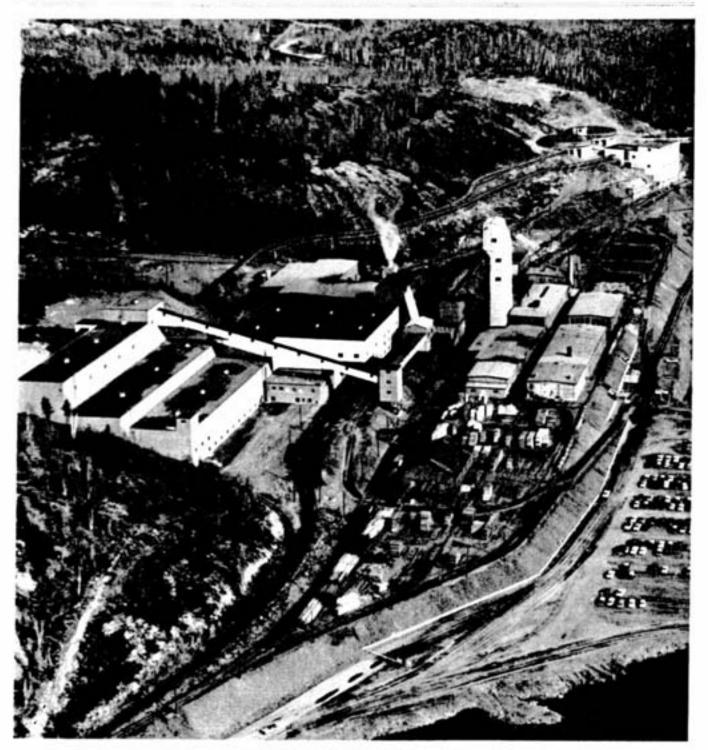


VOLUME 20

COPPER CLIFF, ONTARIO, OCTOBER, 1959

NUMBER 7



The New Look at Levack

(Story on Page 8)



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

D. M. Dunhar, Editor Editorial Office Copper Cliff, Ont. Authorized as second class mail, Pest Office Department, Ottawa.

Tells of Nickel's Potential Uses For the Future

"Of the 1958 estimated free world nickel production of 380,000,-000 pounds, 74 percent came from Canadian sources, 10 per cent from Cuba, seven percent from New Caledonia, and six percent from the United States," K. H. J. Clarke, manager of Canadian sales and market development of The International Nickel Company, told the annual Western meeting of the Canadian Institute of Mining and Metallurgy in Winnipeg.

"This compares with Canada's 85 percent share of production prior to World War 2, and is indicative of the competitive situation which has developed in the nickel industry," he said.

Mr. Clarke pointed out that nickel finds its most important markets in the industrialized areas of the world, and emphasized the importance of world markets to the Canadian nickel industry.

"In recent years deliveries to the United States including all Canadian producers have ranged between 60 percent and 70 percent of total free world deliveries. Deliveries to the United Kingdom have amounted to about 10 percent and Canada has taken about three percent. Other important European markets include Germany, France, Sweden, Italy and Austria. Significant quantities of nickel are also consumed in Japan.

"Free world producing capacity is estimated to be 650,000,000 pounds in 1961, about 100 percent more than total free world defence and civilian consumption in 1983," Mr. Clarke said. "The rapid development of technology, motivated in part by mankind's apparent desire for speed combined with leisure, can help bring about an enlarged market for nickel in things that will satisfy these desires, providing the nickel industry niakes the tremendous market development effort necessary to attain nickel's potential in the face of competitive materials.

"We now believe that with sufficient development effort, nickel can be used in quantity in working out ways of niaking all forms of transportation faster, more reliable and perhaps even cheaper.

"In making gas turbine engines practical for automotive use, for example, it has been necessary to develop nickel base alloys capable of carrying high loads at white heat. The same alloys are being used in jet engines for military aircraft, and the power plaint of the jet-powered Boeing 707 contains Autumn Incense on the Morning Air



The smoke of burning leaves drifts lazily up through the trees and the morning sun sends long shadows across the lawns at Copper Cliff hospital in this pleasant autumn scene as men from the agricultural department tidy up the grounds for winter.

about two tons of nickel — over five times the amount in an ordinary piston power plant for aircraft. The North American X15, the manned satellite, is made mostly of Inco's Inconel X agehardenable nickel-chromium alloy."

Mr. Clarke said many other applications were being found in the automotive industries, both for passenger cars and heavy automotive equipment such as large trucks, road building and earth moving equipment.

Other new or potential uses of nickel which point the way to the future:

--In steam plants where conventional fasts are being burned more efficiently at highest possible temperatures, nickel alloys are being used in a variety of ways.

--Corrosion problems associated with generating power from nuclear sources should require extensive use of nickel stainless steels and high nickel alloys.

--As electrical heating becomes cheaper and more popular, larger use of nickel alloys is anticipated.

-Increased use of nickel in airconditioning units, which will shortly be in as widespread use as heating systems in homes.

-As populations increase, an already appearing shortage of water will probably become acute in some areas, leading to the use of processes for converting salt water into fresh. These processes will require equipment in which nickel alloys can be used.

--The Canadian Pacific Railway's vista-dome cars have eight percent nickel stainless steel bodies from which prairie dust is easily removed at a "minute wash" in Calgary, leaving the cars shining like new.

-Some 40 percent of railway passenger cars built in the United States since 1952 have stainless steel bodies; some built in 1932 are still in operation and show no deterioration.

—Nickel continues to contribute to efficiency in the field of mining, smelting and refining through its use in strong, wear-resistant alloy steels and irons for drills, mill liners and other equipment...

-Nickel stainless steel applications in architectural and household uses are developing at a rapid rate. Stainless steel "curtain wall" buildings, sinks, pots and pans, cutlery, holloware, are now everyday companions.

"At times in the past, Inco was practically alone in its work to extend the nickel market. Little was known about nickel; its uses were small and restricted to a few fields. We now have many helpers — consumers who know the value that nickel alloys can continue to impart to their products, and other nickel producers who will be facing common problems," Mr. Clarke said.

"In its increased capacity in Sudbury, in its new capacity in Manitoba and in its greatly expanded research, market development and sales activities, Inco is investing heavily in the future of nickel.

"We are convinced that nickel can have an even greater economic importance in the future and that with greatly expanded market development and research programs on the part of all concerned, the future can show an upward trend in the consumption of nickel and thus reward the industry's efforts to increase the supply."

Are Non-Magnetic

High-strength bolts and rivets used in airframe assemblies are often made of "K" monel agehardenable nickel-copper alloy because it is non-magnetic and thus does not interfere with the operation of the aircraft's delicate instruments.



In this view at Frood mine a fork-lift truck is unloading a carload of flatted II-foot by 8-inch mine timber and transferring it to a storage pile.



Here stope floor plank is being unloaded by a fork-lift at Creighton mine from the transport onto mine trucks for underground, saving considerable handling. The plank is arranged on the transport so the fork-lift can simply pick it off.

Fork-Lift Trucks Improve Handling Of Timber and Materials at the Mines

In an average year Inco mines use about 50,000,000 board feet of timber and thousand tons of other material such as cement, gravel, steel, and pipe. This requires a tremendous amount of handling.

During the past two years a marked change has been taking place at the various mine timber yards with respect to timber and material handling and piling, through installation of the mobile Pettibone Carry-Lift. This rugged, versatile fork-lift truck can handle with ease and speed almost any form of material the mines require.

