

The Iriangh

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On the cover . . .

The swirling eye of a tornado? The vortex in a kitchen sink?

Nope.

You're down in a mine and you're looking up — way up.

It's called a raise; it's seven feet in diameter, and is used as either a ventilation shaft or a manway between two levels of the mine.

Smooth and circular, it was drilled through solid rock by a powerful raise borer — read all about our latest raise borer triumph further on in the book.

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A thing of the past.

Appointments

Election of Walter Curlook as a vicepresident of The International Nickel Company of Canada, Limited, effective October 1, was announced recently by L. E. Grubb, chairman and chief officer, following a meeting of the company's board of directors.

In his new position, Dr. Curlook will be concerned with the company's longrange planning activities. A graduate of the University of Toronto, he joined International Nickel in 1954 as senior research metallurgist. Following service at Port Colborne and Copper Cliff, he became superintendent of research for the Ontario division in 1960 and assistant to the general manager in 1964.

Dr. Curlook moved to Paris, France, in 1969 as technical director of the proposed nickel project in New Caledonia and in 1972 became general manager of International Nickel Oceanie S.A., also in Paris.

He was named assistant general manager, administration, in 1972 and vicepresident, administrative and engineering services. Ontario division, later the same year.

Divisional:

Norm Creet, manager, maintenance mines and mills.

Charlie Ferguson, director, environmental control.

no more

If you're an hourly rated employee, you're not being paid by cheque any more. From now on your pay will be deposited directly into a bank of your choice. This will eliminate those long line-ups, and will also be more confidential. But don't worry, you'll still receive a statement of your earnings and deductions.

Corporate:

Walter Curlook, vice-president.

Donald Munn, regional vice-president.

Winton Newman, president, Manitoba Division.



Walter Curjook

Charlie Hews, vice-president, administrative and engineering services.

Bob Ludgate, manager, Copper Cliff mines area.

Paul Parker, manager, Garson mines area.

Family Album

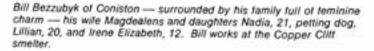


Luigi and Josephine Carbone live in Port Colborne where Luigi works in the "S" nickel rounds building at the Port Colborne nickel relinery. Nick, 18, sits beside his dad while John, 17, sits beside his mother. Sandra, 14, and Robert, 15, round out this fine looking family.



From Shebandowan — the Ed Tessier tamily of Thunder Bay. Ed and wife Hilda, with their three children, Ellen Marie, 9, Eileen Edith, 7, and Edward junior. We hope they're teeling well again after their recent accident.

The Rothensee family of Sudbury. Standing between Klemens and his wife, Irma, is Klause, 11, while twin sister Claudia sits on dad's knee. Monika, 13, and Dieter, 18, are active outdoor types. Klemens works at Garson mine and enjoys doing his own home improvements.







Following decisions to increase the production rates at Levack and Levack West mines to a combined total of 11,000 tons a day, our mines department was faced with a problem.

The Levack mine hoist — which also handles production from Levack West was not capable of doing the job.

A thorough review of the problem by Inco's operating, engineering, maintenance, and specialist groups resulted in major installation changes that solved the problem.

How was it done? Well, as Levack's chief maintenance planner, Ken Hoop explains it — to hoist more you must carry a bigger payload which means larger skips. However, the combined weight of a larger skip and load affect the safety standards for hoisting ropes you then consider a lightweight conveyance of greater capacity.

Another key consideration was to

reduce the duty cycle of the hoist; that is, the time taken to load, accelerate, run at full speed, decelerate, creep into the dump, and unload.

Two lightweight skips of greater capacity were designed and fabricated; an improved duty cycle was devised and two new generators and a solid state regulator were installed, with the result that the mine's hoisting hardware is now capable of handling the additional tonnage.



Under the direction of maintenance foreman Ed Luoma (left) riggers remove one of the mine's two existing bottom-dump skips. The skip weighs 10 tons, with a capacity of 247 cubic feet.

Out with the old ...

The original skips were the Lakeshore bottom-dump type, with a capacity of 247 cubic feet, a weight of 19,900 pounds, carrying a 15-ton payload. The new conveyances are larger but lighter. They are the roller chute type, have a 290-cubic-foot capacity, weigh only 12,850 pounds, and can hoist 18 tons!

The duty cycle was improved by the installation of more sophisticated hoisting controls, permitting longer travel at full speed plus improved acceleration, deceleration, and braking.

The two new generators and a solid state control package with sensitive circuitry gives a much quicker response to controls for accelerating and braking. The control package is in modular form for ease of maintenance and repair. The new generators were tested at 200 per cent overload to ensure maximum power.

The roller discharge chute design on the new skips permits the skip to remain in the shaft when dumping, which greatly reduces vibration that causes wear and tear on guides, shaft timber and the skip dump. The skips are lined with Trellex rubber at impact points to reduce wear. This has proved successful at Frood number nine shaft and other locations.

Levack's double drum skip hoist can raise a loaded skip 3,000 feet per minute. Skip loading takes place at 2650 and 3750 elevations where new and larger loading pockets were constructed for the new skips.

Ken Hoop rode herd on the project from day one, and, together with mine



Tipping the scale at nearly six and a half tons, a glearning new roller gate type skip is eased gently into the shaft. It has a capacity of 290 cubic leet.

.... in with the new

engineer Gerry Crouse and mine general foreman Dar Anderson, was responsible in large measure for the completion of the project on schedule. "We started back in January." Ken explained, "working only on weekends to avoid interfering with regular operations. We installed new clutch drum bushings on the hoist, did a complete rewiring installation, and many other preparatory jobs." The major changes were made during the mine vacation shutdown period.



