INCO TRIANGLE

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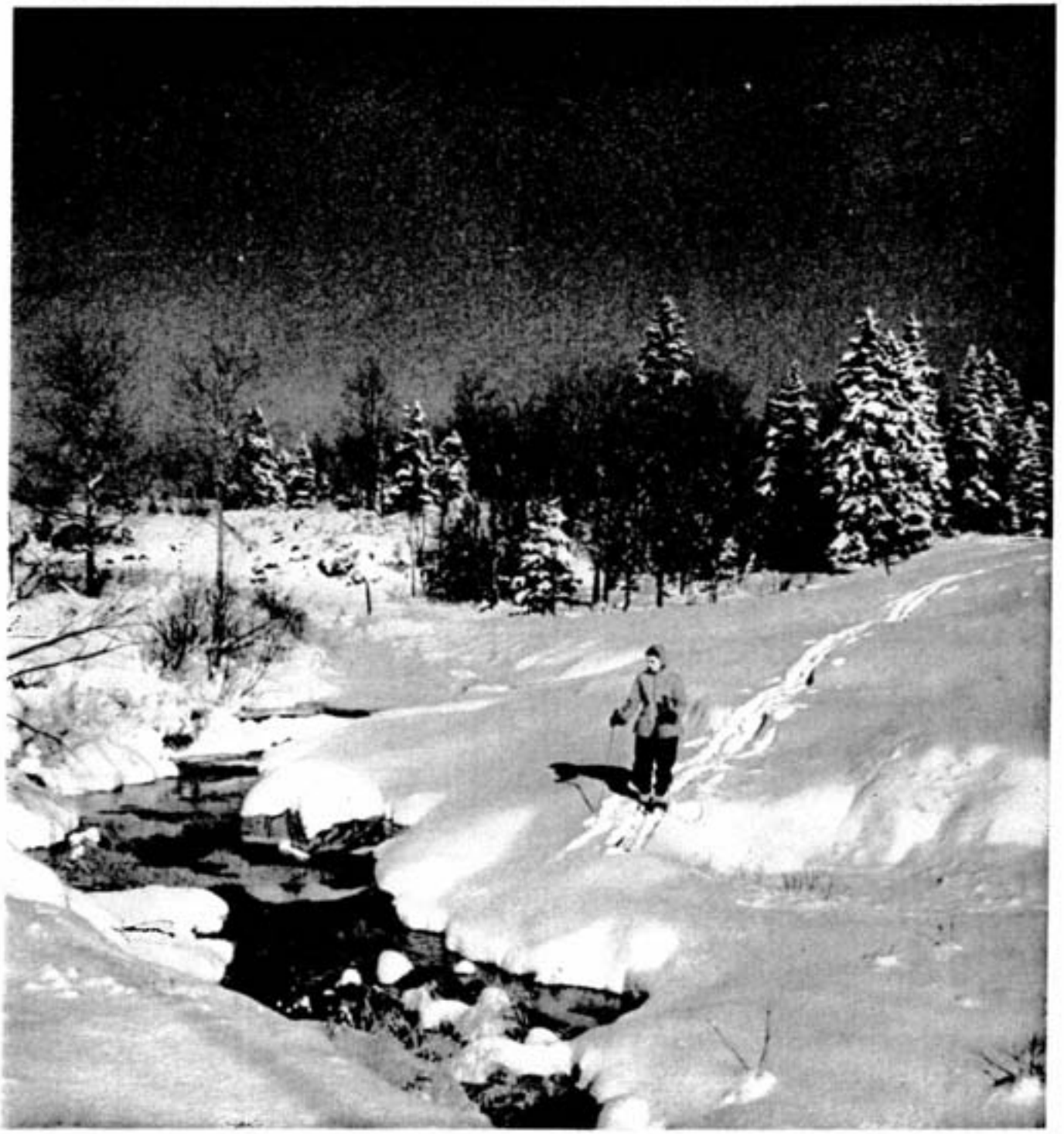


Detour!

INCO TRIANGLE

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

Unique Service To Industry by Inco 'Test Tube'

The corrosion testing station at Kure Beach, near Wilmington, N.C., was established by The International Nickel Company in 1935 for the immediate purpose of comparing the sea water corrosion resistance of low alloy steels with carbon steel. Soon other materials were added to the program so that eventually comparative tests were being made on all kinds of ferrous and non-ferrous metals and alloys. The testing facilities have since been further extended to observe the behavior of several kinds of protective coatings, the effects of marine growth on wood as well as on metals, and even the effects of sea spray and sea air upon rope.

In 1940, facilities for exposing specimens to atmospheric attack were added. The atmospheric test lot is one acre in area and has room for 40 racks, each of which will support from 700 to 900 specimens. At the present time, the number of specimens exposed in the atmospheric test is over 20,000. This is believed to be the largest number of specimens on test at a single station anywhere in the world. The specimens exposed here, and in the sea-water testing station, are the products of over 100 companies.

The number of specimens now exposed in sea water is over 2,500 and, during the past 15 years, the number so tested has been over 15,000. All of this testing has been essentially a co-operative effort, involving Inco and producers and users of materials and coatings. Many of those interested in the tests have visited the test site each year when specimens are withdrawn from water for examination. The number of visitors during the past five years has been over 1,500, representing over 100 companies, in addition to the various government services concerned with sea water and sea air corrosion problems.

The facilities for carrying on the underwater tests are now located at Harbor Island, located between the mainland and Wrightsville Beach, about 15 miles north of the Kure Beach site. Here the inlet, through which sea water flows back and forth with the changes in the tides, forms an even better "Ocean Test Tube" than the basin at Kure Beach which was first given that very appropriate name.

In the sea water test, most specimens are exposed on racks continuously immersed at a depth of from three to four feet. Facilities have been provided also for hanging specimens from a large pontoon float when it is necessary to maintain a constant water line or a constant depth of immersion in spite of the rise and fall of the water with the tides.

The racks themselves, with the exception of those furnished by individual co-operating companies, are made either of Monel, or of the 70% ocpper-30% nickel alloy, well known for its good performance in marine condenser tubing, etc. Racks made of both these alloys are welded with Monel rod. Some of these racks and rods have been in continuous use since 1935 and appear still to be as serviceable as ever.

The period of exposure of a group of specimens may vary from six months to several years — the longest to date being 12 years.

The need for more precise information on the abilities of alloys to withstand the severe erosive effects associated with such uses as condenser tubes, piping systems, pump impellers, propellers and other underwater parts of fast moving ships has led to the design and operation of several types of erosion testing apparatus. By means of these devices specimens in the form of bars or tubes are whirled through violently agitated sea water at velocities up to 30 ft. per second.

The study of the anti-fouling characteristics of metals, alloys, plastics, and protective coatings has been an important phase of research which has been conducted with the co-operation of the William F. Clapp Laboratories, Inc.

As a continuation of the full scale tests of marine piling in the basin at Kure Beach, advantage was taken of the necessity of building the new rack supporting structure at Harbor Island to make each pile serve as a test piece. In addition to timber piles treated with different preservatives against marine borers, the several steel piles used have been giving different types of protection against corrosion. These range from the best of modern organic coatings through hot dipped and sprayed metallic coating to Monel and cupro-nickel sheathings, which are applied to the critical tidal zones. In addition, a large number of piles is being given cathodic protection.

