

# INCO TRIANGLE

VOLUME 20

COPPER CLIFF, ONTARIO, JANUARY, 1960

NUMBER 10



*League Opening at Levack*

(Story on Page 14)



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

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Editorial Office Copper Cliff, Ont.  
Authorized as second class mail, Post Office Department, Ottawa.

## Chairman Sees Steady Rise in Uses of Nickel

Free world consumption of nickel in 1959 exceeded 400,000,000 pounds, or about 25 per cent over the 320,000,000 pounds consumed in the previous year. Dr. John P. Thompson, chairman of the board of directors of The International Nickel Company of Canada, Limited, said on January 28 in a review of the nickel industry. "Despite the substantial rise in 1959 consumption and the uncertainties in Cuba, free world supplies of nickel continue ample," Dr. Thompson added.

"The past year was marked by improved business conditions which were reflected in increased nickel demand and a renewed interest in the applications of nickel by industry," he said. "Intensified marketing activities and research produced gratifying results in the face of keen competition from other materials."

"Despite the prolonged steel strike in the United States," he continued, "nickel consumption in 1959 in that country registered an increase of about 35 per cent over 1958. Marked gains in nickel consumption were also recorded in the United Kingdom and other European markets. The United States, as in the past, was again the world's largest consumer of nickel."

"Free world capacity for nickel production in 1959 was at an annual rate of about 550,000,000 pounds from all sources. This capacity, based on presently planned programs, is expected to increase by more than 100,000,000 pounds, or 18 per cent, in the next two years. During the latter part of 1959 the changed political situation in Cuba introduced an element of confusion in that country's nickel industry which has not been entirely resolved and the forecast for increased capacity is made with this fact in mind. International Nickel's new mining project at Thompson, Manitoba, will contribute 75,000,000 pounds to this annual increase in capacity. The Thompson project takes on added significance in light of the current situation in Cuba."

"Canada continues to be by far the largest supplier of nickel to the United States, the United Kingdom and other free world markets. Of the free world's present operating capacity for nickel production, Canada accounts for over 20 per cent; Cuba, 10 per cent; United States, 4 per cent; and New Caledonia, Japan and other sources, the remainder."

## Canada-Wide Promotion Features Stainless Steel



*"The Gleam of Stainless Steel", a major continent-wide sales and market development promotion, will be undertaken in Canada commencing February 8 by Inco in co-operation with Eaton's of Canada stores from coast to coast. The program is designed to increase the market for nickel-containing stainless steel, and to highlight the contribution being made by stainless steel products to "modern gracious living". No polishing and cleaning are needed for lustrous, versatile stainless steel flatware and hollow-ware — the pieces won't tarnish and are always bright and clean. In the kitchen too, stainless steel cooking utensils and appliances combine to make life easier for the busy homemaker.*

"During September, the General Services Administration of the United States Government announced that it would offer for sale its Nicaro nickel plant in Cuba, and would receive purchase proposals up to December 1, 1959. In its announcement, the General Services Administration said that the plant is capable of producing nickel at an annual rate in excess of 50,000,000 pounds (metal content) in the form of nickel oxide powder and sinter. Early in December, the General Services Administration announced that it had received responses from private industry and that an interest in acquiring the plant had been expressed by the Cuban Government. In this announcement the General Services Administration said that a considerable period of time may be required to determine whether a

sale acceptable to the United States Government can be concluded.

### Inco's Manitoba Project

"The development of the new mining project of International Nickel at Thompson, Manitoba, is proceeding on schedule. This project is expected to come into full scale production in 1961 at an annual rate of 75,000,000 pounds of nickel and will constitute the largest nickel-producing operation in the world next to International Nickel's operations in the Sudbury district of Ontario."

"Capital expenditures by Inco alone for the mining project, which is being financed entirely by Company funds without government assistance, will exceed \$115,000,000, including other investments connected with the Thompson project, total initial expenditures will amount to

\$175,000,000, the largest single investment in Manitoba."

### Activities Intensified

"With adequate supplies of nickel available, International Nickel in 1959 continued to intensify its marketing activities and market research throughout the world with the aim of creating and increasing markets or recovering those lost to other materials. The Company's marketing, sales and research staffs have been realigned and augmented, and certain changes have also been made in its world-wide distribution system. The objective of these activities is to increase sales of nickel by helping the manufacturers of nickel-containing products to expand their sales."

"Special groups have been created to promote the maximum use of established nickel alloys. A product development group has



## "First Baby" Is Daughter of Inco Smelterman

First in the Sudbury district — first in the new year — first in a brand new decade — that's the distinction baby Paulette Beaulieu brought with her upon arrival at St. Joseph's Hospital, Sudbury, at 12.08 a.m. January 1, 1960. To her parents it meant a beautiful, new 6 - pound 5 - ounce bright - eyed daughter, plus an array of mer-

chandise prizes; to sister Nicole, 4, and brother Gary, 2, it meant a new playmate and a new interest; and to Chelmsford's Dr. J. Gaudreau it was a fine reward for a New Year's eve vigil.

Vic Beaulieu was unaware of all the excitement until reaching his home in Chelmsford around 1 a.m. He had worked his regular shift on

the reverberatory furnaces at Copper Cliff smelter. After neighbourly congratulations and a quick trip to the hospital to see his wife and new daughter, father Vic, really walking on air, decided that this year he really had something to celebrate, and so he did!

Married in 1955 Mrs. Beaulieu was formerly Huguette Vallancourt.

been formed to create, in conjunction with research staffs, new nickel-containing materials to satisfy the needs of new and potentially large markets. A group of application engineers is devoting its attention specifically to the creation of immediate markets, the technical service activity to the trade has been enlarged and improved, and the sales forces have been augmented to cover all industries and industrial areas.

### Applications

Following is an estimate of free world nickel consumption during 1959 by fields:

|                      |     |
|----------------------|-----|
| Stainless Steel      | 29% |
| High-Nickel Alloys   | 16% |
| Electroplating       | 15% |
| Nickel Alloy Steels  | 15% |
| Foundry Products     | 12% |
| Copper-Nickel Alloys | 4%  |
| All Others           | 9%  |

"The pattern of nickel use by the various industries throughout the free world during the latter part of the year was influenced by the steel strike in the United States.

"As can be seen from the above

figures, stainless steels in 1959 were by far the largest consumer of nickel. Their excellent appearance, and resistance to corrosion, together with their high strength and ductility, have made this series of alloys of prime importance. During the year the use of stainless steels was expanded in the rocket and missile field. For example, each missile launching pad installation requires almost 100 tons of nickel stainless steel.

