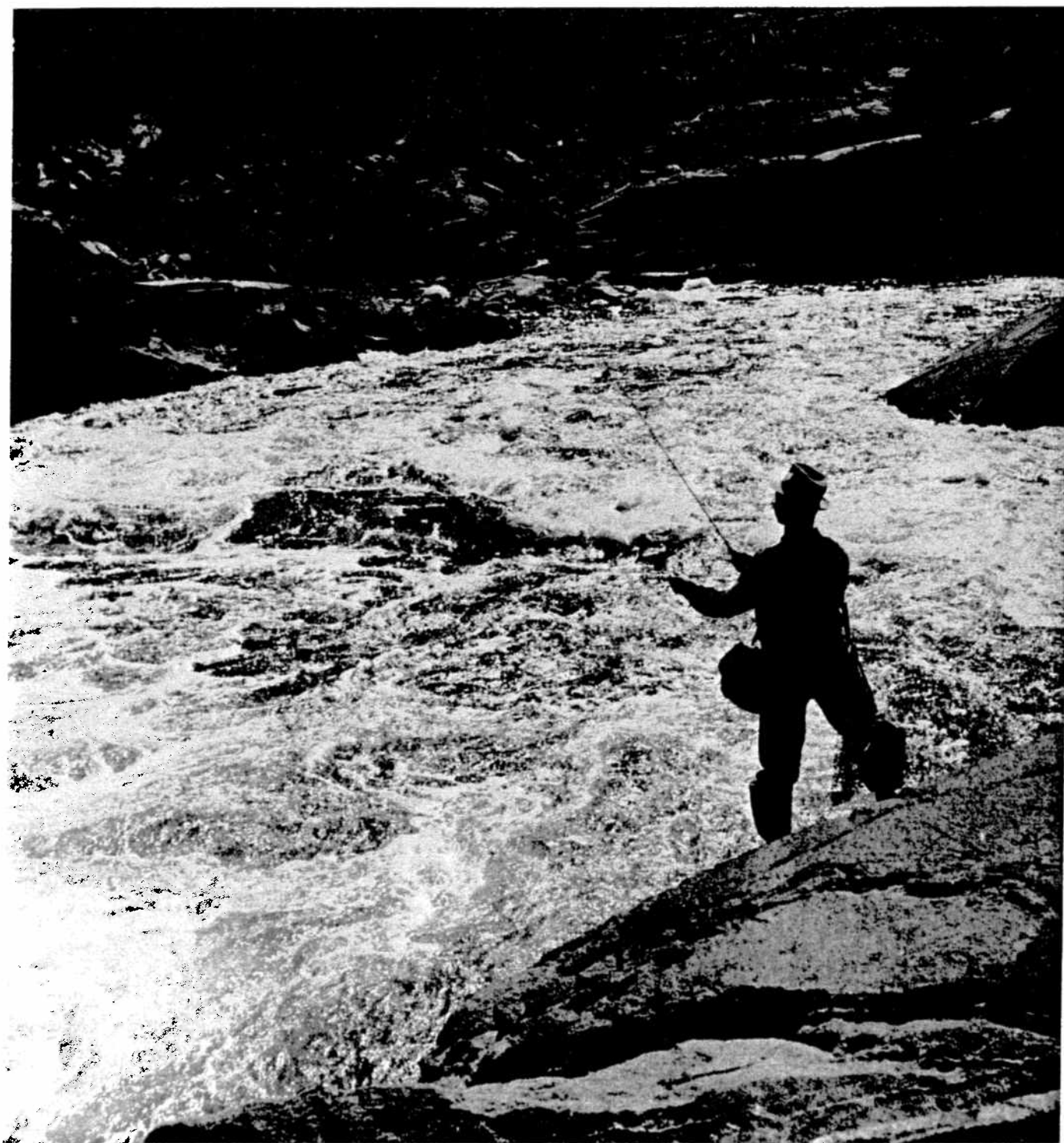




VOLUME 16

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White Water



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Don M. Dunbar, Editor.

EDITORIAL OFFICE COPPER CLIFF, ONT.

Chairman Reports Record Inco Year To Shareholders

The year 1955 was the most successful in the history of The International Nickel Company of Canada, Limited, Dr. John F. Thompson, chairman of the board, told shareholders at the Company's annual meeting at Toronto.

He reported high deliveries of Inco's two principal products — nickel and copper — and increased output of most of the other elements obtained from its ores. At the same time he noted that considerable progress was again made in plant and process improvements and in development and research activities, and that ore mined from underground and proven ore reserves were both at a new high.

Canada's Production Leadership

"The year 1955 marked the 50th anniversary of Canada's leadership in world nickel production," Dr. Thompson said. "The combined total deliveries by all Canadian producers were at a record high estimated at 357,000,000 pounds, or somewhat over 80 per cent of the free world supplies." Deliveries by International Nickel alone last year were 290,000,000 pounds, a new high, which represented over 65 per cent of the free world's supply.

"Since the end of World War II," Dr. Thompson noted, "Canadian nickel producers have increased their annual rate of production by some 95,000,000 pounds, of which International Nickel accounted for 55,000,000 pounds. The gain in Canadian output has been the greatest factor in the total increase in the free world's supply. During this period, the increase from other sources, such as New Caledonia, Cuba and the United States, has also been considerable. The indicated over-all effect of new nickel expansion programmes under way or contemplated is likely to be a further increase in the proportion of the free world's nickel produced outside of Canada."

Free world nickel output for 1956 was estimated by Dr. Thompson at about 445,000,000 pounds, a gain of some 15,000,000 pounds over 1955.

Search for New Sources of Nickel

International Nickel's search for new sources of nickel was continued on an extensive scale. Although nickel was first discovered in the Sudbury District of Ontario more than 100 years ago, the Company "continues to find ore in this area and vigorously pursues its exploration for nickel, not only in the Sudbury area but throughout Canada and other parts of the world."

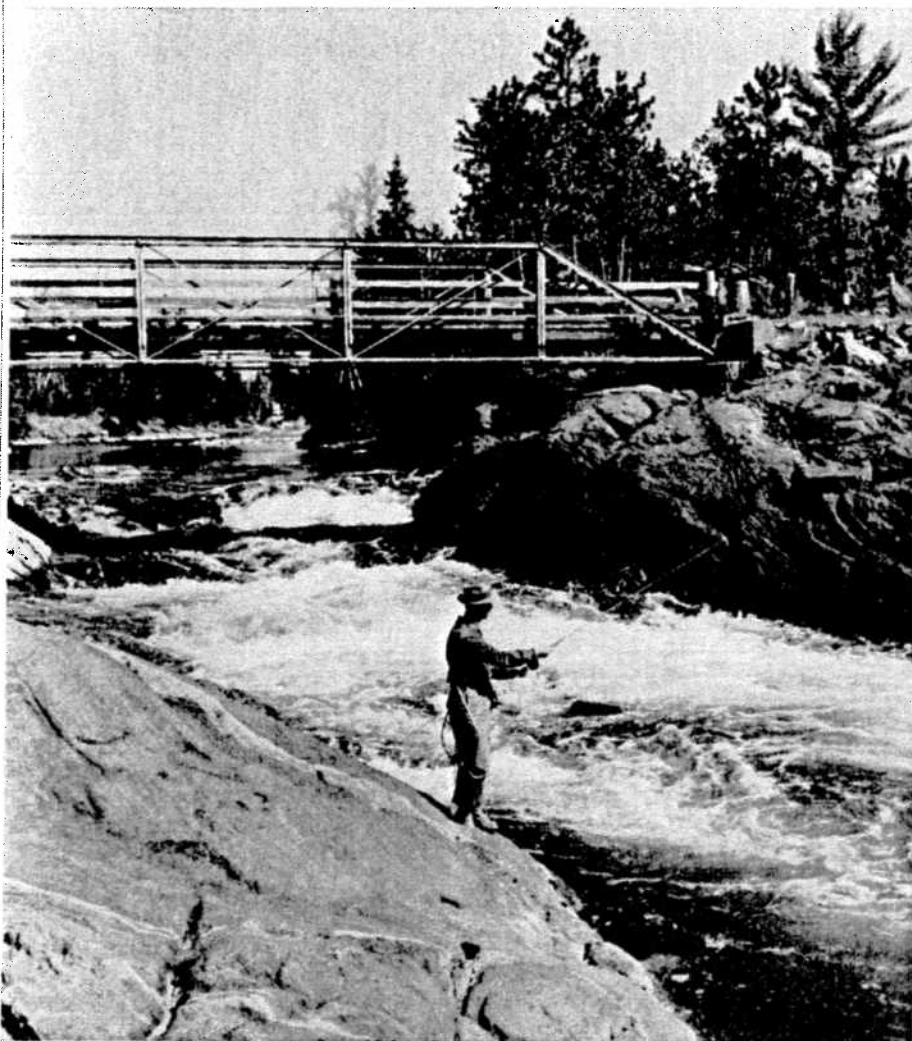
The Company's expenditures for exploration over the past 10 years were given by Dr. Thompson as \$31,000,000 with an average annual rate of expenditures of \$5,500,000 over the past three years contrasted with an average of about \$2,000,000 annually in the preceding seven years.