It was back in 1957 that the first model was introduced to the Inco scene at Levack. Much was learned from those early trials — the art of piling timber so it could again be loaded simply and quickly onto mine trucks: how railroad cars and truck floats should be loaded at the source for convenient fork-lift unloading at the mine: how to clear the yard of snow quickly after a storm.

Page 3

Today Garson. Creighton. Frood and Levack have all converted to fork-lift material handling. This has been a gradual process since it required the relocating of all material in the timber yards.

Storage areas in the mine timber yards are now generally uniform. Timber is piled to be easily accessible to the fork-lift. Regular lanes are maintained throughout the yards in which the fork-lift can travel and efficiently handle timber from transport to pile, or pile to mine truck.

Since conversion was completed last summer a marked improvement in supply and material handling efficiency has been noted.

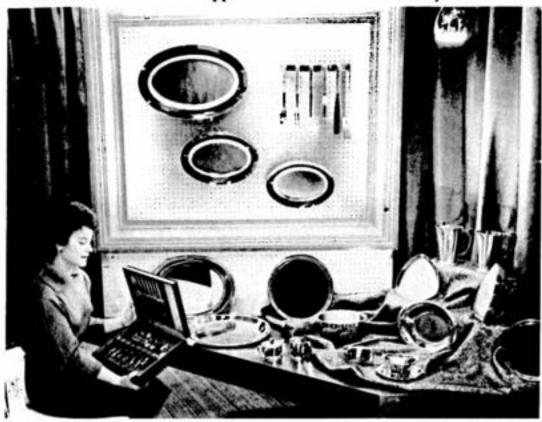
Timber and other material is shipped to the mines by flatcar, (Continued on Page 13)





Loading square-set timber onto mine trucks is easy for the fork-lift in this view at Levack. In piling the timber openings are left for the forks of the truck. In the picture on the right a tractor float of cement in pallets is being unloaded at Garson to be taken directly underground.

Nickel Stainless Steel Appointments Have Rich Satiny Gleam



There is a steadily growing demand these days for household appliances, quality serving pieces and flat-ware, and many other appointments of gracious living, made of gleaming nickel stainless steel. Much interest is being shown in the current exhibit of a wide variety of these smartly designed products in the Inco window in the Lobiaw building, Sudbury. The pert young lady posing in a section of the attractive display in the above picture is Mary McCauley, comptometer operator in the general offices at Copper Cliff; her father, Jack McCauley, was a Garson miner for 25 years before retiring in 1956 on an Inco disability pension, and now resides in Toronto.

John Kennedy Left a Good Record



While his wife looks on, pleased and proud, John Kennedy receives a gift from Bert Charron (left) and Vital Aubry, presented on behalf of his workmates at the Copper Cliff mill who wish him a long and happy retirement.

Recalling that he started work-

ing on a farm for \$5 a month, then

jumped to the fabulous wage of

\$1.80 a day driving team in the old roast yard at Victoria Mine in

1912, John Kennedy said, however,

that good fortune really came after

he hired on at the Copper Cliff

mill. That was in 1931. In the preceding years he worked for the

nickel industry on several occa-

ratif.

sions but never stayed for long.

Retired now on service pension John is catching up on some of his sleep and generally taking things easy.

From bushwork and railroad construction John Kennedy came to the Coniston smelter in 1915. He went west for the harvest in 1916, then returned and hired on at the old Copper Cliff smelter. From there the Murray mine was his next stop on the way to Espanola, where he worked from 1921 until the mill closed.

During construction of the Copper Refinery he worked for Fraser Brace, then decided to settle down with Inco and get a job at the Copper Cliff mill in 1931. He was a flotation boss there for many years. "Jim Parlee was the best man I ever worked for, anywhere," John volunteered.

Born at Eganville in 1894, he married Jenny Gareau in 1924. Of their family, Earl works at Creighton, and William at Palconbridge; Evelyn-Rae is married to Len Hirvela of Murray mine and Margaret is Mrs. J. Casey of Montreal. To date they have two grandchildren.

Residents of the Gatchell for 23 ears, the Kennedys have a comfortable home complete with large garden, and a wide circle of good friends.

A HARMLESS HOBBY

"My family thinks there's some-thing wrong with me," a young woman complained to the psycho-analyst, "simply because I like buckwheat cakes."

"But there's nothing wrong about liking buckwheat cakes," the doctor I like them murmured, puzzled. myself."

Oh do you?" the woman was You must come up delighted. some day. I have seven trunks full."

Inco Continues **Program Aiding Higher Education**

Ten postgraduate fellowships have been awarded to Canadian students by the International Nickel Company as part of its \$2,860,000 five-year program to aid higher education in Canada it was announced recently.

Recipients of fellowships which have been renewed are Charles E. nave been renewed are Charles E. Beaulieu, Amqui Quebec, attending Laval University; Alfio Corsini, Hamilton, Ontario, attending McMaster University; K. G. Davis, Vancouver, B.C., attending Uni-versity of British Columbia; Ray Vance Computer States and Columbia; Columbia; Ray Laakso, Timmins, Ont., attending Queen's University, and John M. Patterson, Winnipeg, Man., attend-ing University of Manitoba.

New fellowships this year were awarded to: E. P. Jones, Trail, B.C., attending University of British Columbia; F. P. Gagnon, Quebec, Que, attending University of Mont-real; V. S. Papezik, Montreal, Que. attending McGill University; James H. P. Watson, Toronto, attending University of Toronto, and Leonard P. Sampson, West Vancouver, B.C., attending University of Alberta.

The ten students are completing advanced studies in a wide range of subjects, including metallurgy, analytical chemistry, geology, physics, mathematics and educational administration.

Inco's contribution to the field of postgraduate studies, the fellowships have a maximum tenure of three years, will provide an annual stipend of \$2,000 and include an annual supporting grant of \$500 to the university. Since the program was inaugurated in 1951, 37 fellow-

ships have been awarded. Inco's overall educational program has two major phases. The first is concerned with the distribution of approximately \$2,000,000 in unrestricted grants to 146 Canadian universities and liberal arts colleges over a five-year period ending in 1960-61 for use in strengthening and expanding their educational programs.

The second phase covers a fiveyear commitment of approximately 860,000 for scholarships, fellowships and special projects.

In addition to the fellowships, 115 four-year scholarships have been established since 1956 for outstanding graduates of high schools and preparatory schools. Twenty-five new scholarships are awarded annually and of that total 18 are reserved for studies in the fields of geology, geophysics, mining, metallurgy, engineering, mathematics and physics. The remaining seven awards are reserved for children of Company employees, and permit free choice of field of study.

Inco also sponsors grants which enable high school teachers of science to take advanced or supple-mentary studies. Some 800 teachers have taken part in special courses since 1956, with Inco providing grants totalling \$120,000.

To be one's self and unafraid whether right or wrong, is more admirable than the easy cowardice of surrender to conformity. -Gerald Johnson

INCO FAMILY ALBUM



PORT COLBORNE: Bob Beattie of the engineering department with his wife and their three attractive children, June, 3, Bob, 4, and Ann, 18 months.



COPPER CLIFF: George Walli has worked on the converters for almost 25 years, and four of his five sons are Inco men. Here are Mr. and Mrs. Walli, who live at Azilda, with Lillian, 12, George (Copper Cliff control lab.), Vilho (Creighton mill), Arvo (Levack mine), Seimi, and Einas (Copper Cliff research lab.).



GENERAL OFFICE: Charlie Nicholson of the accounting department and his wife Helen, daughter of well-known Inco pensioner Rube Cook, with Brian, 5, Nancy, 2%, and Ian, 8 months. They live in Lively.