Installing a new hoist generator armature. L to R; Ken Taylor, Hank Bagnell, maintenance foreman Ed Luoma, Stan Zamojski, and Len Leroux.

... in with the new

This is some of the solid state control circuitry that will speed up the mine's hoisting cycle. Electrical specialists are Bob Squires and Ed Patton.



Hoistman Fred Schroer was at the hoist controls during extensive tests of the new and improved hoisting equipment. On hand to check the action is hoist inspector Len Leroux.



If you've passed the corner of Copper Cliff's Balsam Street and Highway 17W ately, you may be wondering what those strange shapes are that appear to be growing out of the ground beside Copper Cliff creek.

This is the site of a new water treatment plant, and those strange shapes are the piles and foundations under construction for the two large water clarifiers, lime storage tank and instrument house.

The plant is one of two being built by Inco over the next 18 months. Both Nolin and Copper Cliff creek water treatment plants are the first phase of a \$36 million tailings disposal plan, which will treat 85 per cent of all plant and mine effluents in the Sudbury area.

let's make it clear



The purpose of the Copper Cliff creek plant, which is being built in the best possible location to catch the waste from the smelter, is two-fold; to clarify the waters of the creek and the waste from the smelter and, at the same time, to reclaim any of the concentrates which may be flowing in the creek.

As the volume of water in the creek varies with weather conditions, such as storms or dry spells, and is affected by the production in the smelter, the water treatment plant is designed to accommodate a top volume of water in excess of 60 million gallons each day but will normally operate with an average daily volume of 15 million gallons.

Pilings had to be driven through 60 feet of clay before a solid base was reached and 15,000 cubic yards of clay removed and transported to the slag dump area before the foundations and pouring of concrete could commence.

The removed clay will serve as the core for the continuation of the existing berm which has been started along the edge of the slag dump area, and will eventually merge into the grassed area already in existence along Highway 17W.

Included in the budget will be landscaping and the construction of a small grassed park to act as a viewing station for visitors.

The construction of the instrument house, along with the pouring of concrete for the 135-foot diameter clarifiers and the lime storage tank, is expected to be well under way before the first snow flies.

With the Copper Cliff smeller superstack playing the part of a constant sidewalk superintendent, construction of the water and sewage treatment plant near Copper Clift creek torges steadily ahead.

By George! look what he's up to now

A one-time inco Copper Cliff employee, George Todd transferred to the Port Colborne nickel refinery. He now owns a farm and a fruit stand at Niagara-On-The-Lake — and is still with Inco.





Referring to his fruit farm, George Todd says, "It sure is a lot of hard work, but the results are worth it." Tending the fruit and vegetable stand in front of their home on Lake Shore Road at Niagara-on-the-Lake, George and his wife, Judi, are kept busy from June to September as a steady stream of customers stop to make their purchases from the varied display. Judi says, "I like to talk, so I enjoy meeting not only our regular customers, but other local people and tourists from all kinds of countries who stop at our stand."

As a youngster, George moved with his family from Saskatchewan to New Westminster, B.C., where his dad had purchased a poultry, dairy and fruit farm. The experience he gained during the 13 years he lived there are now standing him in good stead.

George joined Inco in 1964 at Copper Cliff, starting with the instrument englneering department as a junior draftsman. Soon after, he was promoted to instrumentation foreman and, in June of 1970, was transferred to the Port Colborne nickel refinery in a similar capacity.

As he travelled about the Niagara district, which is known as "the garden centre of Canada", he was impressed with the fruit farms in the area. "I had my eye on several", recalls George, "and when the five-acre farm I have now became available, I sold my home in Port Colborne and bought it". George added, "A long standing ambition of ours had finally been fulfilled". An experiment, tried this year by George, was growing tomatoes, canteloupe, cabbage and other vegetables through plastic. The method, new to the area, is to plough two furrows, about 40 inches apart, the full length of the patch to be planted. The dark green plastic, four feet wide, is then laid lengthwise with about four inches on either side covered with earth to hold it down.

When planting is done, a spade is used to pierce the plastic and at the same time make a hole in the earth for the plants. In George's opinion, "It's a terrific breakthrough in growing procedures", and he will expand it next year. "There are no weeds to contend with, which is a big plus, and there's little loss of moisture due to evaporation when the hot, dry weather sets in". Comparing two identical rows of tomatoes, 600 feet long, the yield from the row of plants grown through plastic was more than twice that from the row planted in the conventional manner.

Their family consists of Mrs. Jo-Anne Grant, and two sons of Mississauga, Mrs. Lynda Ducette of Toronto, and Richard, presently at home, but soon to join the O.P.P. or Regional Police. George says, "We sure are glad to see them on weekends when they lend us a hand".

Both George and Judi said, "Be sure to include in the write-up a great big hello to our friends in the Sudbury area". So here it is — Hello!

George's wile, Judi. She admits she likes to meet people and talk. She does plenty of both at the stand.

George Todd. He grew up on a larm; missed it when he left — now he's back, and he's happy.





Steve Maville, an employee in the roaster department at the smelter, is just about finished his first term as a guide. He and his wife Marilyn live in Sudbury and both enjoy sports of all types.



Stan Pearce, left, and Mike Brown supervise passengers boarding a tour bus. Stan and Mike work in the converter department at the smelter and both live in Copper Clift. Stan and wife Rosarii enjoy skiing while Mike, who is single, is interested in sports.

The "Super Eight"

Behind the wheel of the tour bus is Marcel Bigras. He lives in Coniston and works at the copper relinery. Marcel and his wife, Elmonde, have three children, Lise, 8, Nicole, 4, and Denis, 10 months.