The new laboratory at Harbor Island offers improved means for preparing specimens for test and examining them afterwards. Another necessary feature is the maintenance of records of test details and in performance of materials. The laboratory also includes a marine museum where sample specimens from the many studies are displayed.

Inco's industrial motion picture "Corrosion In Action" was filmed principally at Kure Beach and Harbor Island. This film is available on request for showings before technical, industrial and educational groups.

Lively's Mayor "Decorated"

The mayors of Toronto and Ottawa, or even the Lord Mayor of London for that matter, now have nothing on Mayor Albert Elliott of the new town of Lively when it comes to dressing the part.

Lively's first chief magistrate was surprised at his home one evening shortly after he was elected, and formally presented with a chain of office.

True, the chain looked suspiciously like it had been requisitioned from an old-fashioned chandelier, and the gravity of some of the remarks with which it was presented was open to question, but Mayor Elliott was more than a match for all the kidding the irreverent visiting delegation could toss his way.

Mayor W. T. Waterbury (right) of Copper Cliff, who made the presentation, holds a leather plaque intricately hand-tooled by C. H. Stewart, whose hobby this exacting work is; it is inscribed "First Mayor, Town of Lively, His Worship R. A. Elliott, 1953".

Witnesses of the historic ceremony are reflected in the mirror: R. D. Parker, I. J. Simcox, J. C. Ferguson.

BOUQUET FOR MEDICAL PLAN

Acknowledging the letter of Christmas greetings from executives of Inco and the $25.00 bonus cheque sent to all retired employees again last year, Miss Mary I. Reynolds of Sudbury added words of appreciation for the Company's medical plan and its assistance to her during her long illness. She said, "It is a wonderful feeling to be so well taken care of even after one is no longer in the active employ of the International Nickel Co. Dr. Stanyon did everything possible to see that I was properly cared for." Miss Reynolds also mentioned how much she enjoyed the Quarter Century Club dinner in November, which she had sufficiently recovered to attend, and how pleasant it is to meet old friends at this annual party for the pensioners and long-service employees.

Life is like a bank in that neither one pays dividends unless we make deposits.
—Cornelius Greenway.

INCO FAMILY ALBUM

Not one New Year's resolution broken yet is the score for these fine people (we hope): (1) Mr. and Mrs. Mick Brouse (Lawson Quarry) and Debbie, 18 mos. (2) Mr. and Mrs. Jack McGauley (Coniston) with Deborah, 4; Michael, 6; Dan, 16 mos. (3) Mr. and Mrs. Frank Ledger (Frood-Stobie) with Brian, 15. (4) Mr. and Mrs. Larry Croteau (Copper Cliff) with Robert, 12; Raymond, 6; Lawrence, 17, and Irene, 19; (Mrs. Phillip Landriault.) (5) Mr. and Mrs. Jim Walter (Port Colborne) with Nancy, 5, and Linda, 11. (6) Mr. and Mrs. A. Hamilton (Creighton) with Jimmy, 4; Rennie, 2; Betty, 10, and Brenda, 6. (7) Mr. and Mrs. G. Gifford (Garson) with (back row) Eileen, 16; Leonard, 10; Billy, 3; Joyce, 11; Colleen, 5, and Bob, 6; (front row) Shirley, 1; Tom, 13; Frances (Mrs. Aubrey Pringle); Marion, 20, and Jean, 8; not shown, Dorothy, 2, and Harold, 19.

Business Girls Learn Curling Is Not Hair-do's

Well, the business girls have finally gone after curling in a big way.

Heretofore curling to them has been some frivolous thing associated with the condition of the hair (hey, that reminds us, we're late for our Toni appointment) or an unfortunate association with the drudgery of sweeping.

But now it's different. Initiated to the thrills of the grand and glorious game, the gals are out there giving furious broom service to the ice that they never dreamed of giving to the kitchen floor, and reaching for the in-turn like they never have for the telephone.

Through the co-operation of the directors of the Sudbury Curling Club, who know a good thing when they see it, the Sudbury Business Girls' Curling Club have the ice every night of the week from 6.00 to 8.00. The importance of this generous gesture to the future of housekeeping cannot be overestimated.

There were 56 at the organization meeting of the SBGCC at the Inco Club, of whom 22 had an Inco affiliation. When they elected officers they picked Jo Walmsley for president, a natural choice since she had sparked the move to get going. Others on the executive are Elsie Richardson, vice-president, Gloria Callandra, secretary, Beulah Hunt, treasurer, and the following committees: competition, Caroline Wood, Leila Holtby, Gert Walmsley, Anna Fleming; entertainment, Ann Whent, Barbara McKenzie, Jean Markle, Doris Reilly.

And now, when the camera takes a brief look at the proceedings, here's what:

1. A group shot of some of the members of the club, obviously not too unhappy about the state of the nation.

2. Barbara McKenzie calls a shot and at the same time gives a very nice impression

Another Safety Triumph for Frood-Stobie Mine

Although it was the ninth time since 1944 that Frood-Stobie had won the 100,000-safe-shifts award, the men of the mine got a particular kick out of going over the top on November 11. Twice within the preceding eight months they had been within one day of achieving the 100,000 mark, only to see their record broken by an accident; in March they reached 97,400 consecutive safe shifts, and in August they had rolled up 98,361. So when they finally went over the top in November, it was an occasion of special satisfaction to all hands. Frood-Stobie is certainly up on its toes safety-wise as well as from a production angle. Two theatre tickets entitling him to admission to any theatre in Sudbury District were presented to every man who was on the roll and worked during the period of September 18-November 11. In the above photograph representatives of all levels at Frood-Stobie No. 7 Shaft are receiving tickets and congratulations; left to right are Underground Superintendent Casey Jones, Asst. Mine Superintendent Al Olive, C. Marsh of Surface, O. Orrenmaa of 400 level, Max Holtich of 600 level, A. Lambert of 800 level, C. Enman of 1,000 level, J. Miller of 1,200 level and D. Domorski of 1,400 level.

of what a traffic cop should look like — if we could only have traffic cops like that!

3. Hattie McCrea is the skip here, and there's no fooling about what she wants from that rock-thrower. Opposing skip holding a watching brief in the background is Anna Fleming.

4. Janet Rivington watches closely as (5) Gert Walmsley gets one away dead on the broom; on the right is Irene Ranta.

6. Hoisting stones on to the rack are Jo Walmsley and Dorothy Purvis. You'd think it was hard work.

7. Caroline Wood has the shot rock in her hand and she's making no mistake with it.

The Triangle hopes to bring its readers more coverage of the business girls' curling, an editorial objective which we feel will meet with universal approval.

Ontario Badminton Titles At Stake in Inco Club Meet

A big boost for badminton in the Nickel Belt, particularly for the scores of younger players who are getting hot on the game, will be the staging of the Ontario badminton championships at the Inco Club in Sudbury February 13-14-15.

Players of high international ranking will be battling for the 1953 titles in this three-day meet, which is a nice tribute on the part of Southern Ontario to the great and growing interest in badminton in this part of the country. It's the first time that the big tourney has been held in the North.

The schedule gets underway at 9.00 a.m. of Friday the 13th (watch that date, there, you drop-shotters) and on the Saturday morning the consolation events will get the floor. Semi-finals will start at 2.00 o'clock on Saturday afternoon and finals will start at 2.00 o'clock on Sunday afternoon.