FROOD-STOBIE MINE: Mr. and Mrs. Raymond Bertrand with Michael, 2, Denise (Mrs. Arthur Frappier), Lorraine, 11, Robert, 9, and Liette, 13. An Inco man since 1951, Raymond is a chute blaster at Stoble. The family lives on Lakeshore Drive in Guilletville.



MURRAY MINE: Al Stevens is a raise driller who commutes from Guilletville. He and his wife look pretty proud of Kim, 7, and Jill, 3 — and why not?



CREIGHTON MINE: Mr. and Mrs. Gerald Wagner with the daughter Bonnie, 10. Gerald is a diamond drill boss, and has been with the Company since 1952.

CONISTON: Mr. and Mrs. Joe Barnes and their happy children, Colleen, 5, and Chris, 7. Joe is a member of the warehouse staff.



Congratulations and Best Wishes to These 48 Nickel Refinery Men who will be Welcomed into Membership in the Inco Quarter Century Club at the Annual Banquet of the Port Colborne Branch on November 12.



Page 6





Den Chishelm

Eimer Beints

Fred Campbell



Bryesten

If Habel















Fred









Harry













delmirre.







Herb Root

Fred Maars

Joe Sathmary

Lloyd Schooley

Stan Shymansky

Vir simpson

Erwin Wallace

Jack Wegrich

Phillip

Alex Winn



Min



Bill Cobb

John Herman



























Layton



Bearss



























Wolves Look Great in New **Pro Company**

"The best thing that ever happened to hockey in eastern Canada" is Murph Chamberlain's emphatic opinion of the new Eastern

Professional Hockey League. "The calibre of hockey is quite a bit better than the old NOHA," the Sudbury Wolves' coach said, "and in a year or two it will be even more so."

How is it better? Chamberlain was quick to answer that one. "It's faster, most of these players are smarter, and the goaltending well practically all these goalies are potentially NHL. You've just got to be better in this league."

Put together last summer with the blessing of the NHL, the new league, in addition to the Wolves, has entries from Montreal, Three Rivers, Hull-Ottawa, Kingston and the Soo. Each team has an affiliation with some NHL club which means that young players on the way up, and some just past the peak. will be made available to EPHL clubs.

Montreal Canadiens sponsor Montreal Royals and Hull-Ottawa Canadiens, New York Rangers have Three Rivers Lions in their family, Boston took Kingston Frontenacs under its wing. Chicago Black Hawks are the parent club of the Soo Thunderbirds and both Detroit and Toronto are brood hens for Sudbury.

To date from the Toronto system the Wolves have received such players as McNamara, Boyer, Ubriaco and Sleaver, while Detroit has provided McCarthy, Chevrefils, Burton, Odro ob-Hendrikson, Burton, Odrowski, Healy and Boisvert. Some ob-servers feel that the parent club's recall rights may deprive the local club of a top flight player just when he is most needed, but Murph Chamberlain pointed out that replacements would be forthcoming if this should happen and furthermore if the Wolves them-

selves should become injury-riddled | they could expect the necessary temporary help from their affilistes to bring them up to strength. This could mean good juniors, who are allowed five games without a pro contract. Young Jim Pappin was a case in point: he played three games for the Wolves at the start of the season before joining Mariboroughs.

"Next year," said Murph, "we'll be getting quite a few over-age

A trie of home-grown stars who are hitting a lively clip with Sudbury Wolves in the new pro league are Cummy Burton of Sudbury, Moe Bartoli of Coniston, and Johnny Sleaver of Copper Cliff.

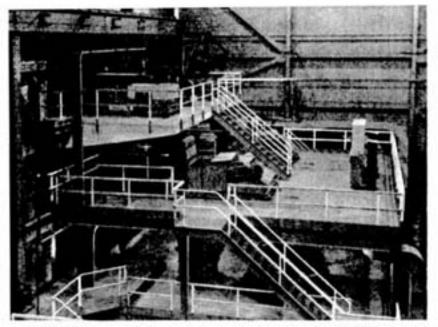
The Wolves' new goalie, Gerry McNamara, who got away to a great start with a shutout over Three Rivers, is shown here with the team trainer, Gary Fletcher, and coach Murph Chamberlain.



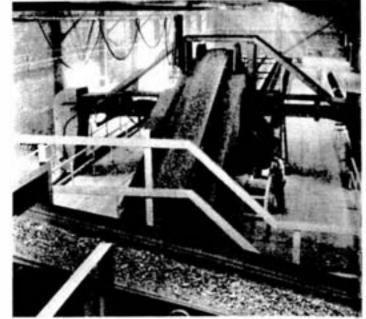


INCO TRIANGLE





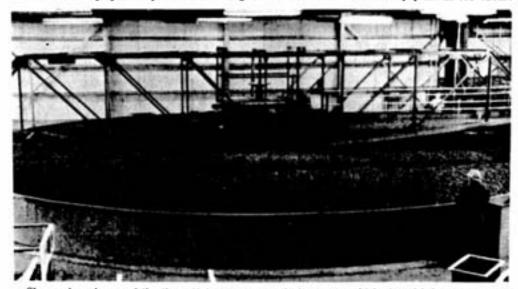
The compact unit pictured here is the crushing section of the new Levack mill, 'where the ore from the mine rockhouse is reduced to minus-%-inch size. One of the two 7-foot Symons short head crushers is partly visible in the lower right corner. Above it, on the rod deck screen floor, is the control panel.



The crushed ore is transferred to the fine ore bins. In the foregroup the belts bringing the ore from the crushing section. In the centre of is the tripper which travels back and forth distributing the ore from main conveyor belt through the four long slot openings above the big



Remote and automatic control has been accomplished to a high degree in the new Levack mill. Here's the elaborate panel for recording and controlling what goes on in the grinding section, from mill feed to pulp density. An alarm is given when trouble occurs at any point in the circuit.



Shown above is one of the three 60-foot Dorr tray thickeners in which the nickel concentrate is dewatered after flotation. A rotating rake slowly moves the thickened material to a discharge in the centre of the tray, at which point it is 18 feet deep. The copper concentrate is also thickened.

New Levack Mill Fea Of Automatic and Re

Latest addition to the Inco ore milling plants is the 6,000-ton Levack mill which commenced production on June 1.

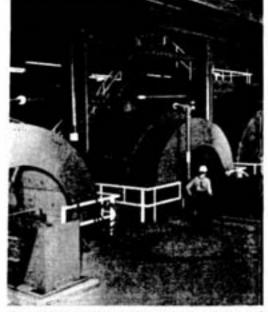
Experience gained from the Copper Cliff and Creighton mills, operating since 1930 and 1951 respectively, proved of great value in designing the Levack mill.

The smoothly integrated new plant is featured by extensive use of instruments for centralized or automatic control of the process from the time the mine ore is delivered to the crusher bin.

Its foundations set into the rock of the hillside behind the surface plant of Levack mine's No. 2 shaft, the mill runs slightly under 500 feet in length widest, and at high. It is of r tion with a ti terior, and co yards of coner Crushed ore

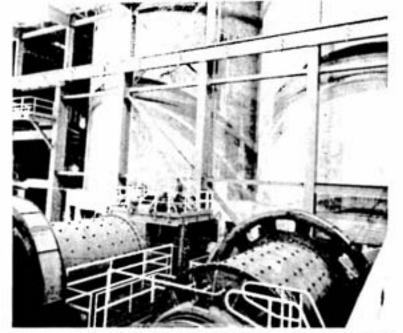
THE FR

"The New I best seen from picture gives : Inco operation larged by the : mill and sand mine shafts. shipped to Cop ton smellers.