Steve Garrett and Tom Plexman show two visitors where mining takes place. Steve works in the silver building at the copper retinery. Tom is with the transportation department in the smelter. Steve and his wife, Kathi, live in Sudbury — Tom and his wife, Linda, in Walden.



The man with the yellow shirt smiled as you signed the register. He then defly adjusted a hard hat to your headsize without measuring — and you wondered how he knew. It could be that he's had a lot of practice; after all, he's had 14,388 visitors so far.

The place is the Copper Cliff curling rink, the starting point for all visitor tours, and the man is one of eight carefully chosen and trained tour guides who escort sightseers through Inco's facilities.

The tour guides are special. They're full-time hourlyrate employees from various areas of the company, and they transfer for special duty during the tour season. This makes them particularly well-suited for their job as they have first-hand knowledge about most of the operations that visitors see when on tour. There's rarely a question asked that can't be answered to the visitors' satisfaction.

The success of Inco's tour program rests squarely in the hands of these eight company representatives, and the results of their efforts are reflected in many ways — the most obvious being the fact that attendance is up 70 per cent over last year. Word gets around you know! Hard hats off to the "super-eight".



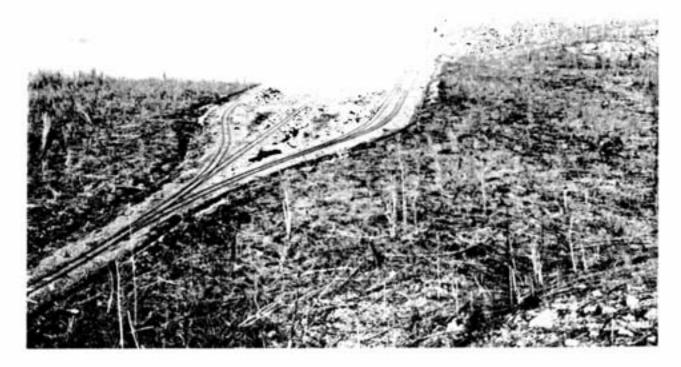
Sid Wasilis "spiels" over the loud-haller so he can be heard in a holstroom. This is Sid's first term as a special duty guide during the tour season. He works with the safety department at Copper Clift and is very interested in photography.

Smiling Dennis Peila returns to matte processing when the tour season is finished. He and his wife, Anne, have three children; 6-year-old twins Sandra Lee and Debble Lynn, and Dean Richard, 4. This is Dennis' second year as a guide.





The O'Donnell



O'Donnell

Back in the '20's, a tiny village nestled in the bushland southwest of Creighton mine.

It was called O'Donnell, and during its short lifetime, no more than 20 families lived there at one time.

Born in 1915, it was abandoned a decade and a half later when its residents moved on in the name of progress. But even though O'Donnell no longer exists, it lives on in the hearts of many who remember it as home — the place where they grew up.

About four and a half miles west of Creighton on the Algoma Eastern Railway line, the village grew beside the O'Donnell roast yard, established in 1915 by the Canadian Copper Co. It was hoped that the chosen isolated area would minimize sulphur smoke damage in the Copper Cliff area. And so began O'Donnell.

It was mid-December of 1920 when Bob Bryson, now a senior industrial engineer for Inco in Copper Cliff, arrived in O'Donnell. He was five years old and his father, Bob Sr., had just transferred from Inco's transportation department at the Copper Cliff smelter to the O'Donnell roast yard. Bob's father was to operate the steam shovel which picked up the roasted ore from the beds and loaded it into railway cars destined for Copper Cliff.

It was dark when Bob Sr., his wife Florence, Bob and his brother Andy drove into the village in their model "T", a team of horses following behind with their furniture on a sleigh. It was morning before they saw the village which would be their home for the next 10 years.

O'Donnell, as Bob remembers it, con-

the little village that was



sisted of frame houses — one of which Bob's father claimed — and a larger boarding house, operated by George Dunsmore, to accommodate single men. A general store provided work clothes and necessary supplies. The school was a one-room building which doubled as a church and there was a sort of community hall. A rustic shack passed for the train station where mail was dropped off each day. And, since indoor plumbing was restricted to the boarding house and a few of the larger houses, most of the new residents made do with "three rooms and a path".

The roast yard was a sight to behold. Individual roast beds, 100 feet long and 60 feet wide, extended in two rows, each about a mile and a quarter long. Ore was piled up to eight feet high on top of cordwood stacked five feet high and, as it burned, dense white clouds of sulphur smoke rolled off the mounds. The smoke had already taken its toll on vegetation for miles around.

Unfortunately, the townsite was on the prevailing downwind side of the roast yard, so residents of O'Donnell lived in a perpetual cloud of smoke. Recalls Bob: "There were days when I couldn't see my hand in front of my face and I'm not kidding when I say I got lost one day walking the 50 yards to school. Needless to say we had no gardens — there wasn't as much as a blade of grass growing in the village."

The townsfolk got used to it though, and it was rumoured that maybe the sulphur smoke wasn't all that bad. There was neither doctor nor dentist in town and, curiously enough, a doctor was seldom needed. Bob remembers a Dr. Boyce from Creighton who visited O'Donnell on occasion. "He used to say we were the healthiest bunch he'd ever seen," chuckles Bob. "Guess that smoke prevented the germs from germinating."

Bob claims when people first saw O'Donnell, they always said they weren't going to stay. But they always did, because, in spite of its drawbacks, O'Donnell was special.

"I've never seen spirit anywhere like there was in that little community," remembers Bob. "We had to develop an ability of getting along with each other. There wasn't enough room in town for fighting with our neighbours. The people made the difference."

