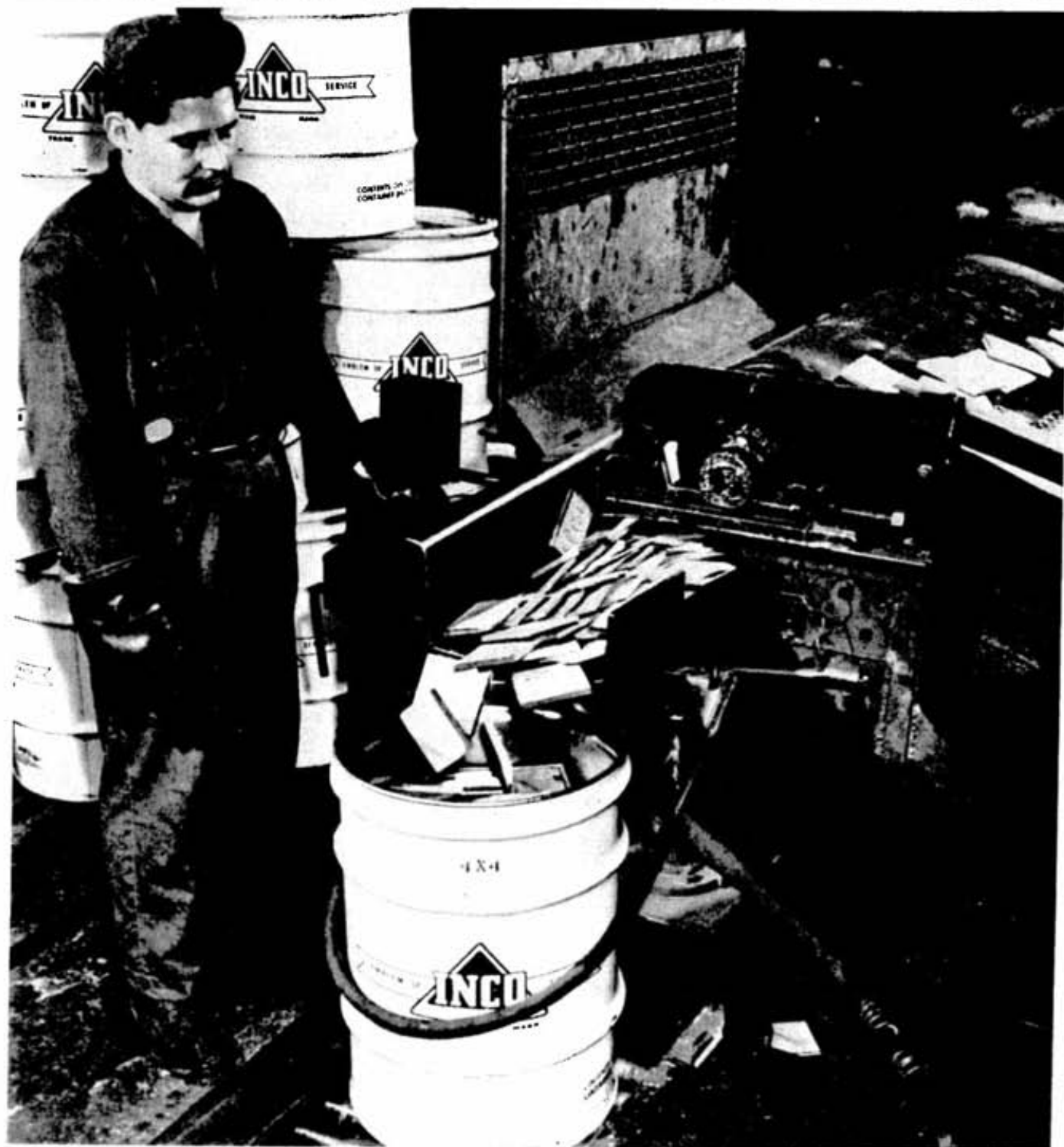


INCO TRIANGLE

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Nickel on the Way to Market



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Don M. Dunbar, Editor
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Boost Capacity of Creighton Mill

Enlargement of the capacity of the concentrator at Creighton Mine to 12,000 tons of ore per day has been announced by Vice-President J. Roy Gordon. He described the development, which adds 20 per cent to the concentrator capacity, as a step in Inco's program of providing maximum nickel production for the requirements of the free world.

The mill building has been enlarged to a length of 465 feet. It is 175 feet wide and 70 feet high. Two crushers have been added to the original four. Thirty-six flotation machines were also added, bringing the total to 180.

The capacity of the mill, in which nickel-copper ore is separated from rock before smelting, has been enlarged twice in response to increased nickel demand for defense and civilian requirements, Mr. Gordon said. When it was designed in 1948, it was to have a daily capacity of 6,000 tons, but plans were changed in 1950 — two weeks after the outbreak of hostilities in Korea — to enable the mill to accommodate 10,000 tons of ore per day. The new capacity of 12,000 tons is, therefore, double that originally planned.

International Nickel is presently producing refined nickel at an annual rate of approximately 275,000,000 pounds.

The concentrator is at the site of Creighton No. 7 shaft, completed in 1951 at one of Inco's oldest operating mines, the Creighton, which has a record of production dating back to 1900. The shaft brought to 14 the number in operation at the Company's mines.

Zinkie Record Zooms Again!

Another substantial contribution has been made to the Zinkie record of Inco service with the retirement on pension of Gus Zinkie, third class powerhouse engineer at Copper Cliff.

Fred Zinkie, who died in May of 1935 at the age of 89, made the initial entry with his 26 credited years. Then his son William of Copper Cliff, who at 76 is still as spry as a young colt, added 49 years and two months when he retired — the longest Copper Cliff service recorded to date. Gus has boosted the Zinkie record by another 31 years and six months, and his sons give promise of doing even better: Gordon, of the Control Lab at Copper Cliff, has 25 credited years although he is aged only 40, and Elmer of the reverberatory furnaces has acquired 19 credited years at age 36; a third son, Mervin, whose tragic death took place last year at the age of 38, had served 19 years with the Company. Truly a noble record is that of the Zinkies.

Gus Zinkie was born in Renfrew County near Pembroke, in an Anglican vicarage which happened to be the only available house when his family moved into the district. This atmosphere in which he spent his tender, formative years undoubtedly had a good

Saturday Night Square Dances



At Levack Employees Club, where Lloyd Davis has taken over as manager on the retirement after many years of faithful service of Mrs. Frank Crome, a Saturday night square dance session is proving a red-hot attraction. The initial turnout early in February was 32 but the attendance soon zoomed past the 100 mark. In the group above, snapped in a dizzy elbow swing, are Doris Demers, Beth Lejambe, Doreen Karchle, Norma Malleau, Frank Delorme, Winston Bushnell, Buck Sauve, and John Gallant. For those who wish instruction in square dancing, classes are held at the club on Friday evenings from 7.30

effect upon him, and acted as a restraining influence during his boyhood in the rugged mining camp of Stobie, to which his father, Fred Zinkie, moved about 1892.

Gus attended the one-room school and during the summer months he picked rock on the tables in the Stobie rockhouse. His first steady job was as skip-tender at No. 2 Mine, working the opposite shift to Jim McNiven. During the ensuing years he broke his service with the Company several times, either to try other jobs or because of long bouts of illness with which he has often been

Cliff as a girl of 10 with her parents, Mr. and Mrs. William Blanchard. In addition to their sons they have a daughter, Velma, whose husband, Ian McLay, is employed at the Oxygen Plant. They have nine grandchildren.

Planning the future, they have just about decided to buy or build a home in Gatchell.