"Advances were made in the architectural field which is recognized as one of the great potential markets for stainless steels. Architects are becoming more and more familiar with the outstanding properties and availability of stainless steels in the large variety of standard mill forms and many of them are now specifying these materials for various architectural applications, including curtain walls, store fronts and windows.

"In the automotive field, stainless steels have shown an advance economically as well as technologically for a larger amount of

the bright work on passenger cars. Another development is the interest in smog-controlling devices which, it is anticipated, will be constructed of stainless steel.

"Early in 1959, International Nickel conducted a 'Glean of Stainless Steel' promotion, designed to increase the use of nickel stainless steel consumer products. It was conducted in co-operation with leading department stores in key cities in the United States and Canada, manufacturers of housewares and stainless steel products. A similar program was undertaken in the United Kingdom by International Nickel's affiliate, The Mond Nickel Company, Limited. Because of the success of this promotion, it is being repeated in 1960 on a greater scale, with more extensive participation by trade and industry groups.

"Production of high-nickel alloys continued to consume substantial quantities of nickel during 1959 and an increasing number of manufacturers undertook production of these materials. There is

a continuing development in engines of all types toward the use of alloys capable of withstanding higher and higher temperatures and consequently much investigation has been devoted to this essential activity. Age-hardenable nickel-base alloys have been developed recently which permit the higher turbine blade temperatures necessary for greater efficiency in gas turbines and jet engines. This necessitates the use of alloys with greater nickel contents in various other components to obtain the required strength without increasing weight. The transition from piston engines to jet and prop-jet power for faster commercial aircraft provides a market for high-nickel alloys that should continue to increase.

"The most exciting possibilities for nickel in the gas turbine field may well be found in the automotive industry. While gas turbine-powered trucks and passenger cars are emerging from the prototype stages, the temperatures and stress requirements of the metals involved in these experimental models as compared with conventional designs are such that several times as much nickel per engine may be required.

"The trend in the steam turbine field has also been toward higher and higher steam temperatures. Nickel-base alloys are under development for steam lines and critical areas of turbines. In the nuclear power field, the high resistance to stress-corrosion cracking of alloys containing in excess of 40 per cent nickel has led to more extended use of nickel-chromium and nickel-copper alloys.

"The use of nickel for electroplating showed gratifying progress during 1959. This increased application of nickel reflected not only the free availability of the metal, but also the trend toward the achievement of better quality decorative plating through the use of thicker nickel coatings. Several automobile manufacturers have increased the thickness specification for nickel plate on bumpers and trim as much as 75 per cent. Transient interest in substitute materials has been diverted and several 1960 models have returned to improved nickel-chromium plated grilles and other decorative components.

"Steady increases in the use of nickel plating have also been noted in the major domestic appliance field. A major advance in the plating industry has been the development of the so-called 'duplex' nickel plating systems in which two successive layers of nickel are deposited, imparting marked improvement in corrosion resistance and quality of finish. Costly buffing and polishing operations are virtually eliminated and service life is extended.

"The nickel alloy steels, important users of nickel, because of their exceptional dependability under the most rugged service conditions and their reliability in processing, were widely used for highly stressed parts of machinery. The automotive industry has been traditionally alert to opportunities to cut costs by taking advantage of more economical materials capable of satisfying the industry's performance requirements. In line

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## Chairman Sees Steady Rise in Uses of Nickel

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with this practice, International Nickel has developed a series of new steels for automotive gears which provide equal or better properties at lower costs than the steels previously used. Considerable progress has been made during 1959 in the United States in introducing these nickel alloy steels.

"In the field of heavy construction machinery, increasingly higher mechanical property requirements for parts of such equipment have resulted in upgrading some presently used materials to higher nickel levels, as well as replacing non-nickel-containing alloy steels. Some manufacturers are using nickel steels for body parts to take advantage of the higher properties of the nickel alloy steels which permit the use of thinner sections and result in weight savings of up to 33 per cent as compared with nickel-free steels previously used.

"International Nickel has invented a new family of very high-strength 25 per cent nickel alloy steels which can be produced in all the various commercial shapes such as bars, plates, sheet and tubing. The high order of mechanical properties and working characteristics attainable in these nickel alloy steels are expected to make them of particular interest for applications in aircraft and missiles, for high-strength wear-resisting precision bearings, for pressure vessels and many other industrial and defense uses.

"The role of nickel additions to steels in improving their low-temperature properties has long been recognized and nickel alloy steels have regularly been employed for such applications. These steels, with nickel contents ranging from 2 1/4 to 9 per cent, are currently being employed in varied low temperature applications concerned with liquefied gases, as well as in equipment operating in the frigid climates of the world. In the electrical industry, there was evidence of a trend toward the use of steels with higher nickel contents for large generator rotors in order to improve the strength and toughness of these forgings.

"In 1959, International Nickel renewed and enlarged its marketing campaign in Canada and the United States to promote the sale of nickel alloy steels through independent steel service centers providing national warehousing facilities. Initiated in 1958, this promotional effort now includes heavy-duty and special-purpose steels as well as the two general-purpose steels whose use enables buyers to simplify inventory problems and reduce costs.

"Nickel is used extensively for alloying purposes in foundry products. For example, it is alloyed with cast iron, steel, copper and aluminum, and is an essential ingredient of heat-resistant castings and corrosion-resistant castings. Activity has

## Hospital Patients Visited by Executives on Christmas



The pleasant custom of visiting the patients in Copper Cliff Hospital on Christmas morning was again observed by general manager R. H. Waddington and assistant general manager F. Benard. They were escorted on their tour by Dr. H. F. Mowat, chief surgeon, and Miss Allegra Walker, superintendent of nurses, and members of the staff. Photo shows Mr. Benard in a Christmas handshake with Camille Piche, locomotive engineer who was hospitalized for a heart condition. Dr. Paul Clarke and Nurses Norma Darrach, Noreen Scheuer, and Marie Mulligan are the others in the picture. Said Camille Piche when his visitors had left: "That did me more good than any medicine."

been resumed to further develop the use of nickel in gray irons and ductile irons for engineering applications. The new nickel-containing austenitic ductile irons continued to be used in increasing amounts for manifolds and turbochargers on heavy duty diesel engines. Abrasion-resisting nickel-chromium cast irons again found widespread application for mill liners and grinding balls in plants handling ores, cement, coal and coke. The use of nickel in ductile irons showed an increase. Studies of the advantages of nickel in improving the corrosion-resistance of aluminum in nuclear power fuel elements have continued and investigations to improve the fabricating characteristics and properties of cast and wrought aluminum alloys have been initiated.