Everyone attended church in the school house, regardless of denomination. Rev. Manuel and later Rev. Mitchell conducted the weekly church service on a week night, since they were too



Individual roast beds were 100 feet long by 60 feet wide. With a clear span of 170 feet, the travelling green ore unloading bridge serviced the mile and a quarter long roast yard. On the average, a bed burned for seven to eight months.

O'Donnell

busy in their own church in Creighton on Sundays.

The general store closed after a couple of years, but Sam Fera took care of the townspeople. By horse and wagon and later by model "T", "Old Sam" brought groceries from Creighton to the people of O'Donnell. Clothes and other necessities were obtained by mail order through the Eatons catalogue.

"Growing up in that village, all we knew was the company," says Bob. Many who went to school together in O'Donnell ended up working for Inco; in fact, Bob's three brothers, two of them born in O'Donnell, also work for Inco — Andy is a paymaster in Port Colborne, Jim is in the laboratory at the Copper Cliff copper refinery and Stan is in the machine shop at Copper Cliff. The four brothers have a combined service to Inco of 145 years, and Bob believes it has a lot to do with their years in O'Donnell.

But, it was not all work in O'Donnell.

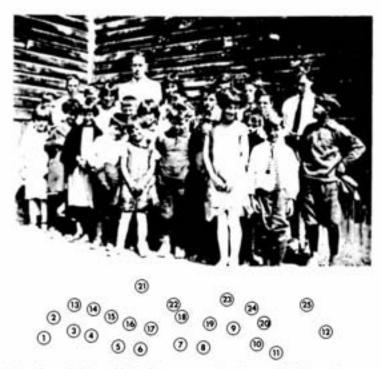
When it came to entertainment, the citizens of O'Donnell were resourceful enough to provide their own. There was an outdoor rink for hockey and there was always a ball field in the Bryson yard, even though there were never enough kids for two teams. The swimming hole was the creek that supplied the water for the village.

Children of high school age generally boarded away from home, but even when Bob started high school in Sudbury in 1929, he found it difficult to leave O'Donnell. For a while he boarded in Coniston, but for the last few months of his first year, he commuted the 16 miles each way every day, nine miles by bicycle and the rest by bus.

During his second year of high school, Bob boarded in Sudbury, but came home every weekend, always walking the distance between Creighton and O'Donnell.

In 1930, some of the families started moving out of O'Donnell and by June of 1931, the Brysons had moved to Sudbury. Construction of a new smelter at Copper Cliff had put the roast yard and the village out of business.

O'Donnell was deserted. The buildings



The class of '26 outside their one-room schoolhouse in O'Donnell. Those identified are: 2. Don Bray, Inco tire marshall; 5. Alcide Denomme; 7. Art Lalonde; 8. Bill Lalonde; Evelyn Hildebrant; 11. Bud Germa, Inco and in the Ontario legislature; 12. Andy Bryson, paymaster at the Port Colborne nickel retinery; 13. Alvin Bray, Inco pensioner; 14. Larry Lalonde; 15. Leo Lalonde; 19. Bob Bryson, Copper Clift industrial engineer; 20. Evelyn Germa (Fox), Copper Clift copper retinery; 24. Allan Hildebrant, Inco pensioner; 25. Clyde Dunsmore, Inco pensioner.

crumbled, the railroad was shut down, Mother Nature replaced the burned vegetation and the townsite disappeared. Only the scar of the roast yard and a few concrete basement walls remain today . . . along with a lot of pleasant memories.

Whenever former O'Donnell residents meet, the conversation always centres around that little community. They tell the true story of a Scottish fellow named Joe MacArthur who brought his new bride from Scotland to live in O'Donnell. As they were approaching the sparsely vegetated townsite, the bride timidly questioned: "But how do they grow those rose beds you were talking about?" Joe retorted, "not rose beds my dear — I said roast beds."



The valuable source of information for this article, Bob Bryson, is overshadowed by the pine that has grown on the site of the house at O'Donnell where he grew up. When he left in 1931, there was not a blade of grass growing in the village.



John Smith, superintendent of Creighton mine, was there to shake the hand of driver C. Lawson, who brought "Merry Baroness" in first for the Creighton Pace. Also on hand was trainer Norman Paquette and his family.



Winner of the Copper Clift Trot, "Dukes Lulla", with driver R. Toole and owner G. Latimer. Grant Bertrim, superintendent of Copper Clift North mine, made the presentation for Inco.



Levack Pace winner "Majestic Dream" and proud driver M. Noble, along with his smilling family, accept congratulations from Milt Jowsey, manager of Levack area mines.

they plunked it down at



The largest purse ever offered at Sudbury Downs.

The most money ever wagered through the pari-mutuel wickets at Sudbury Downs.

The biggest ever — the Nickel Plate at Sudbury Downs.

September 1974 — the first Nickel Plate sponsored by Falconbridge Nickel Mines and The Ontario Division of International Nickel. There was an \$8,000 purse on the ninth race, the feature, and more than \$106,000 was wagered over the ten races with nearly \$17,000 parlayed on the feature.

The best horses in the province paraded to the post for the "heavy money" in the invitational event; a pace for a mile. The favourite was "Poplar Bennie", but the bay gelding finished out of the money. Winning was a bay with no money in its "win purse" up to the Nickel Plate — a horse with the likely name of a horse on the way up — "Elevator".

Ron Taylor, president of the Ontario Division, and Andy Baker, assistant general manager of Falconbridge Nickel Mines, presented the elegant Nickel Plate to Bill Stirton, driver, trainer and owner of "Elevator".

Inco participation was not limited to the Nickel Plate. Race number two was the Copper Cliff Trot, and Grant Bertrim, superintendent of Copper Cliff North mine was on hand to put the "cooler" blanket on the winner, a nine-year-old bay mare named "Dukes Lulla".



