

T. LOHMEYER



VOLUME 18

COPPER CLIFF, ONTARIO, JULY, 1958

NUMBER 4



Here They Come!

(STORY ON PAGE 6)



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

D. M. Dunbar, Editor.

Editorial Office Copper Cliff, Ont.

Authorized as second class mail, Post Office Department, Ottawa.

Platinum Metals Are Widely Used

Six of the 14 elements recovered by Inco from the ore it mines in the Sudbury district are the platinum metals, present in minute quantities: platinum, palladium, rhodium, ruthenium, iridium, and osmium.

Platinum metals are recovered from the beds of certain rivers of Russia, Colombia and Alaska, and from ores mined in South Africa and Canada. Other countries produce small amounts. A most important source of platinum is the Canadian nickel industry, which recovers platinum metals along with gold and silver as by-products of the refining of nickel and copper.

In all these deposits platinum occurs together with other platinum metals. It is seldom, if ever, true that one platinum metal is found alone without some of the other platinum metals.

The world produces more platinum than all of the other platinum metals combined, the proportions being roughly 60% platinum, 30% palladium, 4% rhodium, 3% ruthenium, 2% iridium, and 1% osmium. The production of osmium, the rarest of these metals, amounts to only a few thousand ounces annually.

The following thumbnail sketches of the platinum metals will be of interest to Triangle readers:

Platinum

Pure platinum is a white, ductile metal having a high melting point at 3224° F. It weighs 0.775 lb. or 226 dwt. per cu. in., being therefore a heavier element than gold.

For the production of jewellery, manufacturers usually employ an alloy of 90% platinum and 10% iridium, or alternately 95% platinum and 5% ruthenium. For some purposes they use a softer alloy of 95% platinum and 5% iridium. These unsurpassed, valuable alloys have excellent strength and fabricating properties. They generally are chosen for jewellery set with large diamonds, as metal cost is a minor item in such cases.

The quality of platinum and platinum alloys is maintained at a very high level. Canadian marking laws require a 95% platinum, platinum-iridium or platinum-ruthenium metallic content. Materials supplied for jewellery seldom contain more than traces of other non-platinum base metals.

Platinum has many industrial uses of importance to every-day life. In fabrics, clothing and tires, we utilize great quantities of rayon fibre. This fibre is produced from viscose by extruding the alkaline fluid into an acid bath through very tiny holes in spinnerets made

of precious metal alloys containing up to 90% platinum. Wire gauze, made of 90% platinum and 10% rhodium, serves as a catalyst in making nitric acid, an important chemical essential to the production of fertilizers used in farming. Platinum alloys are used in making and handling molten glass during manufacture of electric light bulbs, glass fibre, optical glass, etc.

Palladium

Pure palladium, an element discovered in 1803, is a white, ductile metal that melts at 2829° F. It is lighter than gold and all the other platinum metals, weighing 0.4343 lb. or 127 dwt. per cu. in.

Produced in smaller quantity than platinum, palladium is an important member of the platinum group of metals, each of which is a separate and distinct precious metal having its own properties. The lightness of palladium is a ready means of distinguishing palladium from platinum.

The use of palladium in jewellery dates from modern times. It is a new jewellery metal as compared to gold which was used for jewellery thousands of years ago.

Jewellery craftsmen eliminate excess weight from ear-clips, brooches, etc., by using palladium. Diamond setters like its working properties.

For making jewellery, an alloy of palladium hardened with ruthenium is generally used. Palladium jewellery articles marked "PALL." under Canadian marking laws, require that 95% of the metallic content be palladium, or palladium alloyed with platinum, iridium, ruthenium, rhodium, osmium or gold if the palladium content is not less than 90% of the whole metallic content.

The composition of 95.5% palladium and 4.5% ruthenium is well suited to jewellery, the cost per piece being only a little higher than 14K gold after allowing for the lightness of palladium. This alloy, known as "jewellery palladium," has the ductility needed to accomplish the manufacture of intricate parts, to facilitate the setting of precious stones, and to minimize the risk of chipping gems during the setting operation. Its hardness and strength insure satisfactory service for the user. Preci-

ous stones are held securely in settings made of the alloy and its white color harmonizes with diamonds, showing them to best advantage.

Although palladium is a modern jewellery metal, it has been used in settings for about twenty-five years — a setting being the small intricate part that holds a gem in jewellery. Makers of karat gold rings and other articles have used palladium settings for years, despite the fact that the jewellery palladium alloy is somewhat more expensive than 14K gold. The successful performance of the alloy in this service was the forerunner of its more general use in jewellery today.

In addition to its use in jewellery, palladium serves the public in many ways. Palladium is employed extensively for electrical contacts in numerous automatic controls that serve people every day in their homes, offices and factories. In these automatic devices, it is essential to have electrical contacts that will do an un-failing job over many years, with-

(Continued on Page Seven)

"... and fulfil my duties as a Canadian citizen, so help me God."



In an impressive ceremony before His Honor Judge Cooper at the Sudbury courthouse, the oath of allegiance is administered to new citizens of Canada by Mrs. Kathleen Coates, justice of the peace. An average of 100 persons per month qualify at Sudbury for their citizenship certificates, approximately 70% of them Inco employees. After each monthly court, the members of the IODE give a reception for the new citizens at the Canadian Legion Memorial Hall. Last year across Canada 95,462 persons took the oath of allegiance: "I swear that I will be faithful and bear true allegiance to Her Majesty Queen Elizabeth the Second, her heirs and successors, according to law, and that I will faithfully observe the laws of Canada and fulfil my duties as a Canadian citizen, so help me God."

INCO FAMILY ALBUM



Mr. and Mrs. Roy Bain, Copper Cliff, with David, 8, Beverley, 10, and Janice, 13. For their holiday this year they took a camping trip through Algonquin Park. Roy is on the purchasing department staff.



Murray mine's Harry Neville and his son Bobby, 10, are surrounded by beauty here: Mrs. Neville and the family's six girls, Emily (Mrs. Arne Haldin), Peggy, 19, Dorothy, 17, Marion, 16, Linda, 14, Gail, 12, and Lois, 7. They live in Sudbury.



RIGHT: At Port Colborne Mr. and Mrs. John Lyrette brought their family around to the Inco Recreation Club to pose for a Sunday photograph. The children are Christine, 2, John, 4, and Paul Albert, 8 months.



A happy group in the handsome home they are building in the Rahala subdivision on Highway 17, about a mile past the Creighton turnoff, are Mr. and Mrs. Bert Little, Robin, 12, Johnny, 13, and Bobby, 7. Bert works at Creighton mine.

Mr. and Mrs. Dave Bamber, Sudbury, with Judy, 13, Susan, 10, Donna, 7, and Chris, 3. An Inco man for 16 years, Dave is a flotation operator in the separation building at Copper Cliff.



LEFT: Lucien Levesque, who has worked at the copper refinery for 14 years, is shown here with his wife and their family. Paulette, 9 months, Jocelyne, and Guy, 6.



RIGHT: Scottish-born Dave Henderson, of the engineering office at Frood, is seen here with his wife, David, 4, Robert, 2, and Susan (who has beautiful red hair), 6.



Nickel Used to 'Hear' Submarines

Sonar, for under-water detection, makes use of an unusual property to be found in nickel.

Nickel changes slightly in length when magnetized strongly. This property, called magnetostriction, makes it useful in acoustic vibrators.

As used for under-water detection, the principle of magnetostriction operates through a transducer that is made of nickel and polarized by a permanent magnet. "A" Nickel and "330" Nickel are most often used in this application.

Short lengths of small diameter tubing are soldered into a structure that looks like a flat drum. The tubes are fitted along the axis of the drum and surrounded by electrical, magnetizing coils. The heads of the "drum" are made of thin sheet, fitted tightly. When the tube bundle is magnetized by the electrical coil, the tubes stretch, pushing the "drum heads" outward. When the electrical current is interrupted, the tubes return to their original length, and the tight, metal plates spring back, sending out a sharp "ping." This sound is reflected from solid objects in the water, and the echo can be picked up and amplified.

With development of higher-speed, nuclear-propelled submarines, sonar has become more valuable than ever, for it is needed by the submarine in under-water navigation, and is useful in locating other submarines or surface vessels which may be in the area. It can also serve, of course, in the location of submarines by surface vessels.

There are two general types of sonar systems used for military purposes. The passive system utilizes a directional hydrophone to pick up acoustic noise radiated from other ships. These are mostly used on submarines, since they can lie quiet, below the surface, listening for the approach of

other craft, without revealing their own location.

The active system is one that sends a stream of sound into the water from the nickel transducer, and records the returning echo. The time that elapses between the sending of the "ping" and the return of its echo indicates the distance of the object from which the impulses are bouncing. This principle applies either entirely under water, as could be the case when one submarine is locating another, or from surface vessels to such under-water objects as reefs, submarines, or schools of fish.

In operation, the distance (called "range") and the direction of the detected object (called its "bearing") are recorded by special electronic recording instruments. In military use it is important to know the range and bearing as accurately as possible, and to "pick up" an object as quickly and as far away as possible. It is also important to know whether the object is actually an enemy vessel, a school of fish, a reef, or other solid object. Consequently, as submarine warfare grows in destructive potential, sonar is the subject of intense experimental work aimed toward improving its military usefulness by lengthening its detection ranges, increasing its reliability at certain ranges, and increasing the types of information it can return to the sender.

Commercially, sonar is employed successfully in taking soundings of ocean or river bottoms, and finding schools of fish for commercial fishing vessels.

The same principle of magnetostriction is also being employed for many industrial applications in connection with cleaning, degreasing, pickling, plating, soldering, welding, degassing, liquid processing, etching, inspection, and measurement, with nickel being largely used in the transducers.

IT'S NEVER THAT BAD

"A lot of the time life isn't worth living," says Old Sorehead, "but there isn't any time it doesn't beat dying."