In action will be: Don Smythe of Toronto, who holds both Ontario and Dominion men's singles titles; Dick Birch, recognized as the best player Canada has produced of his generation, three times holder of the Dominion singles title and eight times co-holder of the Dominion mixed doubles championship, who will be a defender of the Ontario mixed and men's doubles titles; Marjory Shedd, Ontario women's singles champion, who was runner-up last year in the Dominion tourney to Marjorie Mapp of Montreal; Barbara Ince, co-holder with Birch of the Ontario mixed doubles title, who will also help Joan Warren defend the Ontario ladies' doubles championship.

Many other top-flight players will be included in the large entry from outside the district. From the local ranks about 30 are expected to take part, some with an excellent chance of upsetting the visiting stars and others who will be in the lists just to gain invaluable tournament experience.

Plans for the big event are particularly well organized, and the visitors are assured of ample hospitality. On the Saturday noon there'll be a luncheon for Stafford Beck, chairman of the Ontario Badminton Association and other members of his executive, as well as members of the local executive. On Saturday evening the Nickel Range Hotel will be the centre of activity; there will be a reception at 6.00, at which district badminton enthusiasts will hob-nob with the visiting players; at 7.00 there will be a banquet to which all are invited; at 9.00 there will be a dance.

Committee in charge of preparations for the meet is as follows: Honorary chairman, G. S. Jarrett; chairman, Harvey Nadeau; finance chairman, Jerry Myers; secretary, Mary Tkachuk; chairmen of committees: publicity, Dom Demarco; prizes, Edna Johnston; entertainment, Sheila Keegan; program, Jerry Marshall; hotels and billeting, Stella Crawford; draws, Vern Tupling; welcoming, Colette Potvin; house, Richie Gallagher; registrations, Dorothy Purvis; referees and linesmen, Ev Staples.

SMART NEW LOOK

There's a new look around Inco First Aid rooms these times, what with the attendants all sporting snappy new surgical coats. Greg Scully of Murray is the emergency "doctor" in this picture, giving eye service to Adrian Rodrigue.

APPOINTMENT ANNOUNCED

The appointment was announced by Asst. Vice-President J. R. Gordon of John E. Quance as assistant to the chief engineer, effective January 1.

Has Presided At Clara Belle Over 18 Years

Next April 1 J. A. Bergeron retires from active duty with the Canadian Pacific Railway, after more than 36 years of service. His name is news of particular interest to the Inco family because for the past 18 years he has been agent at Clara Belle, known as "the biggest little station in Canada."

Before he was posted to Clara Belle, Mr. Bergeron had served at Levack for a year, and as agent at Murray he had presided over the closing of that station when the ill-fated British America Nickel Company plant was being dismantled, so he already had a lively connection with the nickel industry.

Clara Belle Station sits like an orphan of the storm in a desolate waste of rockland behind Copper Cliff Smelter, but its importance is very definitely scored in inverse ratio to the loneliness of its surroundings. All rail traffic in and out of the Copper Cliff reduction plants is cleared there, and that's saying plenty.

To most of the Inco men with whom he has worked for years, Mr. Bergeron is just a telephone voice, as they are to him. This is a somewhat belated attempt to introduce him to his shipping colleagues in our Company, and to convey to him their appreciation of his unfailing co-operation and goodwill.

Pasted in Mr. Bergeron's scrapbook is a clipping from the "Bantor Magazine," describing Clara Belle. Despite some rather startling inaccuracies which can be written off to the enthusiasm of the author, the article points up the world importance of this little wayside station and underlines the responsibility which Mr. Bergeron has quietly and cheerfully discharged over the past 18 years. The article follows:

"Tucked in behind the Inco Smelter at Copper Cliff, a little Station called Clara Belle serves the C.N.R. and the C.P.R. and the Inco Railway and consists lock stock and barrel of one railway station, a stretch of track and a splendid view of the Inco slag piles. It serves more railway companies than any other station in Northern Ontario.

"It is not listed in the postal guide, and its population is zero. Although half of Sudbury has never heard of it and most of the other half doesn't know where it is and doesn't care, this one building, one track, one telephone railway centre, has plenty to boast about.

"It clears a train every half hour and clears up to 1,200 loaded and empty cars a day.

"It draws more railway revenue per station employee than any other centre in Northern Ontario and probably in Canada.

"They just call it Clara Belle and nobody's just sure why.

"As a matter of fact nobody is sure just how to spell it. The Canadian Pacific spells it Clara Belle and they ought to know—they own it. But the official Ontario Government maps spell it Clarabelle and the government ought to know too.

"Railway lines funnel into Clara Belle from seven directions. The stretch of track in front of the station is linked to Creighton, Murray Mine, Sudbury, the C.N.R. main line, Frood, Levack, and the Copper Cliff Smelter.

"One day this year 759 loaded cars were weighed out at Inco and Clara Belle cleared them all. Thus it's not too hard to figure out why Clara Belle and the nearby Copper Cliff Station are doing millions of dollars worth of business every year. Neither the C.P.R. nor the C.N.R. will say how many millions because of inter-company competition. All there millions, however, are the responsibility of five men at the station. That is what makes Clara Belle one of the highest paying stations in Canada per man on its staff.

"While Clara Belle may not be famous in the Nickel Belt, it is well known to mining equipment manufacturers in the United States and Great Britain, and frequently puzzles railwaymen all over the world. They see car after car bound for Clara Belle, Ont., but they can't find Clara Belle on the map. As a matter of fact, it isn't listed in the Dominion Government's guide to railway stations. To clear up the confusion, shippers recently have begun stealing Clara Belle's fame. They have been addressing their shipments to Copper Cliff, but these shipments will never arrive there. Clara Belle is the end of the line on the road to the smelter.

"Where did the station get its name? Some say the station was named after nearby Clara Belle Lake, but Agent Bergeron differs. He thinks both the lake and the station were named after the wife of one of the early officials of the C.P.R. The official C.P.R. explanation is that Clara Belle was named after Clara Belle Ritchie, daughter of S. J. Ritchie, founder of the International Nickel Company. Another theory is that the original Clara Belle was a cow kept by the crews that laid the original track.

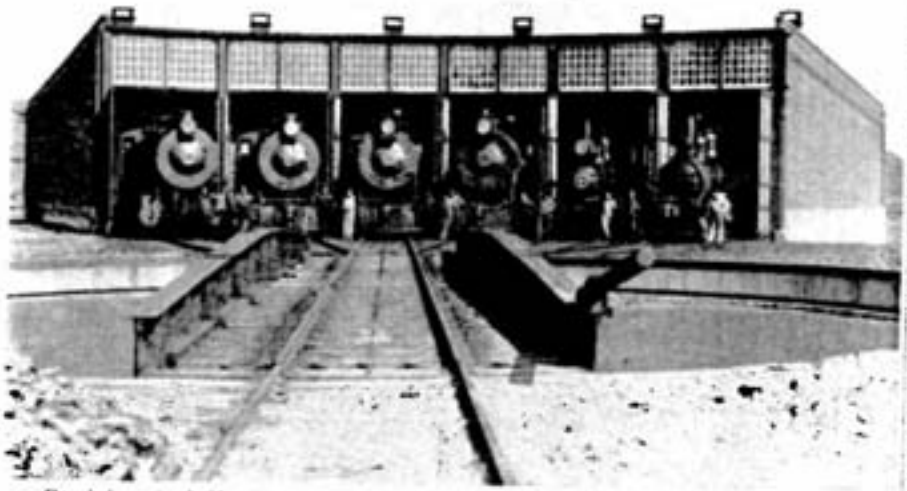
"Agent Bergeron is quick to dismiss this theory. Viewing Clara Belle's gray and gloomy surroundings, he says, 'You think a cow could ever live around here?'"