The Levack Pace was a "cinch" for "hunch bettors", for wearing number seven was a seven-year-old bay gelding that was "touted" at 7-1, with the popular and legendary name of "Casey Jones". Inco's Casey Jones, now a pensioner, was for many years a household name for miners at Levack. "Casey Jones", the pacer, lacked only a nose to be in the winner's circle for Milt Jowsey, manager of Levack Area mines, to present the blanket. The winner was "Majestic Dream" another seven-year-old bay.

John Smith, superintendent of Creighton mine, looked after the blanket for "Merry Baroness" in the sixth race, the Creighton Pace. The Hanmer horse had little trouble with the one mile pace.

The mystic "Destiny's Shadow" was in the winner's circle for Frood-Stobie Area manager, Bill Collis, at the end of the seventh race, and when Harold Strutt, general foreman at Garson mine made the trip to the circle for race eight, it should have been another "hunch" bettor's dream. Harold, or for some, "Hal", made the presentation to "Rosalee Hal", a nine-year-old brown mare. It's understood that somewhere in the Strutt family a hunch was played and paid well.

The opening race of the card was the

Falconbridge Pace won by "Eden Atom". The Onaping Pace was taken by "Middlebrook Roy" and the fifth race, the Sudbury Basin Pace, was won easily by "Verso Hal". The tenth race, the Copper Classic, was a fitting end to the night's races, and bettors, revelers, and spectators were bid "Good Evening" by a Chelmsford bay mare of the same name.

Sudbury Downs has been in operation since early June, and has attracted much attention, not only in the district, but further afield. The Nickel Plate classic surely attracted the powerful pacers for a chance at the big money.





Harold Strutt and brother Glen admire three winning tickets Glen held on "Rosalee Hal", winner of the Garson Pace.



Bill Collis, manager of the Frood-Stobie complex, at the pay window. George Nowlan, manager of the I.O.R.P., waits his furn.

Once again, the mines drilling department have raised their sights and come up with another first — the longest raise bore hole ever drilled by International Nickel.

The machine responsible is an RD-7 Ingersoll-Rand raise borer, whose reaming head widened an 11-inch pilot hole to seven feet diameter through 1,000 feet of some of the hardest rock in the world.

The boring machine, on the 3000-foot level of the Copper Cliff North mine, commenced drilling the pilot hole this past winter and, in a month, broke through at the 4000-foot level. The average penetration per drill shift was 45 feet.

Another First The



In its station on the 4000 level at the Copper Cliff North mine, this is the giant RD-7 Ingersoll-Rand raise boring machine that set a new Inco mines drilling department record. The operators are Ray Jones and Roger Perrault.



Lowered to the bottom of the raise after it had reamer was detached. Drill rods were lifted and and protected by a sturdy overhead cribbing, are

At the 4000-foot level, the pilot bit was replaced by the reaming head, which consists of 12 large bearing-mounted rollers, studded with tungsten carbide buttons. Turning at between seven and eleven r.p.m., the head was slowly drawn upward, churning, crunching and backreaming its way into the pilot hole. As the head rotated, the carbide buttons exerted tremendous pressure on the rock causing it to disintegrate into thumbnail size chips and fall away.

After an average of 10 feet of drilling per shift, the 1000-foot raise was completed a few weeks ago. A combined load of 685,000 pounds of thrust compounded with 125,000 foot pounds of torque was applied to rotate the head and penetrate the rock.

The rotating drill rod, to which the reaming head is attached, is composed of five-foot sections, each 10 inches in diameter. Each section weighs 750 pounds, and a half-ton hoist is used to add and remove the rod sections as required.

Until 1964, before the mighty raise borers were put into operation, the conventional method of raising was to drill, blast and muck, a method which could present safety hazards for the miners who worked in a confined space under freshly blasted surfaces. Time was also an important factor as it took as long as three months to drive 200 feet manually.

Since the raise boring machines were first introduced at Creighton mine, all mines in the Ontario division have used the mechanical giants and 11 raise borers are presently on the job in Inco mines. These safer, faster machines are another example of the modernization occurring within Inco operations; up-todate equipment makes mining a safer and easier job for all involved.

longest yet



ompleted its 1,000-foot vertical boring task, the emoved at the top of the raise. On the job, folly Bedard and drill foreman John Werbeski.



Rolly Bedard (left) and Ray Jones (who parted with his beard between pictures) dismantle the reaming head under the direction of John Werbeski. The tour-ton, seven-toot diameter reaming head has nearly 5,000 half-inch diameter tungsten carbide buttons on its 12 cutters.



Clarabelle mill



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10th

inco had special visitors recently.

Approximately 170 people from throughout the commonwealth assembled in Sudbury to observe our mining operations. They were part of the 10th Commonwealth Mining and Metallurgical Congress.

The congresses are held every four years in a different part of the commonwealth and provide the opportunity for professionals in the mineral resource industry to discuss and exchange technical progress and data. The congress also helps to establish, through personal contacts, effective communication between industry and professionals in all parts of the Commonwealth.

The group visiting the Sudbury district was part of approximately 800 members







CMMC

Copper refinery

that had gathered in Quebec City, the congress' departure point.

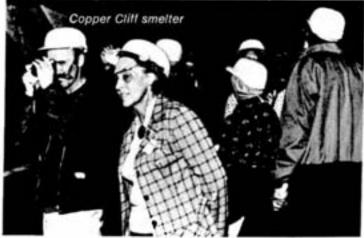
At Inco, the delegates went underground at Stobie mine where they observed the use of in-the-hole drills, load-haul-dump machines, fan drills, and drift jumbos. The visitors were also taken on surface tours which included the Copper Cliff smelter, Clarabelle mill and the copper and nickel refineries. They also saw Inco's efforts at reclamation of tailings.

