



VOLUME 10

COPPER CLIFF, ONTARIO, MARCH, 1951

NUMBER 12



End of a Perfect Day



Published for all employees of The International Nickel Company of Canada, Limited.
Don M. Dunbar, Editor.
EDITORIAL OFFICE COPPER CLIFF, ONT.

Robert C. Stanley

Robert Crooks Stanley, a doughty general whose courage, vision, and vibrant leadership never faltered, died at his home on Staten Island, New York, on February 12, at the age of 74.

He was chairman of the board of Inco, and had received many distinguished honors for his great works in industry.

It was under his guiding genius as president that International Nickel forged to the forefront of Canadian industries, first in the critical postwar years from 1922 on, then in the crucial days of the Second World War and latterly in its great program for conversion to all-underground mining.

Assuming the presidency of the company in the dark days of 1922 when Inco's Sudbury district operations were closed down owing to loss of war orders, Mr. Stanley launched the company on a period of intensive research to recapture old markets and develop new ones.

How his faith in this project was justified was exemplified in the \$50,000,000 building and expansion program launched in Sudbury district in 1928-29.

During the subsequent depression years when other Canadian industries were curtailing such expenditures, Mr. Stanley augmented and enlarged the company's research efforts with the result that when business started to improve Inco was ready with many new products which superseded old methods in widely varied fields.

Humanitarian Interests

Mr. Stanley's interests were not bounded by those of trade and commerce. He instituted the policy of International Nickel Company participating in virtually every charitable and philanthropic cause espoused in the communities in which their plants and operations centre.

It was mainly at his instigation that the company launched on a long-term program of improved townsites for employees' recreational clubs in all company-owned towns, and the best educational facilities possible for the children of employees.

From his first association with the company Mr. Stanley believed in knowing first-hand how the operations were carried out in all departments. As a result, he was a frequent visitor to Sudbury district where he became known over the years to large numbers of employees.

One of his greatest enjoyments was to attend dinners of the Quarter Century Club and personally praise veteran workmen for the contributions they had made to the company.

Born in New Jersey

Mr. Stanley was born in Little Falls, N.J., on Aug. 1, 1876, the son of Thomas and Ada (Crooks) Stanley. During his high school days at nearby Montclair, he found time to play football and was an outstanding back during the period in football when weight and brawn were considered essential qualifications.

To help finance his technical training at Stevens Institute of Technology, where he received a mechanical engineering degree in



Robert Crooks Stanley, 1876-1951

1899, he was for a time instructor of manual training at the Montclair High School.

Mr. Stanley was granted the degree of mining engineer at Columbia School of Mines in New York in 1901. He was later the recipient of the following honorary degrees: Doctor of engineering, at Stevens Institute of Technology, in 1935; doctor of science, at Columbia University, in 1939; doctor of engineering, at Rensselaer Polytechnic Institute, in 1940; and doctor of laws, at Queen's University, Kingston, Ont. in 1949.

Following his graduation from Columbia School of Mines, he was employed by the S. S. White Dental Company, of Philadelphia, to investigate platinum placer sands in British Columbia. Upon his return from this field trip, arrangements were made for him to assay his samples at the precious metals refinery maintained by the old plant at Bayonne, N.J.

Inco Introduction

He showed up there one day in December, 1901. This proved his introduction to an extended career with International Nickel, which company was formed early in 1902, with the Orford Copper Company and the American Nickel Company among the constituents of the new organization. Mr. Stanley was made assistant superintendent of the Camden, N.J., plant of the American Nickel Company in 1902 and subsequently became superintendent.

His energy and ingenuity in changing the Camden plant from an Old World chemical manufacturing works of detached units into an integrated enterprise applying up-to-date metallurgical methods drew early attention, and in 1904 Mr. Stanley was transferred to Bayonne as assistant general superintendent of the Orford Company.

Here again he was responsible for a complete modernization program. Starting with the plant layout and buildings, he next improved the smelting and refining practices. By substituting converters for reverberatories in copper recovery, by substituting in the nickel process modified furnaces for hand furnaces, and by improving the efficiency of the Orford Process of copper-nickel separation, he achieved lower operating costs and greatly increased production.

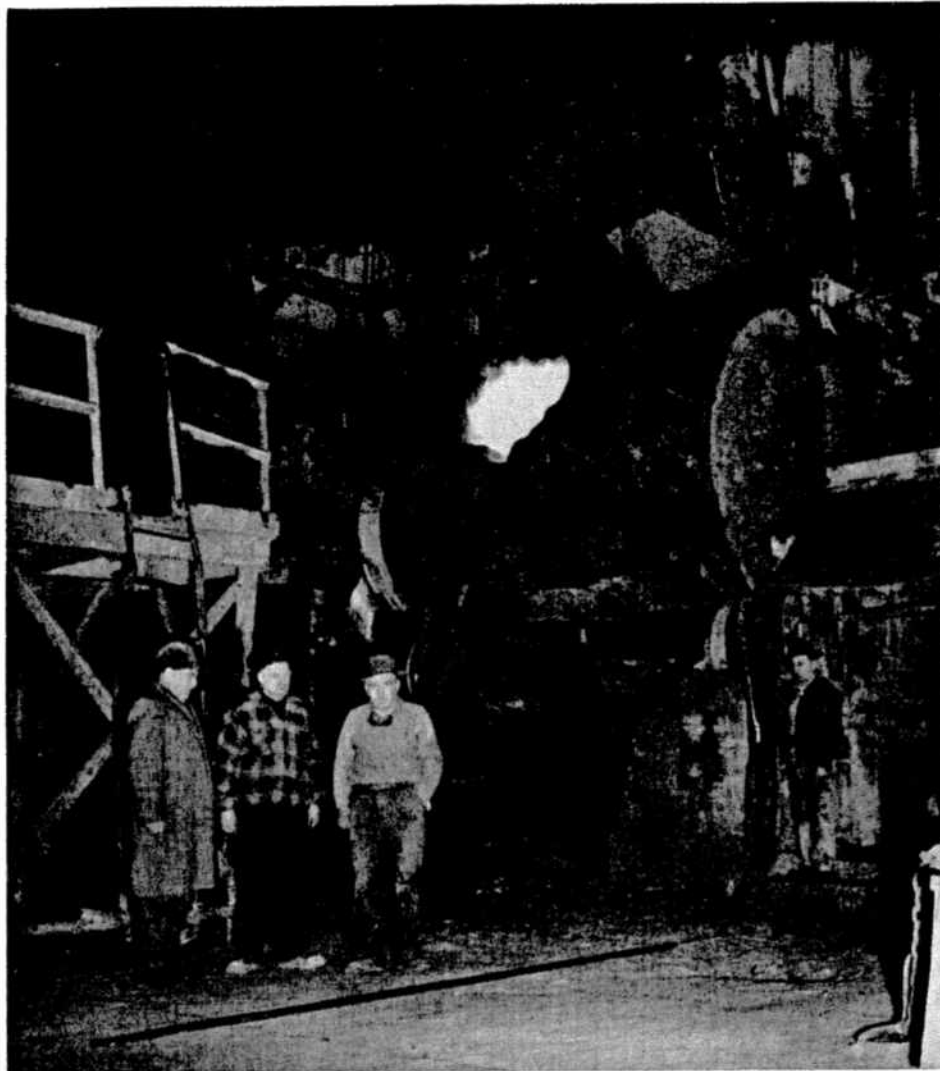
Mr. Stanley effected numerous advances in nickel metallurgy, such as the substitution of a modified Edwards mechanical roasting furnace for the hand-rabbed furnaces previously considered standard in roasting matte. Through this substitution, nickel production was increased during the First World War from 40,000,000 pounds to 76,000,000 pounds a year. His patented refining process, a contribution made later to nickel metallurgy, became the basis for recovering nickel by electrolytic refining.