To show their esteem for Gus, the boys at the substation made him a retirement gift of an easy chair and lamp, of which he is proud indeed.

THE FRONT COVER

One of the forms in which pure electrolytic nickel is shipped from Inco's refinery at Port Colborne is in 4-inch squares which are packed in steel drums holding between 500 and 550 lbs. In Triangle's front cover picture this month the silvery squares are seen passing from the shearing machine belt to a vibrating guide from which they drop into the drum. The rollers on which the drum stands are also vibrating to joggle the contents and thus pack in as much as possible. When the drum is filled it is pushed down the rollers to a man who heads it up ready for weighing and shipping or for storage. Operator seen in the photograph is Adam Katz.

BOOST CREIGHTON LIBRARY

Creighton Mine's public library fund got a substantial boost from the proceeds of a concert given at the Employees Club. John Douglas, master of ceremonies, acknowledged the generous assistance of the contributing artists: the regimental band of the 58th Light A. A. Regt. of Sudbury, under the baton of Lieut. Tom Clegg, appearing through the kind permission of Lieut.-Col. Carl Wilson; the Nickeltones male quartet, and Mrs. Bruno Taus, popular vocalist.

Small deeds done are greater than great deeds planned.—Peter Marshall



MR. AND MRS. GUS ZINKIE

afflicted. It was in September of 1922 that he rejoined the Company to remain until his retirement.

Gus was married on June 19, 1912 to Willo May Blanchard, who had come to Copper

INCO FAMILY ALBUM

If, as Robert Burns wrote, an honest man's the noblest work of God, then a man proud and happy in the bosom of his little family is one of the finest sights to see. This month we greet: to the right, Mr. and Mrs. Cyril Fortier (Coniston Smelter) with Joe, 19, and Annette, 11; not shown, Lucille, 21, in the RCAF, and Jack, 17, in the Navy. (1) Mr. and Mrs. Ken Conley (Copper Refinery) with Grant, 2, Billie, 4, and Roy, 6. (2) Mr. and Mrs. Alfie Mallette (Levack Mine) with Jill, 5, and Judy, 9. (3) Mr. and Mrs. Charlie Ramsay (Port Colborne Refinery) with Richard, 8, and Roberta, 1. (4) Mr. and Mrs. Harry Marchand (Frood-Stobie Mine) with Gall, 2, and Terry, 10 mos. (5) Mr. and Mrs. Rosaire Guillet (Copper Cliff Smelter) with Cecile, 9, Arthur, 3, Armand, 8, Henry, 15, Wilfred, 12, and Rose, 17. (6) Mr. and Mrs. Eddie Cayen (Creighton Mine) with Rochelle, 9, Pauline, 11, Donna, 11 mos., Cecile, 5, Brian, 4, Susan, 6, Chris, 2, Dennis, 8, and Muriel, 12.





Bowling Party For Lively Was Great Success

A Mother and Daughter challenge bowling night was a special stunt arranged one evening last month by Lively Athletic Association.

Almost 60 teen-agers and their mothers invaded the Creighton Employees Club and proceeded to give pins and alleys a going-over long to be remembered.

The party had to be run in two shifts, one bus leaving Archibald's Confectionery at 6.30 and the next at 8.30. Transportation and other arrangements for the highly successful project were handled by the bowling committee of the Lively Athletic Association, of which Ray Forth is chairman and Mrs. Barbara Duncan is secretary. Of great assistance to them were members of the school teaching staff, including Misses Bishop, Shane, Rutherford and Hanley.

The daughters, who take part in a regular bowling league, were prepared to mete out gentle treatment to their opponents, of whom some had not bowled before and others not for many a moon. But some startling surprises were in store for them, and a ding-dong battle was soon under way as the greatly under-rated mothers showed natural skill developed by wielding the floor-waxer and doing the ironing.

In the accompanying photographs are the gladiators from both camps, and a very attractive group of people they are, too.

FIRST PICTURE: Back row, Diane Wilson, Carol Mahon, Carol Blanchard, Joyce Ferris, Rhoda Beilhartz, Sandra Keirle; Front row, Mrs. McCleary, Mrs. Mahon, Mrs. Duncan, Mrs. Ferris, Mrs. See, Mrs. Grandy.

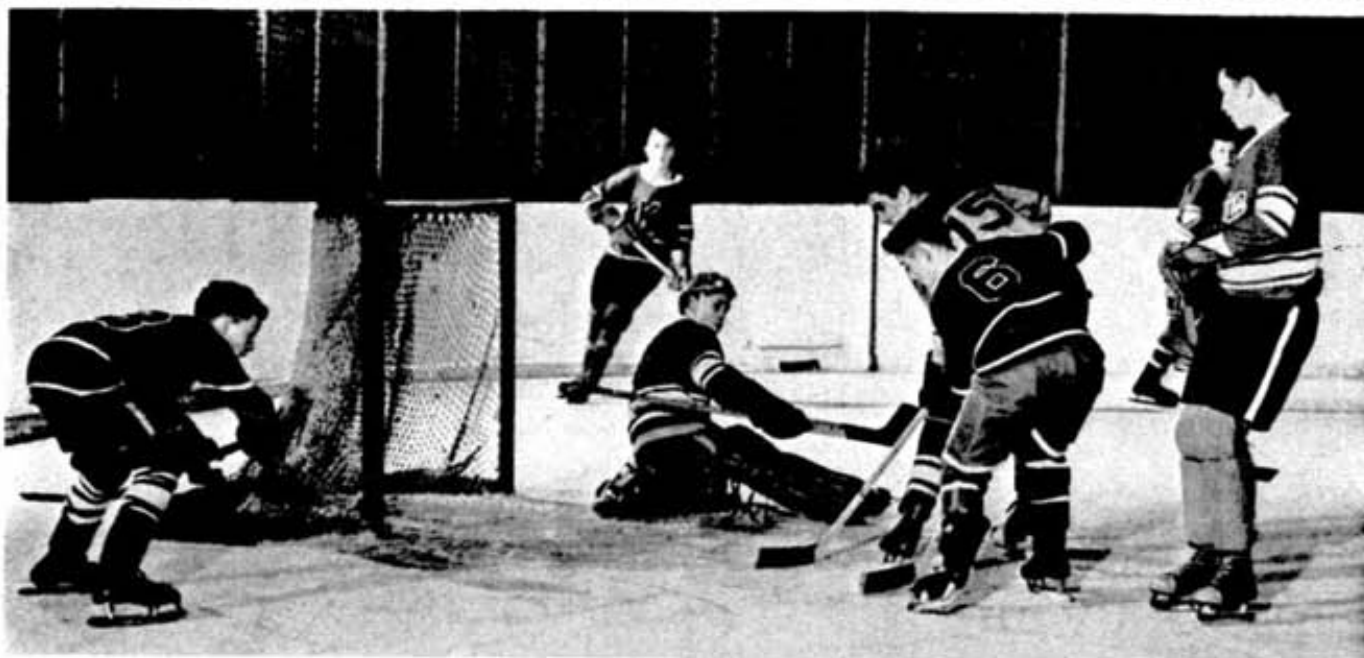
SECOND PICTURE: Back row, Betty Fortin, Patsy Spencer, Jeaneen Perron, Mrs. Bell, Elvi Ikonen, Jeannine Lapointe, Jacqueline Robertson, Carmen Porter; Front row, Mrs. Villeneuve, Mrs. Donnelly, Mrs. Beaudry, Mrs. Difilipo, Mrs. Porter, Mrs. Buchy, Miss Bailey, Miss Shane.

THIRD PICTURE: Back row, Peggy MacFarlane, Ruth Beilhartz, Betty Jean Burchell, Marguerite Spencer, Joan Frizell, Betty Macadam, Barbara Davey; Front row, Mrs. Fenske, Mrs. Morrison, Mrs. Burchell, Mrs. Wheaton, Miss Bishop again, Mrs. Stephens.

