

INCO TRIANGLE

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Maestro

(STORY ON PAGE 11)



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

Don M. Dunbar, Editor

EDITORIAL OFFICE COPPER CLIFF, ONT.

Notes and Comment

PROTEST FROM LEVACK

Back from Levack last month came a copy of the Triangle with no less than 17 spelling mistakes marked in the list of Levack winners in the Inco gardening competition. Wow! That was no lapse on the part of our proofreaders—it was a col-lapse. Attached to the copy of the paper was this rather pointed little note from Clair McGowan:

"Djon Bundar,

Edditer Inoc Trjangli:

Some of the boys feel that a special

plize should go to your pfoof reader."

Well, Levack, about all we can do is offer our sincere allipogies and try not to let it happen again.

Inco's youngest stockholder, as far as we know, is Michael Goodman, infant grandson of I. W. Wilenchik of Philadelphia, Pa. Mr. Wilenchik said in a letter to the Company, "I purchased 10 shares of Nickel Company stock for Michael on June 27th. He is looking forward to an income as his grandfather feels that there is no better management in any industry than in the Nickel Company." Take a well-earned bow, Inco management!

BACK FROM a holiday trip to Eastern Canada, Pat Denhoff of the Unity (Sask.) Courier-Herald sat down at his typewriter and doffed the well-worn editorial fedora in the direction of the Nickel Belt: "... members of the little community of Copper Cliff have stubbornly refused to be deprived of the pleasure of a garden, and with the help of the Company agriculturists have defied the sulphur smoke and created the most attractive flower and vegetable gardens. Proud? Well I should say! Had to transport a squash and six ears of corn some 2,000 miles home as a gift from one of their enthusiastic gardeners."

The Sage of the South Range has come up with another one. He says, and we quote, "The trouble is that when success turns a fellow's head it doesn't wring his neck at the same time."

The two Canadian branches of Inco's Quarter Century Club welcome 76 new members this year. At the annual dinner of the Port Colborne branch on November 13, there will be 19 in the "Class of '52" who will receive buttons signifying completion of 25 years' service with the Company, and at Inco Employees Club in Sudbury on November 20 there will be 57 new members from Sudbury and District "initiated". A wonderful showing!

SUDBURY District Cubmasters went back to school at a two-day conference to relearn such fundamentals of Scouting as knot-tying and Cub games. Ralph Melanson of Creighton No. 5 Shaft, who is Cubmaster of 2nd Sudbury Pack, noticed the heavy percentage of Inco men among the 22 Cubmasters present; his impression was that almost all of them are employed at either Garson, Open Pit, Copper Cliff, Creighton, Coniston, Frood-Stobie or Murray. The instructors for the valuable course were Cub-



A remarkably fine model of the converter aisle at Copper Cliff Smelter is a feature of the Inco display in the windows of the Sudbury Chamber of Commerce offices in the Loblaw Building. The converters with their great hoods, the crane pouring a pot of slag back into a reverberatory furnace, the skimmer on his platform and the puncher at his tuyeres, and other details of this wonderful industrial spectacle, have been faithfully reproduced to scale.

master Art Gobbo of Coniston, and Cubmaster Joe Basha of Frood-Stobie No. 7 Shaft, two of the district's outstanding leaders in this grand boys' work.

ANOTHER link with the early days of the nickel industry was severed by the closing of the post office at Victoria Mines, some 20 miles west of Sudbury on Highway 17, after almost 40 years of operation. The three or four families still residing in the village will now receive their mail at Whitefish, five miles to the east.

Having the carbonyl process for refining nickel, which was originated by Sir Ludwig Mond, the distinguished scientist, in 1889, the Mond Nickel Company of England bought what was then known as the McConnell property, in the township of Denison, in 1899. Development work was pressed forward at the mine, roads were built, a roast yard levelled and prepared, and in February, 1901, the mine, thereafter known as the Victoria Mine, was ready for operation. A smelting plant of the most modern type was installed on the Sault branch of the C.P.R. and with the accessories of offices, storehouses, shops and comfortable dwellings, formed the village site of Victoria Mines. The plant was steam driven and had a capacity of 60,000 tons a year, but it was remodelled for electric power in June, 1909, and its capacity increased to 140,000 tons. The ore was brought from the mine to the smelter by an aerial tramway two miles in length; the roast yard was on the line of the tramway, about midway between the mine and the smelter.

After the purchase of other mines in the field, such as the Garson, Worthington, Levack and Kirkwood, the Mond Company found its operations hampered by the limitations of the Victoria Mines site, and in

1913 established its smelter at Coniston, where smelting commenced on May 15. Most of the dwellings at Victoria Mines, privately owned, were moved away or dismantled. The mine continued to produce ore until late in 1923; at one time its 2,618-foot 3-compartment vertical shaft enjoyed the distinction of being the deepest in Ontario.

The way they've been going so far, those Sudbury Wolves are really howling this winter — and not with pain, either.

WHEN Bert Johnson of Creighton repairs or rebuilds a skip or a cage you can bet your shirt it will be better than the day it arrived from the manufacturer. At Garson Matti Latari is recognized as an artist in lining up his drill holes and judging the amount of powder required to get a clean break with a minimum of shovelling when blasting a slash. When Isaac Kivisto of Frood-Stobie No. 3 shaft is driving a raise his rounds come out square and true so that the manway timber fits in there absolutely uniformly. Joe Meslinski of Coniston builds plating machines that are models of precision, and when it comes to resetting the bearings and scraping them in on one of the Brown-Boveri blowers at Copper Cliff, they call for Bill Kuhl.