Ball Leagues in High Gear at Levack



Boys' work is a year-round hobby with Frank Doyle and Marty Callaghan, Ireland's twin-engined gift to Levack. Carrying on with baseball as they do in winter with hockey, Frank and Marty have a total of 80 young guys hustling in two local leagues, and also field an entry in the Sudbury district midget league. Frank is shown above at the wheel of the panel truck the Levack Juvenile Sports Club bought two years ago for getting its teams around the country. Some of his young baseballers pose in front: kneeling, Gerry Dusick, Jean Quesnel, Terry Holterman; standing, Sanford McFarlane, Ernest Bishop, Jimmy Derhak, Ricky Nadon, George Bell, Jim Cameron, Jay Doyle. Local merchants and townspeople help finance the ambitious club, of which executive members are Frank (chairman), his wife Mary (secretary-treasurer), Steve Taylor (vice-chairman), Father McLellan, and Martin Callaghan.



Loosening up those throwing muscles, during a practice workout, are three members of Levack Cardinals, the town's entry in the Sudbury district midget baseball league. Shown are Terry Holterman, Jay Doyle, and George Bell.

"Rocket" Warmly Welcomed to Nickel Reverbs



When the great Maurice "Rocket" Richard of Montreal Canadiens visited Inco's reduction works at Copper Cliff, he was officially welcomed to the nickel reverb department by tapper Paul (Joe) Seguin, who is also known as "Rocket" because of his ardent support of the Canadiens. With Paul on the receiving line was another Richard fan, Fred Eng, who is seen holding a banner he thoughtfully prepared for the momentous occasion.



The fair sex also gets a break at Levack during the summer months, softball leagues having been organized and equipped for girls under 12 and from 12 to 15. Mrs. Alice McLean, who coaches the three under-12 teams, is seen giving Karon McCauley some batting pointers; the catcher is Sharon Nadon; the umpire, George Carvel.

Mummy Muise Rates High with Coniston Fans

"He's a good steady reliable pitcher, and both players and fans like to see him on the mound," said veteran mittman Art Gobbo in speaking of Coniston right-hander Ray "Mummy" Muise. "I'd like to have caught him myself."

Ray was one of several top eastern baseball imports who followed Lou Moulaison to Coniston in 1951. Moulaison had a good year with the Buzzers (as they were known then) in 1950, and brought some of his mates up the following year. In addition to Ray, Mort Berry, Murray Veno, Clarence Fox, Vic and Burt Boyd were others who came up and stayed.

Incidentally the name "Mummy" has no baseball connection. His kid brother, in his first attempts to say Raymond, came out with something that sounded like "Mummy", and it stuck as a nickname.

Ray's best year, as far as he is concerned, was in 1952 when he defeated Frood almost single handed in the Nickel Belt semi-finals and then won another game in the finals to help his club beat out Copper Cliff for the Monell trophy. Against Frood, in a three out of five series, he won all three games, one a 13-inning marathon.

Many fans will recall the thrilling third and deciding victory over Frood. The last of the 9th it was, finally, with Frood at bat, two away, and the tying run on base. Up went an easy fly to left field that Mort Berry would normally have caught in his hip pocket, but a groan arose from the Coniston fans when mortified Mort dropped the ball, and the tying run crossed the plate. So what happened? Good old Mummy just went right on bearing down to hold Frood in check until his mates knocked in the winning run in the 11th.

Champion Bowler



A sharp prize for a sharp bowler was the carving set presented to Mrs. Alice Young, who was the individual star of the ladies' bowling league at Garson Employees Club. She took it all — high single, high triple, and high average.

Frank Had Three Out of Four Convinced



Norm Silversen seems to have his doubts, but Jimmy Taylor, Grant Bertram, and Art Martell are going along with Frank Boudreau's story about how he captured a bear cub on his way to town, got it into the cab of his truck, and then had to let it go again when it started playing rough. They're all Creighton men, and the picture was snapped at Eli Kiviho's retirement party.

Statistically 1952 was a good year for Ray too. He tied Gord McQuarrie of Copper Cliff for the most strikeouts (78) and also for most wins in regular scheduled play. Ray racked up a 7 and 2



He had a Tryout with Boston

record that year. In 1951 he had pitched the most innings in the league, 114.

Last year was a banner one too with Ray helping pitch his club into the Nickel Belt finals, posting an impressive 9 and 1 record in the regular schedule and walking off with the Frood Hotel trophy. The basis of that award is a high-strikeout low-base-on-balls average, rather than a straight won-lost deal.

A strapping 5-foot 11-inch 180-pounder, Ray once had a tryout at a Boston Red Sox school in Fenway Park. That was 10 years ago and one of the big thrills of his life. He had a good arm they said, but lacked coaching.

Ray first played organized ball in 1948 at Digby, Nova Scotia. In three seasons as a pitcher there in intermediate ranks he had a 7-4, 11-1 and 8-2 record. Why did he become a pitcher? "I was never too good a hitter so figured I'd better be a pitcher."

He threw at a target every night for years to develop his control. "I got by for the first two years with only a fast ball and control." Then he developed a good curve, and finally a pretty

deceptive change-up when his fast ball started to lose some of its zing.

According to Ray a good catcher can almost double the average pitcher's effectiveness. He ranks Coniston catcher Burt Boyd as very good. Boyd caught him for two years in Digby before they came to Coniston.

"Who are some tough hitters to get out at the plate?" the Triangle asked Mummy. "They're all tough if you're not careful," he grinned. Pinned down he named Norm Johnston, Gil Benoit, Ev Staples and Gerry Wallace as among the better batters but repeated, "They're all tough."

Does a pitcher ever agree to being pulled? Not very often according to this moundsman. "I always figure I can get that next batter and that's the way most pitchers figure." Could be, but it's an old baseball axiom that more coaches go wrong leaving pitchers than lifting them.

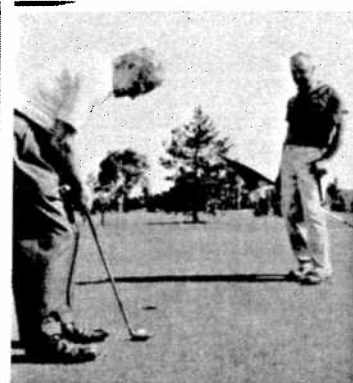
Ray feels that something more could be done locally about the minor baseball situation. Down east he said the minor leagues are exceptionally well organized and are the source of good senior

talent. With more financial backing and help from retired players it could be a bigger and more valuable thing in the Nickel Belt too, he felt.

Born at Belleville, Nova Scotia, Ray returned there in 1951 to marry Evangeline Comeau. To date they have signed up one third of a ball team in Garry 5, David 4 and Peter, 1 month. Ray is a member of the mechanical department at Coniston and besides his baseball enjoys working and living in the north. He hopes for about five more seasons before hanging up his spikes.

As a dedicated Coniston fan, Pete Slywchuk told the Triangle: Mummy Muise always come through with a good game, and when the team is in trouble I always feel better if Muise goes in there. Which is a pretty good recommend in any man's league.

Silver Brothers in Dramatic Golf Finale



It would have been unusual enough to have two brothers meeting in the final match to decide the first flight championship at Idylwyde Golf Club, but Art (Stobie) and Ron (Copper Cliff) Silver really made an event of it by staging a dramatic battle for the title. Three down and four to go, Art turned on the fire and squared the match on the 18th, then banged home a birdie on the extra hole to take the championship. In the above picture he holds the flag as Ron putts.



Cool Way to Hold Hands on a Hot Afternoon

A game of 500 in the cool shade at Sudbury's Bell Park was the pleasant pastime for a hot day chosen by Mr. and Mrs. Bill Boyer (Murray mine) and Mr. and Mrs. Charlie Lalonde (Frood mine). They brought along a well-filled picnic hamper to make the party complete.

Young Lively in Fine Form at Annual Dominion Day Celebration



Lively youngsters eagerly look forward to the annual Dominion Day celebration staged by the Athletic Association. Not only is this a day of entertainment for the kiddies, but the proceeds are earmarked for children's activities throughout the year. Always popular with speedsters of all ages is the race program, in which girls 5 years and under are seen in action here. The boys jockeying for the lead in our front cover picture are David Martel, Fred Taggart, David McArthur and Jackie Egers.



Lively Athletic Association members worked hard to make the day another gratifying success, and so did those who took part in the big parade. President Jock Eadie of the Canadian Legion, Bill Morrison, and Mac O'Grady were members of the color party. A few of the cleverly decorated bicycles are seen above on the right; the fellow in the Zorro outfit is Douglas Hayes.



Marliesh Deburger was the pretty little milkmaid in this parade entry, which made a huge hit with the youngsters; her two handsome escorts were Arnold and Theo Ouwens. Also among the prize-winners were the foursome on the right, Billy Rawson, Moira MacKay, Jane Rutherford and Donnie MacKay. Games of skill and chance, a pony ride, and a display of speed boats were other features.

Platinum Metals

(Continued from Page Two)

out impairment of the contact surface by tarnishing and spark erosion. The drug manufacturers and the chemical industries utilize the excellent catalytic properties of palladium to produce more efficient antibiotics, cheaper vitamins and new chemicals.

Rhodium

Pure rhodium is a white metal, much harder than pure platinum and palladium. This element melts at 3571° F. and weighs 0.447 lb. or 131 dwt. per cu. in.

Rhodium can be wrought, but it is used mainly as an electro-deposited coating on other metals and for alloying purposes.

Reflectors for projectors and searchlights are rhodium plated to obtain a brilliant surface, not affected by heat or corrosion. Extensive use is made of rhodium plating to obtain brilliant finish on jewellery, costume jewellery, novelties, lighters, etc. The hard finish can be obtained with a "flash" coating, less than 0.00001 in. thick, but thicker coatings are more durable.