Agent J. A. Bergeron, who retires on April 1, is seen at the right with two members of the staff running vital little Clara Belle Station. Jeffre Rouleau and Gil Bolbin. Other members of the staff are J. E. Schnupp, G. R. Masse, and W. H. Niemi. These men are responsible for the dispatch of a tremendous quantity of materials in and out of Copper Cliff.

Here's Clara Belle Station, called "the biggest little station in Canada," over which J. A. Bergeron has presided for the past 18 years. He retires on Canadian Pacific Railway pension on April 1.

MR. AND MRS. CHARLES T. CUMMINGS

Gifts presented to Charlie Cummings at his retirement party were a purse of money and a beautifully constructed scale model of one of the Companys big electric locomotives. Three veteran employees of the locomotive shop are posed here with Charlie: Attilio Perlini, Alf Mash, the guest of honor, and Art Lenihan.



Reminiscent of Charlie Cummings' career with the Company is this photograph of the roundhouse at Copper Cliff smelter in the days before electric locomotives replaced the steam-driven iron horses. The roundhouse was located just north of the present carpenter shop in the smelter yard; it was taken down in 1928 to make way for an extension of the converter building.

C. T. Cummings Had Confidence Of Wide Circle

Quiet, affable, and steady as they come, Charlie Cummings served Inco with conspicuous faithfulness for almost 40 years, and steps into retirement leaving a splendid record for all to shoot at.

His popularity, not only with his own men in the locomotive shop but also with associates throughout the Company who had come to know his worth, was apparent at the farewell party given in his honor at the Italian Hall in Copper Cliff. There was a large and representative attendance, and speaker after speaker lauded his ability and integrity.

"Never heard Charlie Cummings have a bad word for any man" was one remark heard at the party, and it fairly summed up the pleasant relationships he maintained throughout his career, on or off the job.

Born in Moncton, N.B., on January 22, 1888, son of a brick manufacturer, Charlie became an apprentice machinist as soon as he finished his schooling, and after six years at learning his trade he landed his first job with the old Inter-Colonial Railway which later became part of the Canadian National Railways system.

In April of 1913 came the break that was to settle the pattern of his life. Charlie Hillson, foreman of the locomotive shop at Copper Cliff, arrived in Moncton to recruit labor for the nickel industry. Young Cummings was one of 30 who signed on to go to Northern Ontario, and there he has remained ever since.

His steadiness and resourcefulness were quickly recognized and by 1923 he had become locomotive shop foreman, succeeding Ed Gill, Hillson having in the interval unfortunately met his death in a drowning accident in Lake Penage.

When Charlie took charge of the shop there were 10 steam locomotives operating at the plant along with four narrow-guage "dinkies" used to haul slag from the converters across to the reverberatory furnace building situated behind the roundhouse. By the mid-thirties the change-over from steam to electric locomotives was well underway, he recalls. The first electric jobs were second-hand 50-tonners which were rebuilt in the Copper Cliff shop. Then three 65-ton locos were purchased, followed by four 100-ton giants, and the days of steam were all but ended.

Through the years Charlie kept his department on its toes and running smoothly, no matter how big or rushed the assignment. He enjoyed the confidence and respect of the men who worked for him.

Charlie was married in 1916 to a Copper Cliff girl, Elsie Brash, and their marriage has been a very happy one. They have two daughters, Marian (Mrs. W. C. Needham of Lansing, Ont.) and Kathleen (Mrs. Don Munn of Sudbury).

Soon after he arrived in Copper Cliff the sports spotlight picked Charlie out. It developed that he was a ball player of outstanding ability and he was duly installed as catcher on the classy Cliff team of those days which boasted other such diamond stars as Bert Flynn, Bill Acheson, Tom Birney and Bill Waterbury.

In later years he has become an ardent summer camp devotee, and much of his new-found leisure will be spent at the lake.

All who know them hope that Charlie and Mrs. Cummings will enjoy to the full their years of retirement.


PAC

Weatherman Has No Tricks To Stump Inco's Yard Crews

You see them working around the yards in the summer time, stripped to the waist and bronzed as lifeguards, and you think it looks like a pretty nice sort of job. But follow them for a shift when it's 20 below and the wind is free, or a smart little blizzard is whipping at them from all sides, and if you're the office type at all you'll covet their assignment no longer.

Without a steady flow of supplies from surface, things would soon come to a standstill in Inco's vast underground mining operations. So, fair weather or foul, the men of the yard crews must keep those supplies moving into the collarhouse. They handle thousands of feet of mine timber every day, and tons of steel and other materials which, in winter, usually have to be dug and pried loose from snow and ice.

Maybe it's pipe for air and water lines or to transport sand fill; maybe it's steel to build an underground crusher station; maybe it's 60-lb. rail for a new grizzley, or a big slusher with its 72-inch folding scraper; maybe it's plate for chute linings, or a 5-ton reel of electric cable, or belting for Roxfeeders, or case after countless case of powder for blasting—there's an astonishing variety of material required in the intricate business of running a modern mine.

But no matter how bitter the wind or deep the drifts, the yard men tackle their work with a cheerful fortitude that carries them surely through their day. And despite the additional hazards of ice and snow they turn in excellent safety performances too.

The Triangle camera made the swing around the Inco mines to focus on yard men at their jobs. It was cold dull winter weather, and part of the time sleety snow was driven by the sharp wind, but everywhere the work of loading and unloading supplies for underground was going on at a steady pace, hour after hour. Follow the layout:

1. At Frood-Stobie No. 3 Shaft four members of the yard crew were unloading 9-inch posts. There's not much protection from the breeze up on top of that car.

2. In this chilly scene at Levack (where the temperature is often 12 degrees colder than in Sudbury), men are seen loading steel scrap into a gondola car for shipment to the steel mills.

3. At Creighton No. 3 Shaft a crew is stockpiling a car of 8-inch pipe. Each length of pipe weighs about 800 lbs. Hardly recognizable through the driving snow are George Clark, Gene Bertrand, Joe Szmyndziuk, John Pentney, and Frank Kuchinski.

4. A load of mine scrap is being taken away to the salvage section in this sub-zero glimpse of the Murray yard. The motorman is Paul Hud, the brakeman A. Poulin.

5. George Clark and Joe Szmyndziuk guide a 20-inch steel I-beam on to the stock pile while Jim Hutton operates the crane truck at Creighton No. 3 Shaft. One of these beams weighs about 2 tons.

6. One of the toughest yard assignments during winter is unloading steel rail which will be used for underground track or in grizzley construction. This crew is stacking the last of a 7-car shipment at Creighton No. 5 Shaft.