Price of Nickel

"The belief that nickel prices should not be dominated by short-term considerations

(Continued on Page 10)

Only One Thing Missing



We galloped around the office and took a poll on which of a selection of pictures to use for the cover, and the voting was so close between this one and White Water that we decided to keep peace in the family by printing them both. The scene was where the old Burwash Road crosses the Wanapitei River, the fisherman was our good friend Orest Andrews, but the trout were someplace else.

Blesses the Day He Migrated to Canada

A business failure in Poland was one of the luckiest things that ever happened to Johnny Hartman — he says so himself. When his butcher business in Sambor went bankrupt in 1926 on account of too much on the books and not enough in the till, Johnny migrated to Canada, and he declares this was the best move he ever made, except for getting married to Eleanor that is.

On arrival in Canada one of the first things at which he tried his hand was mining at Creighton, and although he later drifted south to the Windsor area for a few years, eventually he decided that the north was the place for him. He returned to Inco in 1933, signing on at the Frood. He transferred to the Open Pit in 1943 and remained there until his recent retirement on disability pension. While balking a bit at the limitations placed on his activities as a result of his health, Johnny is gradually giving in gracefully to a life of leisure, realizing what a lucky man he is to have comfort and security at hand when he needs them.

Mr. and Mrs. Hartman have a family of three: John, often in print for his prowess



MR. AND MRS. JOHNNY HARTMAN

on the badminton court; Lila (Mrs. Bill Deegan of the CBC, Toronto), and Adele, also of Toronto. They have two grandchildren.

It's a pleasure to extend to Johnny best wishes from all his old pals for a pleasant and interesting retirement.

Of 405,122 births in Canada in the most recent year of record, 4,587 were twins and 39 were triplets.



Mr. and Mrs. Don Richardson (Nickel Refinery, Port Colborne) with Donald, 9, Craig, 7 and Shane 5.



Mr. and Mrs. Howard Bobbie (Creighton Mine) with Wesley, 12, Janice, 6, Larry, 11, and Diana, 1.



Mr. and Mrs. Fred Cooper (Copper Refinery) with Gail, 18, and Carol, 19.



Mr. and Mrs. George Fleming (Mechanical Engineering, Copper Cliff) with David, 7.

Mr. and Mrs. Omer Hagen (Murray Mine) with Kenneth, 13, Irene, 4, and Joan, 15.



Mr. and Mrs. Leo Landry (Coniston Smelter) with Donald, 8, Claude, 6, Diane, 2, Fernand, 5, Lucien, 4, and Susan, 5 mos. and very sleepy.



Mr. and Mrs. Fred O'Hagen (Frood-Stobie Mine) with Patrick, 2½, Michael, 11, Diane, 12, and Eddie, 14.

Trophies Presented to Levack's Winning Curlers at Dance



Men's and ladies' clubs again joined forces at Levack to stage a rousing windup to the curling season with a very enjoyable supper dance at the community hall. The two presidents, Mrs. Dar Storey and Al Ryter, did a smooth job of emceeing the long program of prize presentations. In the first picture above, Alex Godfrey, assistant to the vice-president of Inco, presents the H. J. Mutz



trophy to the winners of the Mutz plant bonspiel, Johnny McCreedy (skip), Mel Young, and Al Beauchamp; fourth member of the rink was H. Grant. At the right Eddie Plaskoski presents the Plaskoski Memorial trophy for the club championship and the Consols Event to Johnny McCreedy (skip), Al Hutchinson, Frank McAteer, and Al Ryter.



The Fera trophy is being presented in the first of these three pictures by Mine Superintendent Frank McAteer to Jim Hatch, the winning skip, and Barney Forest; other members of this rink were Rolly Nadon and G. Smith. In the centre Les Wilson, assistant general manager of Rolmac Construction Co., hands over the Rol-

mac trophy to Dr. Charlie Jessop (skip), Ed Luoma, and Ron Glassford; fourth hand on this lineup was Percy Yuill. And on the right Frank Palumbo congratulates Horace Boucher and Joe Dixon on receiving the President's cup, an honor they shared with Alec Diddur and L. Villeneuve (skip).



It was Dr. Jessop as winning skip again when Bob Diebel, the new president of the Levack Curling Club, presented the Cochrane Dunlop trophy on behalf of its donors; George Keast, Stan Zamoj-ski, and (not shown) Bud Mayhew were the other members of this brigade. On the right Mrs. Jean Koski, on behalf of H. Endleman, turns over the Endleman trophy to Mrs. Estelle Hilton, Mrs. Evelyn McQuarrie, and Mrs. Ila McCreedy; absent was the skip, Mrs. Helen

Drohan. Other awards made in the ladies' section were the Piccolo trophy to Mrs. O. Wright (skip), Mrs. B. Palumbo, Mrs. P. Moir, and Mrs. E. McQuarrie, and the Special Event prizes to Mrs. D. Jessop (skip), Mrs. R. White, Mrs. E. Davis, and Mrs. L. O'Connor. Also not shown was the presentation by Dr. Hal Mowat of his trophy to the winners of the Colts Event, E. Buckingham (skip), S. Mason, J. Ranger, and H. Bergstrom.

Quick Canadian Quiz

1. Which is greater, the population of Ontario or the combined population of Manitoba, Saskatchewan, Alberta and British Columbia?
2. What river system of the prairies is exceptional in that it flows east to Hud-

son Bay rather than north to the Arctic Ocean?

3. The 65-years-and-over group represents what portion of Canada's population?
4. Which has the greater value, furs taken from wild-life trapping or pelts produced by Canadian fur farms?
5. Which province has the greatest fresh-water area?

ANSWERS: 3. About 8 per cent. 5. Quebec. 1. Population of Ontario, 5.2 million com-

pared to 3.8 million. 4. In 1955 wild-life trapping produced 57 per cent of furs. 2. The Nelson River system.

All genuine progress results from finding new facts. No law can be passed to make an acre yield three hundred bushels. God has already established the laws. It is for us to discover them, and to learn the facts by which we can obey them.

—Wheeler McMillen

Hank Lattanville Genius in His Line

Undoubtedly some have cussed at him over the years, but far more have sworn by him — and for very good reason since it is generally agreed by operating and mechanical men alike that Hank Lattanville was in a class by himself. "He always seemed to have a spare part cached away somewhere." . . . "He could always make some sort of repairs to get you going again" . . . these are typical comments from operating supervision who depended on Hank and his fitters for service. It's doubtful if the electric and blast furnaces at Copper Cliff smelter, where Hank held sway for 24 years, will ever be quite the same without him.

Henry Lattanville, born near Midland in 1891, retired as mechanical foreman of the electric and blast furnaces with better than 33 years of Inco service to his credit — service that began at Port Colborne back in 1921.

Hank's formal schooling ended at the age of 12 when he began working with his father on contract log cutting. After five years of this he had a three-year go at helping build grain elevators at nearby Port McNicholl. He next hooked up with the C.P.R. for six years, first on construction, then in the roundhouse, and finally as an engineer. His days as a "hogger" ended when it was discovered that he was color blind. It was back to the roundhouse for him but not for long, since to prevent any moss taking root this rolling stone quit the railroad and went to work repairing boilers on lake boats at Midland and Port McNicholl.