Discovered Monel

In 1905 Mr. Stanley discovered monel, which has since become one of the outstanding alloys for applications where strength, corrosion-resistance and appearance are requisites.

Mr. Stanley was the inventor of numerous patented processes. In 1920 he patented his method of recovering nickel by electrolytic refining. By the use of this method of separating nickel and copper from copper-nickel mattes or materials, the costs of separation and time required were reduced and the percentage of precious metals recovered was increased.

In 1925 Mr. Stanley patented an improved process for Monel refining (known as the Stanley Process). This process was particu-



Tribute to the Chief

February 14, in respect for the memory of the late chairman of the board, Robert C. Stanley. In the above picture, made in Copper Cliff Smelter, Andy Ranak (right) had turned down his copper converter and stood with bowed head; also seen joining in the tribute were Duncan Finlayson, general supt. of smelters, Pete Akkanen, baleman, and Giuseppe Montesi, furnace tapper. The minute of silence coincided with the commencement of funeral services for Mr. Stanley on Staten Island, New York.

larly concerned with making nickel-copper alloys directly from a nickel-copper matte. Essentially, the process utilized the modern electric furnace with a basic lining to produce the improved alloy from nickel-copper matte which had been roasted in the calciners and then partially reduced with carbon.

Mr. Stanley's earlier career also included service as a mining engineer. In the spring of 1904, a syndicate composed principally of directors of International Nickel, sent him to the northern end of Lake Temiskaming to investigate reports of silver discoveries. His examination and report led to the development of the Nipissing Mine, the first important one in the Cobalt area.

When the Porcupine area was opened, his report on one of the properties there was the determining factor in the purchase of the Dome Mine by a similar syndicate. His investigation and report on a mine in the Illinois coal field led to its purchase and development for coking coal.

Stepped Up for War

Becoming general superintendent of the Orford Works in 1912, Mr. Stanley was in charge of this important source of refined nickel during the First World War, and his resourcefulness and leadership were greatly responsible for the success of this plant in

stepping up its production to meet wartime demands.

Following his election as a director in October, 1917, Mr. Stanley was made vice-president in charge of all operations of Inco in January, 1918. This new position gave him opportunity to reorganize and strengthen the company's mining and smelting operations in the Sudbury district and to move refining operations from Bayonne to a new nickel refinery at Port Colborne.

When Mr. Stanley became president of Inco in 1922, following the death of W. A. Bostwick, the nickel industry was at its lowest ebb. Up to that time nickel had been consumed principally in the manufacture of armaments. To promote industrial peace-time uses for the company's products, he organized the development and research division, and as a result International Nickel became one of the first companies in North America to pursue research vigorously.

Canadian Expansion

Due to the rapid rate of increase in nickel consumption, the development of an adequate and dependable supply of the metal for world industry became an essential part of Mr. Stanley's program. As early as 1924 he began to prepare his Canadian productive organization on a basis which, only a few years

earlier, would have been regarded as fantastically large.

A new mill and smelter were built at Copper Cliff and the mining operations were strengthened to conform with the enlarged surface plant. The Frood Mine was developed into one of the world's largest mines, and an electrolytic refinery with an estimated annual capacity of 150,000 tons of copper was built at Copper Cliff. During the Second World War this capacity was substantially increased.

This program of mine and plant extension was continued throughout the depression and during the war, greatly increasing the company's nickel production capacity with related increases in the capacities for copper and the platinum metals.

Continuing as president of Inco, Mr. Stanley assumed the chairmanship of his company's board of directors upon the death of Charles Hayden in 1937. On Feb. 7, 1949, he relinquished the presidency, remaining chairman of the board.

No aspect of his company's mining, milling, smelting, refining, marketing and other functions, with which he had been associated during successive stages of nearly 50 years of continuous service, escaped his intimate acquaintance and study.

Received Distinguished Honors

Many honors were bestowed upon Mr. Stanley: the rank of Commander of the Order of Leopold was conferred upon him by His Majesty King Leopold at Brussels, Belgium, on April 14, 1937; in November, 1939, he received the Thomas Egleston Medal of the Columbia University Engineering School's Alumni Association for distinguished achievement in engineering; in February, 1941, he was presented with the First Annual Charles F. Rand Foundation Gold Medal "for his pioneering leadership during a period of active growth and development of a world-wide enterprise involving the mining of nickel ores, the metallurgical treatment thereof, and the expansion and diversification of world markets for nickel products"; in October, 1944, the A.S.M. Gold Medal for the Advancement of Research was presented to him by the American Society for Metals "for his pioneering leadership in the field of metals research"; in February, 1946, he received the Alumni Award Medallion of the Alumni Association of Stevens Institute of Technology for his "distinguished service to the College"; in September, 1947, he was awarded His Majesty's Medal for Service in the Cause of Freedom — this honor by King George VI of Great Britain was authorized by His Majesty for the expression of gratitude to non-Britons who assisted the British people during the war and in recognition of valuable services in the Allied Cause; and in May, 1948, Mr. Stanley was awarded the 1948 Platinum Medal of The Institute of Metals at London in recognition of his outstanding services to the non-ferrous metals industries.

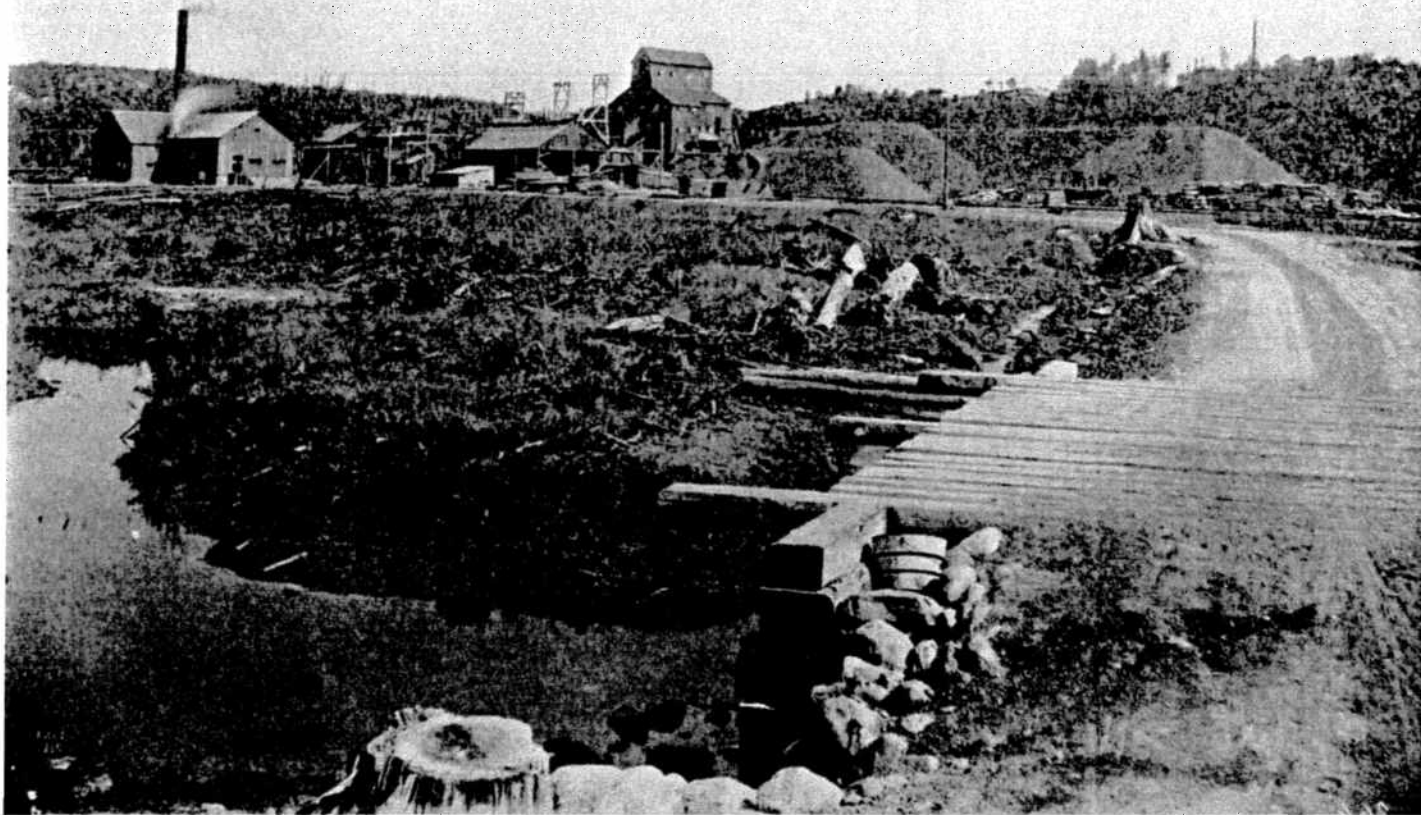
Surviving are his widow, the former Alma Guyon Timolat; a son, Robert C. Stanley, Jr., of Fair Haven, N.J.; a daughter, Doris (Mrs. Reuel E. Warriner), of Morristown, N.J.; and four grandchildren, Jennifer Stanley, Alma Timolat Warriner, Reuel Edward Warriner, Jr., and Robert Stanley Warriner.