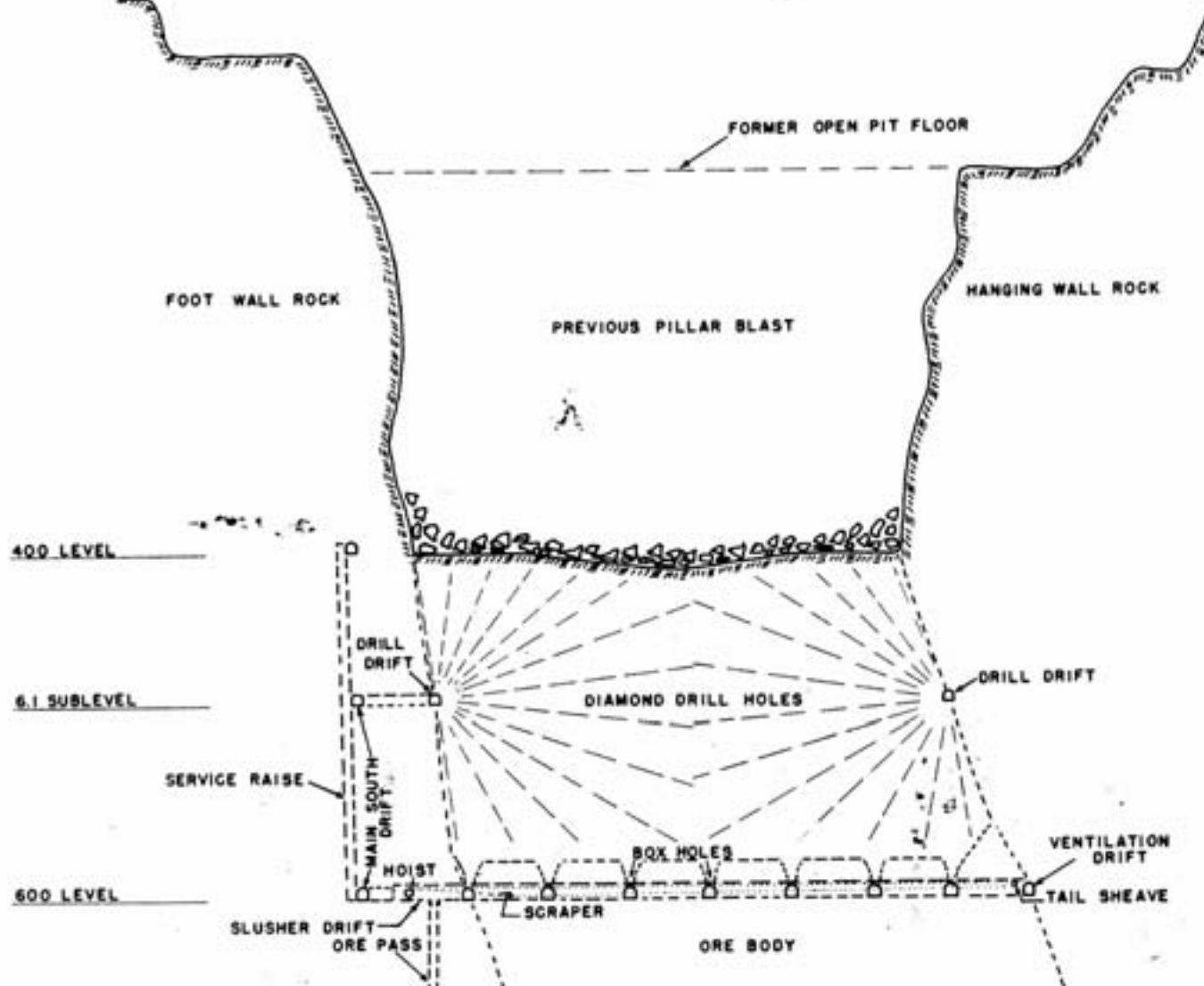
Inco has many men like the few we have mentioned—men who take deep pride in their workmanship and leave the trademark of excellence on whatever job they're called on to perform. At their own plants, and frequently throughout the organization, they are known and respected as craftsmen. They expect no special praise or distinction on this account, but are content with the quiet satisfaction of work well and conscientiously done from day to day. And, come to think of it, life offers few more gratifying rewards.

INCO FAMILY ALBUM

With the January issue of the Triangle the Inco Family Album will commence its sixth year; since it was launched in January 1948 with a seven-page "Salute to the Inco Family" a total of 484 employees with their wives and kiddies have been photographed for this feature. Here's this month's group: (1) Mr. and Mrs. John Williston (Port Colborne) with David John, 3, and Kevin Edward, 2 mos. (2) Mr. and Mrs. Jack Reeves (Creighton) with Donald, 9½ mos. (3) Mr. and Mrs. Bruce Dyce (Copper Cliff concentrator) with Hazel, 8, and Gabrielle, 14. (4) Mr. and Mrs. R. J. Price (Copper Refinery) with Larry, 11 mos., Billy, 7, and Peter, 4. (5) Mr. and Mrs. "Mickey" Bergeron (Garson) with Mary Lou, 4, and Michael, 9. (6) Mr. and Mrs. Leo King (Coniston) with Geraldine (Mrs. Edward Carr). (7) Mr. and Mrs. Dave Sloan (Frood-Stobie) with Ronnie, 9, Beverley, 12, and Allan, 10.



Where 400,000 Tons of Ore Broken in One Explosion



ABOVE: This cross-section drawing of blasthole mining at Frood-Stobie cuts through one of the two pillar stubs which were removed in the 400,000-ton blast which occurred on November 1. The ring pattern of the diamond drill holes, extending from the drill drifts located in the footwall and hangingwall contacts between the rock and the orebody is clearly shown, as are the boxholes, slusher drift, ore pass, service raise, etc.

RIGHT: Colin Reid (left), Ted Goddard and John Power, members of Frood-Stobie Mine engineering department, study a wooden model showing in longitudinal section the progress of the blasthole mining program up to November 1. The darkened part of the model represents ore; the light part shows the footwall rock and one sloping side of the open pit, the benches or berms clearly illustrated. The four slopes which have been mined through from 600 level to surface, remaining pillars yet to be mined, and the two pillar stubs which were removed by the record blast on November 1, can be easily identified. On the right-hand side are two stopes as yet only partly mined through from 600 level. Ted Goddard points at a black line representing one of the drifts across the end of No. 7 pillar from which drilling was done for the November 1 blast.



These before-and-after pictures convey some idea of what was accomplished by the record blast at Frood-Stobie Mine on November 1. The two rib-like formations stretching across the centre of the first picture are the bottom half of 5.0 and 7.0 pillars, left as support while the stopes on either side were being mined out. The top half of the pillars had been removed in a previous blast. Each of these pillar stubs was 70 feet wide, 150 feet high, and 200 feet long; together they contained 400,000 tons of ore. The picture on the right, taken after the big blast, shows how the pillars were removed and the broken ore dropped into the three stopes which they separated. The small openings in the footwall are the ends of drill drifts.

64 Tons of Powder Used in Record Frood-Stobie Blast

The biggest blast in the history of Inco's underground mining on November 1 sent 400,000 tons of pillar ore crashing down into the huge open stopes above 600 level at Frood-Stobie No. 3 shaft.

So well designed was the blast that only a muffled explosion was heard — not even as noticeable as an ordinary Open Pit bench blast. No one realized that so large a blast had been made except those employed on the job.

The mighty blast was another dramatic step in Inco's conversion to all-underground mining as the blasthole program at Frood-Stobie continues recovery of ore from below the point where surface mining was concluded in the south end of the Open Pit.

More than 64 tons of powder was used in the 400,000-ton blast. The broken ore resulting from it would fill Sudbury's new arena to the roof three times; it would fill a train of freight cars 14 miles long.

In the south end of the Open Pit four big blasthole stopes had been mined through from 600 level to the pit floor, and the top half had been removed from two of the pillars of ore left as support while the stopes were being mined out.

The ore from these operations had been drawn down through the boxholes in the bottom of the stopes to the slusher trenches

where it was scraped into ore passes leading to the loading chutes on 1,000 level; in 15-car trains of 260-cu. ft. cars it was hauled to the rotary tippie and put through the crusher, then dumped into the skips and hoisted to surface.

In the meantime the drillers were busy in drifts driven across the bottom half of the two pillars from which the top half had already been removed; the mining program now called for blasting these pillar stubs. Shift after shift the drills sent their bits biting into the ore, penetrating the pillars with rings of 1½-inch holes varying in length from 42 feet to 110 feet. Each ring of 19 holes was drilled to a predetermined pattern, the angle and length of each hole governed by the quantity of powder necessary to break the ore burden on the basis of approximately one-third of a pound of powder per ton of ore.

Despite the size of the blasthole operation, the mining cycle was as usual so accurately timed that the last of the previously mined ore was being drawn from the boxholes as the rings of holes in the newly drilled pillars were being loaded for the blast.