"Copper-nickel alloys continued to be used extensively in the power, petroleum and marine industries for heat exchanger applications. The use of these alloys, which contain from 5 to 30 per cent nickel, in 1959 was more than double that of 1958. Greater appreciation of the advantages of copper-nickel alloy castings from the standpoint of soundness and weldability is improving their commercial status. New uses for these alloys and nickel silver alloys are being pursued.

"Production of nickel-cadmium storage batteries, particularly of the sintered plate type, showed its largest gain in 1959. The extremely long life cycle of these batteries is being utilized in connection with the solar cells on the Explorer VI satellite and small versions find numerous applications in such consumer items as radios and rechargeable flashlights. The batteries are being used in the aircraft and missile

fields, and in ground equipment for polar regions because of their superior behavior at low temperatures. Interest has been shown in the use of nickel-cadmium storage batteries to power electric automobiles, and research is being conducted on this application.

"The most recent summary of world coinage shows that nickel constitutes nearly 10 per cent of the yearly metal consumption for coins. In 1959, France, Greece and Uruguay decreed the adoption of pure nickel for higher denomination coins. The consumption of nickel for coinage in recent years has shown a considerable advance, not only in volume, but also in its relation to other coinage metals.

"In the electronics field, nickel transducers, which change alternating electrical energy into ultrasonic vibration, are being used for the ultrasonic cleaning of intricate assemblies, including meters and guidance components for missiles, and are being employed in underwater sound devices for depth finding, detection and related purposes. A recently-introduced nickel alloy containing 4 per cent cobalt, which provides superior performance, is used extensively in this equipment. The new transatlantic telephone cable to France is equipped with vacuum tube amplifiers, containing nickel cathodes, identical to those used in the earlier cable to the British Isles which have operated without failure or significant change in characteristics. In addition, the electronics field continued to employ sizable quantities of nickel in high-strength permanent magnets.

"Sales of nickel for chemical applications, including that for

catalysts, for 1959 showed a substantial increase over 1958. A new use for nickel appeared in the petroleum industry. One large company began the marketing of a premium lubricating oil for automobile engines which owes its superior performance to a nickel compound additive."

### Outlook

In his concluding remarks, Dr. Thompson said: "The effectiveness of renewed efforts to increase the consumption of nickel through augmented marketing and research activities is evidenced by the increased use of the metal during 1959. Its versatility is making possible many new and promising applications. As far as International Nickel is concerned, these efforts will be continued with vigor, not only to assure markets for present supplies of nickel, but also for the largely increased supplies which will be forthcoming by 1961.

"It is expected that free world nickel consumption in 1960 will show a substantial increase over that of 1959."

### Nickel in Steel Gears

Gears for trucks, tractors and other heavy duty vehicles are made of nickel alloyed steel because of the strain, shock and hard wear they are subjected to.

### A "WAYNE & SHUSTER"

It was during the Nazi regime in Czechoslovakia that a seedy character crept up to the counter of a store.

"The Gestapo is after me!" he whispered to the man behind the counter. "Please — hide me!"

The storekeeper scowled, then pointed to a sign on the wall: "Positively no Czechs cached here."



Stereophonic sound will brighten the days of Rosemary Owens. At the retirement party in her honor she received a handsome record player from her friends, Alex Godfrey (left), assistant to the general manager, making the presentation. On the right is Don Cowdell, works auditor, who was chairman.

## Mary Owens Had Fine Career

Mary Owens' service record was 44 years long, and about a mile high if you were to heap up all the good things people have to say about her.

When she stepped into retirement in December she completed a career that in every way did her credit.

Alex Godfrey, assistant to the general manager, said of her: "There have been many highlights in Mary's busy life, but to try to select one would probably result in failing to do justice to many. I would prefer to stress one of her many attributes — her unchanged spirit of youth and all that implies. This she retained through a working life which saw an expenditure of time and energy far beyond average, given without stint to her family, her church, and the Company. That same energy, with her unflinching interest in all about her, will I am sure produce for her a happy and rewarding future."

Rosemary Owens was born in Copper Cliff, daughter of John Owens, a mine captain who served at Frood, Stobie, Creighton and Copper Cliff.

She started to work for the Company in 1915 as a night telephone operator, and her first shift was almost her last. During the early morning hours she heard a trumpet blow a ghostly tune through the old office building, and she thought it was Gabriel's horn for sure. Not until next day did she learn that Johnny Wilson, the night caretaker, liked to practice his band music when his chores were done.

John L. Agnew put her at the

reception desk, and encouraged her to take a business course at night school. She worked in the file and telegraph room, then in the steno pool, then at the invoice desk. She relieved in the real estate office, then became assistant to John Gribble, the cashier. She worked

in the same capacity with Gray Thompson, and on his retirement in 1956 was appointed cashier.

During her 44 years and four months Miss Owens served eight works auditors, F. P. Bernhard, E. C. Lambert, F. C. Allgeier, R. L. Beattie, J. R. O'Donnell, A. Godfrey, M. Austin, and D. Cowdell.

Walter A. McCadden, the Company comptroller, telegraphed her: "In entering your new sphere of life today may I commend you for the very fine contribution you have made to Inco over your years of service, and also may I extend to you my personal good wishes for your happy enjoyment of the future."

Other telegrams of congratulations and good wishes from officials and friends were read at the largely attended party given in Rosemary's honor at the Copper Cliff Club. She was presented with a stereophonic record player and radio as an expression of the admiration and esteem in which she is held. Presentations were also made at other functions arranged by her friends and office colleagues.

Miss Owens' father came from Dublin, Ireland, and her mother from Elmira, N.Y. She was born on a Christmas Eve. She has two brothers, Dalton of Bracebridge and Jerry of the Copper Cliff mill, and two sisters, Joanne who resides with her, and Kathleen, a nurse in Chicago.

Among Rosemary's unforgettable experiences are the times she served as lady-in-attendance to royalty at Frood mine, first for the Queen Mother when she visited there with King George in 1939, and then for Queen Elizabeth on her visit to the mine last July with the Duke of Edinburgh.