Funeral services were held at 3:00 p.m., Wednesday, February 14, at St. Andrews Church, Richmond, Staten Island.

MOODS AND TENSES

I'd like to be a could-be
If I could not be an are.
For a could-be is a may-be
With a chance of touching par.
I'd rather be a has-been
Than a might-of-been by far,
For a might-of-been has never been,
But a has-been was an are.

The Copper Cliff Mine, Now Market Street



Here's a remarkably well-preserved photograph of the Copper Cliff Mine, probably taken about 1896. The ground where the mine buildings stood is now Market Street. Size of the timber which was cut when the area was cleared is indicated by the stump in the immediate foreground and the one at the turn in the road.

The Copper Cliff mine was discovered in 1885 by Thomas Frood, and was named for the steep gossan-covered hill which marked the outcrop of the ore body. It was the first property on which serious mining was done, in 1886, by the Canadian Copper Copper. It was the first mine from which ore shipments were made, and it provided the site for the erection of the first smelter, which was blown in on December 24, 1888.

The surface ore of the mine was rich in copper, and hence it was not surprising that the first consignments to the Orford Copper Co.'s refining works at Constable Hook, N.J., were regarded as copper ore only. It was while treating one of the early shipments from this mine, in 1887, that the discovery was made that the ore contained an important percentage of nickel. The Orford process of copper-nickel separation was then developed.

When the Copper Cliff Mine was closed down in 1905 in favor of the Creighton, it had produced 376,739 tons of ore. The shaft, 1052 ft. deep, was a compound shaft, inclined 45 degrees to the third level and 77½ degrees to the thirteenth level.

WHY MEN GET GRAY

Woman Caller — Hello! Is this the city bridge department?

Answerer — Yes, what can we do for you?

Woman caller — How many points do you get for a little slam?



Hockey Finals the Best in Years

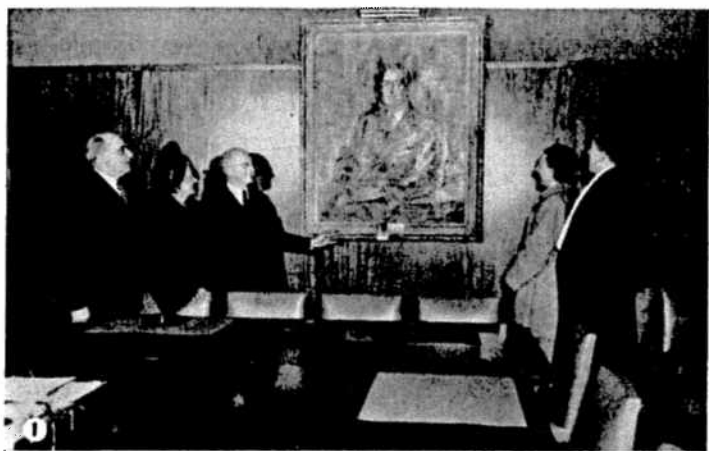
Deadlocked with two victories each as the Triangle goes to press, Sudbury Miners and Sudbury Carusos are staging a mighty battle for the right to represent the Nickel district in the Northern Ontario Hockey Association senior playdowns. Crowds have jammed Stanley Stadium for the thrilling best-of-five series, in which overtime periods have become an almost forgone conclusion. Final game is billed for March 2, the winner to meet Sault Ste. Marie Greyhounds.

Picture shows Scotty Saunders of the Miners beating the Caruso goalie, Toby Leipala, with a carefully placed shot. Paul Theriault, in the background, got an assist on the goal. On the left is Johnny Baby, the bouncing Caruso defenceman.

INCO FAMILY ALBUM

Our favorite assignment this month brought us pleasant visits in the homes of: (1) Mr. and Mrs. Stan Snider (Levack) and Sandra, 8, Sal, 7, and Stan Jr., 13. (2) Mr. and Mrs. Alex MacDonald (Frood-Stobie) and Brian, 4, June, 9, Eric, 11, Diane, 8, Ken, 14, and Iris, 12. (3) Mr. and Mrs. Frank Silc (Murray) and Garry, 10, Linda, 5, and Frank Jr., 8. (4) Mr. and Mrs. Walter Van Exan (Copper Cliff) and Russell, 12, Linda, 7, Robbie, 10; (standing), Jimmy, 20, Tommy, 15, Davey, 17, Jack, 24; (absent) Harry, 23. (5) Mr. and Mrs. Larry O'Brien (Copper Refinery) and Brennan, 5, Laurie, 6, and Kevin, 3. (6) Mr. and Mrs. "Blondy" Moyle (Creighton) and Patsy, 5, Tommy, 7, and Francis, 2½. (7) Mr. and Mrs. Frank Longe (Garson) and Dorothy, 14, Judy, 3, Frances, 11, and Frank Jr., 8.





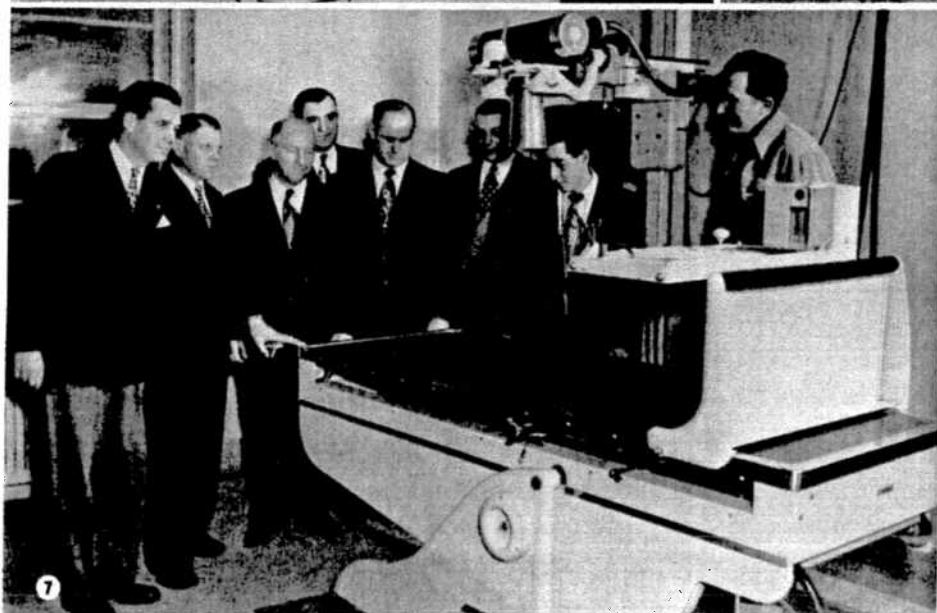
Port Colborne Justly Proud of New Hospital

Community pride soared to a new high in Port Colborne with the official opening on February 10 of the beautiful new General Hospital, a million-dollar memorial to men who gave their lives in World War 2 and a monument to the co-operative effort of the citizens.