The 2,000 drill holes involved in the 400,000-ton blast were all loaded with 75% Forcite powder, then into each hole went the primer containing the electric detonating cap, fol-

lowed by two or three more sticks of powder and a stick of clay. The leg wires attached to the detonating caps were connected in groups or series of 43 and hooked up in parallel to the main blasting wires. The latter were carried 90 feet up the service raise, from the sub level where the drill drifts were located up to 400 level, and connected with four locomotive batteries arranged in series to give a 400-volt jolt. A magnetic switch on 400 level, electrically operated from surface, completed the blasting circuit. All was in readiness; the climax of months of careful planning was at hand.

The last cage of men had come up from underground on Saturday afternoon, November 1. In the depths of the mine the drifts and crosscuts lay silent — no lost-soul wail of diamond drills, no din of percussion drills, no rumble of ore trains, pounding and thumping of crushers, clang of hoisting bells.

In the collarhouse of No. 3 Shaft the mine's chief electrician unlocked the door of the switchroom, stepped inside and pressed a button. From over at the south end of the Open Pit came a muffled roar as 64 tons of explosive shattered the two pillar stubs into 400,000 tons of muck.

The blast was very successful. The boxholes and the bottoms of the open stopes were full of ore. So, after a swift check of what they had wrought, the mine engineers immediately started planning their next blast, which will be even bigger than this one.

Health and cheerfulness mutually beget each other. — Addison

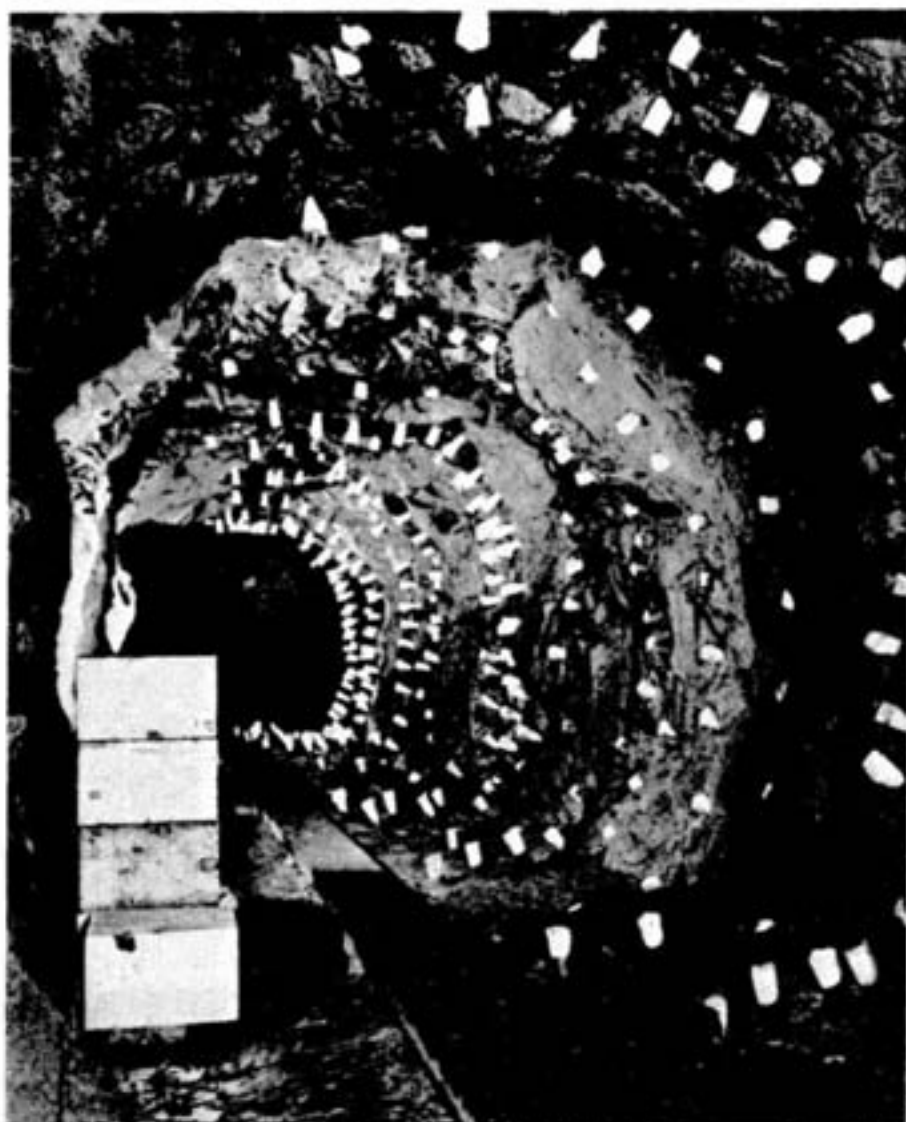
Loading 2,000 Holes for Blast

A total of 165,290 feet of drilling, involving about 2,000 man-shifts, was required in preparation for the 400,000-ton blast at Frood-Stobie Mine November 1. And 64 tons of powder had to be brought down from surface to 400 level, nipped 90 feet down the service raise to 6.1 sublevel, and transported to the four drill drifts where, stick by stick, it was loaded into the 2,000 holes drilled for the blast.

At LEFT is a picture of one of the four drill drifts, two of which were in the footwall and two in the hangingwall, after drilling was completed. The rings of drill holes have been plugged with wooden plugs to keep them dry. Each ring has been drilled according to a definite plan to provide a uniform distribution of powder throughout the mass of ore to be broken.

At LOWER LEFT Larry Rajala is commencing to load one of the rings of drill holes. Beside him Joe Glzycki holds the hollow plastic loading stick which, fitted with a wooden plug, is used to tamp the sticks of powder firmly in the holes; the plastic stick is also used for cleaning out each hole before loading, by connecting it to the mine's compressed air line. Each hole is filled solid with powder to a point 17 feet from the top or collar of the hole; in the remaining distance the sticks of powder are alternated with wooden spacers. About five feet from the collar the primer, containing the detonator, is inserted, followed by two or three more sticks of powder and a stick of clay.

At LOWER RIGHT Joe Glzycki prepares a primer. With the wooden punch seen protruding from his pocket he has punched a hole in the end of a stick of powder. Into this he inserts an electric blasting cap to which are attached leg wires for tying it into the blasting circuit. Larry Rajala is pushing a primer into position in a drill hole, holding the leg wires in his left hand as he does so. All the holes in the drift are loaded before the primers are inserted.