But equally unforgettable to her will be the pleasant Good Mornings she received on her way to work each day from the men coming off night shift in the plant, and also the many happy associations with

her office, which she called her Shangri-La.

Miss Owens has gone on an extended holiday to Arizona, California, and Washington, taking with her the kindest thoughts of all who know her.

## Frank Somrak

A confirmed bachelor, Frood's Frank Somrak says he intends remaining that way. Retired now on service pension he admits that possibly a wife would be good company but argues that it is too late now for him to change his ways.

Born on a farm in Jugo Slavia in 1894, Frank had served in the first war and

first war and

In 1930 he spent six years in a coal mine there before coming to Canada in 1928. He worked one year in an Ontario sawmill before getting a job at Creighton in 1927.



He transferred to Frood and worked in the stopes there until 1941. For the last few years before retirement he was kept busy cleaning shaft stations.

Finding time rather heavy on his hands he is planning a trip back to the old country later this year. In the meantime the order of the day is taking things easy, doing plenty of walking and visiting old friends in the Donovan where he has lived for 30 years.

## TOO GOOD TO BE TRUE

A druggist met an old customer on the street and asked:

Druggist — Well, Tom, did that mudpack I suggested improve your wife's appearance?

Tom (mournfully) — It did for a couple of days but then it wore off.



Even the Copper Cliff Club couldn't accommodate all who wanted to come to Mary Owens' retirement party. This picture shows part of the capacity attendance of friends and well-wishers.

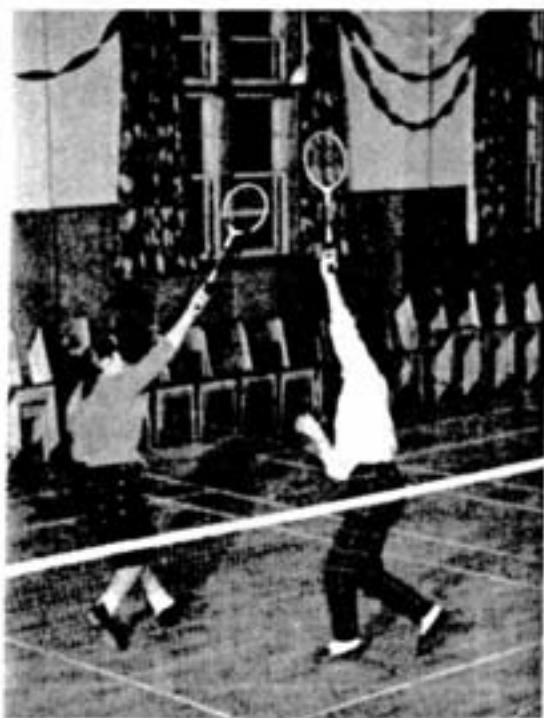


## Garson Club Is Rendezvous for Town Teen-Agers

Each Friday night, fall, winter and spring, the Garson Mine Employees Club is alive with flying birds, flying five-pins, clink of coke bottles, loud and happy voices and the haunting strains of Mac the Knife (or his current counterpart), as Garson teenagers enjoy their regular weekly session at the Club.

Formed shortly after the Club was opened in 1950, the "Teen Town" has been, for over 10 years, the popular Friday night rendezvous for a goodly portion of Garson's teenagers. Club secretary-manager Tom Scanlon, who helped organize the group and is still its mentor, told the Triangle that it has been a very rewarding association.

An eight-team bowling league keeps the alleys hot and hectic





and provides keen competition. Badminton, with Rene Paquette as instructor, has a house league that offers plenty of fun and action. Then from 9 to 11 p.m. the jazz and live artists take over with the club's faithful record player providing the music.

This is really a low-budget high-value evening which can be enjoyed for as little as a half dollar or less. Bowling costs the young people 25 cents (10 cents a line plus a nickel for the jackpot), badminton is free, and for dancing a nickel is charged only when new records are to be bought. Throw in a soft drink or two and it adds up to a pretty full four hours' fun for 50 cents.

No dues are charged nor membership cards issued and any teenager in the immediate area may join. The group meet once a year to elect officers. Brian Stahan is the current president, Connie D'Angelo is secretary-treasurer, and committee members Jo-Ann Morden, Tanya Maenpaa, Roland Girard, Betty Gascon, Sally Quackenbush, Lorraine Raymond and Winston Spencer.

Maurice Joly of the mine security force and Mrs. Maenpaa are among the several who help out with the chaperoning assignment.

#### THE PICTURES

Chaperone Mrs. Jenny Maenpaa stands Jo-Ann Morden's hand while Leo Desjardins, Lorraine Raymond, Jack Pajunen, Iona Hinds, Gerald McDonald and Louis Carroll wait to pay and be stamped.

Discussing business in the Club lounge are the current executive of the Garson Teenagers. Club secretary-manager Tom Scudon and Mrs. Maenpaa are seated in the centre; also seated from left to right are Jo-Ann Morden, Tanya Maenpaa, Brian Stahan and Ronald Girard, while standing are Winston Spencer, Betty Gascon, Sally Quackenbush, Lorraine Raymond and Connie D'Angelo.

Always a welcome and popular treat after bowling or in fact most anytime at the Garson Teenager's Friday night do, is the "pop" break. Pictured at the "bar" are Sandra McCluskey, Beatrice Vold, Winston Spencer, Jeanine Cote, Brian Stahan, Ron Girard, George Barlow and Gerry Pennarum left to right while Arlene Brankley rings up the cash.

Badminton is always a popular part of the Garson Teenager's Friday night activities. In this picture both Denise Mainville and Leona Mattson go for the bird in a friendly match. Promptly at nine o'clock however, down come the nets and then it's on with the dance!

The Club's record player provides music both sweet and hot until the 11 p.m. closing signal. In the corner live session pictured here are Carole Bontinen and John Short, Lorraine Moreau and Leonard Mattson, Betty Gascon and Ronald Girard, Jo-Ann Morden and Leo

## Santa Given Great Reception in New Town of Thompson



When Santa Claus made his triumphal tour of Thompson, Manitoba, on December 19, he had a large and enthusiastic honor guard, part of which can be seen in this picture taken for the Triangle by Charlie Drohomerski. Any little fry who had worried that Santa might not have heard of Thompson because it was the newest town in Manitoba happily found their fears were groundless, and a wonderful Christmas was spent by all.



After his tour of the town Santa held a reception in the Hudson's Bay Company store where he chatted with the children. Photo shows him talking things over with Barbara Cameron, daughter of Mr. and Mrs. Al Cameron. Wonder what that pair of schemers in the background have in mind.