Inco employees, whose Company contributed \$75,000 to the hospital fund and who themselves donated \$17,000, were prominent among the large crowds which gathered to inspect what has been described as one of the finest institutions of its kind of Canada. Some of them are seen in the accompanying photographs:

1. Mr. and Mrs. Harold Beck, R. C. McQuire, and Mr. and Mrs. Robert Rivers admire the portrait of Capt. Scott Misener hanging in the board room of the hospital.

2. Jim Potyok, Mr. and Mrs. Bill Burgess





Hokey-Pokey! What Goes on?

former Sudbury boy and a brother of "Super" Bertuzzi of Copper Cliff concentrator and Noah Bertuzzi of the Copper Refinery. Don't know who missed who in the first picture, but Citizen Gliebe has that right cocked in a most menacing way, and apparently it landed on the button because in the second shot Citizen Bertuzzi is prone and listening to the birdies, and obviously in a very befuddled state. Main go of a dandy card, this fight made such a hit with the fans that Promoter Vern Tupling has re-matched Joe and Leo for the Inco Club on March 26.

Mayhem in the majestic manner was practised at Inco Employees Club the night of February 26 when Joe Gliebe, the pride of Creighton, took the decision from Leo Bertuzzi of Hamilton, a

and their two children, and Mr. and Mrs. Howard Schooley look at equipment in the obstetrics wing.

3. Mr. and Mrs. Jim Williams, Bob Lambert, Walter and Mrs. Bernard, and Eddie and Mrs. Blackstock are seen in the gleaming cafeteria with its stainless steel installations.

4. In the laundry Mrs. Bernard and Mrs. Lubich discuss the size of the ironer while Eddy Lubich, Walter Bernard, and Art Doan check the pressing unit.

5. The solarium with its beautiful views of Lake Erie was the gathering spot for this group of Incoites and their friends: Mrs. Bell, Jim Potyok, Mrs. C. Daubney, Robert Rivers, Mrs. H. Schooley, Mrs. Guinter, Harold Beck, Mrs. Rivers, and Mrs. Beck.

6. This picture shows part of a four-bed ward, in which Eddie and Mrs. Lubich remark on the fine quality of the linen while Mrs. C. Daubney and Mrs. Eddie Blackstock and their husbands admire the smart bed tables.

7. The X-Ray room was of particular interest to the men, and this group is listening to Ray Copeland, left, hospital administrator, describe the equipment: Walter Bernard, Art Doan, Eddy Lubich, Howard Schooley, "Slim" Daubney, Bob Lambert, and Jim Potyok.

People came away from the official opening with the happy feeling that the hospital board had built wisely and well, and that their community had passed one of the most important milestones in its history.

Pay Clerks in Holdup at Bank

Almost any day is worthy of note in these eventful times, but as far as Len Turner and "Nifty" Jessup are concerned, February 19, 1951, is the one to write in big red letters.

Both employed by the pay office at Copper Cliff, they arrived at the Donovan branch of the Bank of Toronto shortly before 9.00 o'clock that morning with an Inco payroll of a large sum in cheques useless to anyone except the employees to whom they were payable.

As Len Turner stood on the steps of the bank with the case containing the payroll, one of two men, both said to have been armed with revolvers, came up to him and said "Let me have it!" Len made a grab for the gun the bandit was holding and it went off as he reached for it. The gun was pointing to the side at the time. The gunman then grabbed the payroll case and, with his accomplice, escaped in a car later identified as stolen. Fast work by Sudbury police resulted in the capture of the two robbers within a few minutes of the holdup after their car was trapped in Fir Lane.

The payroll, which the bandits apparently thought was in cash, was found to be intact and was distributed at the bank to Inco



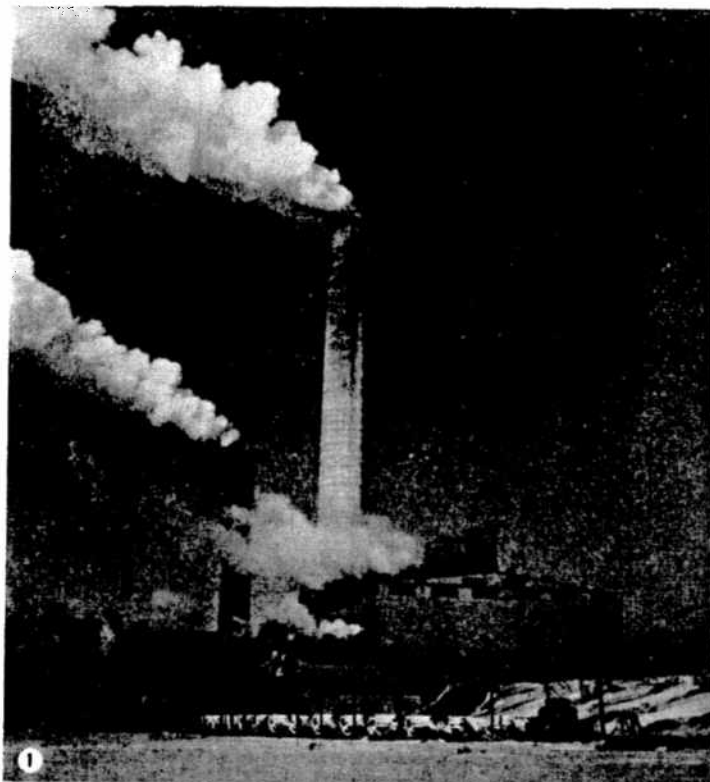
"Nifty" Jessup Len Turner
employees as usual. "A little of that sort of thing goes a long way," Len remarked to "Nifty" as they were handing out the cheques, and received a vigorous nod of agreement.

NOT A SECRET

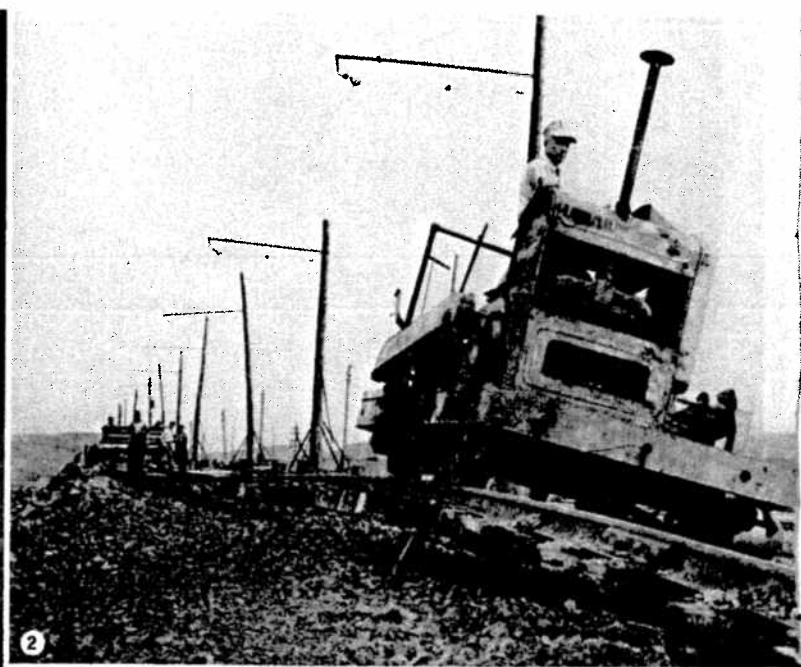
"How are you this morning?"