7. Bundled up against the icy blast, Tom Peacock is seen on a regular inspection trip through the big timber yard at Frood-Stobie No. 3 Shaft.

8. Clearing track in the yards is a constantly recurring job during the winter, and a laborious, time-consuming one too. The little supply trucks are particularly fussy about the kind of rail they'll run on.

9 & 10. The scene here is the Garson Mine yard. In the first picture a length of pipe is being wrestled from its hiding place for shipment underground; it gives up about as easily as would a bear being roused from his winter sleep and dragged from his den. A tree is a beautiful thing, quite worthy of the lovely poems that have been written about it, but a snow-covered ice-encrusted piece of mine timber is another item altogether, and the men who are jarring one loose in the second picture are not in any poetic mood.

11. When this picture was taken at Levack the weather had made one of those unpredictable about-faces which are being grudgingly accepted as part of a Northern winter, and a freezing rain was falling. But you'd never guess how disagreeable it was from the cheery look worn by Dmitri Voynovich, who paused in his shovelling to humour the camera. His smile sums up the yard crew philosophy — "Let 'er come, we can handle it".

Sudbury Arena to be Scene of Canadian Curling Championships

Above is the scene most familiar to winter sports fans at the Sudbury Arena but during the first week of March hockey will yield the big ice cushion to another high-ranking Canadian game—curling.

Held for the first time in Northern Ontario, the Dominion championship playdowns will be staged at the Arena from March 2 to 6. Choice of Sudbury as the site for the 1953 competition for the Macdonald's Brier Tankard was recognition of the tremendous growth of curling's popularity in the Nickel Belt.

In a series of elimination contests involving almost every curling club across the country, eleven teams will be chosen to represent every province as well as Northern Ontario in this great annual classic. Nickel Belt curling fans will thus have a chance to see some of the greatest shotmakers in the game strut their skill and strategy.

The schedule of matches is as follows: Monday, March 2, 3.00 p.m. and 8.00 p.m.; Tuesday, 9.30 a.m. and 2.30 p.m.; Wednesday, 3.00 p.m. and 8.00 p.m.; Thursday, 9.30 a.m., 2.30 p.m., and 7.30 p.m.; Friday, 9.30 a.m. and 2.30 p.m. In the event of a tie it will be played at 8.00 p.m. on Friday.

RELIEF FOR UPPER SUFFERERS

Sufferers of uppers that refuse to remain put may find some comfort in the recent announcement of a new method of keeping false teeth firmly in place. It has been demonstrated that tiny, powerful, platinum-cobalt alloy magnets, embedded within the bones of the mouth cavity by oral surgery, act on similar magnets in the denture and hold dental plates securely.

FRUSTRATION DEPARTMENT

PROBLEM

A radio dealer was approached by a customer who wanted to purchase a Pandemonium radio, priced at $69.98. The dealer accepted a cheque for $80.00, giving $10.02 change in cash. Subsequently he endorsed the cheque to his landlord in part payment of the rent. The cheque turned out to be worthless and the customer was not to be found. The dealer had to make the cheque good to his landlord, but the latter accepted a Pandemonium radio in part settlement. As this type of radio cost the dealer $43.75 at wholesale, what was the amount of his loss?

SOLUTION

The dealer gave the customer a radio and some cash in exchange for a worthless piece of paper. His loss was $43.75 plus $10.02, a total of $53.77.

Of every three solvers, two will probably argue that this answer is wrong. One will say that the dealer also lost $26.23 profit on the radio given to the customer. But this is not cash out of pocket and would not be entered as loss on the books. The other solver will argue that from the loss of $53.77 must be deducted $26.23 profit made on the radio given to the landlord. But why is this particular item deductible? Why not, then, all the profits made by the dealer on all his sales. There is nothing in the problem to indicate that the landlord would not have purchased a radio in any case, or that the radio, if not sold to the landlord, could not have been sold to someone else.

THANKS HIS FRIENDS

George Hebert of the Copper Cliff Concentrator has asked the Triangle to convey his deep appreciation to all his pals at the plant who with others helped to set him and his family up in a new home at Azilda after their home on St. Charles St. in Sudbury was destroyed by fire. That sort of kindness is remembered for a lifetime.

NICKEL-CLAD STEEL

Nickel-clad steel plate consists of open hearth steel with a layer of nickel on one or both sides. It is made by pressure welding, in a rolling mill, of the nickel cladding material and the steel slab at a temperature of about 2 200° Fahrenheit. The resultant material combines the corrosion resistance of nickel with the mechanical properties, heat conductivity and thermal expansion of steel. Nickel-clad steel is used where solid nickel is not required, such as in tank cars, water storage tanks, soap kettles and dye tanks. These steels are also being used to replace pure nickel in many other applications.

Dads and Lads Enthused Over Scouting Work

Ample evidence why Coniston is regarded as one of the brightest spots on the Northern Ontario Scouting horizon was the annual Father and Son banquet held at the Italian Hall on January 22.

First joint banquet of this nature held by Coniston's two Scout troops and Wolf Cub packs, the event drew 180 proud fathers and eager-eyed sons. The committee in charge, E. J. Orendorff and Gerald Maher of 2nd Coniston, and George Schmidt and J. C. Rogerson of 1st Coniston, were naturally jubilant over the unqualified success of the co-operative effort and marked it as a "must" for future years.

E. J. Wiley, M.A., principal of Sudbury High School, was the special speaker for the evening. His remarks were framed around the Scout motto, "Be Prepared". He urged both fathers and sons to familiarize themselves with people and activities outside their own personal spheres and callings, to develop hobbies and to broaden their interests as much as possible so as to be prepared for whatever change or opportunity life may turn up for them.

Motion pictures, including some fine movies of jet fighters and bombers and an instructive short on fire fighting, were another much-enjoyed feature of the program.

In the first of the accompanying photographs is a section of the big turnout at the banquet, for which the Catholic Women's League catering was most adequate in both quality and quantity. In the second pic is a reconstruction of the 2nd Coniston campsite, on display in the banquet hall, and the three Scouts who arranged it, Ted Orendorff, Jimmy Fitzgerald and Randall Dennie. The third photograph shows four of the head-table guests, Fr. LaFontaine, E. J. Wiley, J. C. Rogerson, chairman of the Sudbury District Boy Scout Association and also the 1st Coniston committee, and Oscar Paradis, chairman of the 2nd Coniston committee.

Cashing In on Good Ideas at the Nickel Refinery

The Employees Suggestion Plan continues its handsome rewards to those whose thought and study on the job result in acceptable ideas for improvements. Two Port Colborne men, both veterans of about 24 years' service with the Company, were among the first to cash in on the Plan in 1953. Seen above, receiving cheques from Asst. Superintendent W. J. Freeman, are John Davison (left) and Jack MacAuley. To John, who has spent most of his time in the Anode Dept., went $255 for suggesting an improved method of removing dust accumulation from boiler walls. To Jack, an ironworker in the Mechanical Dept., went $160 for his idea to weld anode furnace preheater assemblies together rather than bolting them. Congratulations to these two popular employees on their initiative and success!