As an alloying material, rhodium is used most frequently with platinum to produce alloys for use in equipment handling molten glass, rayon spinnerets, laboratory ware, thermocouples, gauze catalyst for nitric acid production, etc.

Ruthenium

Pure ruthenium is a hard, white, metallic element, melting around 4530° F. and weighing 0.441 lb. or 129 dwt. per cu. in. It is practically unworkable.

Ruthenium is an excellent hardener for palladium or platinum, being approximately twice as effective as iridium. The hardness and strength of an alloy of 4.5% ruthenium, 95.5% palladium are about the same as the alloy made of 10% iridium and 90% platinum.

Airplane magnetos utilize a 10% ruthenium and 90% platinum alloy for the contact points that continuously make and break the primary electrical circuit. Unusually high resistance to wear and spark erosion are required of contact points in this service.

Iridium

Pure iridium, a very heavy element of white color, weighs 0.813 lb. or 237 dwt. per cu. in. and melts at approximately 4449° F.

Being harder than rhodium, iridium is very difficult to roll into wire or strip. It is used principally as an alloying material, usually as a hardener for platinum. An iridium-platinum alloy containing 10% iridium is used in fine jewellery. A proportion as high as 30% iridium is used to harden platinum for hypodermic needles and other special purposes.

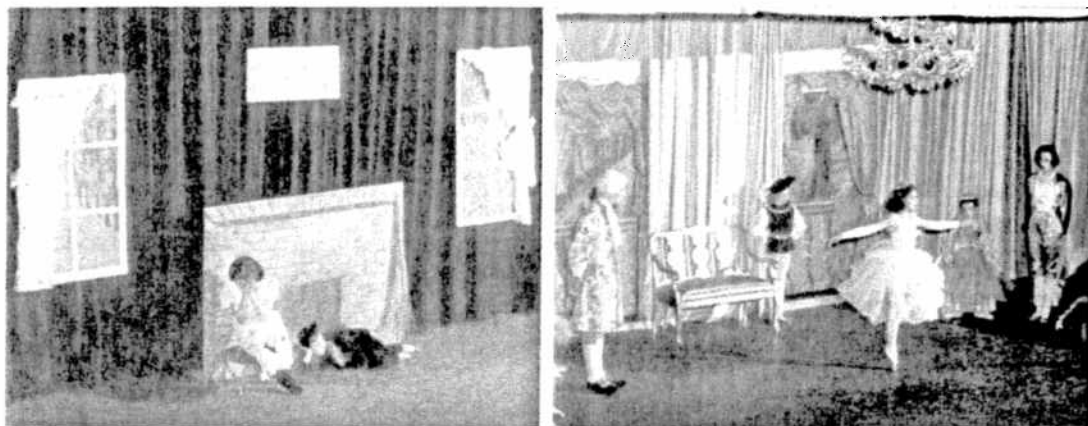
Osmium

Pure osmium has the greatest density of all the elements, weighing 0.82 lb. or 238 dwt. per cu. in. It is a white metal, very hard and unworkable.

Alloys containing osmium and ruthenium are used to tip the points of fountain pens and phonograph needles of the permanent type. The hardest alloys used for such purposes contain more than 60% osmium.

Always remember to drive carefully; don't insist on your rites.

Brilliant Fantasy of Danceland Staged at Inco Club



A ballet of Cinderella was part of the brilliant Fantasy in Danceland staged before a capacity audience at the Inco Recreation Club in Port Colborne by pupils of Valeria Wilson Neff. Cinderella is seen above as she weeps by the fireside, with only Cinders, her cat, to console her; but suddenly, transformed by the Fairy Godmother, she finds herself dancing at the court to the amazement and delight of the Prince.



Then, while the lords and ladies of the court perform the royal ballet, and her two cruel step-sisters go green with jealousy, Cinderella cosily sits one out with His Highness, chatting gaily about the price of pumpkins and white mice. The richness of the costumes and stage settings, and the calibre of the choreography, made this an outstanding production. Another presentation distinguished by colorful costuming and charming originality was Santa Rides Again, in which many many small fry took part. The entire show was one in which Port Colborne could well take pride.

First Job a Sweet One — Kid in Candy Factory

Born in Belgium in 1901 George Viau came to Montreal at an early age and was raised there. His first job, at 14, was in a chocolate factory — most kids' idea of heaven — but by that age his candy craving had unfortunately disappeared and he made little of this great opportunity.

He first worked at Coniston back in 1922 but quit in 1928 to go with Fraser-Brace. Prior to that he had spent five years in bush camps at Blind River. He put in a year or so working for the town of Coniston before rejoining Inco in 1934. He hooked up then with the carpenters and worked with them until re-

tiring in April on a disability pension.



Mr. and Mrs. Viau

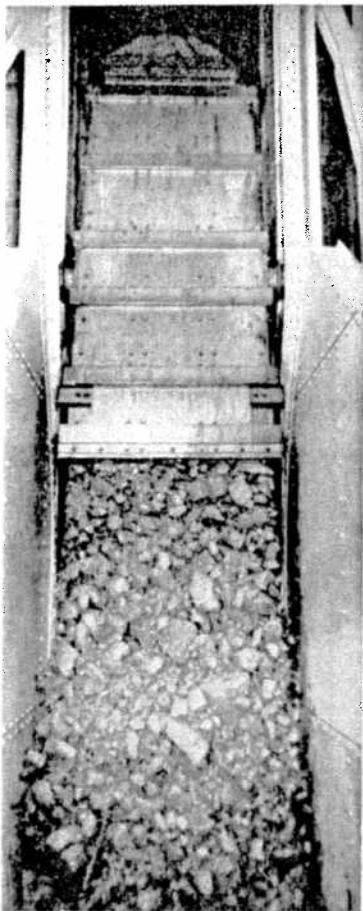
George has done considerable building around Coniston in his spare time. He has built six

houses, raised and moved several others, and remodelled a dozen or more. His own fine home on First Street is entirely his own effort.

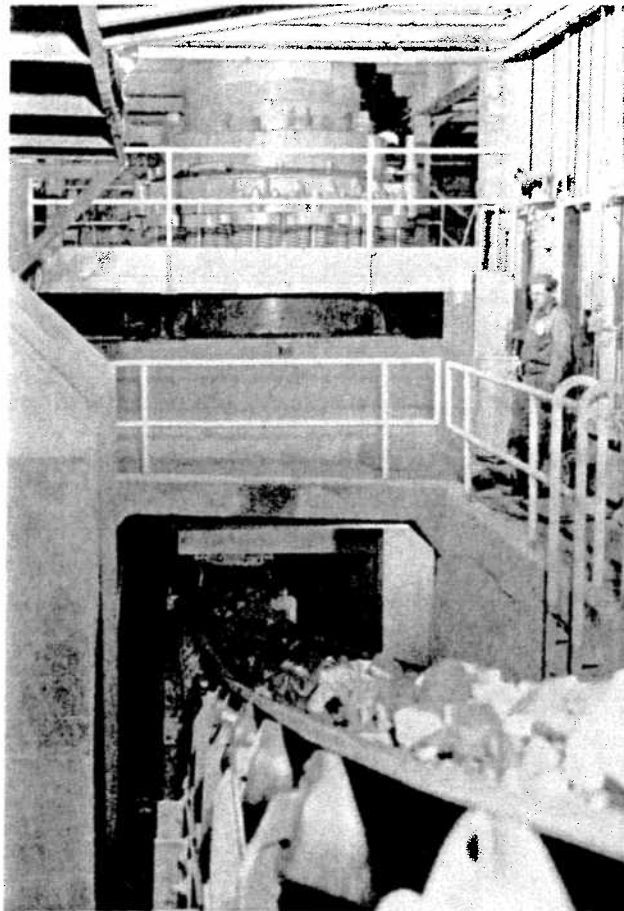
In 1923 George married Mary Boudreau at Coniston. They have a family of five: Evelyn, at home, Margaret (Mrs. E. Veal) of Copper Cliff, George and Albert who work at Copper Cliff, and Theresa, whose husband, A. Albert, is also employed in the Copper Cliff plant. They have three grandchildren.

At a farewell party George was presented by his friends with a wallet containing a sum of money.

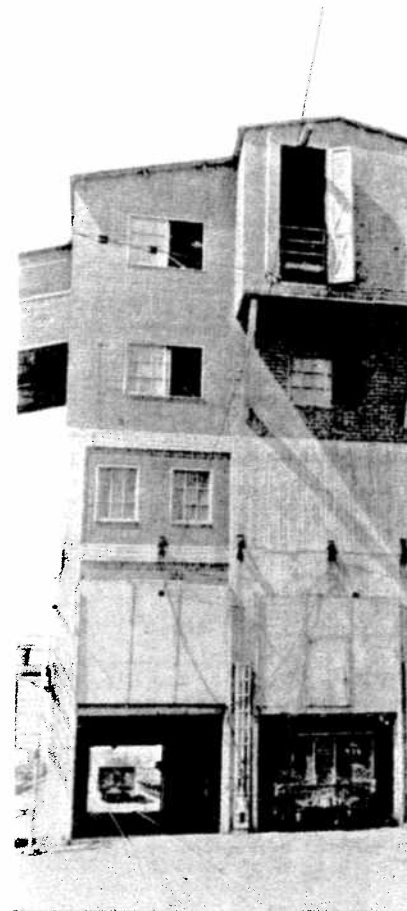
This summer he plans on getting things ready for a little gardening, but otherwise he'll be taking life easy and enjoying visits with his many friends in Coniston.