A different group visited Inco's Shebandowan mine near Thunder Bay, where the emphasis is on the coexistence of mining and nature, with neither suffering.

There were several other tours to widely scattered points in Canada, including the "far north".







Well, the ghosts and goblins are getting set for their annual rounds, the witches are dusting off their broomsticks, and there'll be many a wise owl changing his sleeping patterns, all in preparation for that special night at the end of this month — Hallowe'en. The tricksters'll be on the prowl, too, taking full advantage of the occasion.

Hallowe'en itself goes 'way back, and was originally believed to be the time chosen for the devil's disciples to run rampant. Romans first celebrated Hallowe'en and, centuries later, took the custom to the British Isles, where the enthusiasm of the medieval Britons for harvest celebrations sent Hallowe'en's popularity soaring; however, the peasants believed that the spirits of the departed used ghoulish bodies for the one night in order to inflict reprisals on all who had offended Samhim, the local god of the dead.

Gradually, as Christianity took a firmer hold in Britain, the belief in ghosts faded away, and the English later introduced Hallowe'en to the New World.

As for jack-o-lanterns, the Irish tell an interesting tale about a poor soul named Jack who couldn't get into Heaven because he hoarded his worldly wealth; he was even barred from Hell for playing practical jokes on the devil — Jack had to walk the earth with a lantern until Judgment Day.

Hallowe'en.

their safety



- Check costumes. Make sure they aren't so long as to trip the youngster. All costumes should have some white material or reflectorized tape.
- Use make-up instead of masks. Narrow eye slits will impair vision, and a closefitting rubber mask can cause suffocation.
- Set a specific time for the children to return home. Remind them that Hallowe'en is for fun and frolic, not vandalism and violence.
- Caution youngsters not to dart across busy streets, driveways, or parking lots. Accompany very young children on their rounds.
- Warn children not to eat their "goodies" until you've inspected them. Unfortunately, there are some who include nasty tricks with their treats.
- Keep the porch light on and put the trash cans, lawn mowers, and bicycles in storage; they might be tripping hazards and may give vandals ideas.
- Drive with extreme caution on Hallowe'en. Be especially alert for fender-high little tykes who may suddenly spring out into the street.
- Help your tricksters unwind. Before bedtime, let them tell you about their fun. A glass of hot milk and a warm tub bath will help.



Len McAvany



Johnny Turner

... their memories

Ron Heale

Ron Heale, supervisor, sales tax and customs, was born in Copper Cliff and has been with Inco 42 years. His Hallowe'ens go back to before the days of trick 'n' treat, to a time when witches and goblins were given serious consideration and pranks were more or less expected. You wouldn't see little kids out on the streets, and the older fellows, in their early and mid-teens, were at their best (worst?).

In those days, groceries in Copper Cliff were delivered by horse and wagon, and a half-dozen boys could fairly easily relocate the wagons. Wooden boxes that covered hydrants were removed ... chickens were let loose ... and benches from the ball park were moved, with great audacity, to the front door of the local police station. Ron has seen enough Hallowe'ens to know that "the complexion of Hallowe'en has changed; there's less tricking and more treating today; older kids don't seem to be so involved; it's a time for the wee ones now."

Len McAvany, level boss, Frood mine, was born and raised in Saskatchewan. where Hallowe'en was also a harvest celebration. One of his most vivid memories involved about ten young fellows and a neighbour's wagonload of nearly 60 bushels of grain. Quietly, in the dark of night, the grain was unloaded, the wagon dismantled and carried, piece by piece, up a ladder to the top of the barn, where the wagon was put together again, and the grain hauled up the ladder and placed back in the wagon. Quite justifiably, some of these same fellows were called on to help get the wagon and grain back down again next day!

Len remembers a particularly cantankerous neighbour who used to sit on his front steps with a shotgun. A dismantled mower in the backyard was the best the kids could do; that was the closest they'd dare to get! Len feels that "people fail to observe the true meaning of these occasions now ... we were more daring in the past, and everything was an adventure."

Johnny Turner, truck driver, transportation department, hails from New Brunswick, and remembers how different things were for him on Hallowe'en as a down-east youngster. Seems like the kids got together and actually planned where they'd go and what they'd do to whom . . . usually the neighbourhood grouch was the prime target. Apple trees and orchards were raided, outhouses were upset and windows soaped. Horses would be let loose to wander, and the wagons hidden. Clotheslines were downed, and costumes were simply old ill-fitting clothes ... dirt wouldn't show and rips wouldn't matter. Any goodies they might come upon would simply be stuffed in pockets.

Of Hallowe'en today, Johnny feels it "isn't the fun we had then. Kids and even the grownups used to be more open, and the older people stayed up to watch the mischief — and perhaps catch the culprits. Today, people live differently; in yesteryears, we made our own fun".

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They're way up there — working in the area between the concrete stack and its steel liner.

A few hundred feet certainly isn't any great distance to travel to work in the mornings. But, 267 feet straight up now that's another matter altogether.

Sonny Makherjee, project leader with smelter process technology, didn't realize that stepping forward into a new position with a team of assistants, in actuality meant stepping upward 267 feet, into the lower levels of the Copper Cliff smelter's 1,250-foot super stack.

Yet, Sonny and his crew of six smelter process technicians make their climb, daily, to a test station, which has been constructed around the circumference of the stack's 45-foot diameter liner at the 267-foot level. The climb, which has become commonplace for the process technology team, usually takes about ten or eleven minutes.

The initial climb was quite an experience for Sonny. "A little unnerving, but I couldn't ask the rest of the team to go up there without doing it myself. After the first time, you get used to it," he says, looking up into the vastness of the stack.