"All right."

"Well, then, why don't you notify your face?"



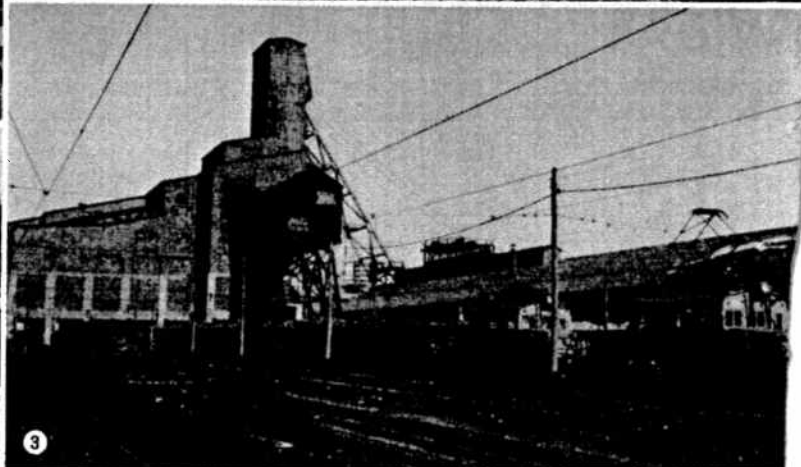
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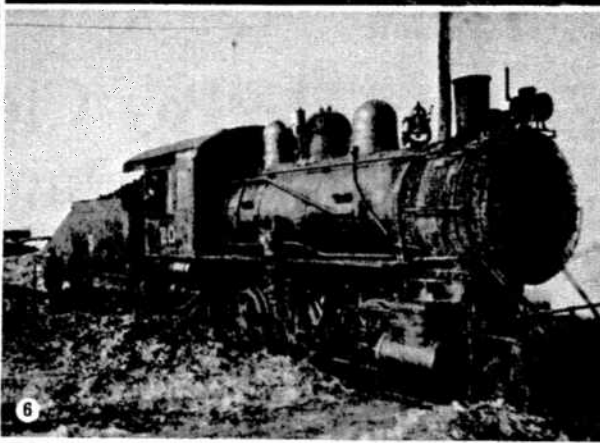
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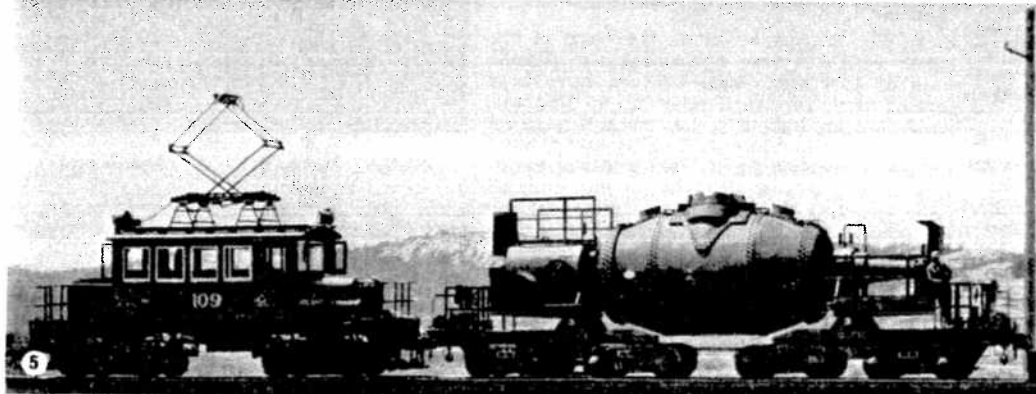
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Two Million Tons Monthly Moved by Transportation Dept.

"Not snow, nor rain, nor heat, nor gloom of night stays these couriers from the swift completion of their appointed rounds."

Those words were dedicated originally to the postmen, but they might just as well have been written about the men of Inco's Transportation Dept., especially during the past few months when some of the toughest winter traffic conditions in years have failed to disrupt the organization and efficiency of the Company's operational life-line.

Inco's transportation system has about 80 miles of standard gauge track, and handles upwards of 2,000,000 tons of material per month, the main items of which are ore, flux, sand fill, fuel, mine timber, equipment and supplies, intermediate revert products, and final products from the smelters including slag to the dump and blister copper to the copper refinery. Nobody can say those boys aren't pulling their weight!

Now in service are four 100-ton, three 65-ton, and nine 50-ton electric locomotives. Steam locomotives are used in regular service at Coniston and also as standby equipment at Copper Cliff. Six steam locomotive hoists, and heavy snow plow units, are also included in the system's equipment.

1,200 Cars in Service

Company-owned rolling stock consists of more than 500 cars of all types at Copper Cliff, Frood-Stobie, Levack and Coniston, including ore cars, 50-ton revert cars, slag pot cars, hot metal cars, flat cars, and miscellaneous types. The Canadian Pacific Railway and the Canadian National Railways maintain more than 700 steel bottom dump cars in ore and flux service for the Company.

Interchange tracks connect the Inco system with branches of the CPR and CNR at Clarabelle Station between Frood and Copper Cliff. The two railways complete an average of 10 trainload transfers daily at this point, consisting of ore and flux from mines serviced

directly by them, Creighton, Murray, Garson, Garson sand pit, and Lawson Quarry, as well as equipment and supplies from outside points. Interchange tracks are also maintained at Sprecker, between Clarabelle and Frood, to connect with the CPR main line west, over which come ore shipments from Levack.

Train operating regulations, patterned after standard railway regulations and modified to suit local conditions, govern the Inco system. A probationary period of training is given all train operating crews. Locomotive drivers must be certified as competent by both the electrical and mechanical departments before being placed in charge of a locomotive. Conductors and brakemen are examined by the Safety Dept. to ensure that crews are familiar with the train operating regulations.

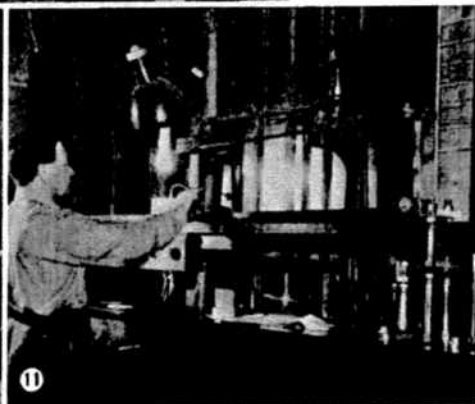
Here-and-there glimpses of the Inco transportation system in operation are seen in the accompanying photographic layout:

1. A train of lime-whitened slag pots pulls out from the east end of Copper Cliff Smelter, bound for the slag dump. The average train carries 19 pots, each holding 16 tons of slag. Meanwhile an empty train is entering the west end of the smelter to be spotted at the reverberatory and blast furnaces, so that a continuous movement of slag is being maintained. In 40 years the slag dump at Copper Cliff has spread over 240 acres of ground and now contains more than 35,000,000 tons of slag.

Track-Shifting on Slag Dump

2. Provision of sufficient track to allow continuous spotting and dumping of slag pot trains is one of the major headaches of the Transportation Dept. Three dumps are maintained in the slag dump area so that when sufficient slag has been dumped at one location to require shifting the track

(Continued on Page 11)





Over 4,300 Entries in Annual Sudbury District Music Festival

With an all-time record of 4,364 entries, the annual Music Festival sponsored by Sudbury Kiwanis Club and the Sudbury Branch of the Ontario Registered Music Teachers' Association this year wrote a brilliant chapter in the history of this top-flight community service.