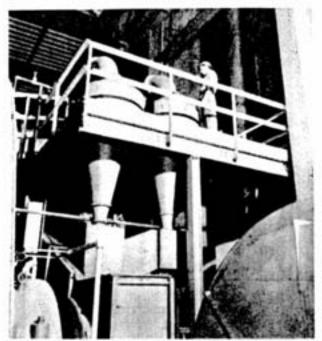
These five Dorr vacuum filters, four on nickel and concentrates. The nickel filters are larger, 16 feet approximately 800 tons in a 24-hour period. The automatically controlled.





md is one of f the picture the 370-foot

The concrete silo-type bins are 50 feet in diameter and 58 feet high. Here they tower above two of the four grinding mills in which the ore is pulverized in preparation for flotation. The man on the platform looks pretty small. Two of the mills contain rods and two contain balls.



Discharge from the grinding mills is put into cone classiflers (above) under pressure, and the resulting centrifugal action within the cone separates the coarser and finer materials, the former returning to the mills.

atured by Extensive Use anote Control Devices

 is 231 feet at its ione point is 100 feet steel frame constructile and transite exoutains 25,000 cubic refe.

from the mine rock-

RONT COVER

Look at Levack" is s the air. Our cover a good view of the us. now greatly eniddition of the new I plant built at the Concentrates are uper Cliff and Conishouse enters the mill on three 36-inch conveyor belts leading to a concrete silo-type coarse ore bin with a live capacity of 3,000 tons.

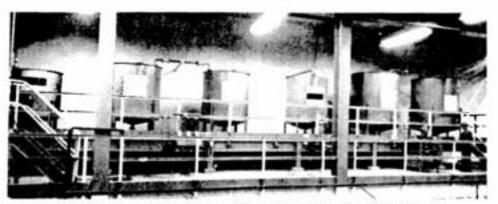
Drawn from the coarse ore bin on two parallel conveyors, the ore is fed to the mill's compact crushing section, which is equipped with two 7-foot heavy duty Symons short head crushers.

After crushing the ore is conveyed to three concrete silo bins, each 50 feet in diameter and 58 feet high, with a total live capacity of 16,000 tons.

En route to the bins the ore passes over a screen for the removal of wood chips, only installa-(Continued on Page 12)



As at Copper Cliff, the mill's flotation section, partly shown here, produces a nickel concentrate and a copper concentrate. There are 50 Denver and 50 Fagergren cells in the rougher-scavenger circuit and 40 Denver cells as separators, cleaners, and recleaners.



From these six tanks, centrally located on a deck above the mechanical office and warehouse, the reagents are piped in minutely controlled quantities to the flotation cells to perform their metallurgical magic in the separation of the nickel and copper ore particles.



one on copper, complete the job of dewatering the long and 14 feet in diameter, and can each handle lensity and level of the pulp feed in the filter are

Great Strides Made in New Nickel Town

Official opening of the first school at Thompson in time for the commencement of the fall term pointed up the very substantial progress that has been made in establishing this brand new community alongside Inco's huge nickel project in northern Manitoba.

Development of the town continues to be pressed forward with all possible speed, both by the Company, which is furnishing the complete basic municipal facilities at a cost of \$8,500,000, and by private interests which are investing in the residential, business and industrial sections.

Optimism and enthusiasm are at a high level among the town's first residents, who take an almost personal pride in each new sign of progress. In the southern part of the province Thompson is rapidly becoming almost as well known for its community spirit as for its importance as the site of the world's second largest nickel plant.

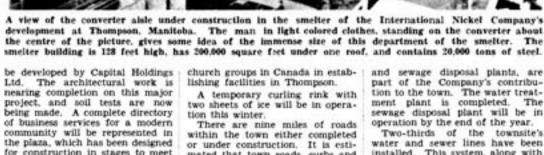
Some 250 houses have now been built or are under construction. Ten duplexes and 10 seven-suite apartments are also underway.

The handsome new Canadian National Railways station is almost completed, as is the freight shed. The hotel to be known as the Thompson Inn will be opened early in November. Initially it has 38 rooms with accommodation for a total of 64 guests, as well as an attractive lobby, large dining room, lunch counter and lounges.

The Hudson's Bay Co. will make the excavation this winter for a two-storey extension to its present large retail store, which has been in operation since last spring.

Foundation walls are being built for the movie 700-seat theatre which will also include eight bowling alleys and a billiard room. The theatre is being built by a subsidiary of Famous Players.

Foundations will be started this



Three banks, Toronto-Dominion, Montreal and Royal, are at present operating from temporary quarters. and have made plans to establish permanent offices in the town.

the needs of the town as it ex-

pands.

church groups in Canada in estab-lishing facilities in Thompson.

A temporary curling rink with two sheets of ice will be in operation this winter.

There are nine miles of roads within the town either completed or under construction. It is estimated that town roads, curbs and sidewalks will cost Inco \$980,000. A start was made on sidewalk construction before the cold weather set in.

It is expected that the stainless steel curtain walls of the town administration building will be and sewage disposal plants, are part of the Company's contribution to the town. The water treatment plant is completed. The sewage disposal plant will be in operation by the end of the year.

Two-thirds of the townsite's water and sewer lines have been installed. This system, along with other utilities other utilities, has been designed with future demands in mind.

Midwest Diamond Drilling Co. have an impressive office, warehouse and shop building. The Monarch Lumber Co.'s office and warehouse is almost completed, and a good start has been made on a similar establishment for Beaver Lumber. The steel has been erected for the Cochrane-Dunlop Hardware warehouse.

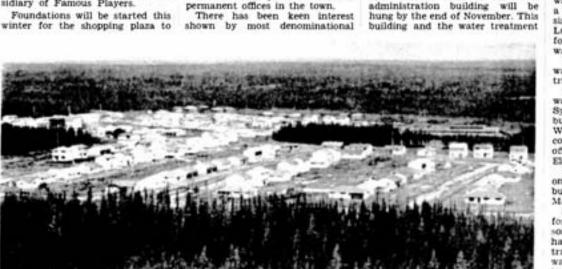
Five oil companies have opened warehouses in the town's industrial section.

The steel is up and the brick walls of the Manitoba Telephone System's permanent exchange building are under construction. Work is also well along on the combined garage, warehouse and office of the Manitoba Hydro-Electric Board.

Excellent progress has been made on installation of the power distribution system in the town for the Manitoba Power Commission.

Forty miles of the right-of-way for a highway south from Thompson has been cleared, and work has commenced on the first contract for the grading of this highway, to connect with provincial trunk highway No. 10. It is exyears Thompson will be connected by road to southern Manitoba.

About 14 miles from Thompson



Part of the development that has already taken place at the new townsite of Thompson is shown in this aerial photograph. The majority of the 250 houses so far built or under construction have been financed by leans guaranteed under the National Housing Act. First of the town's four schools, opened in September, appears at upper right in the picture.

the highway will pass near Paint Lake and Ospwagan Lake, well-known in the area for fishing, beaches, and scenic beauty. Hunting is also said to be particularly good in this territory. Fifty-three miles to the south-

cast of Thompson, construction of the Manitoba Hydro-Electric Board's Kelsey generating station on the Nelson River is proceeding right on schedule. First power from this mighty plant will be delivered to Inco next May. Capa-city of the station will be 210,000 horsepower from five units, with provision for expansion. Power will be transmitted from

Kelsey to Thompson on a double circuit transmission line mounted on steel towers. The station will be operated by remote control from Thompson, although a duplicate control system will permit operation at the site.

The power station is named after Henry Kelsey, the first white man to explore the northern section of Manitoba, who travelled the area in the years 1690-1692.