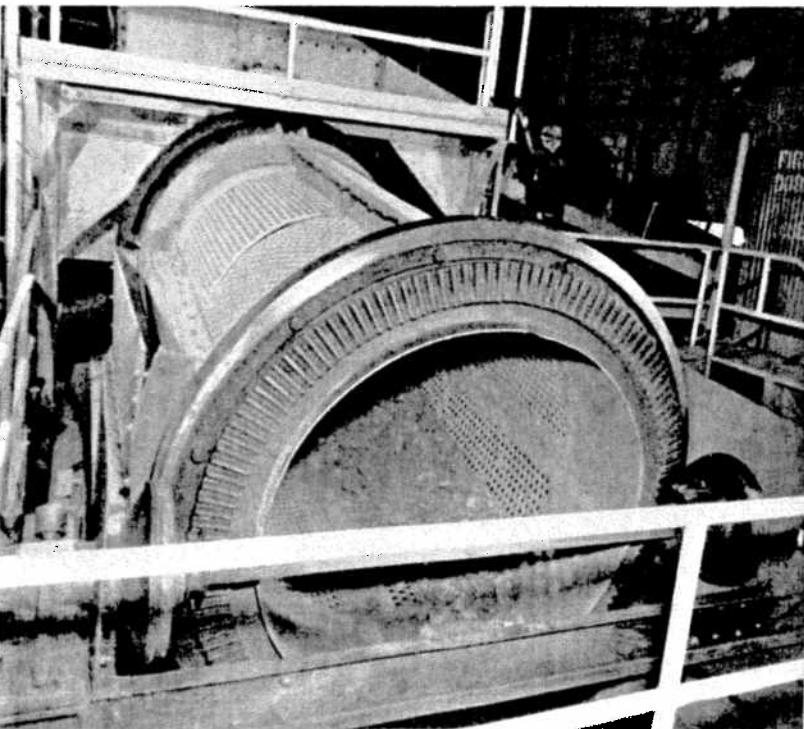
Rockhouse operations commence with arrival of the ore from underground. Here a 15-ton skipload dumps automatically at Stobie mine.



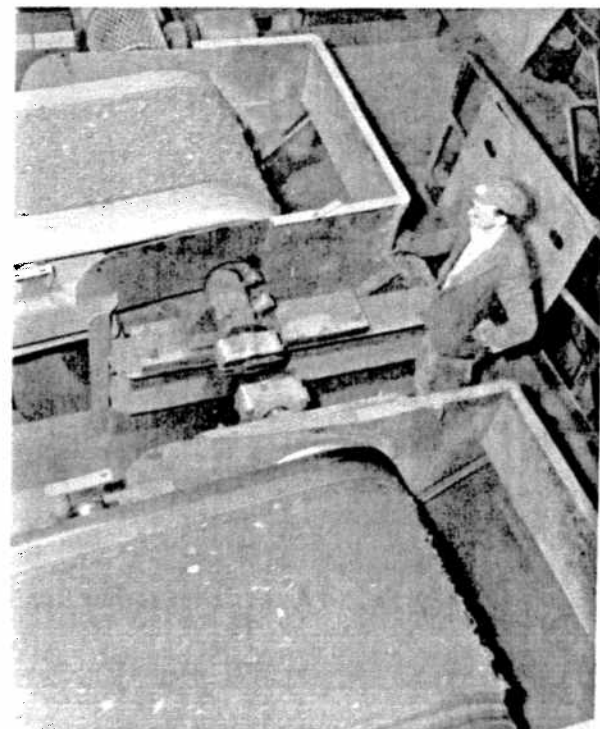
The ore has passed through giant jaw crushers underground. On reaching surface it is further reduced in size by 7-foot Symons cone crushers such as the one above, set at an opening of $2\frac{3}{4}$ inches. The operator shown is Ted Boyd.



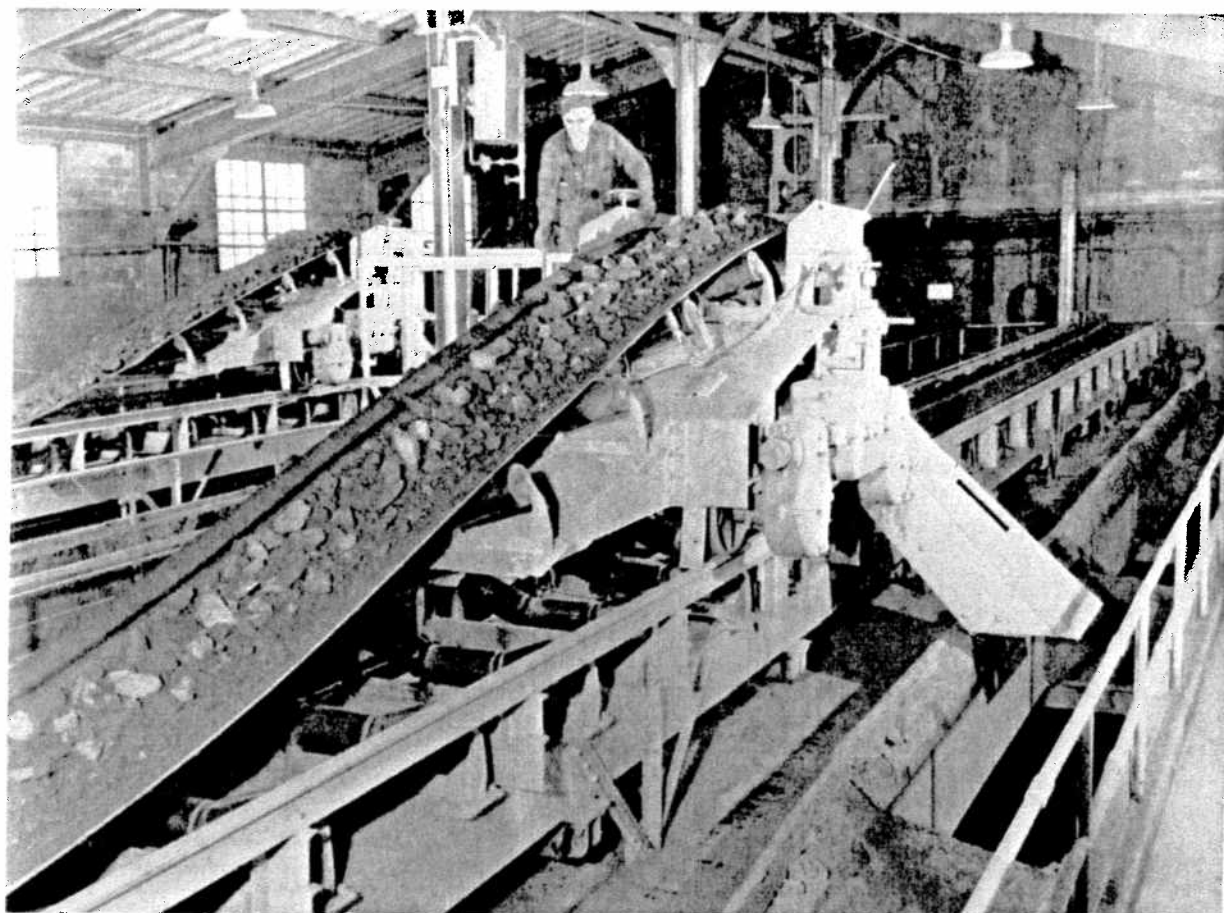
The Stobie rockhouse, 77 feet high and is typical in appearance of the rockhouse less elaborate equipment than some of the ore mined is more complex. It serves



Of a different type than Stobie's, the crushed ore at Creighton no. 5 shaft is fed to two 60-inch 12-foot trommel screens with $1\frac{1}{4}$ -inch holes. Oversize from the revolving trommels drops to one conveyor, undersize to another, and magnetic separation is then carried out. Operating this trommel is Arvi Koskela.



In magnetic separation, the more metallic pieces of ore stick to the belt as it passes over magnetized pulleys, and thus are separated from lower grade material, which falls free. Len Menard is shown checking this operation.



Here's a view of the distributor floor at the top of the Stobie rockhouse. It has an area of 6,300 square feet. Ore is transported from the Symons crushers by belt conveyors to the two distributors which, as they travel back and forth, dump it evenly into the bins below. Bin capacity is 4,500 tons. Gibson Pothiers is the operator shown above. Waste rock from development mining is also crushed and handled through the rockhouse for road and yard dressing.

steel, tile and concrete, Inco mines, but requires h as Frood where the sets of loading tracks.

Rockhouses Handle Many Different Types of Ore

Final handling at the mines of the huge tonnage of ore processed daily by Inco's mills and smelters is performed in the rockhouses, where the ore is sorted, separated, and shipped.

The purpose for which the rockhouse was originally designed, hand-picking rock from ore, has long since gone the way of the Model T and the bustle as far as Inco operations are concerned, replaced by a system — highly mechanized and often quite complex — for preparing materials best suited to efficient milling and metallurgical processing.

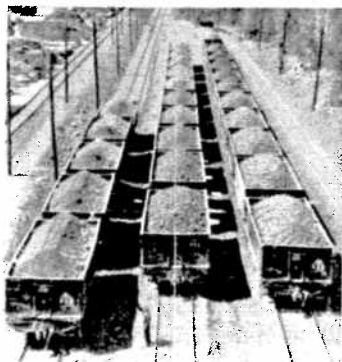
To make the feed to the reduction plants appetizing and digestible, a variety of products graded according to size and metallic content comes off the miles of conveyor belts that cross and criss-cross the rockhouse galleries.

Since some types of ore require fuller treatment than others, each rockhouse is specially designed for the mine it serves.