Despite cold weather and a wave of influenza, thousands of entrants from all points in the district came to compete, benefit from the wisdom of the adjudicators, share in a rich cultural experience, and, in some cases, take home generous awards. On one occasion during the Festival there were 1,542 children in the Legion Memorial Hall, besides spectators.

Members of the two organizations responsible for staging the big event worked hard to ensure its success. The music teachers gave of their best in grooming the contestants, and the Kiwanians worked like a carefully coached team to handle the countless administrative and production duties without a hitch. Orchids to them all, once again!

The two English adjudicators, Albert Howe and John Clements, were most helpful to all the contestants and their teachers.

Pictured here are some of the performers who took part in the Festival Hi-Lites programs at Inco Employees Club the evenings of February 16-17:

1. One of the most popular groups entering the Festival was the colorful male section

of St. Anne's Church choir, under the gifted leadership of Maurice Gravelle. Spirited singing of French folklore was their outstanding contribution. They won the George A. Trudell trophy.

2. Almost unable to believe her good fortune, Ella Minkkila receives the \$250 Inco Scholarship, presented on behalf of the Company by J. C. Bischoff. She was regarded as a budding genius of the piano by the adjudicators. Her proud father, Vaino Minkkila, is a pillar leader at Frood-Stobie Mine. Twelve-year-old Ella also won the Ontario Registered Music Teachers' Association trophy for piano competition, Grades 6 to 10.

3. The piano duet of Shirley Akkanen and Elena Vitali drew hearty applause for their rendition of Malaguena.

4. Gatchell Public School choir, skilfully conducted by Frank Menagh, were infectious happy as they sang The Swing. This group won the shield donated by Nipissing Chapter of the I.O.D.E. for the highest marks among public, separate, and suburban schools.

5. Lawrence Deneka of Coniston, with his E-flat alto horn, captured the \$100 Sudbury Daily Star scholarship and the City Dairy trophy for brass instrument classes.

6. In the piano trio competition under 11 years, Karen Kivinen, Lorraine Branning, and Douglas Mustard, shown here, won the Kiwanis Club shield.

Frood-Stobie Scores Its Seventh 100,000



Safety Engineer Mel Young and every other man on the force heaved a big sigh of satisfaction on January 30 when Frood-Stobie Mine achieved its seventh 100,000 safe shifts without a lost-time accident since the competition was inaugurated in 1944. Coniston Smelter is next in line, having

reached the coveted goal six times. The safety objective has been attained a total of 27 times at Inco plants in the Sudbury District. Picture shows a group of men on 1600 level of Frood-Stobie's No. 7 Shaft, receiving their theatre-ticket prizes from Asst. Supt. Al Olive: right to left, Reg Gillis,

Alden Ramsay, Russell Clark, Anton Ilich, Norman Davis, Russell Williamson, Ellsworth Stevens, Harvey Marshall, Gaston Morin, and Victor Proksa. To them, and all the others who contributed to this fine safe-working achievement, heartiest congratulations from their fellow employees throughout Inco!

Two Million Tons Monthly

(Continued from Page 9)

closer to the slag dump face, slag trains are diverted to another dump. The slag is allowed to cool and is then levelled by an 85-ton spreader, designed locally and built in the Copper Cliff shops, which works like a road-grader. Then the track is moved, the operation shown in Picture No. 2. Clamps of the track shifter fasten on to the two rails and then a motor-driven jack, propelled downward at an angle, hoists the entire track, ties and all, into the air until of its own weight it shifts sideways toward the edge of the dump. Track must be moved an average of twice a week.

3. Here a train of ore cars is being made up at No. 3 Shaft of Frood-Stobie Mine, which is served directly by the Inco Transportation Dept. The average ore train consists of 30 steel bottom dump cars of 80 tons capacity; the maximum is 40 cars, or a gross load of about 4,100 tons. Time for the three-mile run to the Copper Cliff upper yard averages 20 minutes. Transportation of sand-fill from Copper Cliff to Frood-Stobie has greatly increased traffic on this run. One 100-ton or two 50-ton electric locomotives are used. When the picture was made the No. 3 Shaft yard was still being dug out from under the heaviest snowfall Sudbury District had seen in 18 years.

4. This shot from the top of the concentrator at Copper Cliff shows part of the Transportation Dept.'s stock yard on an average day. The cars seen contain low grade ore from Creighton and quartz from Lawson Quarry for flux, sand, slack coal for the reverberatory furnaces. In the foreground are tailings line pipes.

Transporting Molten Copper

5. A feature of the transportation services at Copper Cliff since 1937 has been the transfer of molten blister copper in hot metal cars from the smelter 1½ miles to the

Copper Refinery anode furnaces. Picture shows one of the cars, with a capacity of 70 tons, being hauled to the refinery by a 50-ton locomotive. Between charges of molten copper the cars are kept at a temperature of about 2,200 degrees F. by oil burners.

6. Eight miles of standard gauge track, and interchange tracks with the CPR and CNR, are maintained at Coniston, and motive power is supplied by two 80-ton steam locomotives, one of which is seen in this photo, with Ed McKerral at the throttle. The Coniston locos really have to dangle to negotiate the three per cent grade leading up to the smelter from the CP and CN tracks.

7. Longest seniority among the Transportation Dept.'s 300-odd employees is held by Johnny Martin, seen here punching out at the end of another shift as yard foreman. To February 1 he had service of 35 years and 117 days.

8. By no means all of the Inco transportation system's traffic is on rails. The busy gent seen in this photo is George Gingras, who from his little depot in the smelter yard at Copper Cliff controls the movements of a fleet of trucks and chauffeur-driven cars, transporting supplies, equipment, and personnel between and within plants. On an average day he keeps about 15 trucks and cars on the move.

9. The veteran engineer shown here at the controls of a 100-ton locomotive is George Hildebrand.

10. A train dispatcher is on duty each shift at the Copper Cliff upper yard to control train movements, and between sections of the Inco system such movements are made only on the orders of the dispatcher on duty. Picture shows Bill Bamford at his usual job of keeping at least a couple of telephone lines hot, in his office at the West scalehouse.

All Shipments Are Weighed

11. Two scale installations are located in the Copper Cliff upper yard to intercept the flow of both incoming and outgoing traffic. They are plate fulcrum type railway track scales of 400,000 lb. capacity. All trains of

ore and other material received from the CP or CN railways and over the Company's line from Frood-Stobie are weighed. The clerk shown at the West scalehouse is Peter Pakulah.

12. In the Transportation Dept.'s office at Copper Cliff are seen: J. C. McKinnon, asst. supt., conferring with Nels Green, roadmaster, immediately behind whom is Leslie Mills, chief clerk; in the right foreground is Fred Savage, asst. to the supt., and in the background is Ed Desrosier, section foreman.

13. In this huddle, facing the camera, are Frank Bouillon, asst. roadmaster, Bill Boyle, smelter yardmaster, and Alex Shields, general yardmaster, getting acquainted with a newcomer to the staff, Clark Phillips, formerly safety engineer at the Open Pits.

14. Track maintenance and laying of new track is a never-ending job which must go on, rain or shine, boiling heat or bitter cold. A new stretch of track east of the smelter is being laid here; in the foreground are, left to right, Vic Belanger, Eligio Tomini, Ben Jackus, and Wladus Skilandzunas.

15. Orders for a run from Frood-Stobie to Copper Cliff are being received in this picture by Alf Mash, engineer, from Denzil Severin, conductor; the brakeman is Johnny Hall.

16. Any picture coverage of the Transportation Dept. would be far from complete without a photo of Supt. R. A. Elliott, who is continuing his splendid recovery from very serious injuries received in an automobile accident more than five months ago. With Nurse Burnside he's seen in his room at Copper Cliff Hospital. The popular "Ab," whose return to duty is eagerly awaited by all ranks, started with the Company in August of 1912 as a brakeman, and became Supt. of Transportation in 1929.