Desjardins; watching are Louis Carroll, Jeanne Charbonneau and Gwen Briderman.

Bowling, the favorite almost everywhere, is possibly the top feature of this group's weekly session. Rivalry is the league's life blood and the top trundlers post some pretty impressive scores.

#### RECKLESS EXTRAVAGANCE

Washing windows bored a sweet young housewife, and she forgot that she was hanging out an open window. She lost her balance, fell one floor and hit in a garbage can. She sat there disgustedly. A Chinese student passed by and saw her. "Canadians very wasteful," he reflected. "That woman good for 10, 20 years yet."

## Louie Miroslavich

Another Creighton regular who recently retired on disability pension is Louie Miroslavich, now living comfortably in Gatchell with his friend and fellow pensioner, Frank Marolt.

Louie's first taste of mining was at Garson in 1927, the year he arrived in Canada from Yugoslavia. In 1933 he switched over to Creighton no. 3 shaft but was laid off there in 1930. After a trip back to the old country he tried Kirkland Lake, didn't like it, so came back to Creighton in 1933.

During his years at Creighton he worked at many occupations among them, driller during the sinking of no. 6 shaft. For the last few years he was a shaft inspector.

During his visit to Yugoslavia in 1930 Louie married Mary Stegne. She has remained in that country along with their only son Aloj. Now that he is retired Louie is considering the possibility of going back there himself to live. He was born on a farm there in 1903.

In the meantime taking things easy, regaining his health and enjoying his leisure are pleasantly filling the time for him.


#### ABOUT THAT COW

(Ohio State Journal)

Unfortunately when the cow jumped over the moon she wasn't equipped with electrical devices to report conditions or even take moon pictures.







## 16,000 Kiddies Entertained at Big Inco Christmas Parties

Playing Santa Claus to more than 16,000 Inco children at pre-Christmas tree parties was again the pleasant task of athletic associations at the various mines and plants. With many years' experience to draw on parties ran as slick as a whistle — or at least as slick as could be expected where thousands of youngsters of all ages are involved.

Toy selections were particularly good this year and included many in the space motif as well as models of early cars, stoves, ice-boxes, etc., by way of contrast. Creative and do-it-yourself toys were also in evidence, completing a wide variety sufficient to satisfy the most sophisticated youngster.

Numerically tops, as it has been for many years, the Froid-Stobie Christmas tree catered to over 4100 kiddies including those representing the Open Pit. Bagging candy and fruit for a crowd that size was a real Saturday evening chore for the volunteer help. Held at the Inco Club in Sudbury the show

included coloured movies in addition to the toys, fruit and candy received along with coffee and cake for the parents.

Creighton required two sittings at their Employees Club to accommodate the almost 900 kiddies who came to see the Disney cartoons and receive Santa's bounty. So no one would be missed children of Creightonites residing in Sudbury were included in the Copper Cliff theatre party.

Murray mine had one of its biggest years with nearly 900 youngsters being cared for. The party was held at the Sudbury Inco Club and each child received an individually wrapped gift, fruit and candy plus free pop and hot dogs. Parents were regaled with coffee and doughnuts.

Garson again had its usual wall-bulking parties with some 1400 kiddies packing the Employee Club for the two shows. "Live" entertainment was the order of the day there as in past years with the

(Continued on Page 13)



**More Pictures  
Of Santa and  
Little Pals at  
Christmas  
Gatherings**

(Story on Page 9)





ABOVE: Our Port Colborne representatives this month are Mr. and Mrs. Benny Grimaldi with Sandra, 4, Jo-Ann, 7, and Larry, 18 mos. Both Benny and his wife are keen bowlers.

LEFT: A crane man in the converter aisle at Copper Cliff, Albert Maler is seen here with his wife and their five children: Brenda, 9, Reginald, 6, Jerry, 4, Janice, 2, and Sharon, 9 months. They live at Minnow Lake.



Mr. and Mrs. Dave Scott with Terry Lynn, 1½, and Jane Louise, 5. A mechanic at the Copper Refinery, Dave is a crack softball player.



Here we have Roy Chaput of Frood with his three children, Royalene, 8 on Christmas Day, Spencer, 7, and Wada, 4. Mrs. Chaput died in 1958.



Mr. and Mrs. Andy Crawford of Levack with Billy, 4, and Robert, 5. Andy is a security officer like his brother Bert of Port Colborne.

BELOW: Mr. and Mrs. Paul Gervais of Coniston with Yolande, 9, Roger, 7, Mirelle, 3, and Madelaine. Paul is a carpenter at the Coniston plant and woodworking is also his hobby.

BELOW: A haulage truck driver at the Open Pit is Gerald Brunelle, pictured here with his wife and their happy family: Robert, 11, Della, 10, Evelyn, 8, Gerry, 5, and Susan, 3.





## 20,000 Feet of Welded Tubes in New Copper Refinery Boiler

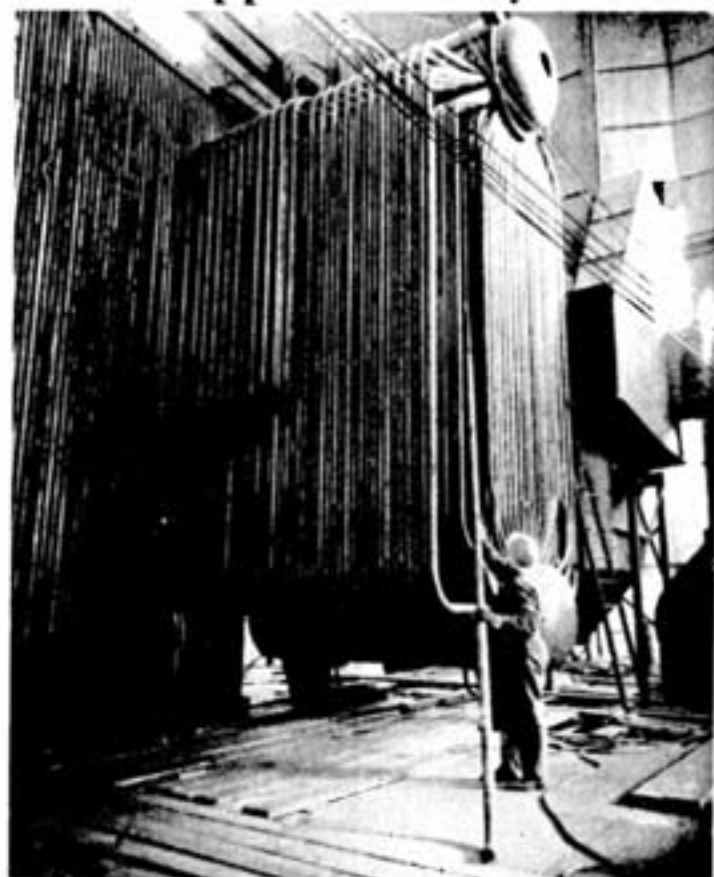


A new auxiliary boiler which can be fired by gas or oil and has an output of 80,000 pounds per hour of steam at 480 degrees F., 100 degrees of superheat, is being installed at the Copper Refinery. The existing boiler, which has approximately the same capacity, will be converted to oil firing and used as a spare.