FOURTH PICTURE: Back row, Gayle Hillen, Helen Fajcz, Beth Shoveller, Audrey Loupelle, Ray Forth (chairman of the bowling committee), Betty Frantz, Patsy Martin, Marilyn Kovulchuk; Front row, Miss Bishop, Mrs. Fajcz, Mrs. Hillen, Mrs. Loupelle, Mrs. Latour, Mrs. Martin, Mrs. Shoveller, Mrs. Kovulchuk.



Four well-known helpers of kid hockey in Sudbury are seen in a huddle: Harry Marchand, a referee; Tony DeMarco, secretary of the city's Recreation Committee; Bert Prete, coach of the Police team, and Lloyd Neilly, treasurer of the Service Club league.



Every Saturday morning Sudbury Arena is turned over to the Recreation Committee for kid hockey, so that the youngsters who see action on the playground rinks can kick up their heels in the big time for an hour. There's also a regular hockey instruction period in which a lad learns how to handle himself.

These pictures were taken during a regular Saturday morning session at the Arena. The first two shots show some of the action in a Service Club league match between Police and Kiwanis which got underway sharp at 7.00 o'clock. The other two pictures catch a couple of brilliant goal-tending efforts in a Playground Rinks league encounter between Kingsway and Riverside.

Tradition-True Nickel Belt Is Hockey Hotbed

Living up to the traditions of a district that for many years has been famous as one of Canada's real hotbeds of hockey, the Nickel Belt has a smoothly organized network of leagues — and leagues within leagues — that bring the game practically right into the backyard of every boy who wants to play.

Five Sudbury service clubs each sponsor, equip and coach a team in one league of Police, Lions, Elks, Kiwanis, and Canadian Legion.

Every public school in the city has a team, picked from each of two age groups, in the Public School league, as has every separate school in the Separate School league.

Each of the seven city playgrounds enters three teams in the Playground Rinks league for peewee, minor bantam, and bantam competition.

As in the other loops, playoffs are now underway in the big Nickel Belt Minor Hockey league, which is affiliated with the NOHA and which embraces Capreol, Coniston, Falconbridge, Garson, Gatchell, Copper Cliff, and several Sudbury teams. In this setup during the season just closing, three teams of 54 boys have played minor bantam, five teams of 80 boys have played bantam, seven teams of 112 boys have played midget, and two teams of 36 boys have completed the juvenile schedule.

(Continued on Page 10)



One of the Best Early Pictures of Copper Cliff



Les Wingrave's Prize Souvenir Taken in 1900

One of the best photographs of early Copper Cliff is this view taken in 1900 from the hill on Granite Street back of the present municipal building. The photograph, very well preserved, was loaned to the Triangle by Les Wingrave, a skimmer on the nickel converters, whose father William was an Inco man before him.

The building partly shown at the left, on the present hospital site, was the general office of the Canadian Copper Company. The railings in front were required to maintain an orderly procession on pay day when the employees filed past the front window to receive their wages from the paymaster, A. P. Turner, who later became president of the Company. The house farther on, at the base of the Clarabelle Road hill, was the home of Dr. and Mrs. Coleman, the latter locally famous as Kit, correspondent of the Toronto Mail and Empire.

On the left side of Clarabelle Road as it climbs the hill in the distance can be seen the log cabins which were the homes of such pioneers as the Stoddarts, the Boyds, the O'Donnells and the McKerrows. Those well-built cabins still stand. The building under construction on the right side of Clarabelle Road was the new Methodist Church, and in the houses this way from it lived Archie Burton, Billy Rowe, Jack Saunders, Mrs. Hanna, and Tom Best.

On the skyline about the centre of the picture are the rockhouse and powerhouse of No. 2 Mine, and to the right of them the East Smelter, the second smelting plant built by the Company. On the trestle leading down from the mine jimmy cars were operated to take the ore to the West Smelter, which had been abandoned when this picture was taken and was doomed to be destroyed by fire. It was located near the houses which now stand alone to the right of the highway as it leaves Copper Cliff for Sudbury, and was the first smelting plant. Years later the trestle was filled in with rock removed when excavations were blasted to prepare the site for the present smelter; the rail line is still in use, of course.

Facing the camera at the corner of Serpentine Street, where the Bank of Toronto now stands, was the Yellow Club, a toney bachelors' residence. Next was Hamilton's Store, later to become Oliver's Hardware Store. Next was Smith's Boarding House, which served meals at all hours, and then Bill Kilpatrick's Store, which had the post

office. Only the back part of Mulligan's Drug Store can be seen.

There was a single-plank sidewalk on one side of the street only. After a heavy rain wagons would get stuck axle-deep making the turn at Granite and Serpentine.

The building on the corner in the immediate foreground was Dick Anderson's tailor shop. Only the peak can be seen of the roof on Hamilton's livery barn, where a horse and rig could be rented for \$1.25 for the trip to Sudbury. John Garrow, who with Billy Chapman has been good enough to identify the photograph for the Triangle, and whose reminiscences these are, recalls the wild night this little cluster of buildings burned down. Seven or eight horses were lost. Among those answering the fire alarm was Billy Moore, who paused only long enough to don a raincoat and a pair of rubber boots but nothing else. Not soon forgotten was the sight of Billy atop the Greek confectionery, heroically manipulating a fire hose in the ruddy glow of the flames, the wind tugging and tossing his raincoat.

The two larger buildings in the right foreground were Boyle's and Boyd's boarding houses. McBeth's Tailor Shop, and the Greek confectionery which was eventually bought by John Anderson, occupied a building put up to the left of Boyle's a short time after the picture was taken.

On the right, next to Boyd's, is seen the structure erected by Dr. Struthers and J. S. Gill, jeweller. When he closed his Copper Cliff office Dr. Struthers rented his half to a milliner. The milliner had a big dog, perhaps not as big as Mrs. O'Leary's cow of Chicago Fire fame, but in any event big enough to kick over a lamp early one winter's morning, and soon the building was ablaze. Bill Dorsett of Sudbury, who was then 18 and working for Mr. Gill, graphically remembers that hectic experience. Pitt's boarding house the long log structure next door, was saved from the flames only because Bill Kilpatrick, the storekeeper from across the street, quickly recruited a bunch of men to pelt the logs with snowballs and thus put out the flying sparks and embers.

Tom Lloyd Passes His 105th Birthday

Thomas A. Lloyd, of Cardiff, Wales, the oldest living pensioner of The International Nickel Company of Canada, Limited, and its subsidiaries, celebrated his 105th birthday last month.

"Tom" Lloyd, white-haired and full-bearded and one of the oldest pensioners in the world, appeared in the September issue of the Triangle in a photograph taken at the Coronation dinner given for the old-timers at the Clydach refinery.

Britain's Queen Victoria had reigned for 12 years when Mr. Lloyd was born on January 2, 1849, at Caerphilly, near Cardiff. He lived through her reign and that of Edward VII, George V, Edward VIII and George VI. On the occasion of his 100th birthday, he received a congratulatory letter from King George VI.

Mr. Lloyd joined Inco's United Kingdom subsidiary, The Mond Nickel Company, Limited, in 1901 as mechanical foreman at its Clydach, Wales, Refinery. He retired December 1, 1925, after 24 years of active service.

He was a musician in his leisure time, playing a cornet in the Mond Band and serving as bandmaster of the Caerphilly Band.

There are more than 1,000 living pensioners of International Nickel throughout the world, including about 350 in the United Kingdom.