In addition to its importance in substantially increasing the free world's supply of nickel, Inco's Thompson project is considered of special significance to Manitoba and to Canada in opening up a great new frontier.

The influence of the Inco project will undoubtedly be felt in the years to come throughout the 150,-000 square miles of northern Manitoba which up to now has been aimost entirely without industrial production.

The increased population and establishment of local government in the Thompson area, the availability of ample power from Kelsey. and the natural resources to be developed are a few of the im-mediate advantages that might attract other industries.

It is thought likely, too, that many who have passed through Thompson, or have taken part in its construction, will be inspired by the opportunities for industrial development that exist in northern Manitoba, and convey their ideas to those who can make them realities.

In the meantime fast-growing Thompson is keeping its date with destiny.

Steve Chorney

"When we came to Coniston 35 years ago it was nearly all bush here." Steve Chorney recalled, re-

ferring to Dubreuil street where he

"I started working in February, 1924, and we have lived here ever since." Retired now on early ser-

since." Retired now on early ser-vice pension Steve is enjoying his

Raised on a farm in Austria where he was born in 1898, Steve

new life of leisure.

now has a fine remodelled home.

worked at farming for 10 years in Manitoba after coming to Canada in 1914. A brother-in-law brought him to Coniston where he started working on the bins, then spent several years in the smelter before going out to the slag dump where he was a pot dumper for 25 years. 'It was sometimes hot, sometimes pretty cold, but I like it," said Steve.

In 1923 Steve married Mary Pakaluk and they have one daugh-ter Olga whose husband. Julian Kulson, works at Stobie. They have a small farm at Verner and Steve spends a good deal of time there helping out with chores and enjoying his three grandchildren.

A little gardening at home, keeping his wood cut, visiting old cronies and taking life easy makes for pleasant retirement days for this long-time Coniston employee and resident.

Tact is the unsaid part of what you think; its opposite, the unthought part which you say.

THE DIAGNOSIS

Samuel F. B. Morse, who was an eminent painter before he in-vented telegraphy, once asked a physician to look at his painting of a man in death agony

"Well," Morse inquired after the doctor had scutinized it carefully. "what is your opinion?" "Malaria," said the doctor.

George Holmes at Pit from the Start

Pundit of the Pit, raconteur extraordinary and mine engineer par excellence. George Holmes has retired from the mine engineering department on a well-earned service pension.

An integral part of the Open Pit operation since first ground-breaking back in 1937. George has played a major role in its large scale production. As mine engineer there for 20 years and more he estimates that over 100,000,000 tons of ore and rock have been removed under his planning.

Small of stature but not of mind, and gifted with quiet good nature and a puckish sense of humor. George has always been popular with his workmates, as well as holding their respect.

Born in Michigan in 1894, he graduated from Houghton School of Mines in 1916. After a wide swing through mining camps in Michigan. Quebec, Colorado and Ontario he returned home in 1918.

George and Mrs. Holmes

His Ontario sojourn was a 10month stint at Garson, which was a half-day \$5 trip from Sudbury by hired livery rig in those times, George recalled.

For the next several years he worked at the Mesabi and Cuyuna iron ranges in Michigan and as chief engineer at the latter had, at one time, eight mines and pits under his charge. It was here he gained much of his early open pit mining know-how.

Later he set up as a consulting engineer but chose a bad time to start - 1928.

That same year he returned to Ontario and joined the Inco mine engineering staff at Copper Cliff. Harold Keast was in charge of the department then. After almost 10 years there, the latter part spent in plotting and planning the future Frood-Stoble open pits, he went out to the scene of operations and with a gang of men started clearing the site. From then until his re-tirement this year George was addicted to two things, his pipe and the Pit, and was never very far from either. Of late years he took Lawson Quarry under his wing and gave that operation the benefit of

his long engineering experience. It was at Duluth in 1919 that a certain charming Miss Oladys Holmes consented to become Mrs. George Holmes. Their two daughters are Beth, wife of Levack per-sonnel officer Bob Wotton, and Frances, Mrs. B. Drulak of Trenton. Their four grandchildren are all boys.

With a new home on Gilman Avenue to remodel and repair, George has been rather busy the past few months though never too busy to reminisce for a couple of hours, given the opportunity and right company.

A contented man is George Holmes who in retirement has a host of friends and countless happy memories.

WHERE IS HE NOW?

We're still worried about the reporter who wrote: "The deceased was the father of five sons. Four of them are respected citizens of Vancouver and the fifth lives in Ontario."

Part of the equipment installed to date in the machine shop at Thompson includes the three lathes shown above. The 28-inch lathe in the fore-ground has a tracer attachment for following a template in repetitive machining operations. Among the other installations in the machine shop will be a 48-inch lathe, a large boring mill, wheel press. 8-foot radial drill, 72-inch shaper, and various saws. The plate, welding and blacksmith shop, the electrical shop, and the carpenter shop will also have the most modern eminment available. have the most modern equipment available.



Steve and Mrs. Chorney



to 64 beds, and will have separate operating rooms and maternity ward. Until the hospital is completed Dr. Blain Johnston and a staff of three

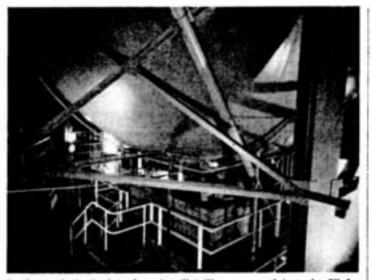
female and four male nurses are providing medical services from

INCO TRIANGLE

temporary locations.



Here is another view showing the close integration of the new 6,000-ton Inco mill at Levack with the mine surface plant. Ore from the No. 2 shaft rockhouse is conveyed directly into the mill's crushing section. Mill tailings are piped 1,500 feet to a sand plant (right) located at No. 1 shaft, where they are used to make sand fill which is sent by pipeline directly into the mine. Rejected slimes from the sand plant are thickened in the two 100-foot Dorr tray thickeners seen in the picture, and are piped to a disposal area.



In the sand plant where Levack mill tailings are used to make fill for use in the mine, there are two of these storage tanks, 70 feet high, to ensure an adequate supply of sand fill ahead of the mine requirements. The fill is drawn off from the bottom of the tanks through 6-inch valves, and is piped directly down No. 1 shaft into the mine.

Levack Mill

(Continued from Page 9) tion of its type in Inco mills.

Ore can be drawn from the fine ore bins through a total of 90 openings in the bottoms of the bins with a roll feeder in each opening to control the rate of feed to the grinding units.

There are two grinding units, each consisting of a 15-foot rod mill, a 14-foot ball mill, and two cone classifiers of which one is a spare. Mill discharge is whirled around inside the cone classifier, and the centrifugal action forces the coarser material to the outside where it spirals down to the bottom outlet and returns to the mills for further grinding. The finer material is drawn to the centre and overflows at the top of the cone, ready for the flotation process.

A nickel concentrate and a copper concentrate are produced by selective flotation, this section having 90 Denver cells and 60 Fagergren flotation cells.

Water is withdrawn from the two concentrates in a battery of Dorr thickeners and fliters before they are loaded into railroad cars for shipment to the smelters at Copper Cliff and Coniston. Mill tailings are pumped to the sand plant 1,500 feet distant, for

sand plant 1,500 feet distant, for the production of sand fill for the mine. Primary and secondary cones and centrifuges are used in this section to recover a maximum amount of the plus-800-mesh material from the tailings for fill. The minus-800-mesh slimes are dewatered in two 100-foot Dorr thickeners and pumped to the tailing disposal area.

The mill is brightly lighted and attractively decorated. Color codes were followed in painting process lines and safety installations.