Ron Falcioni, Rick Flesch and Roger Ceratti, three members of the team, agree that they have, "beyond a doubt, the highest positions at Inco". John Kanerva, Dave Mallette and Heino Saar complete the six man team. "We're in great shape, making the climb twice a day, and if we smoked before, we've either guit or cut down."

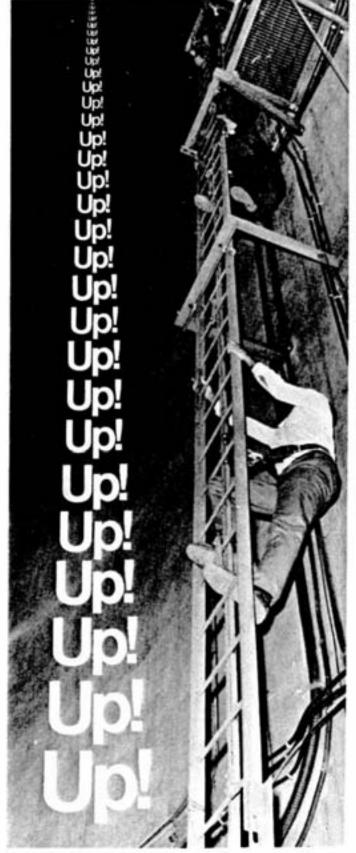
The reason for their daily climb is to make stack emission tests. Using government approved equipment and following defined procedures, the team prepares and carries out a series of quality control tests, to measure and record emission levels, velocities and temperatures.

In preparation for the tests, the stack is divided into four quadrants; north, south, east and west, with each quadrant sub-divided into 22 points for a total of 88 test points. A standard government approved source sampling probe is injected through open ports and into the heart of the stack. Samples collected from a filter on the probe are analyzed and the data recorded.

Much of the data is fed to the oxygen control room in the smelter complex and, in turn, transmitted to the environmental control department where it is combined with weather forecasts to determine the emission level suitable for that time.

When they're not involved with tests at the station, they're concerned with routine dust control testing in the smelter complex.





With safety belts attached, the team of smelter process technicians commence their 267-foot climb up the inside of the superstack.

Suggestion plan

Mark Tugby pulls in top prize of \$310



This month's list of 23 suggestion award winners, who carted off a total of \$1,275, is headed by **Mark Tugby** of the transportation department at Copper Cliff. He won \$310 for his idea to put heat deflectors on slag car air reservoirs. This was Mark's second award — he had previously won \$115 for revising rail clamps.

Charlie Anstey, a converter building maintenance mechanic, picked up \$215 for his proposal to apply "Loctite" to check valve caps on punching machines. This was Charlie's first suggestion and he came up a winner, so if you have any bright ideas don't keep them to yourself, hand them in you could also be a winner!

Winner of two awards this month was smelter employee Edgar Jeanveau. He won \$140 for his idea to enlarge the copper transfer car muck-out pit, and picked up a further \$25 for suggesting a drain between the electricians' shack and the lunchroom.

Glen Butcher and Louis Cole, both from the smelter, received \$75; Glen for suggesting revisions to Garr gun covers, and Louis for his idea to install salvaged car heaters in the Gradalis.

From the smelter, we have two \$50 winners. Ed Donnelly picked up his winnings for proposing the use of grip-type connectors on moveable machinery; Cal Mc-Farlane for his recommendation to modify trolley wire fasteners.

John McOuillan, another smelter employee, received \$30 for suggesting a new locking pin device for the Orford building container lifter.

Eight \$25 windfalls went to Copper Cliff smelter employees; Jos Clark, who proposed that the adjusting screws on "J" floor

Suggestion plan

Charlie Anstey is second with \$215

feed belts be shielded: Cleo Gascon, for his idea to extend the platform and scrap chute between number three and number four reverb furnaces; Dorval Gauvin, who suggested modifications to bail beams, and John Grant, who proposed that the hoist at the west end of the nickel reverb building be made operational from "M" floor to "i" floor. Henry Luplen won his award for suggesting an improved method of centering templates for converter limit switch shafts. Peter McGuinnes' idea involved the installation of a plate to prevent smoke leakage at number nine converter. John Whitaker and Luke Williams round out our \$25 list, with John suggesting modifications to the scrap box stand and Luke proposing a plexiglass window for the west end door of the nickel reverb building.

The lone \$20 winner was **Primo Facca**. He devised an improved braking system on smelter converter cranes.

There were five \$15 awards. James Langley, from the transportation department, won his money for proposing charts for selection of slings and ropes for all hoisting equipment. Murray Lemay, matte processing, suggested modifications to two hoist wells to facilitate proper lifting with the 75-ton crane. Robert MacGregor clicked with his idea of modifying smelter Gaspe puncher air hose, while Alme Sabourin of the smelter and Raymond Sasseville from transportation each picked up the loot for electrical ideas - Aime, for seeing the need to replace grinder start-stop switches, and Ray, for his idea to install a signal light in the Clarabelle mill tipple area.

Ron Brouillette from the Copper Cliff transportation department received \$10 for seeing the need for handles on rail stop blocks at the separation building.





Rick Marzetti, from the Copper Cliff safety office, jogging. A half hour of this, or even walking, will keep you in shape if done daily.

you and your

Are you tired? Feel run down? Don't have that same get up and go you had when you were younger? Wish you could do something about it? Well, there's hope for you yet, if Inco's safety department at Copper Cliff has its way.

The department, along with a helping hand from Dr. Brent Hazelwood, Inco's director of medical services, intends to implement a new programme aimed at reducing the number of back injuries, both on and off the job, for employees and their families.