How to Start the New Year Right



Angelo Condotta of the Copper Cliff electrical department didn't have it listed as a New Year's resolution but after receiving a \$213 Suggestion Plan award for proposing that salvage boiler tube be used in place of lumber under pole stands on the slag dump, his mind will be working overtime for new ideas to improve operations. Angelo has put the money to good use — payments on a house he is buying at 66 Clemow Avenue in Gatchell. Above, he and his wife have a firm grip on the Inco cheque. The Condottas have four children, Ralph, 13, Dennis, 12, Allan, 6 and Judy, 3.

Except for the war years the manufacture of pulp and paper (not counting operations in the woods) has been since 1921 Canada's leading industry in point of value of products and wages and salaries paid to workers.



Levack Ladies' Curling Party

Unanimously endorsed by both clubs as one of the most enjoyed events of the season was the exchange of matches when Levack lady curlers entertained a busload of almost 30 sisters o' the stane from Copper Cliff.

The official scorekeeper for the afternoon discreetly lost her pencil but the result was probably a tie anyhow.

The Triangle camera caught a few snaps of the activities:

1. What would a curling match be without the "plate-glass skips" who call every shot and are the only players in the rink who never make a mistake!

2. Over a post-game cup of coffee Mrs. Jackie Fraser of Levack and Mrs. Clara Tuttle of Copper Cliff compare notes on club activities.

3. A Copper Cliff team of sweepers: Mrs. Lynn Forster (right) heeds her skip's frantic cry to "Sweep!" and Mrs. Gladys Saville hastens up to lend an elbow.

4. Mrs. Mildred McGowan is the Levack skip seen here getting a rock nicely away.

5. Dusting it off ahead of this speeding stone are Mrs. Leona Belcher and Mrs. Alice Davidson of Levack.

6. One of the Copper Cliff skips, Mrs. Doris Taylor, kneels on the tee to study the approach of a take-out her third has thrown. Behind her is Mrs. Olive Wright, a Levack skip.

7. Well-known for her smooth style in the hack is this Copper Cliff skip, Mrs. Jean Wright.

8. Congratulations on a well-played game are exchanged by two opposing skips, Mrs. Anne Bell of Levack and Mrs. Bernice Wilson of Copper Cliff.

9. Two vastly over-worked seconds, Mrs. Phyllis McFarlane of Levack and Mrs. Ethel Fitzgerald of Copper Cliff, enjoy a well-earned respite.

Aye, lass, you's a grand old game!



"SKY HOOKS" THAT WORK



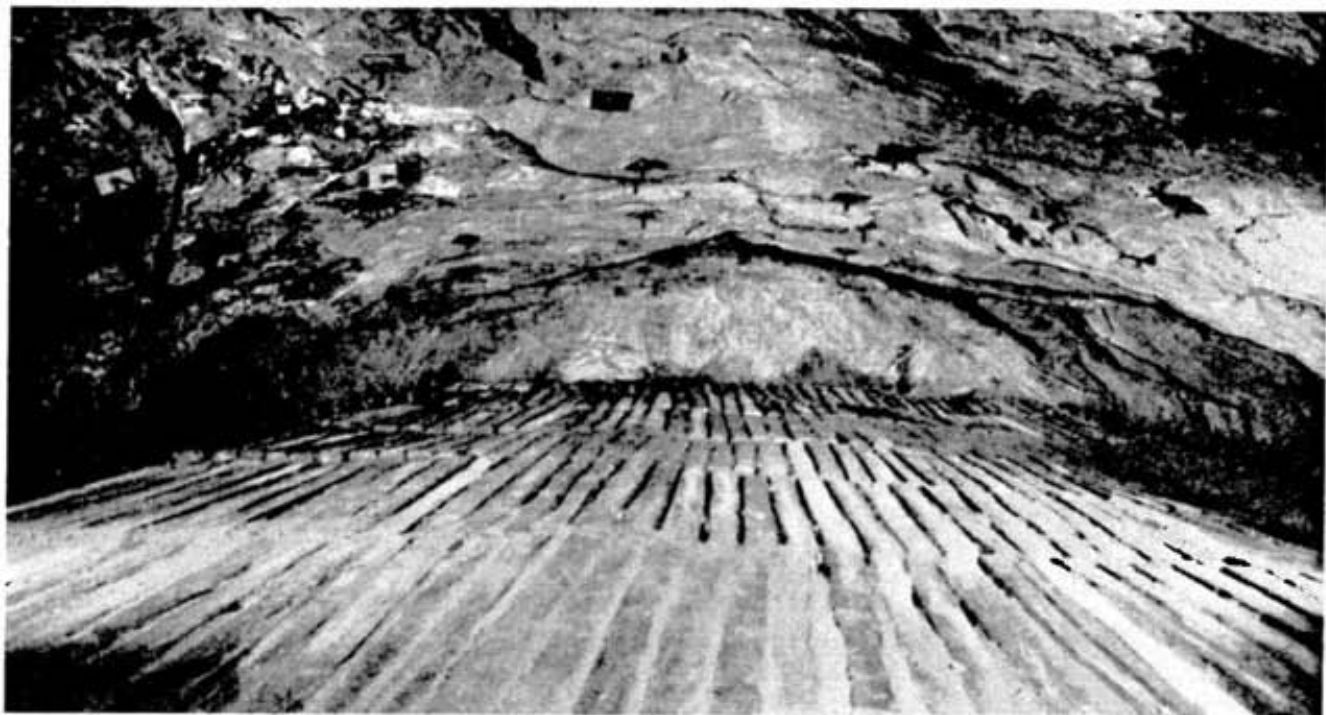
In a cut-and-fill stope at Garson Mine, Paul Korchouski, stope boss, is operating a stoper to drive a roof bolt tight on its wedge. Several roof bolts are seen in place in the back, or roof, of the stope. Six feet long and firmly anchored, they lock the ground tightly into a self-supporting arch which requires no timber.



Shift boss Jack Ferguson demonstrates how a roof bolt is tightened to a tension of 7 tons with an impact wrench.



Here Jack Ferguson uses a torque wrench to check the installed tension of a roof bolt. Spot checks such as this, and further periodical inspection of roof bolts with a hydraulic pull tester, are a regular assignment for mine supervision.



The self-supporting arch, firmly anchored by roof bolts, is clearly seen in the back of this big cut-and-fill stope on 2,000 level at Garson Mine. One cut has been completed and filled, a mucking floor has been laid, and the stope is ready for mining the next cut. Stopes are usually about 32 feet wide.

Self-Supporting Arch is Formed By Roof Bolting

The fellow who dreamed up "sky hooks" for hanging something from nothing would be astonished to see how the mining engineers have straightened out his zany idea and what wonderful things they're doing with it.

Roof bolting, hard-headed descendant of the "sky hook", is a modern technique of far-reaching importance to the safety and efficiency of underground metal mining. Where the ground requires a certain amount of support, roof bolting can be used to lock the back, or roof, of an underground opening firmly into a self-supporting arch.

By thus tightening up blocks of ground it eliminates potential accident hazards. Loose is less likely to develop because the ground is pinned together and acts more as a beam.

In drifts and main haulage ways it may take the place of timber, increasing space and visibility and improving ventilation.

Even in big cut and fill stopes it does away with the need of building cribs to support the ground, thus greatly simplifying slushing operations which often are hampered by the location of the cribs. The danger of timber supports being dislodged by blasting or in moving equipment no longer need be guarded against.

"The application of roof bolting in metal mining is relatively unexplored as compared with its widespread use in the coal industry," Superintendent Norman Wadge of Garson Mine told the Triangle. "In coal mines, where the rock is stratified, roof bolts are used to bind the layers together to form a competent beam strong enough to support its own weight and pressure from above. In metal mining, which has adopted it extensively only during the past few years, the application is primarily to lock individual blocks into a self-supporting arch, thus preventing loose from developing."