In designing the plant, full advantage was taken of the most recent developments in the field of instrumentation to equip the mill for centralized control and, where feasible, automatic control of the process.

Automatic and remote control of the operations begins in the crushing section. The crushing process is controlled from a central panel on the Rod-deck screen floor. The ore hoisted in No. 2 shaft is conveyed to the mill crushing plant and distributed in the coarse ore bin by an automatically operated two-way distributor. The stopping of the distributor, or a high level of ore in the bin, sounds an alarm on the control panel and gives a visual indication of the trouble.

The crushers, crusher oil pumps, screens, feed conveyors, and variable speed ore feeders are all operated and controlled from the central panel, lights indicating what equipment is in service.

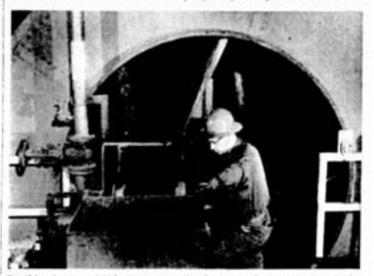
An indicating and recording weightometer on the panel shows the crushing section throughput. Oil temperature recorders are provided for the crushers, and high temperatures or low oil pressures sound an alarm and give a visual indication of the condition.

At the chip screen a blockage of the ore chute automatically shuts down the section and gives a signal at the panel showing the trouble.

In the grinding circuit an imposing central panel located between the two grinding units controls the whole operation. All ore feeders, feeder conveyors, conveyors, grinding mills, and mill oil



Six classifying cones are used in the production of sand fill from Levack mill tailings, and shown above is the cluster of valves controlling the cones. The gauge registers the pressure in the manifold.



In this closeup nickel concentrate is shown as it leaves one of the vacuum filters, dewatered and ready for shipment to either Copper Cliff or Coniston smelter. Thirty or more railroad cars of nickel and copper concentrates are shipped each working day from the new Levack mill.

pumps are operated from the panel, on which lights represent the equipment in use.

Weightometers automatically record and control the rate of feed to the grinding units. Water additions to the rod mills are controlled from the panel, and the rate of flow is shown by water meters.

The density of the classifier overflow is measured by radio-active isotopes and indicated on a recording instrument which in turn controls the density by regulating the water additions to the classifier.

Kilowatt-hour meters indicate the horsepower being drawn by each grinding mill. The amount of mill lubricating oil in the head tank and storage tank is shown on oil level guages. The level of water in the return water sump is indicated on a recorder which in turn automatically maintains the level by controlling the fresh water additions to the sump.

An alarm system, both audible and visual, is activated by failure of the oil or water pressures and by high temperatures in the mill bearings.

In the flotation section and central operating panel provides for a measure of control over the weighted in the process. The In the flotation section also a variables in the process. The temperature of the circuit is recorded and maintained by automatic adjustment of the steam supply.

The density of the pulp in the copper circuit is measured by radio-active isotopes and indicated on a recorder which controls it by adjusting the fresh water additions. Copper circuit alkalinity is measured at two points and controlled by automatic lime additions.

In the dewatering section the operation of the thickeners and filters is all automatically controlled through recording instru-ments on a central panel at the filter floor.

Bubbler tubes using air and metered water provide a measure of the thickener underflow densities and the level of pulp in the filters, which are regulated by automatic valves worked by the recording instruments on the panel.

The underflow pumps and filtrate water pumps are remotely operated from the panel.

An alarm system with both visual and audible signals indicates thickener overloads and rake stoppages, filter conveyor stoppages, and high level in the underflow pump sumps and filtrate sumps.

Albert Sabourin

A member of the electrical department line gang for almost 35 years, Albert Sabourin is now enjoying a comfortable service pension.

Except for his final year, when he was at Copper Cliff as leader on No. 1 line truck, he worked at Coniston.

Born at Potsdam, New York, in 1896, Albert followed a familiar job cycle of farm, bush, mine and farm again before settling at Coniston in 1922. His family farmed at St. Charles for many years as did Albert himself. He married Leda Barbe there in 1918.

He was employed at Crean Hill and Creighton mines before starting at Coniston in 1922. A correspondence course in practical elecJim Byrne Rolls Terrific Triple in Lively Bowling Loop



One for the record books of the Lively bowling league was the resounding triple of 999 rolled by Jim Byrne in a regular league match on the Creighton Employees Club alleys. Jim posted scores of 220, 333, and 346 in his outstanding performance. Picture shows him about to let fly with another strike. His admiring Lively league bowling pais in the background are: back row, Donna Levesque, Pris Spriggs, Shirley Nevala, Terry Glynn, Evelyn Mineault, Audrey Hickey, Mary Ryan, Emma Byrne, and Lois Lealo; second row, Walter Marcolini, Marjorie Marcolini, Bob Spriggs, Gino Mel, Eddy Nevala, Stella Timeriski, Mary Flynn, and Walter Laalo; front row, Ken Glynn, Joe Hickey, Roger Mineault, Alex Timeriski, Dennis Cunningham. Another sparkling score rolled recently in the Lively loop was an 827 triple by Rita McCualg

tricity helped him a great deal in his work, Albert said.

The Sabourins have one daughter Helen, wife of Jim Paradis of Coniston, and a son Laurier who



Mr. and Mrs. Sabourin

is a representative for a sewing machine company.

A camp on Lake Ramsey, bought many years ago, has been converted by the Sabourins into a fine permanent home complete with garden. However, with civilization slowly closing in on him there, Albert took protective measures and bought a summer camp on the French River which gives him the fishing and privacy he wants.

A member of the Coniston school board for 25 years, Albert has always taken an interest in com-munity affairs. In good health, he is thoroughly enjoying his retirement.

Here Are Answers To Hunting Questions

The fall hunting season usually brings requests for clarification of some of the regulations to district offices of the Ontario Department of Lands and Forests. Here are answers to some of the most common questions:

Do you require a gun licence as well as a moose licence to hunt moose?

Although the one dollar No. licence is commonly called the gun licence, it is truly a hunting licence. It is your privilege to hunt migratory birds and upland game birds, rabbits, groundhogs, bear, fox and wolf under this licence but it does not permit the hunting of caribou, moose, deer (elk) or any fur-bearing animal. Specific licences are required to hunt these species.

Can I carry a shotgun and a low-powered rifle at the same time to hunt partridge?

Yes, if you are in possession of the one dollar hunting licence, Under the Game and Fisheries Act, there are no restrictions on the number of firearms that you may carry, but such is not the case under the Migratory Birds Convention Act. While hunting a migratory game bird, no person shall have with him for his own use more than one shotgun and not larger than No. 10 gauge.

Can I carry a high-powered rifle on my resident hunting licence?

Yes — except during the open season for deer and moose, at which time you are not allowed to carry a rifle of greater calibre than the .22 calibre low-powered rifle or a shotgun with shells loaded with ball or shot larger than No. 2 shot, unless in possession of a deer or moose licence.

Do I have to have my shotgun plugged if I do not intend to hunt migratory birds?

All shotguns must be Yes. plugged or altered so that they are incapable of holding more than three shells at one time in the chamber and magazine.

More people should learn to tell their dollars where to go instead of asking them where they went. -Roger Babson.

Fork Lift Trucks (Continued from Page 3)

boxcar, truck and truck float. In some cases it is shipped in convenient pallet form, that is "pack-aged" in either half or full mine truckloads, depending the on. length of the material. Other loads have spaces left at set intervals so the fork-lift may simply pick up a lift and place it on either truck or In boxcar unloading much of nile. the timber has to be piled by hand in pallets in the doorway for the

fork-lift to remove. Standard equipment for timber handling is a set of forks. Each truck is also equipped with a 1yard slip-on bucket for handling material such as sand and gravel, and also a 4-yard snow and sawdust slip-on bucket.