Wiring the Blast Is Intricate Job

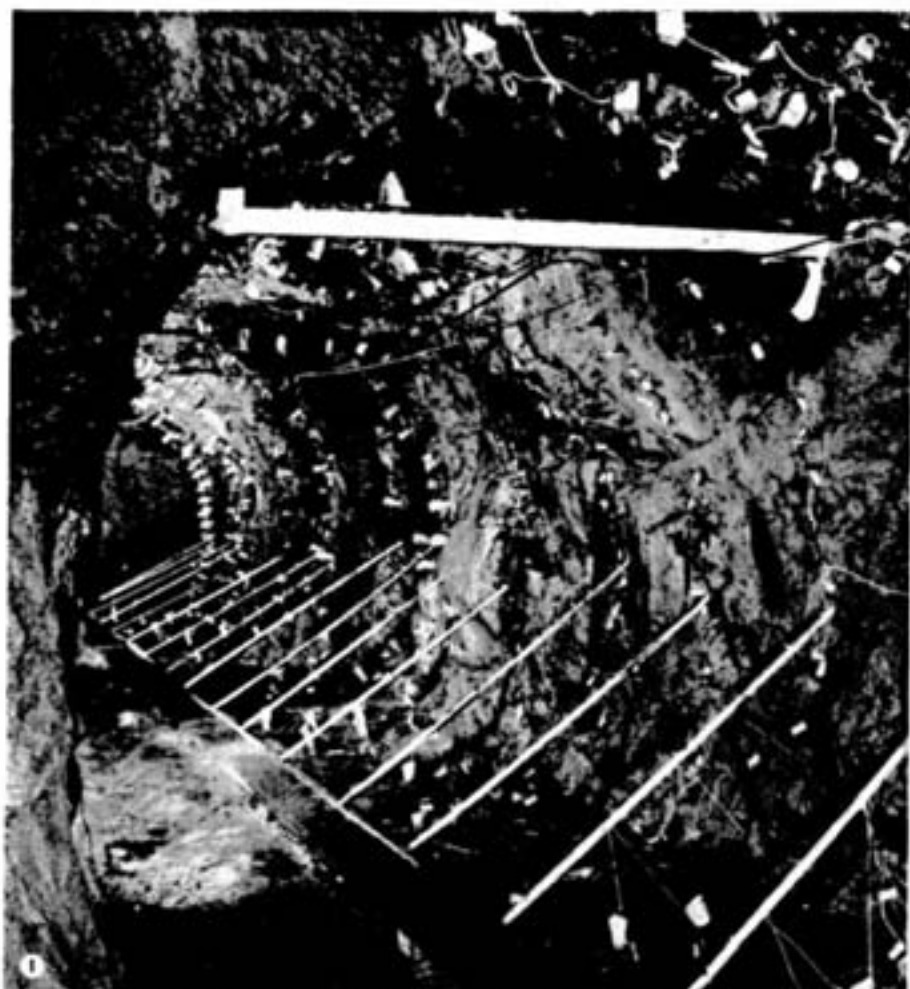
Detonators used in the blasthole mining program at Frood-Stobie are short-period delay electric blasting caps, spaced to fire 25 milliseconds apart. The sequence of the blast in a drift is planned so that the rings of holes at the ends of the drift go first, the others following in swift succession toward the centre.

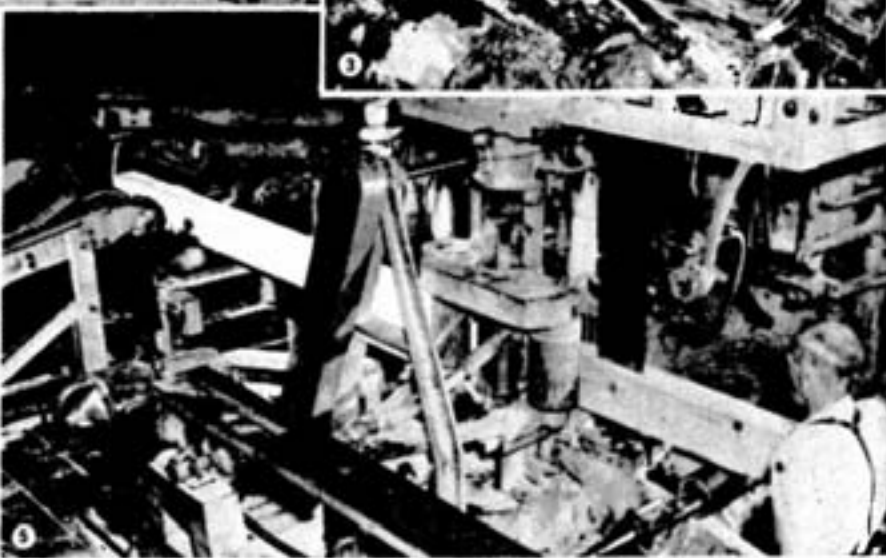
At LEFT is a view of a drill drift wired for the November 1 blast and ready for the final hookup to the blasting circuit. The leg wires attached to each blasting cap are connected in series of 43 caps, and the series are in turn connected in parallel to the main blasting wires. Leg wires leading from the down holes are supported clear of the wet ground by wooden sticks.

At LOWER LEFT is seen in progress the close inspection by supervision of the drift before the final hookup to the blasting circuit. On the right, checking connections, is Fred Levert, shift boss; at centre is Syd Sheehan, general foreman; at left is Vern Ritzel, divisional foreman.

At UPPER RIGHT is one of the four locomotive storage batteries connected in series on 400 level to provide 400 volts of power for the blast. The main blasting wires from the drill drifts were brought up through the service raise from 6.1 sublevel to be linked with the batteries. Completing connections is Chuck Gravelle. The batteries were hooked up with a magnetic switch.

At LOWER RIGHT, having received notice that the mine was clear of men and all was in readiness for the huge blast, Stewart McKenzie, the mine's chief electrician, presses the button which operated the magnetic switch on 400 level, closed the circuit, and set off 64 tons of explosive.





New Cache Bay Sawmill Has Ontario's First Electric Carriages

With a capacity of 120,000 feet of lumber in an 8-hour shift, and equipped with the first fully electric saw carriage drives in Ontario, the new George Gordon Company mill at Cache Bay is regarded as one of the most modern and efficient in Canada.

Cache Bay first became a hustling hub of the Northern Ontario lumbering industry away back in 1890 when Davidson and Hayes built a sawmill to process the timber from their holdings around Lake Nipissing. The business was purchased in 1900 by the late Senator George Gordon and a group of associates, and its holdings were considerably enlarged by lumbering concessions they acquired on the Sturgeon River. The firm became an Inco subsidiary on January 1, 1948. About half its production is used in the Company's operations in the Sudbury District. The balance, chiefly high grade white pine lumber, is sold to the general public. About one-quarter of Inco's lumber requirements are supplied by the Cache Bay plant.

The original mill was destroyed by fire in 1915, and the plant which replaced it fell prey to flames the night of Sept. 26, 1951. Installation of fully electric drives on all machines including saw carriages, instead of steam, and full sprinkler protection, are among the safeguards against fire in the modern new mill.

In the accompanying photographic layout the camera takes Triangle readers on a tour of the new Cache Bay plant, where about 200 men are employed during the season from May 1 to Nov. 1 on a one-shift-day basis.

1. Here's a general view of the sawmill. The water tower at the right, for protection against fire, holds 75,000 gallons and is 100 feet high; further winter water supply in case of fire will be available from a storage pond with a capacity of 1,000,000 gals. A planing mill and an office building are also part of the plant's layout; a new machine shop and locomotive house have yet to be built. The plant has two double-cutting 8-foot band mills, one 6-foot vertical resaw, one 48-inch bull edger with cluster, a 66-inch board edger, and the usual slash table, sorting table, trimmers, etc., besides a picket mill and a chipper.