Anchorage of the bolts presents a much

greater problem in the hard rock encountered at Inco than in the softer formations found in coal mining, the Triangle learned. Rigid attention to size of hole, size and shape of wedge, and method of driving the bolt is necessary to obtain maximum anchorage of

the bolt.

In addition to their use in stopes and drifts, roof bolts have been considered by Inco's Mines Department as a replacement for steel beams for back support

(Continued on Page 10)



This is an example of roof bolting in a standard Garson drift which otherwise would have had to be timbered. Testing bolts with a torque wrench is Foreman Ralph Armstrong.

Big Banquet Staged for Bill Hodgins



More than 100 turned out to give Bill Hodgins a rousing send-off as he stepped into retirement at Copper Cliff. The party was held at the Italian Club and featured copious helpings of succulent spaghetti and chicken. Head table guests shown above were (seated) W. J. Ripley, Bill Hodgins, and John W. Garrow; (standing) Alex Salo, Fred Savage, Duncan Finlayson, W. G. Beaver, Bill Perlini, and Eddie Saville. The guest of honor was presented by Bill Perlini with a purse with a purse, and by Fred Savage with a cleverly built model of a Brown hoist similar to the one he operated throughout his 34-year career with Inco.

Had Lifetime Yen for Bush



John Poutanen with two of his grandchildren, Fay and Brenda Pirto, aged 7 and 4.

When Crean Hill Mine shut down in 1919 John Poutanen turned to the surrounding bush for his livelihood, and during the next four years supported himself and his family comfortably by fishing, hunting and trapping.

"Prices for furs were good then," he recalls. "Much better than now. We got \$60.00 for beaver, \$50.00 for otter, \$40.00 for mink."

And he loved the life of the woodsman. As a matter of fact he says he would never have left it except that the time came for his two little daughters to go to school. So in 1923 John moved into Creighton and took a job at the mine. He stuck with it and when he retired there last month had accumulated credited service of 29 years and 3 months — pretty steady going for a fellow with a permanent yen to be some place else.

Born in Finland, John came to Canada in 1909. He and his third wife, to whom he was married in 1950, have a very comfortable new home with all the modern gadgets on McLeod Road, Lockerby. He has two daughters, Mrs. Wm. Maki of Wahnapiatae and Mrs. Frank Pirto of Lockerby.

He has had considerable trouble of late with his eyesight but hopes that some further surgical treatment in the near future will fix him up so he can get out into the bush whenever the spirit moves him.

Tradition-True

(Continued from Page 5)

Dick Waide is president of the Nickel Belt Minor, Val McGauley is vice-president, and Les McDonald is secretary-treasurer.

The High School league has been hotly contested again this season; five teams battled through the senior schedule and four contested the junior schedule, a total of 135 players.

And then there are what George Kormas, Sudbury's recreation director, calls the "house leagues" — dozens of teams at the Sudbury playground rinks, in Copper Cliff, in Falconbridge and other centres, which play their own schedules and serve as feeder clubs for the all-star lineups.

Co-ordinating agent for minor hockey in Sudbury is the recreation committee appointed by the City Council to direct all phases of recreation in the city: W. C. Jarrett, chairman; Emil Chiasson, vice-chairman; Tony DeMarco, secretary; Doug Yuill and "Spike" Hennessy, members. Working with Recreation Director George Kormas, this committee performs an extremely valuable service.

As the playoffs gradually weed out the field this spring to the point, finally, where the Northern Ontario champs are declared in the four age groups, and the midget and juvenile victors prepare to do battle with the South for all-Ontario honors, there'll be about 1,500 other kids with the good feeling that, while they didn't get to the very top, they had a heck of a fine time trying. And there's always next year.

Roof Bolting

(Continued from Page 9)

In shaft, crusher, and slusher stations, in boxhole brows to prevent excessive enlargement and avoid the necessity of concreting, and in fresh air raises as an alternate method to enlarging and concreting.

In roof bolting a stope, the bolts, 1 inch in

diameter and 6 feet long, are located a maximum of 5 feet apart. In drifts, 4-foot bolts are used in rows 5 feet apart, with 3 or 4 bolts to the row, depending on the width of the drift.

Holes are drilled in the back with regular mine stoppers, depth of the holes being 2 to 3 inches less than the length of the bolt. Split at the end and seated on a steel wedge, the bolt is then driven into the hole with the stopper, which is equipped with a special chuck for this purpose.

Maximum anchorage of the bolt in the hole is obtained by driving with the stopper for about 1½ minutes. Then a plate 6 inches square is attached with a nut to hold it, and the bolt is tightened with an impact wrench to an installed tension of 7 tons.

Torque wrenches are used by the mine supervision to spot-check the installed tension of the bolts. Anchorage obtained on the bolts is also checked periodically with a hydraulic pull tester, and it has been found that even under a strain of 19 or 20 tons a properly seated bolt will break before the wedge will pull loose.

Came to Visit, Here 35 Years



MR. AND MRS. JOHN WERSTIUK

Like "The Man Who Came to Dinner", John Werstiuk arrived in Canada for a visit and is still here, although he didn't have to break a leg to extend his stay and has never even come close to wearing out his welcome.

John came from the Western Ukraine in 1908 to visit his sister at Arnprior and is still postponing his return to the little 15-acre farm where he and his father raised wheat, barley, and rye.

For 16 years after his arrival he worked at various jobs, chiefly in the lumber camps and sawmills, until he signed on with Mond at Coniston in 1924. He started as a machine man in the sinter plant under Fred Stephenson. When he retired on pension last month he had credited service of 26 years and 7 months.

Dancing has always been his favorite fun. In the old days, when the mood was on him, there was no other gay young blade in the district smoother at the one step, fox trot, or waltz. He still shakes a nimble hoof.

John was married in 1931 to Sophie Aker, who has two sisters at Coniston, Mrs. Frank Klimik and Mrs. Bill Curlook. His daughter Mary teaches in Sault Ste. Marie.



The Northern Ontario soccer champions pose in their nifty new sports' jackets.



In this table group are Mr. and Mrs. Vic Stone (he was master of ceremonies), Geoff Wilkinson (winner of the Barlow award for individual stardom), and Mrs. Dave Lennie (wife of the asst. mine superintendent).

Honor Gunners For Great Finish In N.O. Soccer

The great driving finish which carried Garson Gunners to the 1953 soccer championship of Northern Ontario and the Star Cup was acclaimed at a banquet in their honor given at the Caruso Club.

On behalf of the football committee of Garson Mine Athletic Association, the players were presented with smartly styled sports jackets by Dave Lennie, asst. superintendent of the mine.

Geoff Wilkinson, brilliant Garson half back, received the Barlow award for the player most valuable to his team. The presentation was made by Jim Nemis, past president of the Sudbury District Football Association and one of a small group of men whose consistent interest and efforts has been responsible for nourishing local soccer through desperately lean years and safely into the present period of plenty.