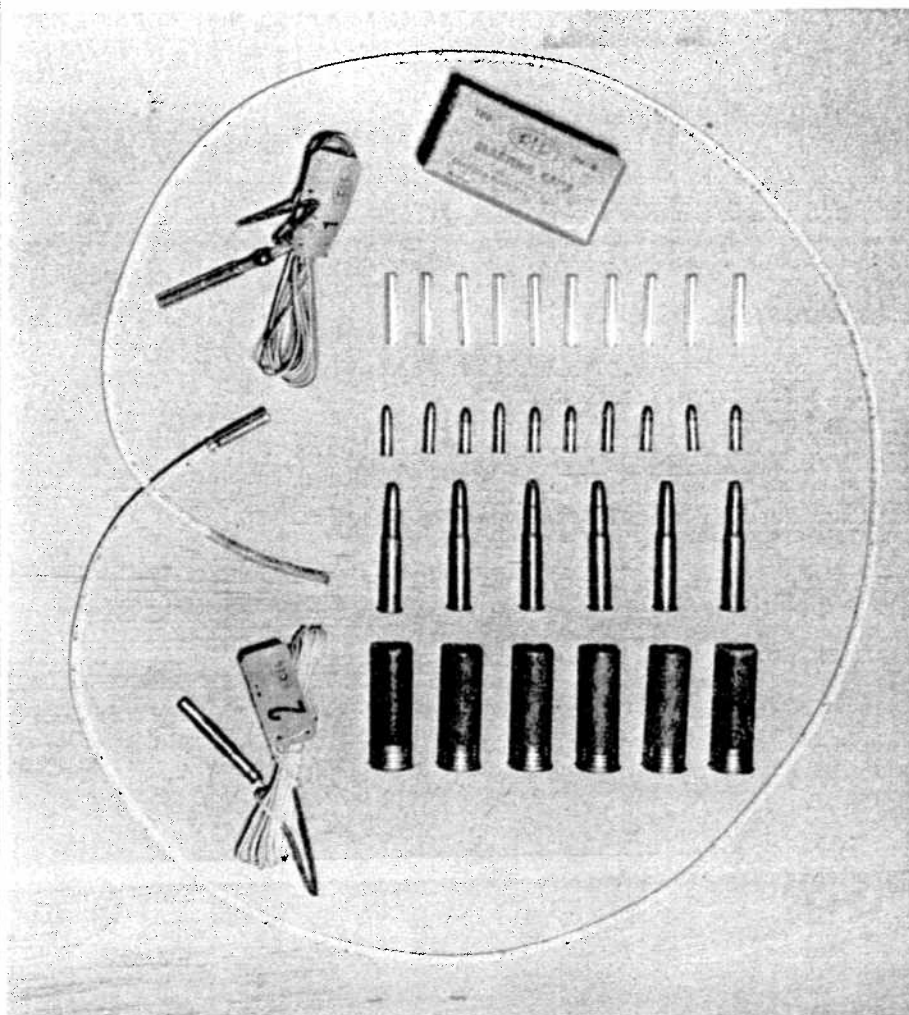
MR. AND MRS. HENRY LATTANVILLE

Hank still vividly recalls one repair job on the SS Osler that had to be done on the run and took two round trips to Port Arthur to complete. This dampened his ardor for that kind of work in more ways than one. He next took a turn at making artillery shells in Orillia during 1917-18. A job with the Canadian Corkboard Company at Port Colborne followed and here Hank seemed to find his niche, becoming master mechanic before he had time to gather much moss. Progress, however, forced him to move on when they demolished the factory to make way for the new Welland canal. Hank continued his job-shopping career until 1921, when he finally hooked up with Inco's mechanical department at Port Colborne, and there the rolling stone finally came to a contented stop.

In 1931, when the cupola furnaces were moved from Port Colborne to Copper Cliff along with the Orford Process, Hank came along to take care of them. Then the electric and blast furnaces fell heir to the care he once lavished on his cupolas.

His early opinions of Copper Cliff were far from good but like many others he soon became a convert and is now closely attached

A Hint to Young Explorers



Exploring days are here again, and children are caught by the irresistible urge to see what lies over the hill or down in the gully. The above photograph, made at Frood-Stobie with the help of Safety Engineer Vern Ritzel, will be useful to parents in emphasizing what every young explorer should know — things NOT to touch while on a treasure hunt. In the four rows are blasting caps, rifle bullets, and shotgun shells. Also shown are electric blasting caps with leg wires attached, and a blasting cap with fuse attached. Children should be told not to touch any of these articles should they come across them, but to go straight to their parents or to a policeman with the information so the dangerous discoveries can be properly disposed of.

to the Nickel Belt. He was married in 1915 and his wife died in 1948. In 1950 Mrs. Nellie Harty became his second wife.

There was a big turnout to the farewell party held for Hank at the Caruso Club in Sudbury, and resounding applause when Master Mechanic W. J. Ripley wished him well and presented him with a reclining chair on behalf of "the boys."

KINDRED SPIRIT

She was nine years old; she went to a party where other girls and boys her age were. When she got home and was telling her mother about the party she said all the boys huddled together and completely ignored the girls.

She—they wouldn't have anything to do with us, but I got one to play with me, all right.

Mother—How was that?

She—Why, I just knocked him down.

SUFFERING FROM CONCUSSION

Larry: "My brother swallowed a box of firecrackers."

Harry: "Is he all right now?"

Larry: "I don't know. I haven't heard the last report."



GOOD FOR THE DIGESTION?

Kelly Storms of the Copper Refinery has saved and bound all his copies of the Triangle since 1944, and enjoys thumbing through them during lunch hour. He's seen above with John Zimany, who works with him on machinery inspection and lubrication at the refinery.

DOGGONE GOOD STUDENTS



Obedience Training Course Completed By Class of Canines

With a group of 20 bright-eyed undergraduates literally straining at the leash, and their proud owners working eagerly with them to speed their progress, the Sudbury and District Kennel Club's fifth annual course of obedience classes is nearing completion.

Graduation Day is June 8. Then the students that have been paying attention to the teacher, and keeping up with their homework, will receive their diplomas (catskins instead of sheepskins), and the other rascals will be banished to the doghouse.

Mrs. Marion Urwin of Copper Cliff, whose remarkable talent for training dogs is well-known in the Nickel Belt, has conducted the 12-week course, held at the Inco Employees Club in Sudbury. She is well pleased with the class, and says it will be a difficult task to pick the winner of the Harold Bruce trophy for the star pupil.

Some of the dogs are seen in the accompanying photographs being put through their paces by their owners:

Top left, Gordon Harcourt, Copper Cliff, with his springer spaniel Major at the "recall."

Top centre, a Samoyed, a just-plain-dog, and a dachshund "stand for examination," facing their owners, Mrs. Jack McConnell of Coniston, Brian McDougall of Copper Cliff, and Mrs. Bill Lawton of Levack.

Top right, Mrs. Jack Lilley of Copper Cliff trains her springer spaniel in the "come for."

Lower left, Brenda Fielding is training her golden retriever in heeling on leash.