Reminiscences of the Early Days

By J. E. McKERROW

(Continued from last Issue)

Copper Cliff was incorporated a town on April 15, 1901, with Thomas N. Kilpatrick as first mayor; he also had a store and kept the post office for many years afterwards. The Yellow Club was the first residential clubhouse, built in 1888 on the site of the present Bank of Toronto, and was the official residence for Canadian Copper Co. officials. Dr. Edward D. Peters, an authority on copper smelting, who built the first smelter in 1888, Frank L. Sperry, first chemist, and J. N. Glidden, chief clerk, also lived there.

To accommodate the growing bachelor population, several other clubs were built about 1902-1903. On Park St. the Matte and Red Club housed the superintendent and staff of the smelter, as well as Phil R. Bradley, H. J. Baird, Roger Taylor. Serpentine St. had three clubhouses. The Central, at the head of the street going down the subway, another near Gribble St., and Bray's, near Mahon's Tailor Shop. These clubs housed budding engineers and smelter superintendents.

The Gorringe Club, named after Elizabeth Gorringe, wife of James McArthur (General Manager, 1887-1902), had been built in 1899 on the site of Dr. H. F. Mowat's present residence and had facilities for dances and lectures on the top floor, reading rooms, cards, and ping pong tables, with pool and billiards, baths and barber shop in the basement. Later, in 1907, this club was reorganized and called The Ontario Club, with a membership limited to 125, and was used until the present Copper Cliff Club was opened in 1916. For many years the Feldhans Family Orchestra provided music for the weekly dances.

The original McIntosh Block (a wooden structure), built in 1898, and named after Henry P. McIntosh, one of the original founders of the old Canadian Copper Co., had apartment suites and stores much as it is today and the first tenant was the Bank of Toronto.

Transportation facilities to Sudbury prior to the turn of the century, and until the advent of the automobile, were provided by stage coach and buggies rented by several livery stables then operating. R. A. Waite had a large livery stable in Shantytown located near the Taxi Stand on Balsam St., and John Campbell at the rear of the old McIntosh Block. The stages as used in the winter were double sleighs covered with canvas on a light frame of wood, with seats running lengthwise for about 12 passengers and heated by a small wood-burning camp stove. Entry was by rear door, and after the journey was completed all passengers paid the driver 25¢, with no insurance against runaways or upsets. A cutter seating two people, with necessary robes to keep warm, was worth $1.25, and the person hiring the

Taken about 1901, this historic print shows the rockhouse of No. 2 Mine and the old West Smelter at Copper Cliff, situated just about where the Oxygen Plant stands today. Rising behind the rockhouse is a cloud of sulphur smoke from the roast beds, which were later moved to O'Donnell. The loading platform in the foreground, and a few of the houses, still stand.

Camera Pictures Lawson Quarry in Winter Garb

Lawson Quarry, near Willisville on the road to Manitoulin Island, can be a pretty chilly place on a winter's day; you can almost feel the bite of the wind as you look at this photograph. In the pit an electric shovel is preparing to load one of the big haulage trucks with quartz which will be hauled to the crushing plant for processing and then shipped by rail to Copper Cliff for use as flux in the smelter converters. From the top of the bank rise the masts of two churn drills.

outfit was responsible for the care of the horse on arrival at a Sudbury livery stable. Summer travel was much more comfortable as the stages had seats for only six passengers and the seats were better upholstered. About 1903 a large gas-operated bus was in service. This service was an improvement over the slower travel by horse transportation. By 1905-1906 the Ford was much in evidence and travel was much easier as several livery stables operated small passenger cars.

Schools

The original school, built in 1891, had as its first lady teacher a Miss Potter whose home was in Sudbury, then during the next few years Messrs. Baker and Miller, until 1898 when Albert V. Forsyth and Miss Ross were on the staff. This school had Junior and Senior Matriculation classes. This was the only Public School until 1912 when W. J. MacPhail came as principal, with the staff increased to five or six lady teachers, including Miss Pelton and Mary B. McKerrow. The present Public School on School Street was erected in 1914, with many additions under the principalship of W. J. MacPhail until his retirement in 1945. The growing needs for advanced school pupils led to the erection of the present High School in 1935, situated on the original Nickel Park near the old Creighton Road.

Medical Services

In the early days, prior to 1900, the medical care of the Canadian Copper Company's employees was entrusted to Dr. R. B. Struthers and Dr. R. H. Arthur of Sudbury, who operated a private hospital situated on Elm St. West, in Sudbury. It still remains as an apartment house with some small stores on the street floor. Dr. Struthers usually visited Copper Cliff every other day and a small office was located near the old Copper Cliff mine. If the doctor was wanted to call on anyone ill, all that was necessary was to write the sick person's name on the blackboard. All accidents of a serious nature were taken to Sudbury for treatment.

About 1898 Dr. Schmidt was established as an assistant to Dr. Struthers and had a small office and dispensary on Serpentine St. near the present Fire Hall. Later on, about 1901, Dr. Thobold Coleman assumed complete charge and had an office and dispensary in his residence located on the corner of Granite and Park St. West, near the present Hospital. During the winter of 1901 an outbreak of smallpox caused the genial doctor to establish strict quarantine and compulsory vaccination in town, also the use of an Isolation or Pest House on the outskirts of Shantytown. A few deaths occurred from the epidemic, which waned after a few weeks.

Dr. Coleman was ably assisted during this epidemic by his wife, Kathleen Blake Coleman, better known under the pen name of "Kit," who was the writer of "Woman's Kingdom" in the "Mail and Empire" of Toronto. Born at "Castle Blakeney," in the west of Ireland, in 1864, and educated at Dublin and Brussels, she came to Canada in 1890, and entered a journalistic career with Saturday Night; she was the only woman correspondent for the New York Times in Cuba during the Spanish-American War of 1898-99.

About 1903 the Company started building a hospital on the present hospital site, of wooden construction, Swiss chalet style, and opened later in charge of Dr. Gibson with Miss Mary E. Dame as matron. Dr. Gibson was later succeeded by Dr. W. C. Morrison, until 1910, when the late Dr. W. A. McCauley, who died in 1936, assumed charge. In 1911 this hospital was destroyed by fire, rebuilt fireproof in 1913, and remains today in charge of Dr. Harold F. Mowat, F.R.C.S.

Open Pit Passes The 100,000 Mark

"I am pleased to inform you," wrote Safety Superintendent A. E. O'Brien to Asst. Vice-President J. R. Gordon in an inter-office memo on January 16, "that Frood-Stobie Open Pit has completed 100,881 consecutive safe shifts from October 17, 1951, to January 13, 1953, and have accordingly won the 100,000-Safe-Shift award.

"Every man on the roll who was working during the above period will receive two theatre tickets entitling him to admission to any theatre in the Sudbury District.