2. Here the log haul-up chain is conveying a red pine log to the sawing floor from the storage area in McLeod Bay of Lake Nipissing, part of which is seen in the background. During the spring and early

summer George Gordon Company timber is driven 120 miles down the Sturgeon River from the company's four lumber camps, and is boomed at the mouth of the river about seven miles from Cache Bay. The 125-h.p. diesel tug Whitney 3rd., named after the late D. C. Whitney, a shareholder of George Gordon Company Limited, tows the timber to the storage area in tows averaging about 200,000 logs apiece. A mill employee feeds the logs to the haul-up chain at the base of the curving ramp seen in the picture.

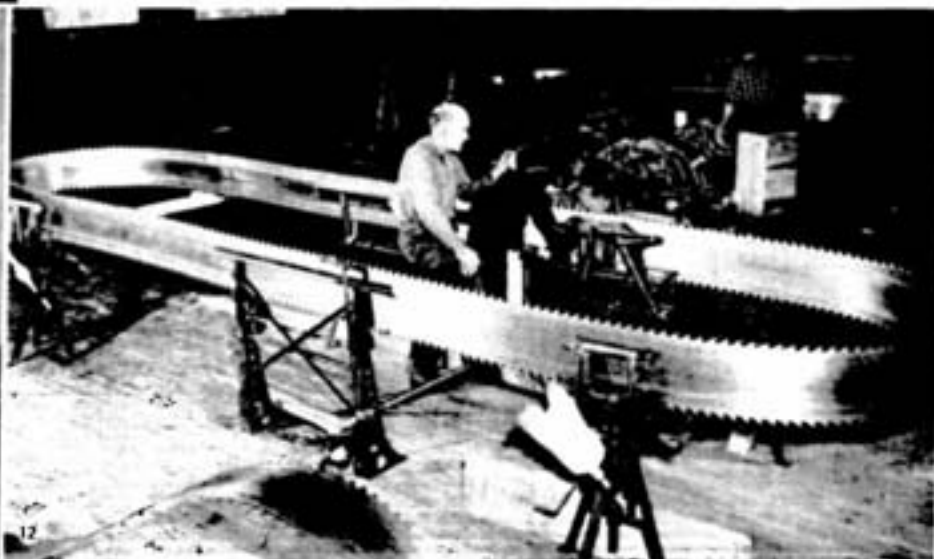
3. In the foreground, on one of two log decks, red pine logs lie ready for their trip through the bewildering maze of stairways, catwalks, conveyors and whining saws in the big mill. In the background is the saw carriage which passes swiftly back and forth as a log is slabbed and squared for finishing by a double-cut band saw. Two men ride the carriage: on the left is the setter, who sets up the thickness of the cut on a signal from the sawyer; on the right is the dogger, who operates controls to hold the log in position on the carriage while it is being cut, and kicks the squared stock off the carriage when this slabbing and sizing operation is completed. There are two of these electrically operated saw carriages.

4. This is the sawyer, the man who sets the production speed of the mill. Operating a set of levers he trips the loaders to flip a log from the deck on to the saw carriage, controls the swift movements of the carriage, turns the log with the nigger as each side is trimmed and squared by the band saw and signals the size of the cut to the setter; from his long experience he knows at a glance the grade of a log and how to get the most out of it. The sawyer seen in action here is Joe Lalonde, who has been more than 40 years at his tricky trade.

5. After its short but hectic ride on the saw carriage the log is now sized stock, and it travels to the resaw where another band saw slices it into a number of boards of whatever dimensions are required. By a clever system of conveyors the stock is passed back and forth through the resaw until cutting is completed.

6. All sized logs of 8 inches in thickness or less are sent through the bull edger, which is set up with a cluster of from six to 10 circular saws, depending on what size of boards is to

(Continued on Page 16)





These people were among the gifted performers at Sudbury Rotary Club's "Parade of Nations":

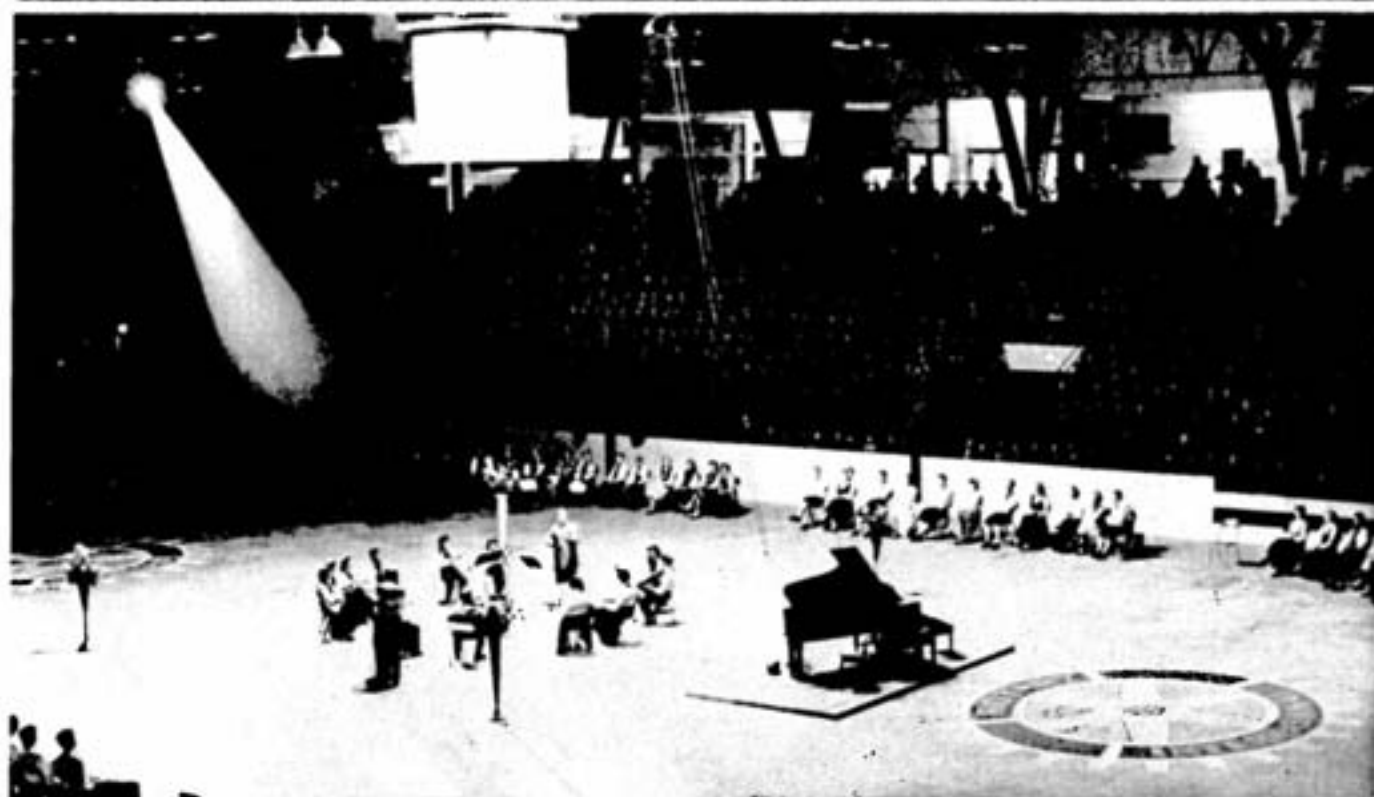
TOP: The Ukrainian dancers and their orchestra: front row, Anita Marunchak, Doreen Shulha, Sonia Romozynsky, Vera Hrycenko, Betsy Budzak, Aksana Hrycenko, Stephanie Dmytryshyn; back row, Thor Kuryliw, Cosimo Gamo, Bill Kovalchuk, John Maychos, Bill Kuryliw, Mike Haluk, Ramona Bendick, Peter Bendick.