PIANO FOR SALE

On a card in the front window of a suburban home appeared the following notice: "A piano for sale."

In the window next door another card appeared with just one word: "Hurrah!"



CREIGHTON TEEN-AGERS



SATURDAY IS THE BIG NIGHT AT CREIGHTON

Every Saturday night the Employees Club at Creighton is turned over to the Teen-Agers, and it would do your old heart good to see the way the young fry make the most of their opportunity. Every recreational facility in the place gets the full treatment, and the evening usually winds up with a nickelodeon dance. As a special treat for those rugged individualists who have given up dancing for Lent, a full fledged orchestra affair is now being planned for shortly after Easter.

With an enrolment of more than 100, the Creighton Teen-Agers Club is one of the liveliest organizations in town. President is Donald MacDonald, and secretary-treasurer is Dolores Brooks. Valuable assistance in the club's activities is given by Mrs. George Rymer, Mrs. Bob Seawright, and George Truskoski.

In the picture layout on the opposite page some of the Creighton kids are seen during a typical Saturday night round-up:

1. Arlene Koskela and Tom Watters are playing for keeps in a table tennis match against Pat Gallagher and Tommy Earl. The ball, which Tom Watters has just returned, is silhouetted against the head of Lorraine Gallagher, second from the left among the spectators.

2. In this group around the scoreboard in the bowling alley are: standing, Pat Gallagher, Catherine Farrell, and Helen Yawney; seated, Arlene Koskela, Helen Moyle, Sheila Farrell, and Catharine Mitchell.

3. The Triangle camera catches Carmen Sharpe playing a drop shot at badminton. His partner is Walter Saffic.

4. Leonard Desjardins pauses to give Lawrence Gonnella and Gino Fievoli a demonstration of the intricacies of tying the Windsor knot, without which no young man is completely dressed.

5. Dick Brooks and Lorraine Gallagher make a gallery for Mac MacDonald as he massages the ivories with "My Heart Cried for You."

6. Keeping close tab on the bowling score here are: seated, Ray Jones, Donald MacDonald, and Bob Seawright; standing, Ken Jones, Tommy Earl, Eddie Zanier, Vic Hreljac, and Eddie Rosborski.

7. At the snack bar popular Mrs. George Rymer is dispensing soft drinks to Bill Mulligan, Tom Stefanko, and Ray Suutari.

8. Initiation into the mysteries of chess is being conducted here by Hector Chevrier (centre). Grouped around the "professor" are Tony Kramarich, Jacqueline Galipeau, Arvo Keskinen, Leland Desjardins, Walter Truskoski, Angeline Marcinshyn, and Adele Johnson.

Act of Penance Brought Miracle

When he suffered a paralytic stroke which left him helpless from the waist down, Edmond Paquette, an Inco pensioner at Coniston, undertook as an act of penance the difficult task of building a church within the narrow confines of a glass carboy. He pledged himself to finish the often exasperating assignment, working through the narrow neck of the bottle, without once losing his temper. He regarded it as a miracle that, when he had completed his act of penance, he was able to walk unaided.

The church, which is fully furnished with



Azilda Musher Wins

coming Chelmsford Valley Chamber of Commerce. A huge crowd lined the town's main street to applaud the seven contestants. Tony Landry of Azilda, former Murray Mine employee, added lustre to the fame he won in the International Dog Derby at Ottawa by putting his nine Siberian huskies over the rugged 14 miles in an hour and four minutes to win the race by an eight-minute margin. Although last to start, Landry's dogs overtook all but two of the other teams and finished in fine fettle, as the photograph shows. Their breeder-owner appears in the inset. W. T. Waterbury, asst. to the vice-president of Inco, was official starter.

Mild weather and a slushy course failed to mar the first annual dog derby staged February 25 by the up-and-

altar and pews, is a remarkable piece of workmanship.

Mr. Paquette, who is 81, resides with his



daughter and son-in-law, Mr. and Mrs. "Dusty" Gareau of Coniston. Another daughter, Mrs. A. Larcher, lives in Sudbury.

MAN'S A QUEER ANIMAL

With a lid on each eye
And a bridge on his nose
With drums in his ears
And nails on his toes;
With palms on his hands
And soles on his feet,
And a large Adam's apple
That helps him to eat
With a cap on each knee,
On each shoulder a blade,
He's the queerest thing made.

First Aid Dates

T. M. Crowther of the Safety Dept. has announced dates for the annual First Aid competitions as follows:

Frood-Stobie, March 4, 7.15 p.m., main auditorium, Inco Employees Club, Sudbury.

Copper Cliff (Semi-finals), March 7, 7.15 p.m., Copper Cliff Community Hall.

Garson Mine, March 4, 7.15 p.m., Employees Club, Garson.

Creighton Mine, March 7, 7.30 p.m., Employees Club, Creighton.

Murray Mine, March 8, 7.15 p.m., Large room downstairs, Inco Employees Club, Sudbury.

Open Pit, March 9, 7.15 p.m., Large room downstairs, Inco Employees Club, Sudbury.

Copper Cliff (Finals), March 9, 8.00 p.m., Copper Cliff Community Hall.

Levack Mine, March 12, Employees Club, Levack.

Copper Refinery, March 12, 7.15 p.m., Large room downstairs, Inco Employees Club, Sudbury.

Coniston Plant, To be arranged with Dr. Jessop.

Teams representing the surface plants, Copper Cliff, Copper Refinery, Open Pit, and Coniston will compete for the Duncan Finlayson trophy on March 20 at 7.15 p.m. at Inco Employees Club, Sudbury. Teams representing the five underground mines will battle it out for the Herman Mutz trophy on March 22 at 7.15 p.m., also at the Inco Employees Club.

The final, between the winners of the Finlayson and Mutz trophies, for the Parker Shield and cash awards, will be staged at Inco Employees Club on Thursday, March 29, at 8.00 p.m.



Weather?—Lots of It!

There has been no shortage of weather in Sudbury District this season, the Triangle is reliably informed.

During the winter to date a total of 90.3 inches of snow has fallen. The heaviest fall during a confined period was on February 11, when 9.6 inches was recorded. Until the mild spell in the last week of February most of the entire season's snow was still on hand.

Temperatures have vied with snowfall for the headlines. On February 9 the mercury nosed down to 47 below, lowest in 18 years. On several days the thermometer stood between 30 and 40 below.

Accompanying pictures give some idea of the size of the snowbanks on Copper Cliff streets: (1) Granite; (2) McNiven; (3) Domenico; (4) Serpentine.

The unusually heavy snowfall's challenge was well met by the municipal services in Sudbury and the towns of the district. Crews worked day and night to keep the roads open.

BROTHERLY PRIDE

Tim — My sister is awfully lucky.

Jim — Why?

Tim — She went to a party last night where they played a game in which the men either had to kiss a girl or pay a forfeit of a box of chocolates.

Jim — Well, how was your sister lucky?

Tim — She came home with 13 boxes of chocolates.

Cliff Curlers In the Brier

One of life's fondest dreams was realized by four Copper Cliff curlers the night of March 2 when they took off for Halifax to compete in the Dominion Curling Championships for the Macdonald's Brier Tankard.

The men who captured this high honor for themselves and their club were Walter Johnstone, skip, Arnold Boyd, Walter Flowers, and Bill MacKay. At Kirkland Lake on February 21 they won the right to represent Northern Ontario in the 11-team Brier matches by defeating Tom Roseborough's Kapuskasing foursome 13-7.

Opening with a three-ender and adding scores of two, four, two, and a brace of singles, Johnstone was in command all the way in the sudden-death playoff. He led 12-4 at the ninth end. Roseborough had reached the finals by ousting Tom Ramsay's 1950 Dominion champions.