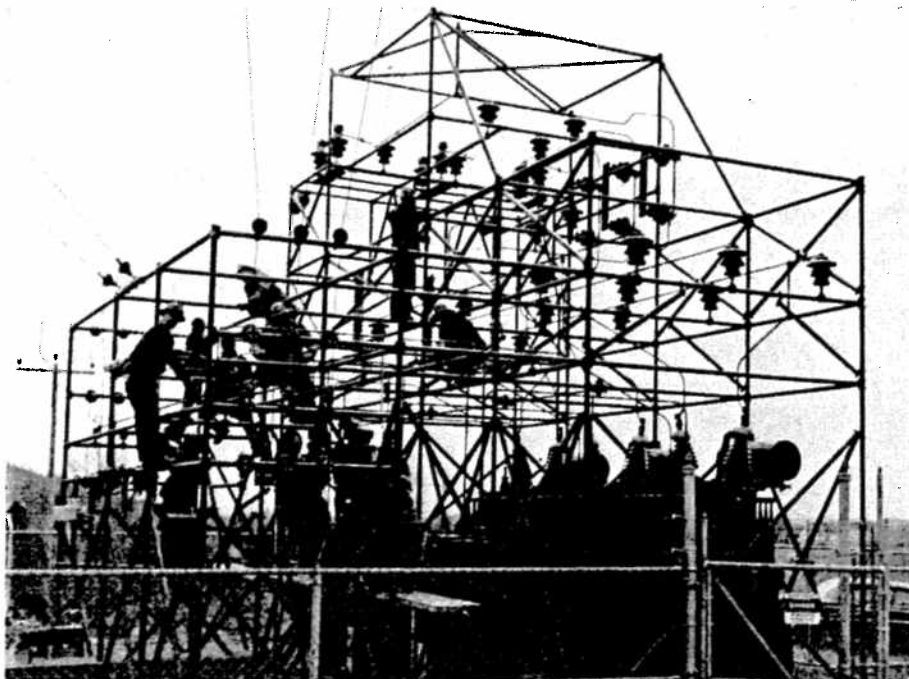
Lower right: Mrs. Urwin gives one of her collies, Sandy, a stick-jumping workout.

And in the centre, taking a five-minute sugar-lump break, are some of the Class of '56.

Dogs graduating from this beginners' course in obedience training receive the degree of CD, which stands for "companion dog". The next move for the canine that really wants to get ahead in life is to obtain his CDX, (companion dog excellent), which calls for more advanced training such



No More Fadeouts for the Lone Ranger



An improvement in power service will result from the new substations recently completed by the Inco electrical department at Lively and Levack. A similar installation will be added at Copper Cliff later this year.

Steadily increasing demands for electrical power had placed a heavy load on the feeder lines supplying the towns, resulting in voltage dips at peak periods. When it got to the point where the Lone Ranger was occasionally fading away to a shadow in the very act of knocking off his weekly quota of desperadoes, everybody realized something had to be done about the situation.

By erecting substations which offset line loss by bringing the high voltage power as close as possible to the point of consumption, and by doing some additional wiring, the electrical department has more than doubled the capacity of the distribution systems in Lively and Levack, and has made available a steady supply of power. Residents of the two towns will appreciate this move to give them the best of service.

The picture above shows a crew of electricians from Creighton making final connections at the new substation in Lively. James Devonshire assistant to Inco's electrical superintendent, was on hand to inspect the installation.

Copper Cliff Curlers Divvy Up the Swag

The annual smoker of the Copper Cliff Curling Club, held at the Italian Hall, was the setting for presentation of trophies and prizes to the victors and runners-up in the various events run off during the season:

The J. R. Gordon: A. Silver (skip), D. Duncan, P. Forster, O. Penman; J. Spalding (skip), B. Dorigo, A. Puppato, W. Prince.

The Inter-Rink: L. Ryski (skip), H. Gilbert, P. Duffy, A. Lanovaz; J. Rutherford (skip), L. Ade, G. Bennett, V. Schneider.

The Consols: S. Kuzmaski (skip), W. Hudgins, A. Rodin, G. Burns; H. Munro

as scent discrimination and direct jumping, by either command or signal. Mrs. Urwin says she will be glad to hold a CDX course if a sufficient number of owners are interested in enrolling their dogs.

(skip), R. S. Longfellow, A. Romanick, W. Pakkala, tied for runners-up with A. Silver (skip), W. Dydyk, R. Steadman, A. Thornborough.

The Single Rink: R. Saddington (skip), B. Valentini, O. S. Laakso, H. R. Jarrett; A. McNeil (skip), E. H. Capstick, W. E. Lawson, J. M. Healey.

The Colts: W. Allen (skip), L. Gallinger, L. Ryski, J. Brannigan; C. Giardini (skip), R. Regimbal, A. Wood, W. Johnstone.

The Collins: W. C. Jarrett (skip), H. Jones, T. Zaitz, A. Hughes; R. Longfellow (skip), A. J. Hall, J. Sauve, D. Harry.

The Waterbury: J. Morrison (skip), R. McGhee, F. Pawson, R. Lefebvre; A. Bray (skip), C. Giardini, A. Romanick, A. Wood.

Affairs of the club will be handled next season by the following: president, A. E. O'Brien; past president, T. M. Gaetz; honorary presidents, J. R. Gordon, R. D. Parker; honorary vice-presidents, W. T. Waterbury, D. Finlayson, G. Hudson; vice-president, G. S. Jarrett; secretary-treasurer, Alvin Nickle; assistant secretary-treasurer, G. E. Burns; executive, W. J. Taylor (mines), R. J. McCormick (mines), R. J. Hall (mines), W. Pakkala (mechanical), T. M. Crowther (safety), N. R. Ripley (copper refinery), Dr. C. R. Ferguson (medical), J. L. Spalding (town), A. V. McGauley (electrical), L. Ryski (smelter), H. L. VanDyke (general office), B. McClelland (teachers); E. G. Stoneman, chairman house committee; A. D. Crossgrove, chairman competition committee; R. Sheridan, chairman shift curling.

What's Par on This One?



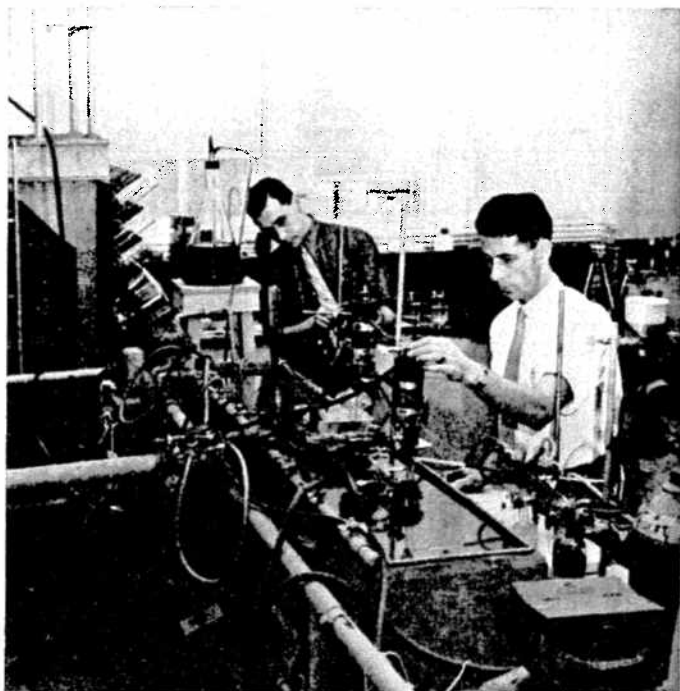
To most Incoites these two fellows are a more familiar sight punching out long, screaming drives from a golf tee, but here's a view of Merle Noyes and Les Lewis busy at their work as department clerks in Inco's nickel refinery at Port Colborne. Normally stationed in No. 4 building, Les had moved over to give Merle a hand in No. 5 for a day.

District Cub Championships Won by Creighton



When Creighton Mine's wolf cubs entertained their parents at a banquet in the Employees Club, presentation of two trophies was part of the program. Archie Massey, on the left above, assistant mine superintendent, turned over to young Richard Pilon the trophy for the cubs district hockey championship, won by Creighton. Len Peterson, (seen at the right) assistant district commissioner, presented the shield for the cubs' district camp championship, which was received on behalf of the Creighton cubs by Michael Allemany, standing beside him. In the centre is the leader of the hustling Creighton pack, Cubmaster Maurice Dennie. There were 37 cubs and 60 parents at the much enjoyed banquet.