LEFT CENTRE: The Chinese singers and their three accompanists: Fred Eng, Lee Wing, Chap Eng, Fay-Ching Kown and Paul Lee.

RIGHT CENTRE: The Estonian folk dancers lead the parade of performers into the arena to start the big show, headed by E. Reinsoo, accordionist.

LOWER LEFT: Dainty little Leona Howard, 7, whose daddy, Dick Howard, is an Inco locomotive engineer, was the Scottish dancer, with George Black as her piper.





The great circle of nationally costumed performers, the colorful Rotary International wheels, the big crowd and the changing hues of the spots made a beautiful spectacle of "The Parade of Nations." Seen performing in the top picture is the Croatian tambourine orchestra, long a favorite with Sudbury audiences. At lower left are the Lithuanian dancers, Audrone Poderys, Alex Kusinskis, Maryte Zizys, Erna Simkus, Jack Bagdonas, Nijole Indriulaitis. Lower right are the Finnish dancers: front row, Ella Klukas, Maria Tuisku, Kusti Autio, Lily Kauppi; back row, Martti Vakkuri, Shirley Akkanen, Saku Ruuskanen, Ellen Kliskinen, Pentti Leskinen.

"Parade of Nations" Impressive Display by Sudbury Groups

In the spirit of international goodwill and understanding which is a basic creed of their craft, members of Sudbury Rotary Club staged an impressive "Parade of Nations" at Sudbury Arena on October 22.

Proceeds of the show will be used in the club's campaign against polio and its program for aiding crippled children of the district. Many nationalities were represented in

the groups of local performers who pitched in to help the Rotary Club in this fine big co-operative effort. The large audience, warmly applauding every turn, got a wonderful conception of the scope and artistry of the folk-lore which these various racial groups have brought from the old lands to blend into Canadian culture. The bright colors of the national costumes made a pretty

sight, and the pleasure and pride of those who wore them was delightfully obvious.

There were the Croatian tambourine orchestra, the Chinese opera singers, the national folk dances by Estonians, Lithuanians, Finns and Ukrainians, the Gals Lurons with their spirited French songs, the Finnish juggler, the Austrian ballerina, the Scottish sword dancer, and the Italian Caruso Club boys' band.

Featured on the front cover of this issue is another of the "Parade of Nations" performers, Wilhelm Uch, a gifted pianist not long out from Germany who is now a Sudbury music teacher.

Stan Francis, national radio cut-up, was the amusing master of ceremonies.



Hallowe'en Maskers at Garson and Copper Cliff

A lot of people remarked that it was one of the "best-dressed" Hallowe'ens in years. The little gaffers making their way from door to door were rigged out in all kinds of costumes, many of them showing evidence of much thought and preparation, and very few of them spurning the spirit of this magic eve by confining their get-up to an eye-mask and an outstretched palm. The visiting of the youngsters was a long succession of surprises and scares and hilarious laughs, and not infrequently a heart-touching bit of

pathos that brought a lump quickly to the throat and prompted a lavish hand-out of peanuts, apples, and candy kisses.

The grown-ups made a big night of it too, and they also distinguished themselves with original and often very artistic costumes. The Triangle camera looked in at the Hallowe'en dances at the Garson Employees Club and the Copper Cliff Club, two highly successful events, and came away with these pictures of a few of the contestants for the evening's prizes: ABOVE, at Garson: (1) J.

R. Bonneville, Mrs. Anne Mann, Mrs. J. R. Bonneville, Miss Garson 1952, Mrs. W. Stoddard, and Miss Garson 1952; (2) Mary Wontoway, Stella Reid, Judy Baxter, Ann Fisher; (3) Mr. and Mrs. Larry Smerdon, Mel Bowen, Joan Smerdon, Alma Charsley; (4) Bill Mann, Mrs. George Cleroux, John MacIver, Norma Welsh. BELOW, at Copper Cliff: (5) Mr. and Mrs. Waverly Tyers, Mrs. Tom Peters, Norman Kneeshaw; (6) Mrs. Norman Kneeshaw, Mr. and Mrs. Jack McConnell, Mrs. Pat Ogilvie, Mrs. Phil Forster.



FOXY OLD PATRICK

An Irish soldier in the Middle East received a letter from his wife saying there wasn't an able-bodied man left, and she was going to dig the garden herself.

Pat wrote at the beginning of his next letter: "Bridget, for heaven's sake, don't dig the garden; that's where the guns are."

The letter was duly censored and in a short time a truck load of men in khaki arrived at Pat's house and proceeded to dig the garden from end to end.

Bridget wrote to Pat in desperation, saying that she didn't know what to do as the soldiers had got the garden dug up, every bit of it.

Pat's reply was short and to the point: "Put in the spuds."

There can be no substitute in a free society for individual courage, initiative and responsibility; for the obligations of communities and states to do all they can for themselves.

—James F. Byrnes

Waiting for the Cage at Creighton's No. 3 Shaft



The warm room at Creighton's No. 3 Shaft has recently been remodelled and enlarged to accommodate the increase in traffic due to the caving program. Here's a typical scene as miners in their underground clothes wait for the cage to whisk them below for the day's shift.

Wolves Look Like a Million

With two wins over Michigan Soo Indians (one on a rulebook decision and the other on the ice at 6-3) and a crushing 7-1 triumph over Soo Greyhounds, Maxie Silverman's Sudbury Wolves are away to a sparkling start as the senior hockey season gets underway.

Most potent person in the lineup on the showing so far is Andy Anderson, the brilliant young New York Ranger goalie prospect. With a style strongly reminiscent of Bill Durnan when that pipe-tender was hitting the headlines with Kirkland Lake a few years back, Anderson has impressed everybody with his coolness and judgment under the heaviest fire. He more than offsets what weakness the team may have shown so far at the blueline.

Almost certain to be the class of the league is the highly-touted forward line of McClellan-Flynn-Kauppi. This Flynn is all that his friends hoped he would be; he has picked up a world of experience in his campaigns on the Atlantic Coast but still goes out there with the old junior "try" and plays as if he loves the game. In McClellan and Kauppi he has a pair of very nifty wingers who will probably finish one-two in the loop's scoring statistics.

The Heale-Milne-Tomiuk line also looks like a million dollars; it has lots of speed and shows deadly efficiency around the goal mouth. Then there's a third string of Meston, Rannelli and McCarthy that with a

little more experience will round out into a formidable aggregation.

A life-saving addition to Silverman's defence mechanism is Specks, who made his debut in the game against the Greyhounds and appeared to be a very hard guy to get around. Barrett, McIntosh and Parri are others of the blueline brigade who while not exactly bruisers nevertheless are shaping up well. The team really needs a policeman; the converted forward, DeFelice, is the closest approach to this type of player on the roster, and he may turn out to be just the ticket when he gets a few more games under his belt.

Crowds at the elegant new Arena have been good to date and will get better. By mid-season the SRO signs may be no novelty because, in the classy new edition of the Wolves, Sudbury really has a team to cheer for.