Johnstone forced the sudden-death playoff by edging the Kapuskasing foursome 12-10 in



Walter Johnstone



Arnold Boyd



Wally Flowers



Bill MacKay

the last match of the round-robin series, although for a while it didn't look as if he'd make it. Roseborough scored a three on the fourth end and a five on the seventh to take a commanding 9-5 lead but the Copper Cliff lads, curling magnificently, rallied with singles on the eighth and ninth ends and then moved ahead with a three on the tenth. It was tied after Roseborough scored one on the eleventh, but in the final chapter the Cliff curlers counted two to win the match and tie up the series.

This is the fourth time that a Sudbury District team has carried Northern Ontario's colors into the famous Brier. A. H. Tobey of Sudbury skipped teams which won the honor in 1928 and 1930, and W. A. McMitchell was skip of the foursome which entered the Dominion finals in 1942, with A. S. Cooper as lead, Don Groom as second, and A. H. Cooper as vice-skip.

The four Copper Cliff men who enter the 1951 final at Halifax are all married and are all veterans of World War 2 with a combined record of 12 years in the services. Johnstone and Boyd are 37 years old, Flowers is 27, and MacKay is 34. They have a combined service of 59 years with Inco at Copper Cliff; Johnstone is a shift boss in the converter building; Boyd is a locomotive engineer, Flowers is a machinist, and MacKay is a sinter plant operator.

Another team brought honor to Copper Cliff Curling Club when Scotty Godfrey captained his foursome to victory in the main event and the grand aggregate of the 1951 Geraldton bonspiel. George Jarrett was lead, Angus Harrison second, and Holly Hyland vice-skip.

Win Nickel Belt Badminton Titles



Upsets, of which the most notable was the straight-games defeat of long-reigning champion Ovide Gauthier by hard-driving Harvey Nadeau in the men's singles, made the finals of the Nickel Belt badminton championships at the Inco Club a crowd-thriller from start to finish. Some of the newly crowned titlists are pictured above: Harvey Nadeau, men's singles; Edna Johnston, ladies' doubles; Jerry Myers, men's doubles; Stella Crawford, ladies' doubles;

Richie Gallagher, men's doubles; not shown are Mary Terrell, ladies' singles champ, and Marg Wilson and Ovide Gauthier, mixed doubles titlists.

Winners in the consolation events were: men's singles, Frank Truskoski; ladies' singles, Chea Medina; men's doubles, Doug Pappin and Walter Wilson; ladies' doubles, Nellie Smith and Jean McCrea; mixed doubles, Edna Johnston and Doug Pappin.

MEDICALLY SPEAKING

(By the Inco Medical Staff)

Just what is a "good tonic"? Many persons when they are feeling "under par" think that all they need to set matters right again is a "tonic". The other day an employee phoned the medical centre, requesting a tonic for his wife. He was persuaded to arrange a medical examination and unfortunately investigation revealed she was suffering from a hopelessly incurable disease. How useless a "tonic" would have been!

The same day another patient came in requesting the same thing because she felt tired and weak. Medical examination showed that she was suffering from pernicious anaemia. She was started on specific treatment for that disease and is now well on the way to complete recovery.

Now we do not wish to suggest that any person feeling in the need of a "tonic" is suffering from some serious disease. The vast majority have just some trivial upset which only if neglected might possibly produce serious trouble later on.

There is no such thing as an all-round "good tonic" although current newspaper and radio advertisements would have us believe otherwise. There are many general tonics prescribed such as vitamins, bitters, iron and liver mixtures, etc. They most often do nothing other than make the patient feel he is combating something. They often serve merely to delay or obscure the true diagnosis.

If there is a "tonic", then good food, fresh

air, proper rest and relaxation with avoidance of all excesses, seems most nearly to fill the bill. Because this prescription, does not come in a bottle (at a fancy price) to be taken three times daily after meals, most people don't feel satisfied with this advice.

Well, we have rambled on long enough. To sum up — If you feel "under par," don't expect a magic elixir to fix things. See a doctor, have an examination to establish and treat the cause of your symptoms!

We were reading in the newspaper yesterday that there were several thousand deaths from smallpox in Calcutta, India. With something of an "It couldn't happen here" attitude, we made a special check on the first 15 patients we saw today, and to our amazement only eight had been vaccinated, and none within the last five years. Somewhat disturbing!

GETTING PERSONAL

"What's bothering Susie?" asked one lady at a bridge party. "She looks furious."

"Oh, she's trying to reduce. She just weighed herself on one of those scales with the new speaking attachment . . . and when she stepped on it the voice said "One at a time please!"

Said the big horse to the little horse: "I don't remember your mane, but your pace is familiar."

WASH ANYWAY

Mother — Junior, go wash your hands and face.

Junior — Aw, I just took a bath this morning.

Mother — Then go wash the bathtub.

This Canada of Ours



Background of this photograph of swathing barley near Radville gives an idea of the horizon-reaching expanse of the Saskatchewan prairies.

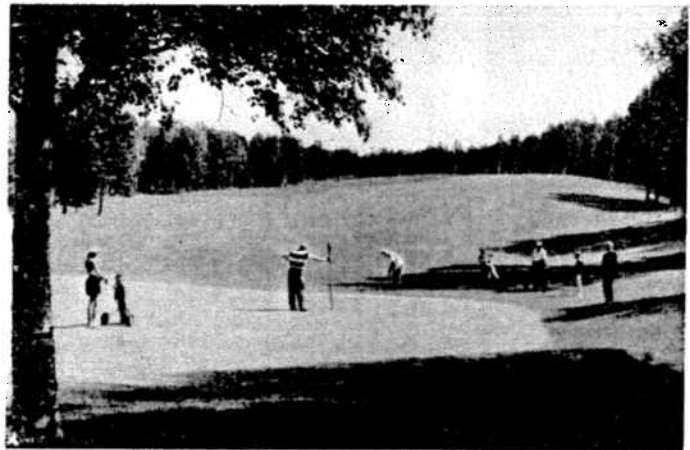
This determined young man of Kelso is one of hundreds of Saskatchewan boys who learn how to raise livestock through community calf club contests.



Enough to make any golfer yearn for the feel of his clubs is this view of the 15th hole on the sporty and picturesque golf course by Lake Waskesiu.



A scene of tranquil beauty is this picture taken at "The Narrows" on Lake Waskesiu, in northern Saskatchewan's lovely national park.



SASKATCHEWAN

By JOHN and ALOIS WAGNER, Murray Mine

The Crees called it *kishiska djiwan*, or "rapid current." The white man's pronunciation made it "saskatchewan," and that became the name of the river which, with its tributaries, waters the world's richest grain belt in our nation's golden heart.

The province which bears this river's name has become the breadbasket of the free world. Saskatchewan's economy is based on wheat, but we have much more than that to boast about. Lush pastures make our native province one of the country's greatest cattle-raising areas. Already an important producer of base metals, Saskatchewan has the potentialities for an immense mining industry. Extensive uranium developments are underway, oil derricks are sprouting out of the prairie, and the Athabasca tar sands hold further promise for the province's petroleum industry.

Saskatchewan's capital, Regina, is an important manufacturing and distributing centre of 65,000 people. Originally called Pile o' Bones because the site was littered with buffalo bones, it got its present name when the CPR reached the prairie hamlet in 1882. It was capital of the North West Territories until 1905, when Saskatchewan became a province.

And never let anyone tell you Saskatchewan has no scenery. There's no finer anywhere than in the wooded lakelands of our provincial parks, and the sight of hundreds of honkers winging southward across a hazy blue fall sky is something you wait for every year.

But our favorite Saskatchewan scenery is the rippling sea of golden wheat stretching into infinity all around you on a mid-August day — a vista with no limits, just like the potential of this Canada of ours.



JOHN AND ALOIS WAGNER