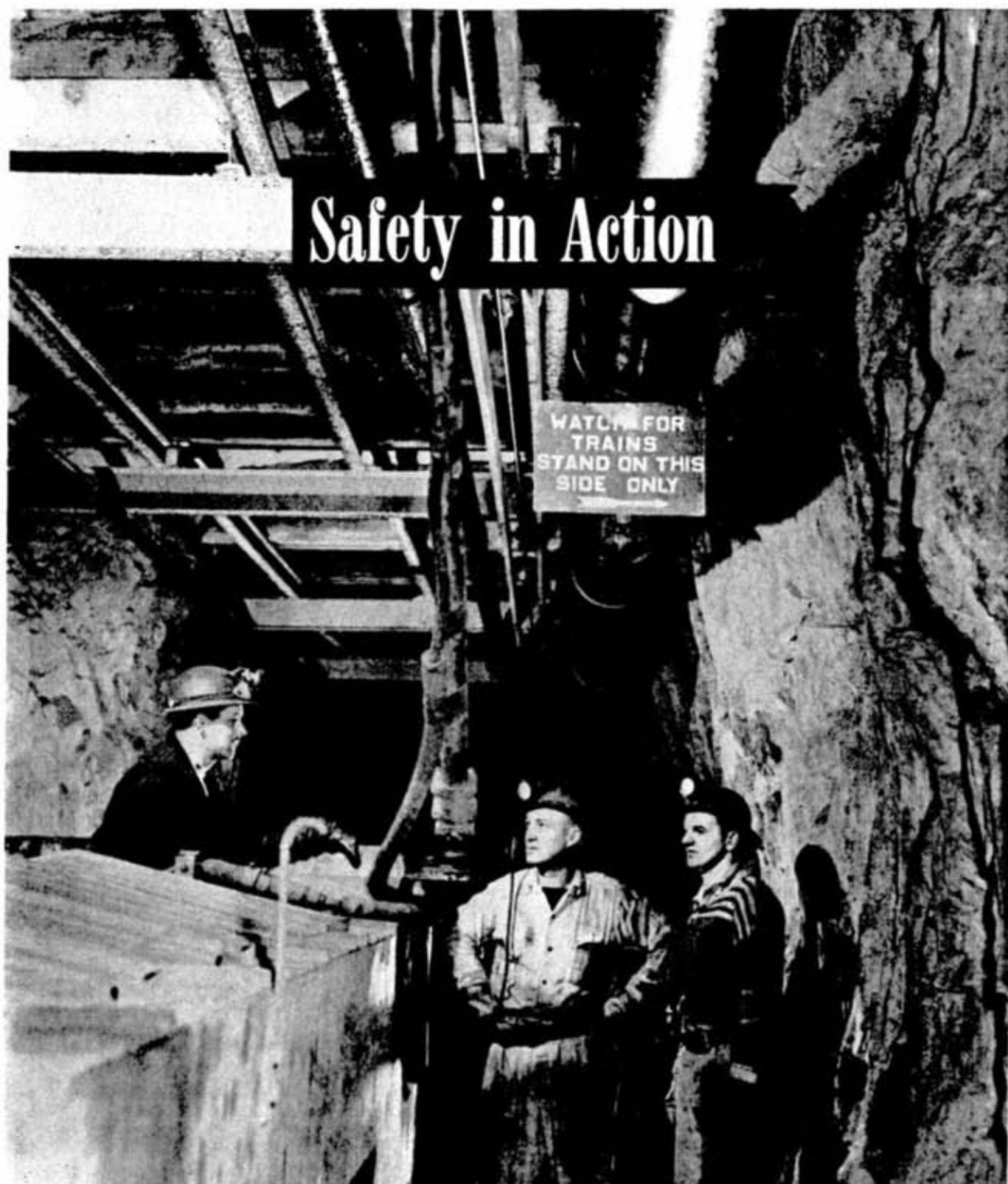
Master of ceremonies at the very enjoyable dinner party was Vic Stone, secretary of the Garson A.A.'s football committee.

After finishing fourth in the league's regular schedule, Gunners uncovered unsuspected reserve strength to go through to the Northern Ontario title. Standing in the regular league play was topped by Croatian-Adria, followed by Ukrainians, Italia, Polish Eagles, Garson, Hungaria, and Black Devils.

Members of the Gunner lineup, seen in the above photograph, are: kneeling, left to right, Gordie Young, Ollie Matson, Bobby Elliott, Ronnie Matson (mascot), Bill Rowarth, Jerry Schuran, Alan Steele and Scotty Muir; standing, Dave Lennie, asst. superintendent of Garson Mine, Tauno Perala, Bobby Weston, Hughie Rorison, Mrs. Mel Young (a most acceptable substitute for her husband, who was unable to attend), Joe McCauley, Morris Chayka, Geoff Wilkinson, Pete Kolundzie, and Taffy Davis. Unfortunately not present, Bob McCauley, Nick Gadjeck, Lobo Bojicic, Mel Young and Vaino Maki.



Snapped at another table were (foreground) Mr. and Mrs. Bill Rowarth and (facing camera) Mr. and Mrs. Andy Muir and Mr. and Mrs. John Brodie.



Day in and day out, with a vigilance that never relaxes, Inco's safety program reaches to every nook and cranny of the operations. Stope by stope and level by level down through the mines, floor by floor and job by job up through the towering surface plants, the carefully calculated campaign for the prevention of accidents is waged by a dedicated group of engineers. Pictured above is a typical example of Safety in Action at Inco: during one of his regular daily inspections at No. 7 Shaft of Frood-Stobie, Safety Engineer Arvo Sirkka (centre) is testing a motor crew in the main South drift on 1,000 level. They have brought their 20-ton locomotive with its string of big ore cars to a halt while he shoots questions at them about standard tramming practice, cautions them about alertness in handling such heavy equipment, reminds them to pay particular attention to working crews and other men encountered on the level, as well as approaching trains. Just as important as warning other people, he stresses, is seeing that they observe the warning. Then he checks their locomotives' lights, horns and brakes to make certain it is in safe working condition and sends Motorman Art Deschamps and Switchman Leo Marcotte on their way with a final friendly admonition to "Work Safely!"



Heart troubled?

You perhaps have read, and may even have worried, about the reported increase in heart disease. Remember, however, that this increase we hear so much about is primarily a problem of late middle and old age.

As you know, folks are living much longer nowadays because comparatively few lives are cut short by the infectious diseases of childhood and youth. Consequently, there are many more old people than there used to be, and it is in the older ages that the heart is most likely to get in trouble. In youth and in early middle age there is much less heart trouble than there used to be. Then, too, because of modern knowledge and methods of diagnosing disturbances of the heart and circulatory system, many illnesses that would formerly have been attributed to other causes are now properly classified as resulting from heart disease.

Find Out for Sure

Sometimes the development of heart disease is not accompanied by any symptoms; sometimes the body sends out warning signals that should be heeded immediately. They may not mean heart disease, but it is wise to see your physician if you notice any of the following:

Unusual shortness of breath — If associated with moderate exertion it can be an early symptom of a weakened heart muscle.

A Feeling of Tightness or Pain in the Chest Directly Related to exertion or excitement — There are many other reasons for discomfort in the chest besides a troubled heart. Any extra pressure, for example, gas in the stomach or intestine, may give rise to pain in the chest although the heart is completely well. But if you have any doubt about it, play it safe and see your doctor.

Swelling of the Feet and Ankles — When circulation is slowed up because the heart fails to pump with its customary vigor, fluid may gather in the tissues and cause swelling, which is usually first noticed in the feet and ankles.

Unusual fatigue — It may be a sign that you have high blood pressure or a deficient heart.

What Can Be Done?

Is there anything you can do to prevent heart disease? The American Heart Association says, "Some forms of heart disease can be prevented . . . a few can be cured. All heart cases can be cared for best if diagnosed early."

Early diagnosis is possible, of course, only if you report faithfully year after year at your doctor's office for a check-up and if you consult him in between times at the appearance of any symptoms.

BUSY LINE

Judge: "Your wife charges that you haven't spoken to her in five years. Why is that?"

Defendant: "I didn't dare interrupt."