Some Views of Research Laboratory at Port Colborne

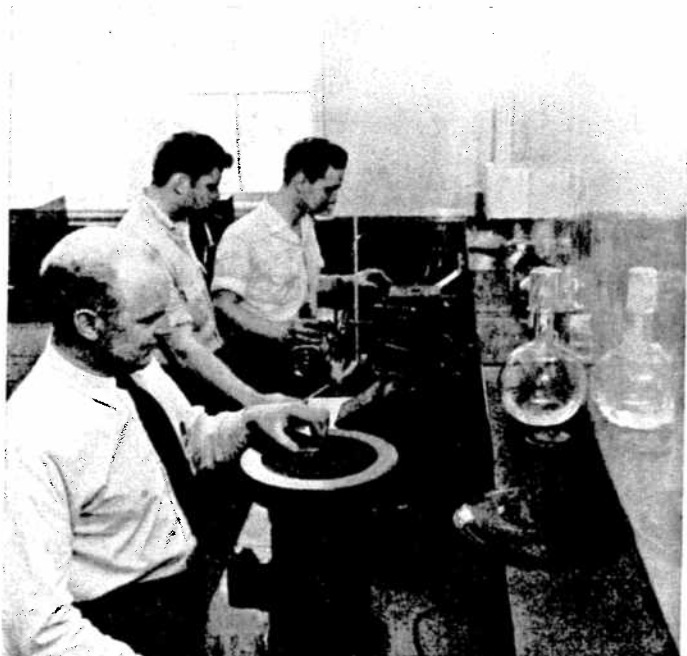


Serving the needs of the operating departments for technical service, and working to develop new processes or improve old ones, the research laboratory at Inco's nickel refinery at Port Colborne is an importantly busy place at all times. In these pictures the Triangle camera shows some typical activities. On the left, above, at the farther end of the controlled temperature water bath, F. C. van Suchtelen is testing a piece of cathode box duck. The test will show

whether the duck has a suitable permeability for protection of the purity of nickel cathodes in the electrolytic process. Chemist Jim MacDonald, nearer the camera, is conducting an experiment in the water bath in which he uses a flask and an electric stirrer to simulate the operation of a pachuca tank. The water temperature keeps the electrolyte in the flask at the same temperature as would be encountered in the plant. Small scale laboratory experiments such as this one often

lead to larger scale experiments in the plant and to improvements in processes.

In the picture at the right, made in the analytical section of the laboratory, chemist Clarke Tennier is using colorimetric technique while Bill Dufton, across the bench from him, analyzes electrolytic nickel for traces of lead. In the background chemical engineer Dave Benner is determining copper by the dithizone method. Dave's samples come from a project he is working on in the laboratory pilot plant.



In the foreground of the first picture Dennis Green polishes a specimen of stainless steel before etching it and examining its microstructure with the Busch metallographic microscope beside him.

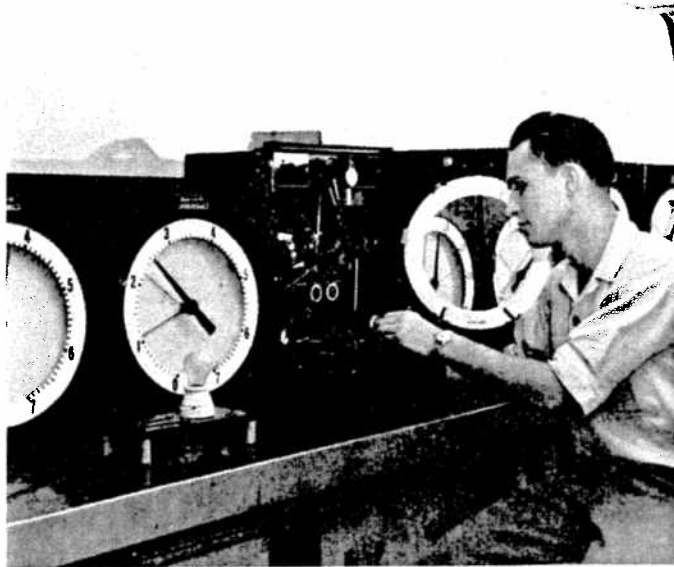
In the electrolytic refinery knowledge and control of electrolyte pH is of fundamental importance, and so carboys of standard pH buffer solution are maintained throughout

the plant. George Moore, whose responsibility for pH buffers and for dithizone have earned him the degree of "pH-d", is seen farther on in the picture, making his daily check of buffer solutions against laboratory pH standards, using a Beckman model G pH instrument. Observing him is Stan Pettit, who is being trained in this work.

"We get a lot of satisfaction out of the

spirit of teamwork that exists here in the research lab. It's something we're really proud of," says Vern Barker, chief research chemist, seen in the picture on the right dictating a report to his secretary, Miss Jackie Bellinger. Port Colborne's new lab was built in 1953, adjacent to the plant's main office and its control lab., and was occupied in July of that year.





Port Colborne's research laboratory basement houses a well-organized, well-equipped instrument section supervised by Joe Rossi. In the first picture above Jan vanDillen tests a pH meter with a Beckman service instrument, which is also invaluable in solving tantalizing problems in electronic control instruments in the plant. As a pH controller is about as complicated and as

expensive as a color television set, though not always as entertaining, Jan and his colleagues need such specialized tools for the trouble calls they may receive during the day or night.

The second picture, also made in the instrument section, shows Tom Christoff, an electrical technology grad of Ryerson Institute, checking in some electronic recorders.

These new instruments will be installed in the electrolytic nickel refinery to record and control the pH of the electrolyte, on the purity of which depends, in turn, the purity of the cathode nickel the plant produces.

Quiet, unobtrusive work is that done by the research laboratory, not often seen in the spotlight, but vitamin-vital to the scientific well-being of the nickel refinery operations.

Bruno Comacchio Veteran Mechanic

After more than 34 years spent at catering to the mechanical whims and moods of Coniston smelter, Bruno Comacchio will contemplate such matters from the sidelines from here on. Retiring on a comfortable Inco pension, he admits, is not hard to take and the distaff side of his family heartily echoes this sentiment.

Coming to Canada from Trevisa, Italy, in 1913, Bruno landed a job at the Copper Cliff smelter the following year. He broke his Inco service in 1919 but for a very good cause, going back that year to Italy to marry Noemi Conte and bring her out to this country. No work was available at Copper Cliff on his return in 1920 but he managed to wangle a job in the mechanical department at Coniston, and there he happily remained until his retirement, working as a maintenance mechanic leader during the latter years. He enjoys reminiscing about furnace breakdowns of the old days in the plant, and some of the marathon repair jobs he worked on, but is glad to note that things run much more smoothly today.

Bruno has left Inco's mechanical affairs in pretty good hands, he feels: his son Ugo is with the fitters at Coniston, his daughter

Angela is married to Julio Baggio, another Coniston mechanical man, and his daughter Zita is the wife of Bruno Tramontini of the mechanical department at Copper Cliff. With his natural concern for the plant thus taken care of, he can settle back to a contented life of gardening, gossiping with his old cronies, loafing, and enjoying his grandchildren.

MAKES INSOMNIA WORTHWHILE

"What do you take for your insomnia?"
"A glass of wine at regular intervals."
"Does that make you sleep?"
"No, but it makes me satisfied to stay awake."

FRIENDSHIP

Oh, the comfort, the inexpressible comfort of feeling safe with a person; having neither to weigh thoughts nor measure words, but to pour them all out, just as they are, chaff and grain together, knowing that a faithful hand will take and sift them, keep what is worth keeping; and then, with the breath of kindness, blow the rest away.

George Eliot

At Retirement Party for Popular Lloyd Paul



Mill Superintendent Jim Lee unlimbered his trusty Leica and got the Triangle this fine shot at the retirement party they held for Lloyd Paul, flotation foreman, who has reached for his easy chair after more than 30 years' service. That's Lloyd behind the mike during the singsong, flanked by his three sons, Don, Lloyd Jr., and Bill. Joe Leclair is with the guitar, Cecil Rivard (partly obscured) is playing the fiddle, and Al Godin is on the piano. At the right is George Godin, who represented the separation building at the party. A fine time was had by all, it's said.



MR. AND MRS. BRUNO COMACCHIO

The Bowling Champs Of Chelmsford Valley



Winners in both the A and B sections of the Chelmsford Valley bowling league were decided when Legion Jets took the measure of Legion Bombers in the B section and Vaillancourt Jewellers knocked off Lakeview Motors for the championship of the A group. A total of 16 teams from Azilda, Chelmsford, Blezard and Larchwood, staffed largely by Inco men, took part in the season's schedule.