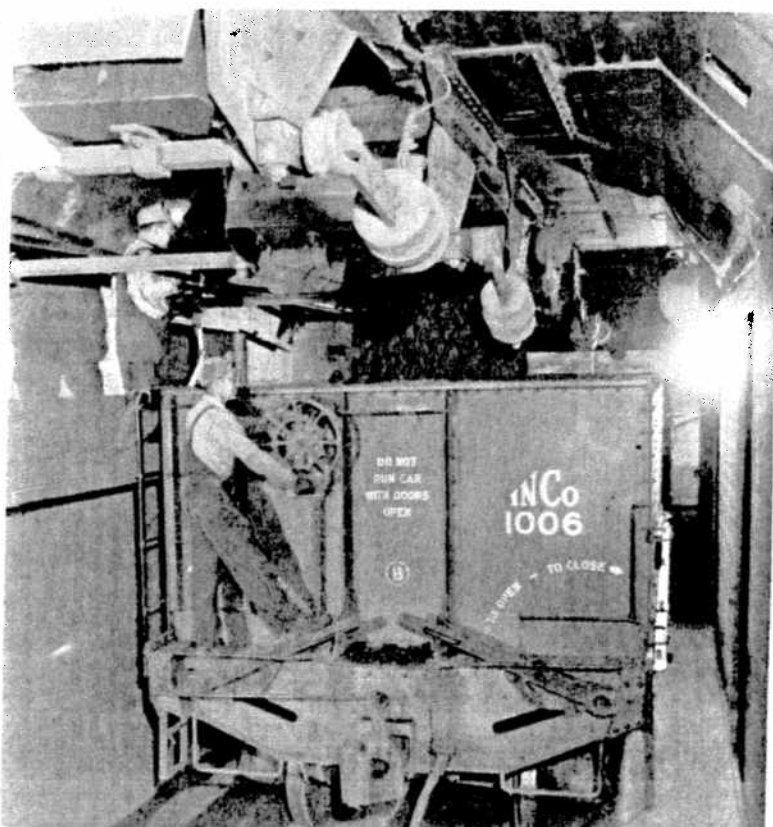
At Stobie, Murray and the open pit, the rockhouse operation consists of crushing the ore and transporting it by conveyor and distributor to bins, from which it is loaded into cars for shipment to Copper Cliff. These mines pro-

duce a lower grade ore, as do no. 3 and no. 7 shaft at Creighton, where, too, a minimum of rockhouse handling takes place; this Creighton ore passes almost directly to the mill, pausing only long enough for a short visit to 7-foot Symons crushers.

At other Inco mines where some of the ore has sufficient metallic content to make it suitable for
(Continued on Page Thirteen)



These strings of loaded ore cars are ready for shipment from the Stobie rockhouse to the reduction works at Copper Cliff.



To allow even drawing of ore from the bins, each of the three sets of loading tracks at Stobie is served by 10 chutes. Here Dom Bertrand controls a car with the hand brake while Jim Carter operates a chute to top off a 75-ton load of ore. This is the final rockhouse operation.

Shaft Work Was Oscar's Favorite

A shaft inspector at Creighton for the last eight of his more than 25 years with the Company, Oscar Edman is now retired on disability pension. "I always like shaft work," he said, "and I do lots of it." And that he did helping sink shafts at Creighton, Murray and Frood before becoming a shaft inspector. Earlier he had driven raises and drifts.

Oscar came to Canada from Sweden in 1928 along with two companions. Before leaving their homeland they stuck a pin in a map of Canada and speared the Soo, the way the girls pick their winners at the races. Finding no work on arrival there they went to a lumber camp at Blind River. The following year they made it to British Columbia, mined there a short time, then came to Sudbury.

Oscar was a bartender at the old Sudbury Hotel, which he states was a pretty lively place in those bad old days. If your shirt wasn't ripped off your back during a shift you chalked up a quiet night, he says.



OSCAR AND MRS. EDMAN

In 1930 Oscar joined Inco at Frood, then went to Creighton in 1934 to help sink No. 5 shaft.

Oscar married Edwina Tessier at Sudbury in 1935. Of their family of six, Henry works in the separation plant, at Copper Cliff smelter, Theresa is employed in Sudbury, James and Lenora are at school, and Richard and Catherine are of pre school age.

Learning to walk with an artificial leg is the next trick Oscar must master, and with his naturally cheerful determination that won't take long. Recently the doctors found it necessary to amputate his right leg.

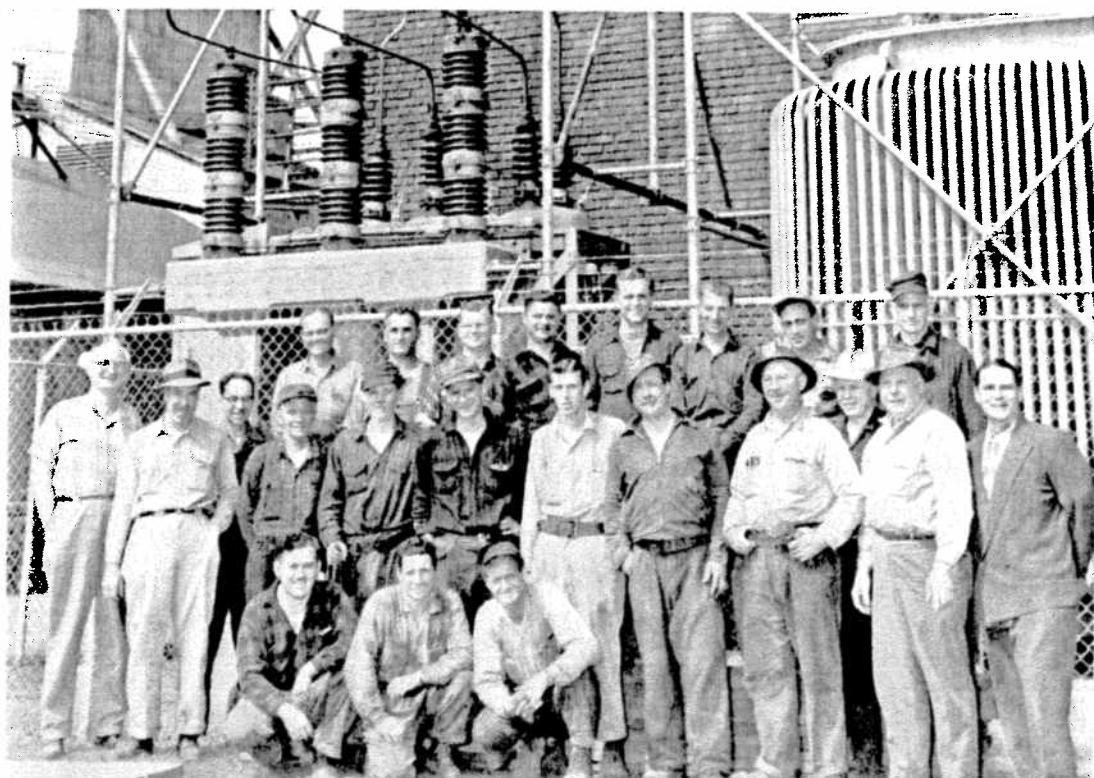
At present he is taking things easy, watching TV, reading, and amusing the children. A trip back to Sweden is a future possibility when he becomes more mobile.

Winners Declared In Levack Bowling

Westerners emerged winners in the mixed bowling league at the Levack Employees Club, edging out the Bottlenecks by 185 pins. Alex Didur was captain of the Westerners and had with him his wife Alice, Helen and Melvin Corkal, and Rose and Frank Swiddle.

Helen Corkal also shone in the individual scoring, winning the

Splendid Safety Records Deserve Praise from All Inco



Frood-Stobie mine was the scene of an outstanding safety achievement on June 24 when its electrical department completed one million hours of safe work. Not since January 10, 1951, has this safety-conscious crew had a lost-time accident. "We're very proud of this wonderful record," said Inco electrical superintendent A. E. Prince in congratulating Frood-Stobie's chief electrician Stuart MacKenzie, and his men. In the above group, comprising about one third of the Frood-Stobie electrical department, are: front row, L. Hamilton, F. Dubery, G. Hardy; second row, E. Dash and H. Fraser (assistant chief electricians), A. Wilkes, B. Poutiainen, G. Rae, J. Mikkola, T. Hopkin, K. Adamson, L. Puro, P. Evans (assistant chief electrician), S. MacKenzie (chief electrician), T. Parris (Frood-Stobie safety engineer); back row, F. Graham, L. Christink, C. Tremblay, R. Chenier, R. Siren, R. Gallagher, L. Fielding, E. Mason.



Another distinguished record of safe workmanship, also extending over a period of some seven years, has been rolled up by divisional foreman Roy Hamill's shift at Creighton mine. As of July 18 this splendid record stood at 205,151 shifts without a lost-time accident, the biggest safe-work score of any divisional foreman in Creighton history. Creighton safety engineer Leo MacDonald is seen in the above picture warmly congratulating Roy Hamill and a representative group from his shift: John Lekun, pillar leader; Teddy Kovalainen, pillar leader; Stan "Casey" Caul, shift boss; Albert Kruk, pillar leader. On the left is Lyell McGinn, assistant safety engineer.

ladies' high single (352) and high triple (825). Jean Roberts took the high average with 195. Alex Didur scored the men's high average (219) while Stan Piaskoski walked away with both the high single (337) and high triple (818).

In the men's league Blue Bombers swamped Silver Foams by

268 pins in the playoffs. Team captain Hector Lauzon had Tony Andrews, Jerry Lappan, Murray Crane, Fred Sealy and Bruno Franceshini to help him roll up this impressive win.

