown by this gift," said T. D. Edward (right), chairman of the Sudbury & Algoma Sanatorium Association. He was presented with a cheque for \$100,000 by L. J. Simcox (left), general asst. to the vice-president. Construction of the new sanatorium is proceeding rapidly at the attractive site on the south shore of Lake Ramsay.



New Record For First Aid

Inco's First Aid training program has attracted the largest enrolment in the many years since it was inaugurated. Tom Crowther of the Safety Dept. comes up with the info that 900 men are attending the classes at all plants. This is more than 200 above the figure for 1950, and naturally the Safety people are running a high temperature over the great success of their presentation.

Tom thinks training for civilian defence may have something to do with the big bound in First Aid interest among Inco men. Whatever the reason, there is a heap of satisfaction over the situation.

The Triangle camera moved in on a typical First Aid session at the Inco Club in Sudbury and photographed a scene which could be duplicated in Levack, Garson, Creighton, Coniston, Copper Cliff. St. John Ambulance handbooks in hand, members of a class are seen in the top photo closely following a demonstration of First Aid by a team of experts. In the closeup you see on the left Tom Gladstone, one of the assistants in the show, a man with a distinguished First Aid career, and Dr. Don Steepe of the Inco medical staff; on the right are Joffre Perras, who conducted the demonstration, and Louis Berlinquette, another First Aid assistant. The "patient" is the patient Leo Frappier, who has been tied up almost as many times as the famous Tommy Newman of Inco First Aid fame. His trouble this time is a couple of fractured femurs, for which he has obviously been well and truly splinted and bandaged.



JOYS OF MOTHERHOOD

Mother has her numerous offspring out shopping, and as they waited for a bus she began to tell them a story to keep the peace.

"One time I was in the middle of the jungle," she said wearily, "and I looked up to see a tiger only a few feet away. I tried to

run, but with a bound it was on me and I was struck down dead."

"But it couldn't have. You're still living," protested several of the children.

A weary look swept over her face as mother closed her eyes and replied, "You call this living?"

NEAR MISS!

An Indian who ordered a sandwich at a drugstore peered between the slices of bread. "You slice him ham?" he asked the waiter.

"Yes," said the waiter.

"You pretty near miss him," grunted the Indian.

Wrapping Gifts for Kiddies of Levack Workers



A draw for a \$500 bond raised a large lode of lucre for Levack Mine Athletic Association's annual Christmas Party on December 21, to which all children of employees at the mine are invited. To gift-wrap the 800 presents Santa Claus will hand out at the big do, Lloyd Davis, personnel officer, recruited a willing group from the Teen-Agers and set up a production line which cleaned up the job in jig time. Wrappers in the front row above are Rosalie Taylor, Ruth Hopkins, Beatrice Shank, Gwen Davis, Claire Shank, and Les Lejambe (inspector); in the back row are Noreen Hutchison, Wanda Jemiola, Dawn MacCoy, Arlene Asunmaa, Doris Demers, Beth Lejambe. In the background, before a stack of attractively wrapped gifts, is Lloyd Davis.

Diamond Drill

(Continued from Page 9)

each 14 ft. in diameter with a 110-in. face, contain more than a ton of nickel, and there is also more than a ton of nickel in the 62,000-lb. shaft. The shipping weight of the complete hoist was more than half a million pounds.

A skip in No. 7 Shaft weighs approximately 16,800 lbs., its load of ore weighs 30,000 lbs., casing through the fractured area. Diameter of this bit is a fraction under 2 inches.

The small hole in the face of a non-coring bit allows circulation of water which is forced down through the rods at 100 lbs. pressure, clears away the sludge from the cutting face of the bit during drilling, escapes through the grooves in the side of the bit, and is forced back to the top of the hole, carrying the sludge with it. In the case of a coring bit the water passes between the core and the inside of the bit.

9. Bob Spriggs is checking bit numbers against his inventory before making a shipment to one of the mines.

10. Used diamond drill bits are returned by the mines and the bort units are recovered either by dissolving the crown of the bit in nitric acid (on the left in this photo) or by the electrolytic process (on the right). The two operators are Jerry Mulligan and Bill Prince.

11. After being cleaned the recovered bort is taken to the sorting tables, where good stones are separated from fractured scrap and returned to stock. Delina Squires is seen sorting.

12. In this bery are the girls of the casting shop: front row, "Dixie" Callaghan, Arlene Condie, Gertrude Cousineau; back row, Dorothy Smith, Delina Squires, Alma Pupato, and Lydia McNamara.

13. And here are the men on the scene:

Front row, Jerry Mulligan, Bill Prince, Bob Spriggs, Alex Melnyk; back row, Doug Brammer, Vern Johnston (foreman); Marty Quinn, Bryce Knight, Stan Rychio.

Not shown, Roy Leck.

Creighton Hoist

(Continued from Page 4)

and the weight of suspended rope from the headframe sheave to the loading pocket is about 15,000 lbs., but the powerful new hoist has plenty of margin over this combined load with its maximum safe total rope pull of 76,000 lbs.

The new Creighton hoist is driven by two 2,750-h.p. 600-volt 500-r.p.m. d.c. motors with rotating type control. It can be switched over to manual control for shaft and hoist inspection and maintenance.

The complete installation is fully protected by the most modern safety devices. It is housed in a hoist house of impressive dimensions, 116 ft. long, 65 ft. wide, and 58 ft. high. No. 7 Shaft's handsome monolithic concrete headframe is 196 ft. high.

Curling Club

(Continued from Page 5)

mock are really bearing down on those brooms as they coax a lazy rock over the hog.

4. It's Mrs. Clara Tuttle here, showing good style as she sends away a winner.

5. Puffing contentedly on his pipe, Skip Mac Forsythe calls for a point-maker from his lead man. Behind him is his rival of the evening, Skip Bob McAndrew.

6. Ready to hit the ice with that broom the second his skip shouts the word is Bill

Holmberg.

7. Allan Hall is calling the shot here, and the other skipper is Jesse Morrison. They were having a great battle in a shift league duel.

8. Happy over a shot rock that turned the verdict their way in an extra end are Albert Charron, Bill Allen, Earl McDowell, and Angus Johnston.

9. This must be an important stone, judging by the attention it's getting. From the left are Alfie Pinaud, Lloyd Sleaver, and Jack Frost.

Uses of Nickel

(Continued from Page 2)

for American dollars. Thus nickel is instrumental in the acquisition of the United States currency so essential for the subsistence of Canada's foreign trade.

Living in a modern, progressive world it is difficult for us to conceive that the first discovery of nickel was greeted with indifference. It was thought at that time that this hard, seemingly unworkable metal could be of no earthly value. To-day, however, we are well aware that the uses of nickel are multitudinous. This element has pushed itself to the forefront of economic development until it has become of momentous consequence. A day never passes that we do not in some way come in contact with it. In the home, in the office, in the plant or on the street nickel is constantly in the wings, awaiting its cue to step out upon the stage of progress to demonstrate its pricelessness. Realizing this, we are inclined to believe that Sam Slick was indeed a discerning old gentleman. Just as he sagaciously reflected, we could have done without nickel quite well, but only until we had tasted of its manifold virtues.