Above are the Legion Jets: left to right, Bill Stewart, Don Moore, Leo Belanger, Mickey Oarmichael, Aurel Frappier, and Harold Tripp.

Lined up below are the Vaillancourt Jewellers, left to right, Bert Beaudry, Lomer Vaillancourt, Omer Pilon, Gerry Vaillancourt, U. Rheume, and Ray St. Jean.



Chairman Reports

(Continued from Page 2)

to the detriment of the necessarily long-term planning by nickel consumers," Dr. Thompson said, "has been an important factor in the progress of the nickel industry. In making necessary price adjustments from time to time, International Nickel has made every effort to follow rising cost trends as conservatively as possible, always bearing in mind that nickel-containing products are competitive with many that are made of other metals and materials and must be priced competitively if the position of consumers of nickel is not to be jeopardized. The Company, therefore, is continuing its long-established policy of selling at prices which encourage the development and expansion of uses for nickel."

Nickel Uses

The chairman stated that the "consumption of nickel by uses in the free world in

Chayka's Men Won League Playoff



Les Chayka of the separation building led his team to triumph in a closely contested playoff with Ralph Regimbal's lineup for the championship of the Copper Cliff bowling league at Inco Employees Club. The victors sponsored by Pat's service station are shown above, left to right, Benny Taylor, Orval Couture, Gerry Jeanveau, Len Belanger, Eddie Jeanveau, Romeo Boulay, and Captain Chayka. Best scores hung up during the league schedule were: single, 356, M. Harvey and R. Terry; triple and average, 916 and 225, R. Sabourin; team single, R. Duffy, 1313; team triple, R. Regimbal, 3579.

1955 was approximately as follows: stainless steels, 30 per cent; engineering alloy steels, 17 per cent; high-nickel alloys, 16 per cent; electroplating, 15 per cent; copper-base alloys, 6 per cent; jet engine alloys, 5 per cent; cast irons, 5 per cent, and industrial chemicals and miscellaneous, 6 per cent. This consumption was fundamentally affected by the abnormal conditions arising through defence and stockpile requirements and inadequate supply."

Copper Second Most Important

"Copper is International Nickel's second most important product," he continued. "Deliveries of refined copper in 1955 amounted to 263,000,000 pounds, a post-war high, and

an increase of almost 10,000,000 pounds over 1954. Canada consumed the bulk of our production — nearly 60 per cent — the balance going principally to the United Kingdom, our second largest market, and the United States."

LIFE'S UPS — AND DOWNS

"What was your business before you were captured by my men?" asked the chief of the cannibals.

"I was the assistant editor of a newspaper," answered the captive.

"In that case, cheer up, young man," said the chief. "Promotion awaits you. After dinner you'll be editor-in-chief."

Staged Play To Make Money for Ottawa Trip



Raising money by various projects for an educational safari to the wilds of Ottawa, Grade VIII students of Creighton Mine staged a hilarious one-act play by the appropriate name of "The Battle of the Budget". Cast in the role of Father (who really does know best), Charlie MacKenzie is seen with the family piggy bank; others in the picture are Margrette Makix and Shirley Kautto (seated), Eino Ikonen and, behind Father, Susan Douglas.



Cuthbertsons in Mexico

Clarence Cuthbertson of the Creighton concentrator and his wife Kay, formerly of the safety department's stenographic staff at Copper Cliff, who live in Lively, landed a whopper during their holiday trip to Mexico. Off Acapulco, after a thrilling 25-minute fight, Clarence brought in this 110-lb. sailfish which measured 9 ft. 6 in. long. Wow!

Honor Noranda Miner For Rescuing Partner

What the late E. A. Collins referred to as "the Victoria Cross of mining," the Medal for Bravery was presented to Frank Arko of Noranda Mine at the annual meeting of the



FRANK ARKO

Transport at Levack — Then and Now



This impressive conveyance operated on the spur line between Levack Station and Levack Mine in the days before motor cars were in general use. The driver shown in the picture was the late Peter Leberge, three of whose sons are Inco men, Peter of Frood-Stobie, J. P. of the transportation department at Copper Cliff, and Oscar of Levack. The photo was kindly loaned to the Triangle by Jack Black of the copper refinery. Similar transportation was provided in the early days between Turbine and High Falls, and Copper Cliff and O'Donnell.



What to do when you have a one-cylinder gasoline motor left over from a deal was neatly solved recently by a Levack man, Chester Hersberger. With the "one-lunger" as a starting point, plus the front wheel of a motor cycle, the rear end and transmission of a '37 Ford, and sundry other items, Chester finally produced The Thing. It'll go 40 miles per hour and per gallon of gas, and, its inventor states, is ideal for daily transportation to and from the mine while his sleek new Olds 98 loaf in the family garage and saves up strength for the trip to Sudbury.

Canadian Institute of Mining and Metallurgy in Quebec City on April 10.

The heroic action for which Arko was honored by the mining fraternity was described in a citation as follows:

"On the 28th day of January, 1955, a miner and his helper were engaged in clearing poorly consolidated fill, which had run into 22 Shaft pillar, North Stope, Noranda Mine, Quebec, flooding the vertical access manway. Both workmen had been warned of the danger of "hang-ups" and all the shots were to be placed with long blasting sticks. After blasting several times, Frank Arko was sent for more powder. During his absence his partner ascended about 20 feet above the level to locate a suitable spot to place a charge by hand. The fill shifted burying him to the shoulders and blocking the hole below. On Arko's return he dis-

covered his partner's predicament. Giving the alarm he returned to the manway and began working through the loose fill to his partner, whom he succeeded in freeing. However, in so doing, considerable fill moved in, closing the entrance completely and trapping both men. Calling to the rescue party, helpless below, for certain tools. Arko was successful in releasing his partner and rendering first aid. As a result of the courageous use of his physical and mental resources he was able to free his partner and himself, after being confined for 40 minutes, without serious injury to either."

No man can tell whether he is rich or poor by turning to his ledger. It is the heart that makes a man rich. He is rich according to what he is, not according to what he has.

—Henry Ward Beecher

Honor the Champs of Ladies' Curling at Copper Cliff



With the president, Mrs. Agnes Forsythe directing the ceremonies, and Mrs. Gena Ogilvie demonstrating her winning ways by sharing in no less than three of the awards, presentation of trophies and prizes was a pleasant feature of the annual banquet of the Copper Cliff ladies' curling club, held at the Caswell Hotel. In the picture on the left that irrepressible bon vivant, Bill Jessup, is presenting his trophy to Mrs. Ogilvie and her rink of (right to left), Mrs. Ann O'Reilly, Mrs. Olive O'Brien, and Mrs. Mary Ostashek. On the right the Copper Cliff Jewellers trophy is given by Mrs. Kay Chaulk to Mrs. Bea Forsyth (skip), Mrs. "Ginger" Fitzgerald, Mrs. Muriel Racicot, and Mrs. Mary McCroome.



The Copper Cliff Canadian Legion trophy was won by Mrs. Aura Moland, Mrs. Nan Hawkins, Mrs. Shirley Burns, and Mrs. Forsyth (skip), seen on the left above with George MacDonald, who made the presentation. On the right Bill Newton turns over the Robert Brown tankard to the victorious skip, Mrs. Inga Stemp, seen with Mrs. Olive Smith and Mrs. Ogilvie; the fourth member of her rink was Mrs. Helen Mynerich. In the picture below Mrs. Ogilvie receives the Racicot-Darrach trophy, presented by Mrs. Marg Bennett on behalf of the donors; shown are two other members of the winning rink, Mrs. Marian Rumney and Mrs. Hawkins; the fourth, not present, was Mrs. Gerry Pappin.



Bob Pascoe Started At Creighton in 1913

When Charlie Heale, long since an Inco pensioner, visited his native Cornwall, England, in 1913 he persuaded a young toolsmith there to return to Canada with him and join forces with the Canadian Copper Company at Copper Cliff. Two weeks in the smelter was all that was required to turn up the special ability of this young man, with the result that he was promptly packed off to Creighton as steel and blacksmith shop forman. And that's how Bobby Pascoe came to the mine where, except for the five years he served in World War I, and a couple of years at Frood, he remained until his retirement, liked and admired by all.