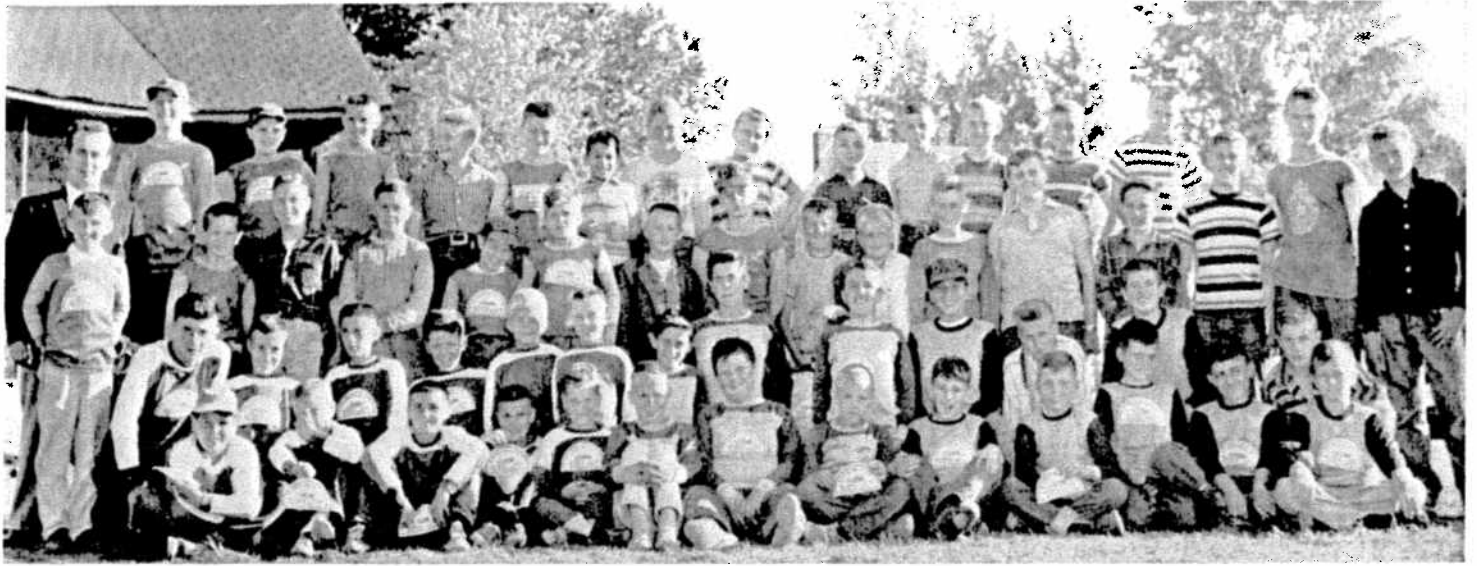
Individual winners were William Wanchaluk with 354 for the high single, Hector Lauzon with 895 for

the high triple and Alex Didur taking the high average in this league too with 226.

NEXT QUESTION!

The only cure for the fevers of youth is age, and everyone knows what constitutes the cure for the infirmities of old age.

Legion Again Sponsors Minor Bantam Baseball League at Copper Cliff



In this gang of happy young Canadians are some of the 125 boys taking part in the minor bantam baseball league operated by Copper Cliff branch of the Canadian Legion, which furnishes sweaters and other equipment for the six teams entered. This is the 11th year that the Legionnaires have sponsored the loop. Shown on the left with the boys is Ray Smythe, the branch sports officer.

Joseph Albert Had Highly Varied Career

"There were 12 of us in the family so we didn't get much chance to go to school — everybody had to work," said Joseph



Albert of his early life in New Brunswick where he was born in 1893.

Albert, as he was known at Frood, has retired on service pension with over 26 years of credited service.

Leaving the farm and tiny fishing village Albert spent two years working in the bush in New York state before coming to Espanola and a job in the paper mill there. He served in the army from 1917 to 1919, returned to Espanola for a time, then went to Timmins and over to Quebec, spending several years on construction projects.

His next venture was a silver fox farm on the old Garson road which eventually left him minus \$6,000 when sickness struck. He recalls paying \$2,400 for two pair of breeders to start with. He tried farming there for a time, then in 1929 got a job at Frood. He worked with Joe Lapointe's track gang.

In 1930 he rebuilt his farm home, which had burned down, then got rehired at Frood the same year. He worked in the stopes, then was on ventilation door maintenance for 10 years. Several years ago he got transferred to surface and has been helping in the lamp room.

Albert married Blanche Tessier in 1927 and they have four of a family, three of them in radio work: Henry is with CHNO while Lucille and Lucien are at CKSO; Remi is employed at Chapeau. They have two grandchildren.

Albert is rehabilitating himself

after an eye operation and finds things rather lonely with the children grown up away and no regular job to go to. However he is getting accustomed to the change and knows that it will improve with time.

A DILEMMA SANS HORNS

Caller: "I must see the judge."
Secretary: "I'm sorry, sir, but he is at dinner."

Caller: "But, my good man, my reputation is in peril."

Secretary: "It can't be helped, sir. His honor is at steak."

QUICK QUIZ

1. Who founded Quebec's famed St. Anne de Beaupre shrine?
2. What is the ground color of the Union Jack?
3. Are there more Canadian-born residents of the U.S., or more American-born residents of Canada?
4. What fast-running wild animal once outnumbered the buffalo on the western prairies?
5. Who was the first daredevil to go over Niagara Falls in a barrel?

ANSWERS: 3. At the most recent census there were 995,000 Canadian-born residents of the U.S., 280,000 American-born residents of Canada. 1. Fishermen from France built the first chapel in gratitude for survival of a perilous Atlantic crossing. 5. Bobby Keach, who went over the Falls in 1911, and survived. 4. The Rocky Mountain antelope. 2. The blue of the background of the cross of St. Andrew, the flag of early Scotland.

It's funny how people ask for advice and then resent it if it's not to their liking.

The Boys at Frood Wish Dan Sembrek a Long and Contented Retirement



The day he left Frood mine on service pension Dan Sembrek, popular dryman, was given a pleasant parting surprise. A group of his friends and workmates gathered to wish him a long and contented retirement, and present him with a bit of good luck in the form of a purse of money. Eddie Menard is seen above as he did the honors. Dan had worked for Inco since 1933, starting as a miner at Frood and later working for several years at the Open Pit.



Ten of the determined dozen from Coniston who made a dream come true are shown above, Angelo Basso in front, and Al Gaudet, Phil Lalonde, Tom Duhaime, Emil Hachey, Rheal Perron, Ernie Giguere, Vic Gauthier, Pit Rivais, and Ray Lavigne; not present are Gerry Geoffrey and Norm Johnson. The man who got them organized was Father Proulx, Coniston parish priest.

In Their Spare Time During a Year They Built a Subdivision

The solid satisfaction of earning their own homes is being enjoyed to the full these days by the 12 proud ratepayers of a smart new subdivision that has sprung up on the banks of the Wahnapiatae River, 15 miles east of Sudbury.

It's little more than a year since this determined dozen decided to do something about the dream of home ownership. Today they're established with their happy families in handsome homes that would fit into any exclusive urban residential district.

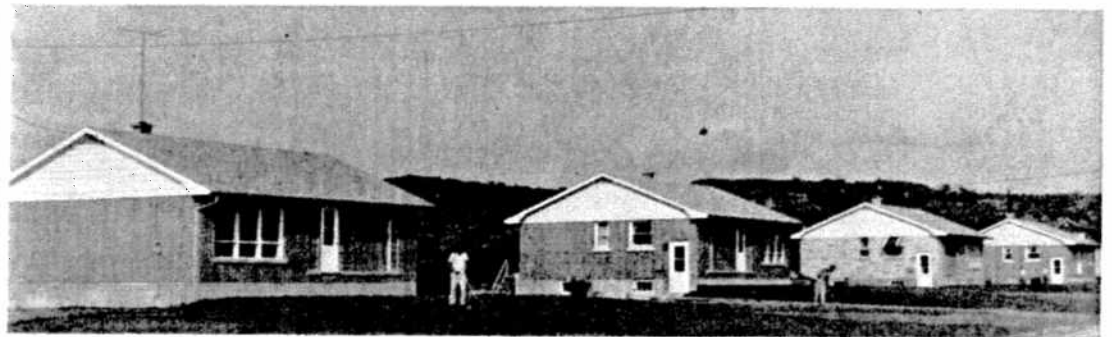
Father Proulx of the Roman Catholic Church in Coniston got them going. He encouraged them to form the Coniston Co-operative Housing Project and apply for a charter, which was soon forthcoming. Raymond Lavigne was nam-

ed president, Edward Jones vice-president, Norman Johnson treasurer, and Rheal Perron secretary.

During the winter of 1956-57 the 12 disciples of independence took a course in home building, rounding out the skill which was a stock-in-trade of their group through the various trades represented in it. Arrangements were made to acquire mortgage loans with the help of Central Mortgage and Housing Corporation.

The property selected for the development was attractively located near the little village of Wahnapiatae, and offered lots of room for possible expansion of the subdivision.

On May 15, 1957, the work got under way. All 12 basements were dug, then all foundations were poured, and then construction pro-



Lawn-making and other landscaping is at the top of the work list these days in the pleasant little 12-home sub-division on the banks of the Wahnapiatae River, 15 miles from Sudbury.



The handsome brick houses are attractively laid out with three bedrooms, large living room, bright, conveniently arranged kitchens with lots of cupboard space, full basements. On the left are Mr. and Mrs. Phil Lalonde and their son Michel, 2, at the door of their kitchen; on the right Mr. and Mrs. Emil Hachey "model" their living room with their twin sons, Ronald and Donald, 6, and their daughters Lola, 3, and Monique, 2. Everybody looks pretty proud of the situation in these pictures, and why not.

ceeded, all the houses being built as a unit, stage by stage. Not until it was time to start interior finishing were the houses allotted to their owners, just in case personal zeal might interfere with community spirit.

Each man spent a minimum of 25 hours a week on the project, either during his day off from his regular job or after regular work hours. They did about 40% of the total work themselves, hiring experienced tradesmen only when necessary. The houses were closed in before winter, and interior finishing proceeded. During February and March the first families moved in. These days lawns are being built and other landscaping planned. The pleasant little community with its single broad street leading down to the river is taking full shape.