Two Copper Cliff Foursomes In the NOCA Curling Limelight



This foursome of Bob McLeod, Doug (Roy Rogers) Gathercole, Vern Johnston and Art Silver (skip) won two trophies for Copper Cliff Curling Club in the 67th annual NOCA bonspiel. They defeated Hughie Munro in the final of the Algoma Steel event, and took the measure of Freddie Rinaldi in the showdown for the Cochrane-Dunlop trophy. Grand Aggregate honors in the 'spiel went to the smooth-curling quartet of Don Groom (skip), Ray Cook, Bob McInnes and Tommy Callaghan, who also won the right to represent Northern Ontario in the Macdonald's Brier Tankard at Edmonton.



Seen here are Johnny Cecchetto, Ralph Boyter (skip) and Art Romanick. Along with Don Frattini they became first winners of the handsome new Chapman Bros. trophy by doing some classy curling in the NOCA bonspiel. They beat Joe McDonald in the final match. Another beautiful new trophy, presented by Inco, was won for the first time by Skip Milt Moran, Elwood McCrea, Sam Craig, and Frank Poupore. The Moran rink was also runner-up for the Carmichael-O'Brien Memorial trophy, emblematic of Grand Aggregate honors.

LIFE AND DEATH

"Pa, what does it mean by 'Diplomatic Phraseology'?"

"My son, if you tell a girl that time stands still while you look into her eyes, that's

diplomacy. But, if you tell her that her face would stop a clock . . ."

Whatever necessity lays upon thee, endure; whatever she commands, do. — Goethe.

Over 40 Years At the Smelter



MR. AND MRS. HARRY MOORE

Although his health forced him to accept a disability pension at 62 and "take it easy" from here in, Harry Moore of Copper Cliff had piled up the impressive credited service of 40 years and 2 months.

One of the real old-timers at Copper Cliff Smelter, and a man who despite a quiet and somewhat retiring nature can count his friends in the hundreds, he was a bin boss during the closing years of his career in the plant.

Harry was born in Yorkshire, where his father was a locomotive engineer on the Lancashire & Yorkshire Railroad. One day in 1911 a pal who was working next to him in a dye works said, "Let's go to Canada," and they did.

At Copper Cliff in 1917 Harry was married to Flora MacKenzie, the ceremony being performed by the Presbyterian minister, Rev. W. T. Prittle, father of A. F. Prittle of Inco at Port Colborne.

Mr. and Mrs. Moore have a son Harry, who is employed in the carpenter shop at the smelter, and a daughter Grace, whose husband, George Dempsey, is with the plate-workers.

First Aiders Hit Playdowns

Inco's First Aiders hit the playdown trail February 28 when four teams met to decide the splint-and-bandage championship of Frood-Stobie Mine. Plant laurels at Coniston were scheduled to be awarded the night of March 1, with two teams competing.

Other dates in the annual elimination contests leading to the grand showdown for the Inco inter-plant title were announced by Safety Superintendent A. E. O'Brien as follows:

Levack (3 teams), March 3, Employees Club; Copper Cliff semi-finals (8 teams) March 3, Community Hall; Copper Cliff finals (2 teams), March 5, Community Hall; Murray Mine (2 teams), March 4, Inco Club Sudbury; Creighton Mine (4 teams), March 4, Employees Club; Copper Refinery (4 teams), March 5, Inco Club, Sudbury; Garson Mine (4 teams), March 7, Employees Club.

Four teams representing Inco's surface plants in Sudbury District, having survived the eliminations in their own bailiwicks, will compete at the Inco Club, Sudbury, on the night of March 16 at 7:00 o'clock for the Duncan Finlayson trophy. The following

Thursday evening, March 18, at 7:00 o'clock, the Herman Mutz trophy will be at stake among five teams representing the underground mines.

The inter-plant First Aid champions of Inco will be decided at the Inco Club, Sudbury, the night of March 23, commencing at 8:00 o'clock, when the winners of the Finlayson and Mutz trophies meet with the Ralph D. Parker trophy at stake. Last year's championship team came from Copper Cliff Smelter and was captained by Pete Duffy.

As usual the final contests will be dramatized by realistic props and backgrounds.

Manny Wolfe New Pensioner

C. E. "Manny" Wolfe has the distinction of being the first Humberstone Township-born employee to be retired from Inco's Port Colborne plant.

It was in February, 1889, that Manny was born down the Buffalo Road near Gasline. After attending school in that district he helped his dad in the carting business and then, being an active lad, he gathered experience in a variety of jobs including clerking for a Mr. Stanley, general merchant, and working in the now defunct Brass Works and the Cork Works.

When the Foundation Company came along to erect the Nickel Plant, Manny got a job as storeman working under Joe Brady in 1917. On April 18, 1918, Manny was transferred to the Inco payroll and has been a loyal and faithful employee ever since.

Manny's job as storekeeper brought him into daily contact with all kinds of equipment and made him an expert in mechanical and electrical accessories. Often his knowledge of those odds and ends and bits and pieces has been used to advantage in making new equipment.

To those not acquainted with the Stores Department, it is a huge hardware store where one goes to get nails, resin, oil, brushes, nuts and bolts, shovels, pipe, rope, glass, cotton, nylon, iron, lead, antimony, wire, etc.,



MR. AND MRS. MANNY WOLFE

etc., etc. Here Manny was responsible for stock, supplies, and smooth service. During his long tenure as storekeeper he presided over the distribution of more than \$50,000,000 worth of goods.

While he was attending to his duties as a much respected and competent cog in the Nickel wheel, Manny found time to serve his community as a councillor in Humberstone Village prior to the greater Port Colborne area amalgamation. He has been a faithful member of his church, St. Peter's Lutheran, where he was a choir member for 42 years and has been on the Board of Managers for 15 years. He has just seen completed one of his life-long hopes, the erection of a beautiful new St. Peter's Church, for which he was chairman of the building committee.

In recreation his aim has been to bowl a perfect game in 10 pins. He has not yet attained his goal but he plays on two 10-pin teams, Stores in the Inco League and Reichmans in the Humberstone League. His average is around the 165 mark and that's good shooting in any man's league. He has had nine trips to the American Bowling Congress tournaments and hopes to see many more. Horseshoe pitching is his favourite summer game, although he also enjoys a few turns around the golf course during the season.

To have been so active all these years requires a good manager, and the person behind Manny is Clasti Rothie, whom he married over 42 years ago. They have been blessed with two daughters and a son, Hilda (Mrs. Cliff McBride) of Ridgeway and Doris (Mrs. Keith Kramer) of Port Colborne, and Charles, who works with Inco in the Electrolytic Department and lives at home with his mother and dad. Five granddaughters delight their grandparents when they visit 221 King Street, Port Colborne.

Manny has spent all his life there and he has won the highest reward any man can attain — the respect of all who know him.

At a gathering in the Recreation Club with many of his fellow workmen, R. C. McQuire presented Manny with a gold watch and a chair on behalf of his many friends while Roy Howard did the honours by presenting Mrs. Wolfe with a handbag and a bouquet of roses.



MERRY-GO-ROUND BROKE DOWN

When this picture was made the engine on the Onaping Ski Runners' tow at Levack had just given one wild snort, coughed, and quit in protest. The load on the rope was just too heavy, and had to be lightened before the faithful old gas-eater could be coaxed to start work again. But on the nearby jump things went ahead without a hitch in the Northern Ontario ski zone two-day championship meet. Karl Martitsch of Levack, former Austrian Olympic team member, was the best all-round skier with first place in jumping and third in both downhill and slalom events. He was an Onaping Ski Runners entry. The meet was staged at Levack and Beaver Lake, and was an unqualified success.

Here's the Height of Coincidence—At Least!



Mr. and Mrs. Mac Dunn with their daughter Sandra and their twin sons, David and Donald.