Steam and power engineer Len Kitchener told the Triangle the new boiler is the most modern installation of its kind available.

An integral furnace tangent tube boiler, it is equipped with an air pre-heater and drainable type super-heaters. It contains no refractories, but is a furnace completely surrounded by water walls composed of welded tubes, the whole enclosed in a steel casing. It is completely automatic, with combustion and flame safe controls.

Mr. Kitchener said there are 20,000 feet of swaged or tapered tubes varying from two to three inches in diameter in the boiler, which will contain 58,500 pounds of water at working level.



The above photographs show the boiler in the course of erection. In the picture on the left the section made up of the roof and front water wall is being hoisted into position. On the right is a view of the convection bank and part of a side water wall. Mr. Kitchener explained that the side water walls are mainly heated by radiation and the convection bank tubes by direct contact of the gases.

## ANNOUNCE APPOINTMENTS



L. S. Renzoni



D. A. Fraser



W. Curlook

Several Inco appointments were announced at Copper Cliff on January 14, effective on that date.

R. D. Parker, vice-president, announced the appointment of L. S. Renzoni as manager of process research (Canada).

R. H. Waddington, general manager of the Ontario division, announced appointments as follows:

D. A. Fraser as an assistant manager of reduction plants;

W. Curlook as superintendent of research, Copper Cliff, and H. J. Roorda as assistant to superintendent of research;

J. T. Colquhoun as assistant general purchasing agent;

R. R. Saddington, manager of reduction plants, announced the appointment of J. A. Poll as assistant superintendent of the Iron Ore Recovery Plant.

### L. S. RENZONI

Born in Copper Cliff, where his father was employed by the Canadian Copper Co., Louis S. Renzoni received his primary and secondary education at Espanola. He graduated from Queen's University in 1935 with the degree of bachelor of science, and the following year received his master's degree.

After spending a year on the staff of a consulting laboratory in Brantford he joined Inco on May 1,

1937, at Port Colborne as research chemist. He became superintendent of the research department of the nickel refining division in 1946.

In 1948 he was transferred to Copper Cliff as assistant superintendent of research, and eight years later became superintendent of research, the position he held until his appointment as manager of process research (Canada).

He was recently awarded, jointly with R. C. McQuire and W. V. Barker, the gold medal and certificate of the AIME for extractive metallurgy, following presentation of their paper on the direct electro-refining of nickel matte in Inco's nickel refinery at Port Colborne.

Mr. Renzoni, whose home is in Copper Cliff, is married and has four children.

### D. A. FRASER

A third generation Inco man, Donald A. Fraser was born in Copper Cliff and attended Copper Cliff Public School and Sudbury High School. In 1942 he graduated in metallurgy from Queen's University and that year became a permanent employee of International Nickel, where he had worked during the summer months since 1936.

Starting in the efficiency department of the reduction plants, he became assistant plant metallurgist in 1946. In 1953 he was appointed assistant to the manager of reduction plants, and in 1956 assistant mill superintendent. He now be-

comes an assistant manager of reduction plants.

Residing in Copper Cliff, Mr. Fraser is married and has three children.

### W. CURLOOK

Born in Coniston, where his father worked in the smelter until retiring on service pension in 1956, Walter Curlook received his primary and secondary education in Coniston and Sudbury.

Graduating in metallurgy from the University of Toronto in 1950, he then spent three years in post graduate studies in metallurgy leading to his doctorate. This was followed by one year on a post-doctorate fellowship at the Imperial College of Science and Technology in London, England.

A summer vacation employee of the Company since 1944, he joined Inco permanently in 1954 as a member of the research department at Copper Cliff, where he now becomes superintendent, returning from Port Colborne where he had been on temporary assignment.

Mr. Curlook's home is in Copper Cliff. He is married and has one daughter.

## Nickel Underplate

Nickel-plating, under the chromium on a steel automobile bumper, helps prevent rust and keeps the bumper looking bright and shiny.

# The Roving Camera



**L**EO MACDONALD was intercollegiate light heavyweight boxing champ for two years when he was at Queen's University, from which he graduated in mining in 1943. He has taught the manly art to classes of boys at Creighton and Lively, although lately it's kept him busy defending himself at home from his own family of five, Carol, Joanne, Rory, Jean and Sheila. Both Leo and his wife are from Kingston, where she was Rita Greenwood before her marriage in 1943. An Inco man since 1947, Leo is senior safety engineer at Creighton mine. Our roving camera portrait shows him in the little holstroom at 2.3 service raise on 4 level of no. 3 shaft, checking the signals during the course of a regular safety inspection.

## 16,000 Kiddies

(Continued from Page 9)

ever-resourceful Fred Desjardins and his gang providing plenty of music and fun. Gifts, candy and a word with Santa completed a big day for these youngsters.

At Levack more than 2100 youngsters enjoyed a visit with Santa and received an attractively wrapped gift plus fruit and candy. A cartoon show was held in the evening and a large outdoor tree at the Employees Club added to the Christmas atmosphere.

Lawson Quarry employees' children attended a Christmas tree party at the Willsville schoolhouse where approximately 50 youngsters and their parents enjoyed a concert, gifts and a visit with Santa.

The Copper Cliff theatre party was again a large-scale success. Upwards of 3800 kiddies, including those of Iron Ore Plant men, Police and Creightonites resident in Sudbury, were treated to two hours of the finest cartoons and shorts topped with candy, fruit and a visit from Santa. Four Sudbury

theatres were required to accommodate this happy gang and bus service was provided for those living outside the city.