Prior to taking off for Canada Bob was married, the intention being to have his bride follow him in the immediate future. The war intervened, however, and it wasn't until 1919 that Mrs. Pascoe finally saw her new home. After the gracious countryside of Cornwall, the little frontier mining camp was something of a shocker but she took the change in stride and was soon deeply imbued with the loyalty to their town that characterizes all Creightonites. In fact when it came time recently to move the three miles to her fine new home at Lively, Mrs. Pascoe was loathe to leave the old surroundings with which she had so many fond associations.



MR. AND MRS. BOB PASCOE

An ardent sportsman, Bob starred with both the football and lacrosse teams for which Creighton was well known, and is still very active outdoors, enjoying to the full his hunting and fishing. He remains a disciple of the almost forgotten art of walking, and would think nothing of hiking the 30 miles to his camp at Fairbanks Lake.

Success is wrapped in responsibility.

Curling and Girling Popular at Copper Cliff High School



Scenes have come to hand from the sporting and social fronts at Copper Cliff High School. On the left here are the curling champions, Bill Barry (skip), Don Skelton, Dick Murray, and Bill Duffy (holding the C. W. Nute trophy). Runnersup in the annual junior joust w' besom an' stane, an important feature of the Copper Cliff Curling Club's program, were Paul Merrifield (skip), Bill Baker, Ron Silver, and Reimo Tulisalo. On the right is a glimpse of the May Ball, as usual a memorable success with the beauty of the decorations setting off the glamor of the girls and the mystery of the males. The old wishing well was a popular rendezvous. The musical background was played by Earl Simard's orchestra.

Came for 6 Months Stayed for 30 Years

The offer of a job up north with the International Nickel Company's engineering department at Copper Cliff (guaranteed duration six months, probable duration five years) sounded mighty good to young C. O. Maddock in 1926. His bride was something less than enchanted, however, when first she gazed upon the rugged terrain surrounding her new home, but she agreed to stick it out for the duration if necessary, before heading back to Toronto and points south. Nearly 30 years have passed, and as far as the Maddocks are concerned the lure of the metropolis has long since been forgotten under the spell of the northland.

C.O., as he is known to all, was born on a farm in Lambton county in 1896, and received his early schooling there. He attended the University of Toronto, graduating in civil engineering in 1918. The next eight years were spent with several engineering firms in and around Toronto, getting experience. Then came the opportunity with Inco.



MR. AND MRS. C. O. MADDOCK

Biggest job on the agenda when he arrived, C.O. recalls, was remodelling the old Creighton No. 3 Shaft rockhouse, but shortly afterward plans were started for the sinking of No. 3 Shaft and the construction of surface buildings at Frood. This led into the planning of the huge new smelter at Copper Cliff. Other big construction projects fol-

lowed in quick succession and C.O. found himself involved in some of the most interesting work a young engineer could wish for. Recalling those early days he noted that of the present mechanical engineering department staff, only Gordon "Sparky" Harry was there when he arrived.

C.O. was married in 1924 to Hettie Jane Zavity, also of Lambton county. They have a family of three: Carol (Mrs. Roy Cleland of Hardy Mine), June (Mrs. Graham Byers of Copper Cliff), and Harriette, attending high school. They have three fine little grandsons.

Always interested in public affairs, C.O. became a member of Copper Cliff town council in 1949 and remained a councillor until 1955 when he became mayor, a position to which he brought dignity, eclat, and

sound judgment.

A keen hunter, C.O. will have to pass up the pleasure of his annual trips in future, and also the strenuous work he enjoyed doing around the family's attractive summer place at Little Penage lake, since the doctor's orders are for him to take it easy. That isn't too simple an assignment for a man whose chief hobby is work, but he'll do his best to obey orders. He has retired from Inco, and is filling in some of his time at the desk of a small Sudbury concern in which he has an interest.

Mr. and Mrs. Maddock have taken up residence in Sudbury but they will never really move from Copper Cliff, where by their unflinching interest and enthusiasm over the years they have made such a worthwhile contribution to the life of the community.

Champs of 21-Team League



When all the pins were counted in the 21-team ladies' bowling league at Levack Employees' Club, the champs were found to be this smiling sextette, Mrs. Vi Finn, Mrs. Eileen Mitchell, Mrs. Betty Kauppinen, Mrs. Norma Kemp, Mrs. Camilla Shaller, Mrs. Bess Holmes (captain). Runnersup in a thrilling race to the wire were Mrs. Delma Landau (captain), Mrs. Anne Maryschak, Mrs. Helen Corkal, Mrs. Joyce Forget, Mrs. Sophie MacLean, Mrs. Helen Brown. The league was voted one of the best yet.

22786

Edison Developed Cap Lamps Worn By Inco's Miners

Drills, slushers, crushers, locomotives, and hoists are all essential enough to the Inco miner, but the most important equipment furnished to him by the Company to carry on his daily work is his lamp. Without it he'd be helpless.

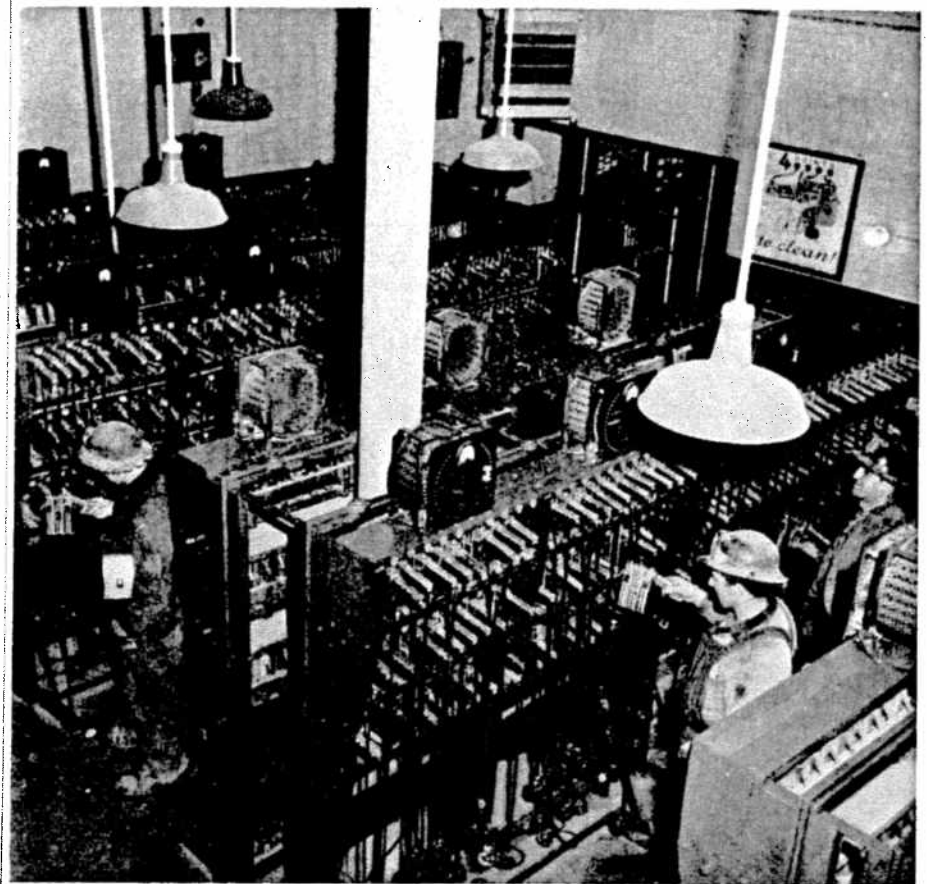
It will be news to many that the electric cap lamp which is the safe, dependable companion of the Inco miner as he goes about his job deep underground was developed by the great inventor, Thomas Edison.

In 1898 Edison started development of the storage cell which bears his name, but it wasn't until 1908, after more than 50,000 different experiments and tests, that he considered it perfected.

The elements of the Edison storage battery cell are a container of steel; a positive electrode containing a number of perforated steel tubes filled under heavy pressure with alternate layers of nickel hydrate and pure nickel flakes; a negative electrode consisting of perforated pockets filled with black iron oxide; an electrolyte solution of potassium hydroxide. There are two positive and three negative plates in each cell, mounted on steel rods which serve as terminals or poles, and insulated by rubber.