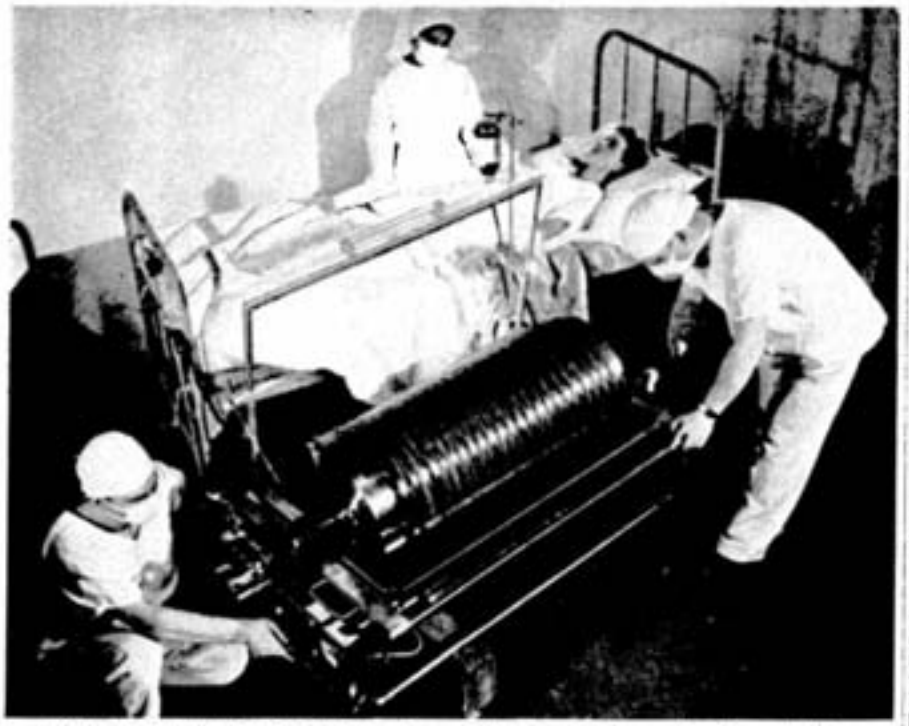
"This is the third time that the Open Pit has won the award since 1944."

It took them more than a year to do it, but the Open Pit workers steadily piled up one safe day after another and finally reached the coveted goal. All Inco salutes an achievement like that.

FROOD BOWLING TOURNEY

In Frood bowling league's first individual tournament of the season, held the week-end of January 4 at Inco Employees Club in Sudbury, Jim Kilby took top money for triples with an impressive 874. Other prize-winners were P. McGuffie, 867; J. McIntyre, 865; W. Woollacott, 858. Others who bettered 800 were W. Kritz, 849; H. Johnston, 842; G. Constable, 825; P. Dowse, 819; F. Wharton, 819; F. Felski, 802. The best single, 371, was rolled by P. McGuffie; also sharing prize money for high singles were J. Kilby, 346; F. Fiorotto, 335; C. Collins, 322.

Small minds discuss people. Average minds discuss events. Great minds discuss ideas.



Doctors adjust mechanical kidney. Impure blood passes from artery in patient's arm through casing wound around drum and is returned as pure blood through patient's leg.

It Takes Over When Nature's Kidneys Fail

An artificial kidney, used in many cases of shock, injury, disease and other accidental poisoning, was recently built by the Allis-Chalmers Manufacturing Company as an engineering experiment and presented to the City of Milwaukee as a public service.

After it had been disclosed that at least 30 people in the Milwaukee area died annually from acute uremic poisoning, the Allis-Chalmers engineers began development work on the first machine. It was felt that if such an artificial kidney were available for emergency use, many of these people could have been saved.

Scientists and engineers of the firm decided to construct a kidney based on the design of Dr. W. J. Kolff, a famous urologist of Kampden, Holland. Dr. J. Van Noordwijk, an assistant of Dr. Kolff's, was brought to the United States and supervised the development of the Kolff-type kidney.

The mechanical kidney functions by means of a large chromium-nickel stainless steel cylindrical drum around which is wrapped 125 feet of cellophane tubing. This tubing revolves in a bath of rinsing fluid. Blood is taken from an artery in the patient's arm and fed into the tubing. It then passes through the casing wound around the drum, which rotates in a rinsing bath, and returns into the body through a tube in the leg.

While the tubing rotates through the rinsing bath, minute impurities that cause uremic poisoning seep through the cellophane into the rinsing fluid. The porous tube permits these impurities to pass through the casing while retaining the essential elements of the blood. The whole treatment takes about five hours.

Like many standard pieces of hospital equipment, the artificial kidney is constructed almost entirely of 18-8 chromium-nickel stainless steel. This material is used because of its satin-smooth sterile finish, its durability and resistance to all forms of corrosion encountered in hospital work.

In addition to the one at Milwaukee, other models of the Kolff-type kidney are located in the Allegheny General Hospital, Pittsburgh, Pa.; Cleveland Clinic; Methodist Hospital, Peoria, Ill.; Bellevue General Hospital, New York City, N.Y.; and Christ Hospital, Cincinnati, Ohio.

As the medical world is becoming more familiar with the new kidney, the number of lives saved is steadily mounting. In addition, research projects now being carried on with the kidney hold promise of revealing more ways of prolonging life.

Platinum and Palladium Vital For Industry

"The 1952 requirements of the free world for the platinum metals continued at the high level of the previous year," C. W. Engelhard, President of Baker & Co., Inc., of Newark, N.J., and its affiliates, including Baker Platinum of Canada, Ltd., the world's leading dealers and manufacturers of platinum metals, stated in a year-end review.

"As in the past, the United States was the largest importer and user of platinum and palladium and the 1952 volume of sales of these metals to its consuming industries, principally the electrical and chemical fields, was at a rate comparable to that of 1951," he said.

"Indications are that complete sales figures for 1952, when available, will show that for the second consecutive year palladium sales paralleled those of platinum. The widening acceptance of palladium as an industrial metal was already reflected in the 1951 sales in the United States of 222,000 ounces as compared with 209,000 ounces of platinum. In the first six months of 1952 platinum sales in this market totalled 111,000 ounces and palladium sales were 108,000 ounces.

"The outlook for 1953 is that overall demand for platinum is likely to continue at a high level and there is no indication at present of an early oversupply. Palladium supplies should continue adequate.

"As its domestic production of platinum and palladium is small, the United States obtains a large proportion of its requirements by importation.

"The main sources of supply for platinum are Canada, South Africa and Colombia. There seems to be little room for doubt that the three countries together have supplied the United States with more platinum in 1952 than in 1951. Canada, the principal supplier, delivered to the United States again more than 100,000 ounces from its annual production, which has averaged about 135,000 ounces during recent years. In addition, Canada is an important supplier of palladium to the United States. The Canadian production of the platinum metals comes largely from the Sudbury nickel-copper ores.

"The platinum metals serve us every day in many ways. In addition to platinum and palladium, we are served by four other and very rare platinum metals—rhodium, ruthenium, iridium and osmium. Each of these six metals is an element.

"The tires we ride on have cord of rayon, produced from spinnerets of platinum-rhodium alloy. Platinum alloy bushings convert molten glass to fibers which are finding widespread uses both in industries and in homes. Platinum catalysts are used in making high-octane gasoline. Airplane spark plugs use platinum electrodes. These are only a few examples of the many uses of platinum.

"Our communications systems utilize innumerable electrical contacts of palladium. Extensive use is being made of palladium as a catalyst in chemical processes. Some chemicals that present unusual handling difficulties are being dried and finished successfully in palladium containers.

"Designers and manufacturers of jewelry in Europe, Canada and the United States are making increasing use of palladium. Newest of the precious jewelry metals, palladium has advantages both for the manufacturer and the consumer. It has the beautiful white color that is so desirable for mounting diamonds; it has strength to secure the gems and its lightness enables elimination of excessive weight.

"Rhodium finished mirrors for projectors are made by electro-plating the precious metal onto other metals. The brilliant rhodium finish is applied to numerous consumer articles including razors and lighters.