Coniston held their Christmas party at the Club Allegri where the kiddies saw a colour movie of Eaton's Toronto Santa Claus parade before themselves meeting that kindly old gent and getting their gifts. Close to 800 youngsters attended the two sittings that were necessary.

The Copper Refinery at their party followed the practice of calling up each child by name. Santa then took over and along with a host of helpers distributed toys and candy. Some 850 kiddies were accounted for and parents enjoyed coffee and cake in the Inco club lounge.

Santa arrived at Lively on the town fire truck, creating almost as much excitement as if he had driven into town with his real live reindeer. He adjourned to the high school auditorium with his assistants where they dispersed gifts, candy and fruit to over 1300 happy children.

To the many athletic associa-



**Y**OU might say Sam Kelba has always had a flair for the militaire. He is a fully commissioned officer in the army and a senior neo in the air force. His idea of a swell vacation from his job is to fill in as warrant officer on the station at Aylmer. He is a former commanding officer of the Port Colborne army cadets and a former instructor of the air cadets. And he's also been first aid man for the Port Colborne Juveniles, who have won something like seven Ontario championships in 11 years. A busy man is Sam, and a happy one. Of the three sons born to him and his wife Carolyn, Samuel George is a teacher, Robert Michael works in the Nickel Plant, and Gary Nicholas is a professional musician in the states. The picture of Sam shows him at his work in the research lab at the Port Colborne refinery, checking the permeability of diaphragm cloth for the electrolytic process.

tions, and all those who worked with them to finance, organize and operate these traditional parties, a sincere vote of thanks is extended from the children and parents for whom Christmas was made that much more wonderful.

## George Chisholm

"I'm able to spend more time with my wife and our twin granddaughters now," said George Chisholm, "and that's something I enjoy." Retired from Coniston on an early service pension George is quite content to stay close to home, at least for this winter.

A member of the metallurgical department for nearly all his years at Coniston, George started there in 1935. Earlier he had worked 13 years for the CPR in the switch control tower east of Coniston.

Born near Inverness, Scotland, in 1897, he was raised in Glasgow and had his first job there with a railroad company. Coming to Canada in 1921 he found good jobs scarce at that time.

After several poor starts he landed a job with a rubber company in Toronto, mainly on his ability as a fine centre half at soccer. He joined the CPR in 1922, and when his tower job was replaced by the block system, moved in to the Coniston smelter.

"Coniston was a real football town when I first came here," George said. "In 1924 we won all

the district championships. 'Pop' Evershed and Fred Fischer were on that team, too." In those days, George recalled, trainloads of fans travelled to and from Espanola and Capreol to support their teams.



Mr. and Mrs. Chisholm

In 1926 George married Jennie Bethune. Their son Gordon is a machinist at Copper Cliff and their daughter Jean is Mrs. K. Goldring of Toronto. Two granddaughters are a delight to George in his retirement.

Fond of good music and good books, George is now devoting much of his new leisure to those pleasures.

When a man's knowledge is not in order, the more of it he has the greater will be his confusion.

—Herbert Spencer.





More than 300 boys take part in the Levack Minor Hockey League, one of the Sudbury district's best examples of organized youth activity. Pictured above is the scene at the official opening of the league for the 1960 season. On the FRONT COVER of this issue is a shot of the first faceoff, with R. H. Waddington, Inco general manager, doing the honors for Richard Lauron of the Boston Bruins in the Squirts Division and Jeremy Doyle, captain of the Midgets; in the background is Father McLellan, the league's referee-in-chief.

## Levack Is a Mighty Fine Place To Be a Boy

"Put a boy on ice and you keep him out of hot water" was one of the slogans they used to publicize Minor Hockey Week in Canada.

One town where they certainly have their boys "on ice" is Levack. This winter Levack's Minor Hockey League is the biggest since it was started in 1955. There are 23 teams averaging 14 players each — 322 boys, all in uniform, all full of the old hustle, and all very very happy about the whole thing.

No wonder Levack is proud of the way it's handling its youth.

Five divisions comprise the league: Squirts, 6 to 8 years, playing for the DeMarco trophy; Pee Wees,

8 to 10 years, E. P. Taylor trophy; Minor Bantam, 10 to 12 years, Piccolo trophy; Bantam, 12 to 14 years, Palumbo trophy, and Midgets, Levack Athletic Association trophy.

In each division there are Montreal Canadiens, Boston Bruins, Toronto Maple Leafs, Detroit Red Wings, and Chicago Black Hawks.

Individually the boys compete for the Father Wells trophy for the season's most sportsmanlike player, and goal scoring trophies, one for each of the first four divisions, presented by Alf Armstrong, Frank McAteer, Bill Lord and Mel Young.

Martin Callaghan got it all going back in 1955, and is still a staunch member of the Levack juvenile sports committee, which also sponsors baseball during the summer months. Other members of this committee are Father McLellan, Matti Hawryliuk, and Frank Doyle, with Mrs. Doyle as secretary.

When Inco general manager R. H. Waddington officiated at the opening of the league for the 1960 season in the Levack Arena, he paid tribute to "men like Frank Doyle", who has been minor hockey chairman since 1956, for their contribution to community life. Others who shared in this well-earned

recognition included the corps who give of their time and enthusiasm to coach and manage the teams of boys. Among those who would get special mention in this department at Levack are:

Squirts division, Matti Hawryliuk, Archie Cucksey, Al Cullis, Doug Stead, Ken McLeod, Laddie Kavluk, and Red McCort; Pee Wees division, Doug Stead, Murray Hatfield, Ted Atkinson, Frank Doyle and Pete Maryschak; Minor Bantam division, Ted Lawrence, Roger Crapeau, Jim Dalrymple, Bert Mallette, Ron Beaton, Bill Collins; Bantam division, George Carvell, Jerry Duack, Jerry Robillard, and Bert Bertrand; Midgets, Frank Doyle and Archie Cucksey.

Also highly important people in a minor hockey organization are the referees, by commanding the respect of the players maintain the character and reputation of the league and also instill in the boys a healthy regard for discipline and clean play. Father McLellan is chief of the Levack refereeing squad, and working with him are Laurie Thompson, Mike Kay, Jerry Doyle, Fern Robillard, Kenny Frohlick, Harry Koski, Archie Cucksey, Ernie Mallette, and Harry Knight. They have the full backing of the arena commission in their decisions.

Always noted for its community spirit, Levack has no difficulty raising the funds to buy uniforms and equipment for its horde of young puck-chasers. Legion, Elks, Lions, and business firms all gladly ante up to assist the town's Juvenile Sports Club with its program.