Mr. and Mrs. Bill Van Allen with their daughter Janie and their twin sons Billy and Jimmy.

They Followed Each Other Around!

Bill Van Allen of the Copper Cliff electrical department and Mac Dunn of the Research Lab must have been reading one another's mail back there someplace.

Their theme song must be "Me and My Shadow".

To begin with, they were both brought up in Copper Cliff, Bill having been born there and Mac arriving as a youngster. They went to school together, played ball and shinny together, swam in Clarabelle Lake together. Both their fathers were Inco men.

In the Second World War they both enlisted for service at sea, Bill in the navy and Mac in the merchant marine.

They both married Copper Cliff girls, Bill saying I Do with Edna Thomas and Mac with Beryl O'Brien. Their wives' fathers were both Inco men.

Bill and Edna had a daughter, Janie, who'll be 5 in April. Then Mac and Beryl had a daughter, Sandra, now 4½.

On March 30 of last year twins were born to Mac and Beryl, both boys. On December 2 twins were born to Bill and Edna, both boys.

The attending physician for both families was Dr. Ross Ferguson.

The Dunn twins each weighed 6 lbs. 2 oz. at birth. So did the Van Allen twins.

Now what do you think of that?

HERE'S YOUR HAT

"I'm going to kiss you before I go," said the young man who had outstayed his welcome.

"Do it now, while I'm still young," replied the girl wearily.

Some things may be hard to get, but never be so unwise as to ration courtesy, patience, politeness or attention.

Sudbury Takes 4 Badminton Titles

Except for the ladies' single title, which was retained by Helen Forbes of Sault Ste. Marie, the Northern Ontario badminton championships for 1954 have all come to Sudbury.

In the tournament at Noranda Gerry Myers of Inco Club scored a sweeping triumph by taking the men's singles, and then teamed

up with his clubmate, Harvey Nadeau, to win the men's doubles. Sheila Keegan and Colette Potvin won the ladies' doubles, and Miss Potvin paired with Johnny Hartman to capture the mixed doubles.

A real thriller was the Myers-Nadeau victory in the men's doubles. This tough, hard-to-take team had to shoot the works to get a decision over Tommy Stefanko and Harry Narasnek of Creighton in the final, winning 15-12 and 18-15. Gerry Myers had a man-sized assignment in the singles final too, having to fight back after a first-set loss to Gino Gonella of Creighton.



Female and male duck at Frank Fielding's ranch. The male's iridescent colors are not apparent at a distance, but the white lines on the face and sides are distinctive. In flight the white belly and long dark tail show up well and the bird keeps its head back and held high with beak pointed downward.

IMPORT PAIR OF WOOD DUCK

Hoping to establish wood duck in the Sudbury District, Copper Cliff Rod & Gun Club has purchased a pair of these delicately proportioned and exquisitely colored birds.

They have been given the honeymoon suite at Frank Fielding's fowl motel on Evans Road. Sometime next year they and their family will be moved to the Fielding game preserve, where the Rod & Gun Club has already established a dozen or so nests for them. It's hoped that by then the nests will be sufficiently weathered to look like attractive permanent homes, and the wood duck will decide to take out citizenship papers.

Tom Peters, one of the club enthusiasts who has been working on this project, says Sudbury is a fringe area for wood duck, which are seldom found further north than south-eastern Ontario. He says the usual number of eggs in a nest is from 10 to 15, which hatch in 28 to 30 days. The ducklings may be carried to the water in the mother's bill or on her back, but these methods are not the rule. The mother usually coaxes from a position on the ground or a nearby perch, and the young climb to the nest opening and tumble to the ground one by one, being protected from injury by their fluffy down and light weight.

SNAPSHOTS OF LIFE WITH INCO



Having to hang up his skates for the rest of the season was a tough sentence for Gordie Heale, but it had its compensations. Now he can catch up on his acquaintance with his cute little son Michael, who appeared on the scene a couple of months ago. Although more than a month's rest has fixed the strained heart muscle he picked up, Dr. Jack Stanyon advised him to wait until next season for more hockey and Gordie wisely heeded the popular medico's advice. His absence on the firing line is being keenly felt by Sudbury Wolves as they fight fiercely for the NOHA southern group title. Last year Gordie won the group's scoring crown with 30 goals and 48 assists. And he's sorely missed too by the fans, who love his free-wheeling style of play. Gordie is on the roll at Creighton concentrator. His pretty wife was formerly Aline Buck, daughter of Mr. and Mrs. C. H. Buck of Copper Cliff.



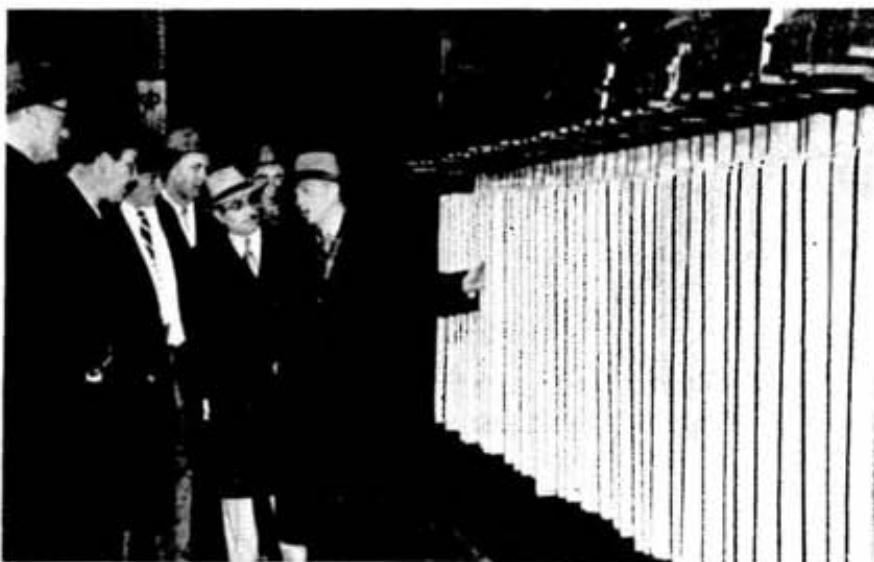
This space will get to be known as Hreljac Corner. Last month it carried a picture of "Hurricane", who had bowled a perfect game of 5 pins at Creighton Employees Club. This month the guest of honor is his younger brother Ed, just turned 14, who stroked his way to the Ontario Junior B singles badminton championship at Toronto, downing Don Laird of Bowmanville 17-15, 15-11 in an exciting final. Bev Wescott, seeded No. 2 among Canadian singles players, later took the young Creighton star to the court for an instructional game and afterward pronounced him a brilliant prospect. Ed, who took up badminton only two years ago this month, has come fast under the guidance of Ev Staples and will soon run out of competition in Northern Ontario.



Harry Davidson of the Garson Mine time office staff was the lucky guy when the draw was made at the Garson Employees Club 4th anniversary dance February 5. He won the handsome TV set he's seen here enjoying with his charming wife and daughters. Jack Reeves and his Garson band played for the very enjoyable dance.



Unsung heroines of the church supper, the community banquet, the Boy Scout father-and-son night, are the angels of the kitchen who toil long before, during, and long after to make the meal a memorable one. Typical is this kitchen scene at a very successful ladies' night held by Levack branch of the Canadian Legion.



Touring the Copper Refinery with Russ Hewgill, manager of Inco's Copper Refining Division, as guide, a group of TCA officials see a rack of fully grown cathodes of pure copper. They were in Sudbury for the official opening of the twice-daily air service to Toronto and Montreal. Second from the left is Rod MacInnes, director of public relations.