"Ruthenium, iridium and osmium are hard metals, used in pen-tipping alloys and for similar purposes."

YOUTH RALLY AT WILLISVILLE

Enrolment of three new Brownies and the "fly-up" of another trio to Guides were features of a very successful youth rally at Willisville. Those receiving Brownie pins and badges were Linda Burley, Diane Eaton and Diane Williamson, and those graduating from Brownie to Guide ranks were Pat Tilston, Joyce Stevens and Vera Spry. The impressive ceremonies were staged in special settings.

Guides and Brownies of Willisville and their leaders were warmly congratulated on their proficiency by Mrs. I. J. Simcox of Copper Cliff, Algonquin Area commissioner, who headed a distinguished list of guests at the rally. Chairman for the evening was Mrs. Richard Dow.

ON THE WAY OUT

Sandy McPherson was dying and for three days his devoted wife never left his bedside. Her neglected household duties began preying on her mind, and she decided to leave her post for a short time.

Wife—Ye'll nae dee while I'm gane, will ye, Sandy? But if ye should dee, dinna forget tae blaw oot the candle afore ye gae.

Levack is Proud Of Smart New Curling Centre

The Roarin' Game officially came to Levack on January 11 when the bustling little mining camp's latest pride and joy, a fine three-sheet curling rink, was declared open for play by J. R. Gordon, asst. vice-president of Inco, with the Company's hope that it will be used to the full by men and women of the community alike for good fun and good sportsmanship.

As was to be expected, the Levack people handled the official opening in real style. In the first of the accompanying photographs is the scene before the first rock, appropriately bedecked, was well and truly thrown by J. R. Gordon. In the row of curlers behind him can be noticed Sam Rothschild, representative of the Dominion Curling Association, Bill Duncan, president of Sudbury Granite Club; Mac Forsythe, president of Copper Cliff Curling Club, and Alven Dickie, president of Sudbury Curling Club, who were among the many outstanding local exponents of the game taking part in the christening matches. Through the plate glass is seen some of the capacity crowd of curlers and embryo curlers who attended the happy event.

Picture No. 2 shows J. R. Gordon turning over the keys of the rink to Frank Palumbo, Levack druggist who is president of the town's new curling club. In a brief speech Frank expressed the gratitude of the community to the Company for its generosity and thoughtfulness in providing this splendid winter recreation centre; Inco could rest assured, he said, that full use would be made of its handsome gift.

Other pictures indicate that Levack men are taking quickly to the new sport. In No. 3 Vic Romagna is really bearing down as he delivers a rock. In No. 4 the camera has caught Bill Billows and Joe Ribic, busy with their brooms in one of the opening matches, and in No. 5 it's Archie Loney and Ray Anderson who are demonstrating their technique with the big whisks.

Executive of the Levack Curling Club is

(Continued on Page 16)

England Has Big Plans for Frank's Return

Next spring Frank Milligan of Creighton will return to England for his first visit in 30 years. He hears that some rather elaborate plans are being laid for his homecoming—a nation-wide celebration culminating in the coronation of Good Queen Bess the 2nd—and he is properly appreciative of all this trouble to entertain him. But in truth he is looking forward most of all to a four-months visit with his sister, Miss Mary Milligan, and the opportunity of browsing at leisure in the haunts of his boyhood.

Frank, whose retirement from Inco becomes effective February 1 after the enviable credited service of 28 years and eight months, was born at Ambleside, in Westmoreland, on January 4, 1888. He was the son of a nursery owner but the gentle mystery of the bees and the flowers held no particular appeal for him and at the age of 16 he became an apprentice machinist. By the time he was 21 he had qualified for a job with the Daimler Motor Co. at Coventry and there he remained for five years. Then he moved on to Barrow-in-Furness, on the west coast of England, to hook up with the great Vickers organization, and there became acquainted with Bob

FRANK MILLIGAN

Stephenson and Jim Miles. The latter left for Canada and soon his letters urged his two friends to join him in the land of opportunity. So in 1923 Frank and Bob came to Creighton Mine and that's been their home ever since. John Symons was in charge of the machine shop when they arrived.

A great soccer enthusiast, Frank found plenty of action in his favorite sport at Creighton, and was a member of the camp's powerful cup-winning teams in the late '20's.

Frank suffered a grievous loss last March when death took his wife just when the reward of years of planning for retirement seemed within their grasp. She was Kathleen Bowring, and they were married at Coventry in 1911. Their children are Ivy (Mrs. Bob Burford of Murray Mine) and Frank Edward, who is with the Ford Motor Company in Winnipeg.

Frank's cheery disposition and neighborliness have made him very popular at Creighton. There was a capacity turnout at the stag party celebrating his retirement. His gift from the boys was a handsome pair of travelling bags and a well-filled wallet, the presentation being made by Fern Roberts.

Whether he decides to settle down in England or to return to the Nickel Belt, Frank will always have the best wishes of a host of friends for a long and happy retirement.

A Great Creighton Soccer Team

Among Frank Milligan's cherished souvenirs of earlier days at Creighton is this picture of the camp's Charity Cup team of 1927. Many familiar faces can be spotted in the lineup: left to right, back row, Ted Marsh, Albert Stone, Al Cave, Wally Blackwell, Jack Cullen, Bill Barnicott, Alex Donnelly; centre row, Harry O'Connell, Bob Stephenson, Tom Starkey, Albert Edgell, James Collier, George Bath, Frank Milligan; front row Jack Treasure, Alex Cullen, Chaff Cullen, Cyril Cullen, Jack Randall, Sam Treasure, Dr. W. Boyce, John O'Connell. The two mascots are "Red" Marsh and Gordie Treasure.

Nickel Belters Take Algoma Trophy

Nickel Belt Badminton Association's representatives uncorked some powerful play to recapture the Algoma Trophy from Sault Ste. Marie in the annual inter-city challenge series, 7 matches to 4. It was the third time in four years that the locals turned the trick. Some members of the victorious squad, holding the trophy, are seen here: Johnny Saganiewicz, Colette Potvin, Jean McCrea, Sheila Keegan, and Harvey Nadeau. Other members of the lineup were Jerry Myers, Mary Tkachuk, Stella Crawford, Nellie Smith, Bub Jewitt, Monica Coules, Gino Gonnella, Harry Narasnek, Gerry Marshall. One of the highlights of the series was Harvey Nadeau's thrilling singles win over Gord Frech of the Soo. After dropping the first game, Nadeau called on his superb condition and tricky repertoire to take the next two and the match from the clever but exhausted Frech.

THE FRONT COVER

A bubbling stream, still defying the grip of Winter, dictates a change of course for Sally McDonald on a skiing jaunt over hills bordering the road to Creighton Mine, just past the turnoff from the Soo Highway. Clever, attractive Sally, as at home on skis as she is on the basketball court, is the daughter of Mr. and Mrs. D. E. McDonald of Finland St., Copper Cliff.

Levack is Proud

(Continued from Page 15)

shown in No. 6: left to right, Ted Lawrence, Doug Wright, Bill Bell, President Frank Palumbo, Secretary-Treasurer C. McGowan, Archie Loney and Dunc Cameron; not shown, Monty Montgomery and Fred Spencer (asst. secretary-treasurer).

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