At Coniston 29 Years John Solski Retires

Another Coniston old-timer has reached the end of his working days in John Solski, whose pension became effective December 1 after an even 29 years of credited service, most of it on the smelter charge floor.

Although his plans weren't definite when the Triangle called around to see him, John thinks he may go to live in Winnipeg. When he came to Canada from Austria in 1907 it was to Winnipeg that he went first, and he has returned there many times for holiday visits during the intervening years. Wherever he decides to settle down, the boys wish him well.



JOHN SOLSKI

Although he was enrolled as an employee at the Coniston plant in 1914 and again in 1916, it was not until 1923 that he became a permanent fixture there.

Katie Wolychyka, whom he married at Transcona, Man., in 1914, died in 1931. Members of their family are: Frances (Mrs. Walter Killinnik of Coniston), Joe and Stanley, Coniston carpenters, and Mary (Mrs. Edward Lalor of New Haven, Conn.)

RHYME

No matter how grouchy you're feeling,
You'll find a smile considerably healing.
It grows in a wreath,
All around the front teeth,
Thus preserving the face from congealing.

You Have to Know Where to Look



Partridge? Who said they are scarce this year? Mr. and Mrs. Harry Smith of Creighton went on a two-day hunting trip in the Lake Agnew area north of Nairn and bagged 16 nice fat birds. Maybe those hunters who come home empty-handed aren't living right.

Liquid Sulphur Dioxide Plant Is Now Operating

A plant producing more liquid sulphur dioxide than the combined manufacture of the rest of the free world is now in operation at Copper Cliff. It will turn out 90,000 tons of the product within the next year. The liquified gas will be used as a much-needed substitute for sulphur in Canada's vast paper-making industry.

In effect, the new Canadian Industries Limited plant will produce the equivalent of 45,000 tons of sulphur toward the paper industry's total annual consumption of 400,000 tons.

While costs of the new plant, situated a few hundred yards from the International Nickel Company's smelter and fed by gases from it, have not been given out, estimates place them as high as \$2,000,000. In spite of its massive size, the operation normally is run by two operators per shift.

Dr. Russell W. Allgood, works manager of the Copper Cliff acid and sulphur-dioxide plants, and Charley Hubbs, works supervisor, were on hand when the first gas started flowing through the plant a few days ago.

Opening of the new plant means a large expansion in the company's Copper Cliff activities, with the sulphur dioxide production adding to C.I.L.'s work in recovering sulphuric acid from smelter fumes. Acid production at Copper Cliff started in 1930.

C.I.L. has long been in possession of the methods of producing liquid sulphur dioxide from smelter gases, but until fairly recently the cost of the product was too high to per-

mit competition with raw sulphur in paper making processes.

A new flash smelting process developed by Inco during the past few years resulted in a waste gas running above 75% sulphur dioxide, and it is this that is converted in the new plant. The new flash smelting process also made possible an increase of 60% in sulphuric acid production.

The slick new plant at Copper Cliff is all but automatic in its operation. From the time the flash smelting gases stream into C.I.L.'s plant to be converted to liquid sulphur dioxide and loaded aboard tank cars, the only hands guiding the operation are those of the two operators manning temperature and pressure controls in the main control room.

The gas as received is first passed through filters to remove any residual dust and then dried by contacting it with sulphuric acid supplied from the acid plant. After drying, the gas is compressed in reciprocating compressors at pressures ranging from 80 to 270 lbs. per square inch. It is then partially cooled, passed through an oil-removal unit to eliminate oil picked up in the compressors, and then passed into the liquifiers where the gaseous sulphur dioxide is actually liquified by further cooling.

A barrel-like liquid gas separator at the end of the production line receives the mixture of liquid and uncondensed gases. Approximately 25% of it remains in gaseous form and this is drawn off and fed back to the acid plant, where it is used to manufacture sulphuric acid.

A massive open-air water cooler supplies thousands of gallons of chilled water to cool the gas.

From the separator, the liquid sulphur dioxide is drawn off to fill giant storage tanks, from which it is loaded into tank cars.

Don't let the best you have ever done be the standard for the rest of your life.

—Gustavus P. Swift.

In These Days

We need clear minds to think; Lord, give us those.

We must work out our problems with great care.

Least tragedy ensue from thoughtless acts.

We must move wisely, with discernment rare.

But give us quick response to human need.

Response which reckons not the mighty cost.

But having seen that need, wells from the heart.

Bestowing comfort where so much is lost!

Lord, we may love our country above all

That gem thy wondrous earth, but make us know

That of one blood all mankind has been made.

And love of country will then overflow

Upon all others not so blessed as we.

Oh Lord, increase our nation's trust in Thee!

—Marguerite La Barrer Hibler.

THE SILVER LINING

Two gangsters were escorting a member of a rival gang across a lonely field on a dark rainy night.

"What rats you guys are," groaned the doomed one, "making me walk through a rain like this."

"How about us?" growled the escort. "We gotta walk back!"

Some people never handle the truth without scratching it.—Austin O'Malley.

Punched Tuyeres at Coniston 28 Years

From 1924 until his retirement on service pension last month, Bill Holongo punched tuyeres at Coniston Smelter. The hiss and roar of compressed air at the back of a converter, deafening and confusing to a visitor, became so much a part of everyday living to him that he never noticed it.

Born in Roumania in 1886, Bill came to Canada in 1912 and worked on railway section gangs until 1916, when he started at Coniston Smelter. He broke his service by moving over to the Copper Cliff plant for a



MR. AND MRS. W. HOLONGO

few years, but returned to Coniston permanently in 1924.

He was married at Coniston in '24 to Helen Wolowichuk; they have a family of seven: John and Mike, employed in the Coniston plant; Anne (Mrs. A. Zacerkowny of Sudbury); Mary, at home; Alex, employed by the CPR, and Stella and Mickey, attending school.

Bill has long been admired for his steadiness on the job, and his old mates in the smelter wish him happiness in retirement.



RECEIVES GIFT FROM PALS IN THE SMELTER

Surrounded by some of the group of men from the smelter who paid them a surprise visit at their home, Mr. and Mrs. Jimmie Davidson wear happy smiles in this photograph. Jimmie is comfortably installed in the handsome lounge chair which Pete Duffy presented to him on behalf of his workmates. Beside him is his grand-daughter June, and in the immediate right foreground is his son Jim.

Good News for Conn Smythe is Jimmy Davidson's Retirement from Smelter

A cheery, peppery little Scot, known and liked throughout the nickel reverberatory department which he ruled with a firm hand since 1931, Jimmy Davidson has retired on pension with the splendid credited service record of 36 years and 10 months.

Now he'll be able to devote full time to his work as remote-control coach of the Toronto Maple Leafs, a hockey team which, although nominally operated by a fellow named Connie Smythe, has actually been under Jimmy's wing for many years. The

boys in the plant presented him with a clever drawing by Chuck Ivey in which George Ferguson is bidding him goodbye and telling him to get a move on because Conn needs him badly.

During the summer months Jimmy will rest up from his hockey and also do some gardening, a hobby he has loved since boyhood when he spent three years helping his father to operate a greenhouse.