By purchasing their building lots and materials as a group, and putting in about 900 hours of work apiece, the men estimate that they each saved upwards of \$3,000. Their monthly mortgage payment, including taxes, is \$71.

First project of its kind to be carried out in the Sudbury district, the Coniston Co-operative has been watched with keen interest.

Beautiful Birches Killed by Youngsters



The old plea of "Woodman, spare that tree!" might be changed to "Young fry, spare that birch!" since many fine birch trees are destroyed by youngsters.

Peeling the bark through the cambium layer to the wood is a sure way to destroy any tree, and this is what is happening to numerous Sudbury district birches.

Beautiful, gleaming, white-trunked birch trees are a distinct northern heritage, in all seasons a joy to behold. Yet a few minutes' thoughtless mischief by some youngster with a knife can destroy what nature spent 30, 40 or more years to produce.

Many children are unaware of the damage they do in this way, and parents would be wise to explain it to them and enlist their cooperation in helping perpetuate these handsome trees.

The above picture indicates the damage done to a number of fine birch trees in the park-like area at the eastern edge of the town of Lively. Inco agriculturist Tom Peters points to the depth that bark has been cut.

Now there's talk of the subdivision being enlarged by 36 more homes at the rate of 12 a year for the next three years, all built to the same high standards. Other co-operatives may be formed elsewhere in the district. Father Proulx, now secretary to the coadjutor bishop at North Bay, really started something!

Eight of the 12 new homeowners are Inco men: Phil Lalonde, Tom Duhaime, Emil Hachey, Pit Rivais, Ray Lavigne, and Norm Johnson work at the Coniston smelter; Gerry Geoffrey and Ernie Giguere work at Copper Cliff. Of the other four, Al Gaudet is Coniston town clerk, Rheel Perron is a Coniston schoolteacher, Vic Gauthier is a Coniston plumber, and Angelo Basso works for the Hydro.

Rockhouses

(Continued from Page Nine)

direct smelting in blast furnaces, by-passing the long and expensive milling operation, magnetic separation is carried out in the rockhouses.

Thomas Edison is credited with having invented the magnetic pulley. In his search for a more efficient filament material for his lamps, he came to the Sudbury district to investigate the characteristics of nickel. After observing methods then used to separate nickel ores he devised the magnetic pulley.

The head pulley at the discharge point of a conveyor is made an electromagnet. As the magnetic ore such as massive sulphide or pyrrhotite approaches this pulley, the magnetic particles are attracted and held fast. The belt takes this ore beyond the magnetic influence, carrying it to the underside of the pulley where it is discharged separately. The reject material falls away in a normal trajectory from the belt. Magnetic belts can of course be quickly converted to ordinary conveyors by merely switching off the electromagnet.

At Frood two separate rockhouse circuits handle the widely different types of ore mined. Siliceous ore, and ore from blasthole mining operations, do not receive a magnetic separation but are simply screened, crushed, and binned. From the mine's other ores the rockhouse produces magnetic fines, middlings and coarse, as well as non-magnetics in similar sizes.

Magnetic fines and coarse produced at Creighton no. 5 shaft are shipped to Copper Cliff smelter, while non-magnetics travel the long hungry conveyor belt to the Creighton mill. Magnetic separation at Levack also produces a waste rock product used as mine fill. A large percentage of Garson ore, along with some from Levack, feeds the Coniston smelter. Some high silica ore from Frood and Garson, valuable for its fluxing properties, is charged directly to the converter furnaces at Copper Cliff. At Lawson Quarry, where quartz is mined for furnace flux, the rockhouse crushing and screening system produces two products, fines for the reverberatory furnaces and coarse for the converters.

Highly equipped and smartly

Link with Early Days to Disappear



News that the old Roman Catholic church near Whitefish is being torn down will set many an old-timer to reminiscing. This link with the early days of the nickel industry was built by Father Lebel 60 years ago for people of that faith residing at Victoria Mine, where the Mond Nickel Company's first smelter was built. Rosario Hamilton of Whitefish, who works in the crushing plant at Copper Cliff, was baptised, confirmed, and married in this church. Now he has the contract to remove it in return for the wood he'll salvage, part of which he will use to build a summer camp. Here he sits astride the roof.



Dan Leach (left), patrolman of Inco power lines, happened by and stopped to discuss a souvenir of the old church with Rosario Hamilton (right) and three other Inco men who are helping him on the demolition job, his brothers Leo Hamilton of Frood and Romeo Hamilton of Copper Cliff smelter, and (centre) Ernie Geroux, also of Copper Cliff smelter. An Anglican and a Presbyterian church, both removed many years ago, also served the busy little community, which included men working at the Mond mine two miles distant. Mond's smelting operations were moved to Coniston in 1913.

operated, the mine rockhouses play an important part in the great Inco enterprise.

A LOT OF EATING

A hillbilly who went to a large city to see the sights engaged a room at a hotel and before retiring asked the clerk about the hours for the meals.

"We have breakfast from 7 to 11, dinner from 12 to 3, and supper from 6 to 8," explained the clerk. "Hey," put in the hillbilly, "when am I going to see the town?"

A HEAD START

Donald and Mary had decided to adopt a child. A little girl was produced and Mary was about to close the transaction when Donald tapped her shoulder.

"Mary," he whispered, "Let's have a boy. Hae ye forgotten the lad's cap we found on the train?"

LIFE'S LIKE THAT

It's easy to find your station in life — sooner or later someone will tell you where to get off.

Lots of Satisfied "Customers" at Annual Scout-Cub Banquet



Mothers and friends of the Scouts and Wolf Cubs catered for the annual dinner given by the Boy Scout group committee at Copper Cliff, and judging by the contented expressions in these pictures they made a fine job of it. On the left, above, are Al Cameron with his son David, 13, and Pat Gallagher with his son John, 10, and Teddy Randall, 11; on the right are Bob McAndrew and his son Sandy, 14.



About 150 attended the enjoyable event, among the distinguished guests being the district commissioner of Scouting, Ainsley Roseborough. Chairman of the Copper Cliff group committee is Walter Morden. The satisfied "customers" shown above are (left) Bill Nelan and his son Bill, 9; (centre) Bill Chandler between his son Bill, and Ross King; (right) Elliott Lawson and his son Randy, 8.

Important Early Events Recalled By Frank Dennie

"I remember when Thomas Edison came to Sudbury with an engineer from the States. That was around 1900. He hired me and Henry Ranger as prospectors," said diminutive Frank Dennie recalling how, at the turn of the century, mining was gradually moving ahead of lumbering in importance in the Sudbury district.

Still alert and fit at 83, Frank lives with his son Rand, an Inco policeman at Coniston, and still keeps his hand in at prospecting. Another of his sons, Maurice, lives at Creighton.

Relating the Edison episode to the Triangle, Frank said they discovered what eventually became Falconbridge. Frank had earlier noticed some metallic-looking boulders in a gravel pit east of Garson, near the old road to Lake Wanapitei. When he took the famed inventor and his associate there Edison was using an invention of his own to search for ore, the dip needle, which reacted to magnetic properties. When the needle went wild, Frank said Edison turned to him and exclaimed, "Frank, I think you've found a mine!"

Later, Frank continued, Henry

Ranger sunk a shaft through the gravel for 83 feet and struck ore.

Frank was in on two other important finds in the Sudbury district and on one he made quite a bit of money. That was the present Nickel Offset, which he said he originally located in 1926. It was first named the Foy Offset after the township in which it was located. Financial interests in Buffalo backed the development of this ore body to the extent of a quarter of a million dollars, Frank related. He made \$10,000 and bought a house in Sudbury.

Earlier in his career, around 1891



Showing his son Rand the dip needle he used for many years while prospecting, Frank Dennie says they have changed little from the one Thomas Edison invented and used back in 1900 when he was in Sudbury.

he thinks, Frank says he discovered the outcrop that became the East Rim mine. He tells how he was on a river drive on the Wanapitei when he noticed some mineralization. He took a sample to an old prospector named Tom Thomas, and they returned and laid claim to the land. After sinking a shaft by hand for about 10 feet they abandoned it for some time. It was later sold to Rinaldo McConnell, a name synonymous with early Sudbury mining development.

Another association of the early days Frank likes to recall was that of being retained by Inco to locate a suitable site for a new roast yard. Charles McCrea, a close personal friend and for many years provincial minister of mines, recommended him for the assignment. After a month of searching he reported an area that was suitable and clearing operations began. Pat O'Donnell contracted to clear the land and the roast yard took his name. It was located about five miles west of Creighton on the old Algoma Eastern Railway.

Frank's life has been a full one and he has lived it to the hilt and loved every moment of it. Today he is a happy warrior with no regrets and a keen interest in everything.

Born near Perth, Ontario, in 1875 he worked on river drives at Sturgeon Falls before he was 15. He says he has driven logs on every river from Sudbury to Blind River and is still partial to lumbering. In his son's home on 3rd avenue in

Coniston Frank told the Triangle, "About 67 years ago we camped right here while driving logs down the creek to the Wanapitei." Today that creek is a mere trickle running through Coniston.

One of a vanishing breed of bushmen, Frank worked for the Department of Lands and Forests for 20 years. On one occasion he walked 85 miles through the bush to Hornepayne and landed right on target.

In the early days Frank was a bartender at the old Montreal House and despite his lack of size managed to keep the boys in line. He later became the owner of that establishment. He also bought and operated the hotel at Hanmer at a later date.

Frank is proud of still another district association. He states that he was largely responsible for the town of Capreol being established where it is. When the Canadian National were driving through that part of the country in 1911 Frank bought a large piece of land along the right-of-way. When the railway came to purchase it Frank gave them 200 acres with the proviso that they build shops and maintenance buildings there.

Frank was married in 1912 to Emerance Menard, and seven children were born to them. They have 30 grandchildren.