Electricity is not "stored" as such in a storage battery but rather "energy" is stored in a chemical form during charge and released by chemical action during discharge. The Edison cell is unique in that its action is one of complete reversibility, that is, the active material in the plates always returns to its original composition after cycles of charge and discharge. This feature accounts for its long life.

During the charging period current enters the positive plate and oxidizes its nickel hydrate to a higher nickel oxide, while at the same time the iron oxide of the negative plate is reduced to pure iron. On discharge, a reverse action takes place. To express it



In this view of the lamproom at an Inco mine, Creighton No. 3 shaft, miners going on shift are seen removing their lamps from the self-service charging racks. At the end of the shift, when the men have returned their lamps to the racks, the lampman raises the movable shelves to put the lamps in contact with the charging clips. The lamps are left on charge about 6½ hours in preparation for the next shift. The amount of charge is controlled by the rheostats on top of the racks. About 700 lamps are maintained here.

In simpler terms, the charging of the cell involves the transfer of oxygen from the negative to the positive plates, whereas on discharge oxygen is taken from the positive

plates and added to the negative. The electrolyte acts as the transfer agent, taking the oxygen from one plate and delivering it to the other; it undergoes no change during this action.

Distilled water is added to the battery



In the first of the above pictures Mel Davies, one of the lampmen at Creighton No. 3 shaft, is testing the amount of charge in a battery. Besides receiving regular inspection and maintenance, each lamp is completely overhauled once a year. In the centre picture Don Lenihan removes his lamp from a storage rack where it has been charged to burn brightly for from 10 to 12 hours. The third picture shows Willard Frantila as he tests his lamp to make sure it is in good working order before he closes the magnetic lock on the battery container.



Stainless steel battery case attached to his belt, and headpiece burning brightly, this miner and his lamp are ready to go underground for the day's shift. He's Johnny Jamieson, a shift boss at Creighton No. 3 shaft.

once a week, and the electrolyte is renewed as required, usually at intervals of 8 to 10 months.

The magnetic lock on the battery container consists of two lock levers of magnetic steel. The miner uses a powerful permanent magnet to pull the lock levers apart when opening the battery, to return it to the charging rack.

The 3½-volt bulb in the headpiece of the lamp contains two filaments, one designed to last 50 per cent longer than the other so that ample warning is given when it's time to replace the bulb. When the lens of the headpiece is broken or removed, the bulb is ejected by a spring, opening the electrical circuit as a further safety precaution.

Suggestions to the miner for the care of his lamp include the following:

- Always keep the light turned on.
- Don't "play" with the switch.
- Do not use the cord as a handle. Carry the lamp by grasping the cable protector.
- Report breakage or trouble to the lampman promptly.
- Keep the battery in an upright position wherever possible.
- Treat the lamp as the expensive tool that it is. Your safety may depend on it.
- Report to the lampman when one filament of the bulb has failed underground. This can be noticed by a sudden decrease of about 40 per cent in light output.

Laws have their proper place, but the responsibility of worthy citizenship is a personal one. We each have a separate and individual share in eradicating social evils and in refusing to perpetuate practices odious to a free nation.

—Herbert Brownell, Jr.

Mr. and Mrs. Jim Clark and Friends



Mr. and Mrs. Jim Clark of Port Colborne are the pleasant couple photographed here with four of the French poodles which, with cocker spaniels, are the pedigreed stock in trade at the kennels they have operated four miles west of the town for several years after more than 30 years of Inco service. Jim is now free to spend all his time with his beloved puppies, and a happier man you'd search far to find.

Born in Breckon, South Wales, Jim took to the sea at an early age, firing tramp steamers, and the Canaries, Madagascar, Hong Kong and Frisco were soon familiar ports of call to him. He joined the naval reserve in 1914 and sailed with the merchant fleet until the end of the war. It was in 1922 that he went aboard for the final voyage of his career at sea, shipping for

Canada where he planned to settle down.

After working on construction of the Welland canal Jim joined Inco, commencing a long association with which both parties have been well satisfied. He started in the calciner building, paddling furnaces, but transferred to the office as janitor in 1934, and worked the 4-to-12 shift steadily for 22 years.

On his retirement Jim was given a gold watch as an expression of the esteem in which he was held by everyone from the office boys to the manager. Clarence Beach, works auditor, made the presentation.

Mr. and Mrs. Clark have one son, Jim, who recently graduated as a veterinary surgeon and is practising in Michigan. He shares his parents' love of dogs and skill at handling them.

Friends Honor Two Refinery Men

At a stag party given in their honor by a group of their old friends at the copper refinery, John Katarincic and George Majercak received mantel radios, the presentation being made as shown above by Graham Dick, tankhouse superintendent.



It was a proud occasion for both these faithful employees, who were retiring on pension after more than 20 years of Inco service.

John Katarincic, on the left in the picture, came to Canada from Yugoslavia in 1930 and toughed out four lean depression years before landing a job at the refinery in 1934. He was a section inspector in the tankhouse.

His wife and three of his four children joined him in 1939, one daughter remaining in the old land. Their daughter Lillian is married to Eli Raguz of Copper Cliff smelter, their son Mike lives in Windsor, and their son Paul works at Frood-Stobie No. 3 shaft. They have five grandchildren.

Advised by his doctor to take it easy, John has retired on disability pension and from now on will content himself with a little gardening and fixing up around the house.

George Majercak, seen on the right in the photo, arrived in Sudbury from Czechoslovakia in 1929 and worked at a variety of jobs before joining the Inco family in 1933. He was employed in the tankhouse and thinks there's no place like it. His wife died in Czechoslovakia in 1935 and his two children, Sophia and Anthony, are still in that country. George is planning a trip to visit them.

SNAPSHOTS OF LIFE WITH INCO



Gerry Pilon of Creighton concentrator was planting a honeysuckle hedge in the patio he is developing behind his home at Lively when the Triangle camera came along. Again this spring (?) hundreds of Incoites are beautifying their home surroundings by planting trees and shrubs.



Bert Devai (foreground) of No. 5 Building at the Port Colborne refinery had a real production line on the go the other day, putting in a cement curb at his home, with his sister, his wife, his son and his daughter-in-law all lending a hand. Home improvements are really a family affair with the Devais.



When the Inco Club ladies' bowling league held their annual dinner at the Caruso Club to top off another highly successful season, the above galaxy of youth and beauty was gathered for a prizewinners' picture. Standing, left to right, are the winners of the playoffs, Mrs. Pat Westfall, Mrs. Jean Boal, Mrs. Ida McKain, Mrs. Rose Mary Coagle, and Mrs. Gert McLelland (captain). At the right is popular Val O'Neill of the Inco Club staff, league president. Seated are: Mrs. Mary Price, league secretary; Mrs. Mamie Gorday, who scored the season's high triple, 779; Mrs. Anne Jaffe, the high single scorer with 343. High average for the season was Mrs. McLelland's 194. There were 60 bowlers in the loop. Mrs. Nellie Shepherd's team finished first in the regular schedule, and last year's winners, Mrs. Dorothy Bouchard's team, were second. Consolation winners were Mrs. Myrtle Langman's squad.



When Bill Hykin, blacksmith at Levack (in the light shirt, above), came to the end of his last shift prior to retiring on pension after 26 years' credited service, a bunch of the boys gathered around to wish him good health and good luck in the years ahead, and present him with a purse of money. Plateworker Charlie Gravelle did the honors.



With funds they raised by various projects, the two Grade VIII classes at Lively entertained their parents at a much-enjoyed dinner at the Italian Club, Copper Cliff. Seen in the table shot above are, facing camera, Harold Levac and son, Donald, Mrs. Levac, Bert King and daughter Judith, Mrs. King, Vic Hillen and son Arthur, Mrs. Hillen; foreground, Frank Young, Roberta Dennison and her father, Charlie Dennison, Mrs. Peter Zelinsky. Charlie Quinn was chairman, and Dr. C. M. Elliott, retiring inspector of schools, was the speaker. Class pins were presented by Principal George Ross.