Snow removal, long time bug-bear of all mine timber yards, has been reduced to minimum of inconvenience and delay by these machines. A quick run down each track with the big bucket after a snow storm and traffic is soon moving.

The Pettibone Carry-Lift has four-wheel drive, four-wheel power steering, with five working and five road speeds, and is driven by a six-cylinder gasoline engine. Tires are large — 14 x 20 in 12-ply tractor tread.

The machine weighs approximately 10 tons and is capable of lifting up to five tons. The fork can be extended and retracted four feet at any height. It can also be tipped down 80° and up 27° from ground level and be raised to a height of just under 14 feet. At that elevation the fork reaches well over nine feet from front tires.

Should the machine get bogged down in soft ground it can literally push itself out of the hole, using the fork as a jack.



Like a movie marquee this big banner in Levack mine's lamp room tantalizingly advertises a new safety film. Pondering what K.N.E. can mean are Herve Desloges, Bob Zola and Clarence McHugh, who learned the truth of those letters and the significance of the yellow flag when they saw the movie.

Mysterious Letters Are Key To Impressive Safety Concept

K. N. E.

These three mysterious letters, appearing on banners and bulletin boards on surface and underground at Levack mine, quickly aroused a wave of curiosity.

The men at Levack now know the meaning of the letters K. N. E., and the significance of the latest safety symbol, the yellow flag. They have been shown a motion picture that graphically establishes a new concept in safety.

concept in safety. The show is to be screened for all Inco mines and plants in turn. Prood-Stoble is at present flying the yellow flag as the film is being shown on the various levels of that mine. Murray is next on the list. Concerning the movie safety superintendent A. E. O'Brien is as enthusiastic as any Hollywood producer. "The United States Steel Corporation produced the picture after a great deal of research, and they have done a wonderful job," he said. "In my opinion it is the most outstanding picture ever made on safety. I certainly hope others of this calibre will be produced."

"Movies are an excellent method of teaching safety," he continued, "since they can so readily depict potentially dangerous situations. This latest picture is by far the most interesting and colorful we have ever shown and really points up the slogan that we stress, 'the time to be careful is NOW."

Projectionist for the 38 separate screenings of the film at Levack was Copper Cliff first aid man Walter Lalonde, who had almost 1,600 "customers." The film was shown on all levels for all shifts, so everyone got a chance to see it.

Wolves Look

faces from last year, Sambo Bettio and Norm Guimond. But the rest are no strangers to local fans, or at least many of them aren't. In addition to Bettio, who played with Buffalo before joining the Wolves last year and was with Boston in 1950-51, other local products include Cummy Burton, a Detroit Red Wing in-and-outer for the past couple of years; John Sleaver, product of the Quebec Hockey League who had a season with Chicago in 1956-57; Moe Bartoli, Coniston's gift to the Wolves who was with the Louisville Rebels last year, and the latest addition, goalle Gerry McNamara, one of the Toronto Leafs' hottest prospects. He had a shutout in his first game with the Wolves at Three Rivers.

Other team members include ex-National Leaguers Real Chevrefils and Tom McCarthy, plus highscoring Keke Mortson and Al Cleary, hustling Gene Ubriaco, Wally Boyer, Canny Gerry Odrowski, Ernie Roche, Jack Hendrickson and Rickie Healey.

"Tve always wanted to come back to Sudbury to coach," said Chamberlain, "I like it here and I want to give the people of Sudbury a good club. I think we can do it too — with their support of course."

Chamberlain is well remembered as a standout on that famous Frood Tiger Allen cup team of 1937. He went directly to the big time then, and spent 12 seasons in the NHL. A real rugged player himself, he is past master at that type of hockey. He started his coaching career at Vancouver in 1949.

Interviewed while a full three points ahead in first place. Murph was not giving any season-end predictions. "The Wolves will be in there" was his only comment.

"All those other clubs are tough in their own way," he said. "You take the Royals, they've got three of the best centres in the whole league; they can hurt you. The Soo are developing plenty of power too, in fact they're all tough when you're playing them."

The new league has evidently caught the fancy of Sudbury's hockey loving fans, who are averaging well over 4,000 for Wolves' home games. Booster ticket sales have been good and it appears that if the Wolves continue to play smart hockey, the fans will be with them all the way.

Sandy Butler

Retired from the crushing plant at Copper Cliff with over 35 years' service, Sandy Butler recalled that his first association with the nickel industry was back in 1900. He was



two years old and his family had just moved from Ottawa to Victoria Mine where his father worked until 1913.

After serving in World War I with the RCE, Sandy travelled

the province over for several years, then got a job at O'Donnell roast yard in 1924 for what he intended to be a month or so. He transferred to the new crushing plant in 1930 and stayed.

Sandy has lived in Copper Cliff for 30 years. He married Bernadette Hamilton there in 1929. Their family include an adopted son, Don McNabb of Copper Cliff, Redvers of the Copper Refinery, Robert of Sudbury, and Gayle and Ricky at home. Six active grandchildren complete the happy roster.

In fine health Sandy is planning on getting a small business to operate, something that won't tie him down too much, since he has every intention of enjoying his pension.

NOT UNDERSTOOD

"Some husbands are wonderful. Take George — been married 20 years and still romantic. If his wife heard about it she'd break his neck."



No popcorn, but plenty of interest, in this movie audience. Almost half a mile underground, in Levack's 2350 level refuge station, the Inco safety department's latest promotion, a fine safety film in full colour, is being shown to a group of miners. Holding down front row seats are Emile Lefebvre, Delphis Joanette, Emile Lavigne, Paul St. Jean, Tom Bell, Barney Forest on the left, Art Brohart, Bill Whelan, Alme Giroux, John Levesque, Albert Klussman and Nestor Leroux on the right, and many others in the background. Projectionist is Walter Lalonde.

Andy Ballantyne

Retired from the converters at Copper Cliff smelter with better than 29 years of credited service, popular Andy Ballantyne recalled that John Weir, a close personal friend in Scotland, induced him to come to Canada.

That was back in 1927 and, as Andy proudly remembered it, "Ruby took her first step when we landed at Quebec on July I."

Very proud of his five daughters, of whom Ruby is the eldest, Andy has built himself a fine new home near Iron Bridge which locates him about at the hub of his family. Ruby, wife of the Copper Cliff research department's Morley Grugg, and Virginia 'Mrs. J. Hurtubise' are in Sudbury district: Beila 'Mrs. R. Cherry: lives in Elliot Lake and



Mr. and Mrs. Ballantyne

Damaris (Mrs. R. Bennett) and Agnes (Mrs. A. Collina) both live at the Soo. There are ten grandchildren. Mrs. Ballantyne was Sarah Anderson until she married Andy in 1926.

After a couple of pretty lean years at farming in Quebec, Andy again took the advice of his mentor John Weir and came on to Copper Cliff. Starting in 1929 he worked almost all of his Inco career on the converters. For the last 10 years he was a valued member of supervision. Curling was his sport.

Born near Glasgow in 1903, Andy worked in coal mines from the time he was 13 years of age until he left for Canada. He made a trip back to Scotland in 1954 and may so again next year.

However, in a handsome new home, built with real assistance from his five sons-in-law, and with 75 acres of bush and farm to work when he gets the urge. Andy is quite content to stay put. And there's excellent hunting and fishing right in his own back yard!