Born in Aberdeen in 1887, Jimmy came to Canada in 1912 to join his brother Bill at Copper Cliff. His first job at the smelter—he says it almost finished him—was breaking up coal for the locomotives with a sledge hammer. He stuck at that for three days and then became a motorman on the charge floor above the blast furnaces. In 1931 he was transferred to the roasters and immediately took it more or less as his personal responsibility that those calcines kept flowing steadily down the fettling pipes and into the reverberatory furnaces.

Jimmy was married in Aberdeen in 1910 to Katherine Cadger. Their son Jim is employed in the machine shop at Copper Cliff; their three daughters are Edith (Mrs. L. Stephenson of Gatchell), Edna (Mrs. Howard Mahoney of Campbelltown, N.B.), and Laura (Mrs. Roy Heximer of Sault Ste. Marie).

Moving to Sault Ste. Marie to make their home in future, Mr. and Mrs. Davidson take with them the warmest wishes of many friends for a long and happy retirement.

Ten Seconds to Live!

"He pushed his sleeve back, held his wrist close to the lighted speedometer, squinted to read the time. A little after nine. Five, ten minutes after. Ought to be home in half an hour.

If he'd known he had only ten seconds to live, he might have checked the time more closely. He might have done several things differently.

Ten seconds to live. He massaged his eyes with thumb and middle finger, trying to rub out some of the sand.

Nine seconds to live. He'd driven almost eight hours since lunch, and was beginning to feel it.

Eight seconds to live. Lousy driving in the rain. Light from your headlights just seems to soak in along with the water.

Seven seconds to live. Probably need a new windshield wiper blade. Old one just spreads the water around instead of wiping it clean. Get one tomorrow, or next time it rains.

Six seconds to live. Somebody threw a cigarette out of an oncoming car. The red glow dissolved almost before it hit the pavement.

Five seconds to live. He planted his heels on the floorboard, squirming back in the seat, trying for comfort.

Four seconds to live. At 60 miles an hour, a car covers 88 feet of pavement every second. Four seconds, 352 feet.

Three seconds to live. Something looked wrong through the blurry windshield. A tentative dab at the brake stiffened into desperate pressure as he made out an old, unlighted, slow-moving truck ahead.

Two seconds to live. Panic moved in. Turn to the left. No, car coming. Headlights too close. Can't make it. Turn to the right.

One second to live. Horror numbed everything into slow motion. He was floating right into the rear corner of the truck-bed. He opened his mouth to scream.

No seconds to live. It's happened to lots of people; maybe not just that way, but similarly. Drive too long, eyes get tired, reactions slow down. Rain, darkness, a windshield that's hard to see through. Driving too fast. A car or truck ahead that you can't see. It has happened to lots of folks."

—Raymond Eastman, Des Moines Tribune.

This Was the Copper Cliff Staff in 1897



This historical photo, from the souvenirs of John Gribble, retired Inco cashier now residing in Sudbury, shows the office staff of the Canadian Copper Co. at Copper Cliff away back in 1897. In the back row, left to right, are F. P. Bernhard, John Gribble, J. G. Oliver, Wm. Telford, T. N. Kilpatrick (smelter superintendent), and P. S. Jordan; in the front row, L. H. Thullen (master mechanic), John Lawson (mines superintendent), James McArthur (general manager), and A. P. Turner, later company president. As far as can be learned, only two of the group have not passed on. F. P. Bernhard, who is retired on pension after many years as comptroller at the Company's New York office, and John Gribble.

Square Dancing Away to Another Big Season



About to swing partners in a lively breakdown of Dip and Dive, these people were thoroughly enjoying themselves in the first square dance of the season at Copper Cliff. Square dancing seems sure to maintain the peak popularity it attained with both old and young in the Nickel Belt last winter. Many a middle-aged blade who can drum up a dozen excuses for dodging a "round" dance will eagerly get ready to cut a caper when the fiddles start to wail and the voice of the caller is heard in the hall.

New Saw Mill

(Continued from Page 9)

be produced. In one operation this hungry machine carves a cant into several smooth boards.

7. The next step is the trimmers, on which the boards are placed according to the desired length and are pulled along by chains past circular saws which cut off the unwanted portion. The trimmerman seen setting the length of two boards by pushing them against the bunters is Lionel Bonenfant. From the trimmers the finished boards drop to sorting tables where they are sorted according to length, size, and grade; there are 50 different divisions for red pine, 80 for white pine.

8. Knot-free trimmer ends and slabs, which would otherwise be waste, are sorted out and sent to the picket mill, a beehive of activity where they are cut into pickets 1 inch square and 16 to 38 inches long.

9. The pickets are sorted for size, tied into bundles of 25, treated with an anti-stain solution, and shipped to a factory at Ogdensburg, N.Y., to be made into window shade rollers. Last year the Cache Bay mill produced 4½ million of these pickets.

10. Still another method by which waste wood from the sawmill is converted to good use is the chip plant. Any material useless for pickets is passed through a 54-inch disc mounted with eight knives which chop it into chips. A truck is seen in this picture receiving a load of chips for delivery to the

Abitibi paper mill at nearby Sturgeon Falls for the production of corrugated paper and hardboard. This is the third year of operation for the chip plant, which turns out about 140 tons of chips a day.

Sawdust and bark is all the waste from the sawmill that is allowed to go to the burner, the big stack seen at the right of Picture No. 10. It's 90 feet high and 30 feet in diameter, and has a thick brick lining. Draft is furnished by a fan located in the small building at the right.

11. Lumber from the mill is stacked on high cars and drawn to the yard where it is carefully piled for drying. In good drying weather white pine boards, which are treated for anti-stain, are seasoned for at least 90 days before shipment to the wholesalers. No seasoning is necessary of the bulk of the mill's red pine production, which is earmarked for use by Inco as mining timber. Sometimes there is as much as 15 million feet of lumber stored in the mill yard.

12. A highly important department of the mill is the filing room where the saws are sharpened. Narcisse Viens is seen operating one of the machines specially designed for putting a top-grade bite in the teeth of the huge 33-foot band saws.

And that's a quick look at the sawmill operation at Cache Bay. A firm with a nationwide reputation for high quality products, business integrity, and efficient management, the George Gordon Company had all the qualifications for becoming a subsidiary of the great organization which for many years had been its best customer. Inco.

Getting Ready for Ont. Championships

With the all-Ontario badminton championships slated for Inco Employees Club on February 13, 14, 15, the Nickel Belt Badminton Association has a heavy organizational job on its hands this winter in addition to its regular league responsibilities.

The executive elected to handle the big deal is: president, Harvey Nadeau; immediate past president, Willard Evoy; vice-president, Ritchie Gallagher; secretary-treasurer, Jerry Myers; asst. secretary-treasurer, Mary Tkachuk; scorekeeper, Johnny Saganiewicz.

To bring along junior players the association is arranging instructional classes for Saturday afternoons at the Inco Club.

The best season in years is expected in the Nickel Belt league, according to President Nadeau.

MIND-READER

They were huddled closer together than houses in Boston. The lights were low . . . very low. He whispered: "What are you thinking about, darling?"

"The same thing you are, sweetness," she shyly answered.

"Then I'll race you to the icebox," he shouted gaily.

FAR FROM HOME

Mess Sergeant: Why don't you eat your fish? Something wrong with it?

Private: Long time no sea!