What's that you say? What does reducing the number of back injuries have to do with feeling tired? Well, the common denominator is being physically fit. If you're in good physical condition, you're less likely to suffer injury due to muscle strain. You'll also have more energy and, hence, be less tired.

Back injuries are the major cause of permanent partial disability. One of every five lost days is due to back injury. The prevention of such injuries through proper lifting procedures has been a continuing aspect of safety programmes over the years, but the emphasis this time is on maintaining good physical condition and understanding just how the back operates.

You may have already seen some of the posters at the information centres in the various plants and mines. This is just the first step in the programme. In the future, you can expect discussions with supervisors, printed informational material, as well as an instructional movie. Pat McGlade, safety department employee, looks at "Oscar's" backbone to see if the skeleton shows any sign of back trouble.

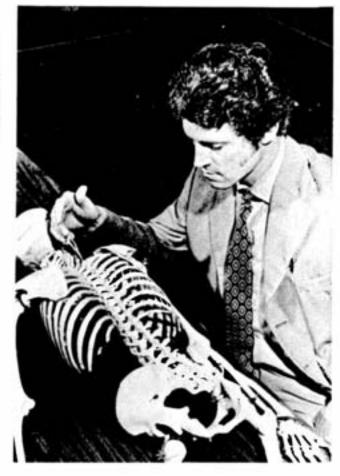
Back

An effective way to control back injuries is to engage in a regular exercise routine, preferably daily. Once a week is not good enough, so if you play a round of golf on the weekend you're not getting enough exercise, especially if you do nothing else in-between. You'd be doing yourself more benefit if you went for a 15-minute walk every day. In fact, walking rates as one of the best forms of exercise if done on a regular basis.

What's the purpose of this regular exercise? It strengthens the 140 muscles that are involved in the support of the back and control of its movements. But all of the muscle groups involved are not located in the back - one important set is out in front - the abdominal muscles, too often misnamed "stomach muscles". When these are flabby, the weight of the abdominal contents is thrown forward and tends to pull the spine with it. The simple act of frequently tightening these muscles will eventually strengthen them, and take strain off the spine. If you're looking for exercises to do, some excellent ones are outlined in a booklet called 5BX, which can be purchased for about 35¢ at most book stores.

So you see, not much time or expense is involved. The hardest thing will be finding the will power to get into a daily routine. This is something that no doctor can provide — it has to come from you. So get with it and exercise — the next back you save may be your own.

Rick Marzetti measures Cameron McLeod's heartbeat. Cameron is with industrial engineering at Copper Cliff.







The pressure's on, as the Guatemalans attempt to net the marker that would win the game for them.

CONCACAF

Muscled arms and legs glistening with sweat — a soccer ball kicked hard toward a guarded net — players knocked roughly to the ground as threats and encouragements are shouted across the field in different tongues ...

This is how the globe-spanning game of soccer looks from the sidelines. The hard-hitting, colourful game, taken so seriously by its participants, triggers an astounding emotional impact on even the most neutral observer.

Teams representing Jamaica, Guatemala and Cuba dug their cleats in the turf at Laurentian University for three games, as part of an international tour sponsored by the Confederation of North and Central American and Caribbean Soccer Association (CONCACAF).

CONCACAF is one of six continental confederations operating under the banner of the Federation Internationale de Football Association and has a membership of 22 nations, including the most northern country, Canada, and the most southern countries, Surinam and Guyana, as well as the Caribbean and all the Latin American countries inbetween.

The players taking part in the Sudbury segment of the tournament were treated by International Nickel to a tour of the Copper Cliff North mine, Clarabelle mill and the Copper Cliff smelter, followed by lunch at the Copper Cliff Club.

The luncheons were hosted by Mel Young, assistant to the president of International Nickel's Ontario Division, Frank McAteer, vice-president and general manager of Nickel Basin Properties, and John MacDougall, director of engineering for utilities and central maintenance for the Ontario Division.

The Cubans opened the tournament in Sudbury with a hard-fought win over the Jamaican Club, but Jamaica retaliated during the following game, squeezing a



These Jamaican players look worrled as they watch the action around their own net.



The Guatemalan soccer team. Explaining the operation of the Clarabelle mill control room is four guide, Sid Wasitis.

Looks good! The Cuban players dig in at the Copper Cliff Club during a luncheon held for their team prior to their final game at Laurentian University.



tight two to one victory from the Guatemalans. Public opinion rated the Cubans as the team to beat, and the Guatemalans, the underdogs with a winless record, clashed with the firstplace Cubans on the final Sudbury game in the area.

During the second half of the final game, with the score deadlocked at 1-1, the Guatemalans were shown a yellow card by officials, followed immediately by a red card. Penalized, and forced to play short-handed, the determined club scored a few minutes after losing their penalized player, and managed to keep a tight defense to hold the one goal margin and win the game.

In addition to the games played here, other hosts were Toronto, Ottawa, London, Oshawa and St. Catharines.

Since "the triangle" logo went to a hand-written style last January, we've had signatures from people with a wide variety of jobs.

While putting this month's issue together, we figured it was about time we asked someone without a job to do it.

So we did.

We asked a company pensioner to step forward and do it, a very special company pensioner — the oldest — Percy Coones.

Now living in Toronto with his daughter, Margaret Coones, Percy was born on May 15, 1878. He retired in 1946, and he was 96 on his last birthday.

Coincidences are funny things. They pop up when they're least expected.

One popped up this month.

Percy started his Inco career in 1918 — can you guess where?

Kind of a tough question, but there's a memoryjogging story in this issue that should give you a clue. He started at the O'Donnell roast yard.

pensioner

logo

and

writer

Inco's

oldest

Percy Coones

He lived in the "little village that was" - O'Donnell.