A lot of men in the years to come will look back with pride and gratitude to their boyhood in Levack.

Spending is so popular with governments as with individuals that thrift and self-denial need to be rediscovered.

—First National Bank of Boston.



Here's a fair sample of Young Canada, Levack brand, ready for action in the town's minor hockey league. Those are Canadiens in the front row and Black Hawks standing behind them. On the right Inco's general manager R. H. Waddington meets the members of Levack's entry in the Sudbury and District Midget Hockey Association; he's seen shaking hands with Bad Man Callaghan.





## Give Lessons in "The Gentle Art" At Levack's Club

Art is not entirely confined to painting, sculpture, literature and music. To a Japanese, "The Gentle Art" means judo — the lightning-fast sport which can double as a ferocious means of self-defense.

A special item on the weekly bill-of-fare at the Levack Employees Club this winter is a course in judo given by one of the Sudbury district's leading exponents of this noble skill, Bob Cree.

The other night the Triangle watched Bill Shaver (lighter jacket) and Danny Laberge go through a fascinating display of judo tricks, some of which are shown here, and then had the pleasure of talking with Bob about his favorite sport, which he learned back in Scotland.

Bob is seen second from the left  
(Continued on Page 16)



Tai (Salutation)



Tomoenage (Stomach Throw)



O-uchi-gari (Leg Throw)



O-goshi (Loin Throw)



Deashi-hari (Foot Sweep)



Ukeni (Break Fall)



Choke Hold

## Give Lessons

(Continued from Page 15)

in the first of the accompanying pictures.

"Judo is definitely not a fighting weapon," Bob said, "though most people seem to think that that's what it was designed for. Actually, judo is a way of attaining pure efficiency, not only on the mat, but in everything we do in our daily life."

The "school" of judo, with its faintly mystic overtones, was founded by Dr. Jigaro Kano, Japan's leading educator, in 1886. The doctor combined the best points of the 12 leading forms of ju-jitsu, added a few refinements of his own, and injected this new pastime with a brand of sportsmanship that makes cricket a street brawl by comparison.

The champions of the ju-jitsu schools, the Babe Ruths and Mickey Mantles of what was then Japan's national sport, did not take kindly to Dr. Kano's fledglings. The issue was firmly settled during a tournament staged in the early 1900's, when judoists met and utterly defeated their ju-jitsu opponents. So complete was the victory that of the two, only judo today survives in Japan.

Bob got his introduction to the sport in Scotland's first judo club in Kilmarnock. "What got me interested first was the cat-like grace of the experts. I'd never seen anything like it. And it looked so easy!"

But it wasn't easy — or anything like it. Bob started in 1948, and the first six months were sheer torture. "I spent half a year learning how to fall, and I never want to go through anything like that again. It was the same thing, night after night. First, the instructor went through it slowly, teaching me how to use my arms to absorb the shock of falling. Then the tempo stepped up as I got the feel of it. Finally I got to the point where I could stand a whole series of body slams, but before that I spent a lot of time in a warm bath trying to untie the knots in my muscles."

One secret of judo is the ability to absorb the fantastic shock of a well handled throw. Tests have shown that the body is travelling between 50 and 60 miles per hour when it hits the mat. The shock is absorbed by a terrific full-length slap of the arm against the ground a fraction of a second before the body hits. A well-trained judoist can survive such a throw even against concrete.

The other secret is to develop pure efficiency. A judo contest looks something like a slow waltz — ending with a bone-crushing rock 'n' roll bit. The two opponents shuffle around the mat, each with a firm grasp on the white coat of the other. There's no strain — none of the bumps and grinds of television wrestlers. The men may chat, hum, stare vacantly somewhere else, or manage to look supremely bored. They rarely look at each other — there's no need to. But each is completely aware of what the other is doing, solely by touch. The slightest movement; a pull to one side, the start of a throw that won't work, a pivot, or a foot out of place — and lightning strikes. It takes just the split part of a second and, with a hair-

## Toronto and McMaster Students Inco Visitors



Thirty-six metallurgical students from the University of Toronto and McMaster University, Hamilton, were keenly interested visitors at Inco operations at Copper Cliff. The picture shows a group watching casting of a ladle of Bessemer matte into a mould in the first stage of the matte treatment process at the smelter; their guide is J. R. Felck, converters superintendent. Dr. H. E. Petch and Dr. W. W. Smeltzer of McMaster and H. U. Ross and A. W. Lund of the University of Toronto were the faculty members accompanying the party. At a luncheon at the Copper Cliff Club the visitors were cordially welcomed to Inco by general manager R. H. Waddington.

raising crash, one of the men is flat on his back.

Judo is full of symbolism. The white costume denotes purity of spirit and mind. The wearer does not fight in anger, and may not while he wears the jacket. To stress the point, matches begin and end with a deep, kneeling "salaam" to the opponent. The practitioner — for such he is — attempts to apply the developed sense of efficiency of movement and thought to his daily life. And, knight-like, he is bound to use his art in defense of the weak and helpless.

So deeply rooted is judo in Japan's culture that literally everybody who is anybody is an expert. Most diplomats, for instance, are at least "ne dans" — second degree black belts.

There are seven belts, ranging down the color scale from white — the novice — through yellow, orange, green, blue, brown to black, the true judoist and the goal of every beginner. There are 10 degrees of black as well, but anything beyond six is usually an honorary title. Bob holds a second degree black.

"Judo has taught me a lot of things besides the sport itself," Bob said. "When you start applying some of the principles to your daily living you realize how deep it can go. It can give a man a wonderful sense of well-being and contentment."

Any Inco employee in the Levack area — or farther afield for that matter — who would like to give judo a try will be heartily welcomed to Bob's class at the Employees Club. A new group will be started any time a sufficient number show their interest.

### SPECIAL EVENT

"Lady," said the tramp, "I'm hungry, could you give me a piece of cake?"

"Isn't bread good enough?" asked the woman.

"Usually, ma'am," was the reply, "but today's my birthday."

## Murray Miners with Lulu from Loon Lake



Three highly pleased Murray miners were Wally Nevin and Joe and Amle St. Onge, shown here with the beautiful 17-pound lake trout they caught while fishing through the ice at Loon Lake, behind Espanola, on January 3. They were using an 8-pound test line with a chub for bait. Wally said it took them 20 minutes to get the big fellow through the hole. The picture was taken by Hub Beaudry of CKSO-TV.