The man who coined the expression "good things come in small packages" could very well have been thinking of Frank Dennie.

Weir Stringer Happy Over Sudbury Sweep



When Sudbury Canoe Club swept to its second consecutive victory in the annual City of Sudbury Regatta, winning 28 of 39 prizes, a very happy fellow was Frood's Weir Stringer, shown above with megaphone. Vice-commodore of the club and chairman of the regatta, Weir has long been a staunch booster of the fine sport of paddling. Toronto Balmy Beach, Toronto Island, Toronto Sailing, Ottawa Rideau and Carleton Place were the other competing clubs. Wearing the earphones in the picture is the regatta "whipper in" (Don Kedey), who acts as contact between the contestants and the chief scorer, and is also responsible for getting races away on time.

Four-Team Shift Softball Loop Produces Some Sizzling Competition at Levack



A four-team shift softball league, sponsored by the mine athletic association, is stirring up a lot of excitement and friendly competition in Levack. Office, Huskies, Lords and Andrews are the entries, with Lords looking like the probable champs. Huskies are mostly members of the hockey club by the same name. The above pictures were shot during a game in which Huskies beat Office 16-11. LEFT: Harry Knight of Huskies connects for a big triple. CENTRE: The Triangle camera caught this action a fraction of a second before Monty Montgomery of Office hammered the white blur for a rousing double; the umpire is Vic Regimbal. RIGHT: Larry Warner is the husky Huskie hitting away here to keep his team in the lead.



Win Newman of Office makes an easy third out of Laddy Kauluk as pitcher Ron MacNeil and third baseman Joe Gaydos head for the bench.

Reverbs Fine Place To Work, Fred Says

Fred Deschene has retired from the nickel reverbs at Copper Cliff smelter on service pension with almost 23 years credited to him. In excellent health, he is already enjoying his new leisure to the full.

Fred was born at Naughton back in 1893 when his father worked at Victoria Mines. They moved to Parry Sound, which Fred says "was a boom town then, and a good one." Lumbering was the big industry.



Mr. and Mrs. Deschene

Following the fortunes of logging, Fred and his father worked at Blind River and Thessalon for many years in mill and bush work.

In 1915 Fred came to Sudbury and during the next 20 years turned

his hand to almost everything. He was a diamond driller, miner, carpenter, teamster, trucker, city employee, lumberjack and what have you.

He went to work for Clarence Buck as a carpenter in 1935 but after some four years he moved over to the reverb furnaces. "I was never a very good carpenter," Fred says, "but I did like working on the reverbs." He remained there until his retirement.

Fred married Alphonsine Lafleur at Sudbury in 1923 and to this happy union four children were born: Albert and James, Margaret, whose husband Delphis Menard works at Creighton, and Frederick who works at Copper Cliff. They have six grandchildren.

With his fine home in New Sudbury supplying ample odd jobs, with family and friends to visit and places to see, a nice pension cheque coming in every month, and good health to top it all off, Fred just isn't asking for anything else.

NOT GUILTY

The Sunday school teacher was reviewing a lesson. "Who led the children of Israel out of Egypt?" No answer. So she pointed to a small lad at the back of the room.

"Wasn't me, ma'am," he answered timidly. "We just moved here from Timmins."



Sid Kemp of the Office lineup beat out this throw to the plate by something less than inches, and standing up at that. Umpire Vic Regimbal pronounced him safe and Huskies' catcher Jim Laberge didn't argue — much. The league produces lots of close ones like this.

Sherbrooke University Honors Inco Program

The University of Sherbrooke, the youngest of Canada's leading universities, honored The International Nickel Company for its educational program, in which the University participates, by conferring the honorary degree of doctor of science on Dr. W. A. Mudge, assistant to the president of Inco and his special representative on educational programs, at a convocation held at the University, in Sherbrooke, P.Q., on May 14.



Msgr. Irene Pinard, rector of the university, praised Inco's lead-

ing effort for assistance to education in Canada and cited also the outstanding accomplishments in Dr. Mudge's metallurgical career before he assumed his present responsibilities.

"It is to the Company, personified in Dr. Mudge, that we desire to extend our grateful recognition," Msgr. Pinard said. "And at the same time we would like to express the fervent hope that the man and the Company serve as examples to stimulate similar generosity in other industries."

Used in Machine Tools

Extensive use of ductile iron has been made by the machine tool industry in parts where it has offered advantages over malleable iron, cast iron, high strength gray iron and wrought steel. Ductile iron is used for parts ranging from small brackets and levers weighing only ounces to massive components weighing over 20 tons.

Ferguson Era Comes to End At Copper Cliff

More than 1,500 people attended the public reception held at the Italian Hall in Copper Cliff in honor of Dr. C. Ross Ferguson and his family when he retired from the Inco medical staff.

This remarkable demonstration was sparked by the community's affection for the man and by its desire to express its respect and gratitude to his noble profession.

Combining the hallowed tradition of the "family doctor," handed down to him by his father, with the skill of the surgical specialist, Dr. Ferguson made an unusually broad contribution during his 29 years with Inco. On the civic front he was also very active, his interest and enthusiasm finding expression in many fields of service. Throughout this richly varied career he was inspired and aided by his wife, who shares the high place he holds in the public's esteem.

The little town of Ethel, in Huron county, 40 miles inland from Lake Huron, was Dr. Ferguson's birthplace. His father, who was born in a Scottish settlement only 30 miles distant, was a general practitioner for 35 years, the latter part of which he spent in practice on Kingston Road in Toronto. During his summer vacations for eight years young Ross worked on the Great Lakes passenger boats, six of them as a purser.

Graduating from the University of Toronto in 1927, he interned at St. Michael's Hospital for two years, then struck out to take a job in a northern mining town with the intriguing name of Copper Cliff. He arrived there in a second-hand Ford on which he owed \$600. If this financial commitment hadn't been enough reason to anchor him in the community, another was soon forthcoming; within three weeks he met Virginia MacDonald, and Copper Cliff suddenly became the one place in the world for him.

On his second day in town the young doctor was dispatched to O'Donnell, hard by the old roast beds from which billowed dense clouds of sulphur smoke. As he recalls it by the time he arrived it was impossible to tell which was the patient, Ferguson or the man he came to treat.

He shared a bachelor home on Power Street with Ed McKerrow until the Engineers Club reopened that November, when he moved in along with a distinguished roster that included such well-known present-day Incoites as Bill Nelan, Pete Bregman, Jack Dingwall, Ross Corless, Harry Van Dyke, and Clarence Beach, as well as Dr. Moe Mitchell, Ivan Bowman, and others.

In 1931, on September 3, Dr. Ferguson and Miss MacDonald were wed. They didn't travel very far on their honeymoon, the MacDonald Studebaker having a great thirst for gas and oil, which sharply conflicted with the deep-rooted



Dr. and Mrs. C. Ross Ferguson, with their daughter Gael and son Ross, thoroughly enjoyed the "summons" read by Inspector Adam Watson of Copper Cliff Police, which listed among other things various practical jokes perpetrated by the fun-loving doctor during his 29 years' residence in Copper Cliff. At the reception in his honor Mrs. Ferguson was presented with a silver tray and the doctor with a gold watch, both inscribed.

Caledonian instincts of the bridegroom.

For 27 years they lived "between 1st and 3rd base," overlooking the ball park, first on Granite Street, and then over on School Street. They had a son, Ross, a daughter, Gael.

Dr. Ferguson delivered 2,000 babies, almost 100 of them second generation. He performed countless surgical operations in the Copper Cliff Hospital, and the men who owe life or limb to his skill are legion. He had a gentle but sure way with human foibles and frailties, and his counsel and guidance were often sought.

He served on the school board, was president of the athletic association and of the figure skating club, was a member of the execu-

tive that backed the Copper Cliff Redmen to the Memorial Cup finals. He was a dedicated curler for 27 years, and skipped the winning rink in the first Canadian Legion bonspiel, beating Mayor Bill Waterbury in a final game that is still discussed in tones of awe and wonder. He served on the board of governors, and as chief of staff, of Sudbury Memorial Hospital. Through his lodge work, into which he poured energy he often could ill afford, he helped crippled children. In these and many other ways he showed his appreciation of life and good fellowship.

Dr. Ferguson would enjoy the coincidence of this story about him being written in the Penage district, in which is located the

fine summer home that was his favorite hobby and recreation. It was there that he endeavored to instil in his fellow men a love of such practical deeds as mixing concrete, building docks, constructing steam baths, etc. Ever the idealist in such matters, he was always astonished when his motives were regarded with suspicion by some of his friends. One of these, Alex Godfrey, even went so far as to accuse the innocent doctor of operating a slave labor camp under the guise of hospitality on his island in Lake Penage, an allegation which, along with other witty remarks, caused much amusement at the Ferguson farewell party.

Finally forced on account of his health to heed the old admonition of "Physician, heal thyself," Dr. Ferguson decided on retirement from full-time practice. He has taken the position of medical consultant to the Aetna Life Insurance Company, supervising the 12 western states of the U.S. and British Columbia. He and his family will make their home in a suburb of Los Angeles.

Most people save for a rainy day, but not so many wait for one.



Some 1,500 patients and friends came to say goodbye to Dr. Ferguson, among them many boys and girls he had ushered into the world, many men and women with whom he had walked the long dark corridors of suffering and sorrow.

"The Best Thing in the World"

What's the best thing in the world?
June-rose, by May-dew im-pearl'd;
Sweet south wind, that means no rain;
Truth, not cruel to a friend;
Pleasure, not in haste to end;
Beauty, not self-deck'd and curl'd
Till its pride is over-plain;
Light, that never makes you wink;
Memory, that gives no pain;
Love, when, so, you're loved again.
What's the best thing in the world?
--- Something out of it, I think.

-- Elizabeth Barrett Browning