Bob Brown

'Tm one of the few remaining originals of the first Canadian contingent left in Sudbury," Bob Brown said in telling of his experiences in World War I. "I spent 39 months altogether in France and was in the first gas attack there. I managed to get as far as Passchendale before being wounded." In the second world war Bob joined the RCAP and served from 1942 to 1945, mostly in Newfoundland.

In addition to being a veteran of both wars Bob is also a veteran Inco employee who retired this fall with almost 30 years of credited



The Bob Browns

Lots of Enthusiasm in Rayside 4H Potato Club



The best crops in Rayside township 4H Potato Club's annual competition were grown by Roger Trotiler, Ronald Methe, and Rejean Couture. The three young Cheimsford farmers are shown above with one of the contest judges, C. A. Young of the Inco agricultural department. Prizes for the club's achievement day are donated jointly by Inco and the provincial and federal departments of agriculture. Nineteen of the 21 members entered exhibits of potatoes. They were entertained at dinner and a theatre party by the Sudbury Rotary Club.

service. All his Inco years were spent at Frood and Stoble mines.

Born near London, England, in 1894 Bob came with his family to Canada when he was 10 and started working at a grocery store in Montreal almost immediately. At 13 he apprenticed as a plumber, later changing to automatic sprinkler maintenance.

While on leave in Wales in 1918 Bob married Margaret Watts and he returned there after his discharge. He worked in the steam plant of a colliery until coming to Canada in 1928.

Arriving in Sudbury he hired on as a pipefitter at Frood No. 3 shaft, and remained there as pipeman, powderman and fireguard until 1550. The last nine years he worked at Stoble as a steel sharpener.

The Browns have lived in the same house in the "Little Britain" section of Sudbury since their arrival. "We were the first house on the hill here," Bob said. A very fine garden sets off their comfortable home. Their son Ken is in Owen Sound, and their daughter Betty is Mrs. H. Hickey of Toronto. Seven grandchildren give Bob and Mrs. Brown a lot of pleasure, and so does relaxing, making minor repairs on his home and planning next year's trip back to the old country.

Married 57 Years



Mr. and Mrs. D. A. Chishoim of Port Arthur this year celebrated their 57th wedding anniversary. Formerly an employee at Coniston smeller, Mr. Chishoim has been an Inco pensioner since 1936. They are both 85 years of age. Their old friends and acquaintances in the Sudbury district will be pleased to learn of their good health and happiness.

Cliff Legionnaires Hold First Ladies Night in New Hall



It was the ninth annual ladies' night of Copper Cliff Branch of the Canadian Legion, but the first in their handsome new building, so it was a very special occasion indeed. Cabaret tables were set up in both the big auditorium and the cosy members' lounge downstairs, where more than 200 enjoyed dancing to Ricky Lamoureux's orchestra. In the above picture, from left to right, are Mr. and Mrs. Jack Bennett, Mr. and Mrs. Veldon Bennett, Mrs. Bob Kelly, Mr. and Mrs. Laurie Armstrong, Bob Kelly and, in the background. Alphie Pinaud. Mrs. Armstrong is president of the lafles' auxiliary of the Legion.

Lively Students Showed Keen Interest in Inco Shops



Forty-two shop students of grades 11 and 12 at Lively High School toured the Inco machine and carpenter shops at Copper Cliff and found their visit "most interesting and informative" according to their instructor, C. A. Tuttle. The occasion was in the nature of a "reunion" of the Tuttle family, since Charles Tuttle, Sr. is an Inco machinist and Richard Tuttle was present as a plant guide. In the photograph above are Stuart Young, Craig Hallbourg, Ron McDermid, Charles Tuttle, Sr., John McCleary, Gary Pidgeon, Lance Morbin (partly showing), Richard Tuttle, Bill McLean, and Charles Tuttle, Jr., industrial arts instructor at Lively.

Plaque Marks Historic Discovery Site



A scene at the unveiling of the plaque marking the nickel discovery site near Murray mine: On the left is A. E. Goring, president of the Sudbury and District Chamber of Commerce, and at the right is R. H. Waddington, assistant vice-president and general manager of the Ontario division of Inco.

Beside the Levack highway, not -far from the Murray mine headframe, a plaque has been erected by the Ontario archeological and historic sites board to commemorate the discovery of nickel in the Sudbury Basin.

Rev. J. F. McCaffrey, a member of the board and director of the Martyrs' Shrine at Midland, presented the plaque to McKim township in an unveiling ceremony which was attended by a representative gathering of 60 persons, including a group of high school students.

The inscription on the plaque reads as follows:

THE DISCOVERY OF THE SUDBURY BASIN

August, 1883, construction In crews preparing the Canadian Pacific Railway's right-of-way cut through rock near this site. blacksmith, Tom Flanagan, noting a rusty patch on the face of the excavation, dug several holes, and discovered what proved to be

nickel-copper sulphides. John Loughrin, who held a contract to cut railway ties nearby, was also attracted by the formation, and in 1884, he patented the adjoining property in conjunction with Thomas and William Murray, and Henry Abbott. This holding be-came the Murray Mine. The interest stimulated by the discovery led to the development of the world famous nickel-copper deposit of the Sudbury Basin.

Dave Nairn

For more than 15 years a familiar figure in the shops office at Copper Cliff, Dave Nairn with his bright smile and soft Scottish accent is greatly missed there. He retired last summer on disability pension. He is a veteran of both world wars.

Dave was born in Scotland in 1894. Coming to Canada to join a brother at Galt, Ontario, in 1913, he entered the service of the Bank of Commerce after working for a few months in a foundry. He enlist-ed in 1915 and served three years overseas. Severely wounded in the arm during action in France in 1918 he was discharged the following year. In 1940 he again enlisted in the Canadian Army and served with the Veterans' Guard at both Espanola and Lethbridge until 1943.

Joining the Bank of Toronto staff in 1919 Dave remained with them for many years. One of his early appointments was at Copper Cliff. 1929 he returned to the Nickel Belt to open new sub-branches of the bank in the north end of Sudbury and at Frood mine.

Before joining Inco Dave also worked for a time in the brokerage business.

An experienced and ardent gar-

dener Dave spent the past summer with the Company's agricultural department on a temporary basis, supervising various projects.



Dave Nairns in their lovely The garden at Lively

just love that work," he exclaimed. "I don't know why I didn't throw away my pen for a trowel years ago." His own fine garden in Lively attests to his skill at growing things.

In 1913 Dave married Dorothy Cooper, member of a well-known Sudbury family.

Frank Bowers

While admitting he does miss the old gang at the blast furnaces, Frank Bowers also admits he likes his new life of leisure. He has retired on an early service pension after nearly 38 years with Inco.

Born and raised in Copper Cliff where his par-



ents settled in 1888 Frank first worked for the Company back in 1911. "A. P. Turner was president then," he said. Starting work in the old roast yard back of no. 2 mine

he moved to O'Donnell when roasting was transferred to the new beds there. He went west for the harvest in 1917, then returned to Copper Cliff and joined the army. Back at O'Donnell in 1919 he later moved to Copper Cliff. During the shutdown in 1921 he spent a winter in the bush and a summer on railroad construction near Cochrane.

During most of his long service in Copper Cliff smelter, Frank worked on the blast furnaces. The last several years he was on matte transfer.

An ardent fisherman, Frank has just bought a new boat and trailer and with this hooked to the back of his car the whole northland is his oyster. "I like to travel and try new fishing spots," he said. He once landed an 11-pound pickerel and aims to better that record now that he has the time to concentrate on it.

A bachelor, Frank resides with his brother Jack (also an Inco pensioner) and two sisters in the old family home on Balsam street where the Bowers have lived for upwards of 50 years.