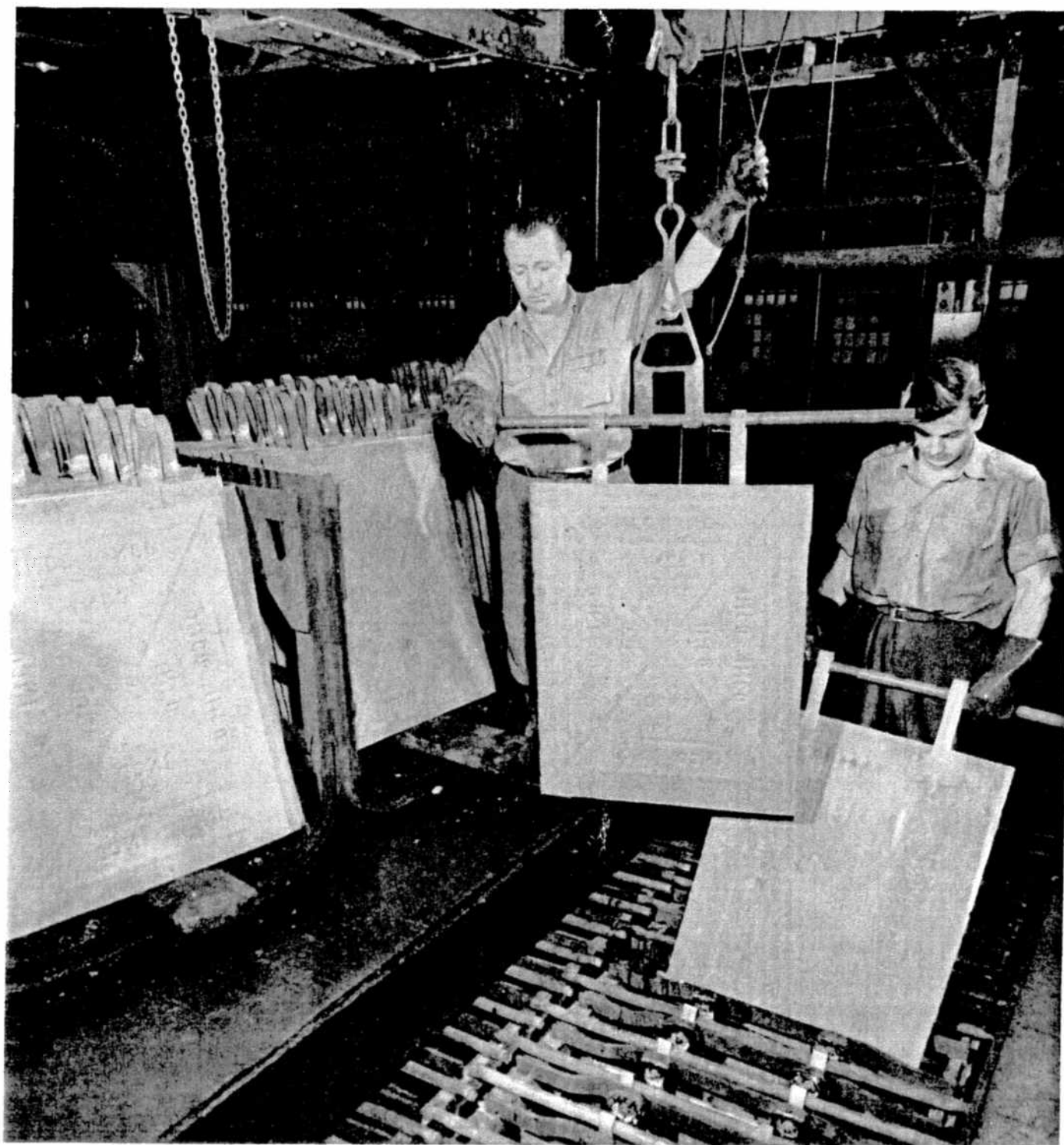


INCO TRIANGLE

VOLUME 18

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NUMBER 9



Harvesting the Nickel Crop

(Story on Page 14)



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Electrorefining Process Chosen For Thompson

Underground development and construction of surface and town facilities are proceeding on schedule at the great Manitoba development which bears his name, John F. Thompson, chairman of the board of Inco, reported in his annual address to the Company's shareholders at Toronto on April 29.

"Favorable results in the exploration of the orebodies revealed that the Thompson Mine would be capable of meeting the planned objective of the Manitoba project of 75,000,000 pounds of nickel annually," he said. "This made it advisable to postpone work at the nearby Moak Mine and concentrate on the rapid development at Thompson. The railroad grade from Thompson to Moak Mine, however, was completed, but track installation is being deferred. This right-of-way for a future railroad is being used as a truck road to service the area's exploration camp which is located at Moak Lake."

The Manitoba project, which is being financed from Company funds and without any government subsidy or government guarantee of a market, will be the world's second largest source of nickel, exceeded only by the Inco operations in the Sudbury district of Ontario, the chairman stated.

"In the 29 months since active development work has been under way, the Company has expended in excess of \$60,000,000 on this project and, in addition, it has advanced \$20,000,000 to The Manitoba Hydro-Electric Board to assist in financing the development of power facilities in the area," Dr. Thompson continued. "Expenditures by the Company for the Manitoba project for the balance of the year are estimated at over \$30,000,000."

Use Electrolytic Process

"It has now been decided to construct an electrolytic nickel refinery at Thompson with a capacity of up to 75,000,000 pounds of nickel per year, the initially scheduled capacity of the Manitoba project. In the original program, decision on the process to be used was deferred until completion of experimental studies. These studies have led us to the decision that electrorefining would be the most suitable and economical procedure. In making arrangements for electric power, the Company included refining in its estimated requirements from the Kelsey hydro-electric plant being built by The Manitoba Hydro-Electric Board on the Nelson River 53 miles from Thompson."

A Spring Ceremonial Rite of Great Social Significance



This scene was more or less typical of the important ceremonial rite that took place in countless homes in the Nickel Belt as fishermen fondly checked their gear in anticipation of the opening of the speckled trout season on May 1. "Bet you the cokes I catch the first one," says Terry O'Brien, proud of the new rod and reel he got for his 14th birthday from his parents, Mr. and Mrs. Basil O'Brien, Copper Cliff. "That'll be the day! was the sisterly scoff from Drinda, 12. In addition to hunting their favorite local pools Terry and his dad will make at least one pilgrimage again this year to Shoo-fly Lake to match wits with the wily denizens of those famous waters.

The refining process to be employed was developed by research scientists and engineers of the Company, the chairman said. Its suitability had been demonstrated by commercial operation since December, 1956, in a section of the Company's nickel refinery at Port Colborne, Ontario. A main feature of the process is the direct electrolysis of nickel matte, which eliminates high-temperature oxidation and reduction operations. Nickel sulphide of low copper content from Bessemer converters will be cast directly into sulphide anodes and electrolyzed for the production of high-quality nickel.

Long-Range Importance

Dr. Thompson declared: "I cannot emphasize too strongly the long-range importance of the Manitoba project to the Company and to the nickel industry in general. Consumers of nickel must be assured of plentiful supplies in the years ahead if the full market potential of the metal is to be realized. Nickel production capacity must be capable of meeting surges in demand that will arise

during the anticipated upward trend in nickel consumption. The prompt completion of our Manitoba project, which will increase the Company's total annual nickel production capacity to 385,000,000 pounds beginning in 1961, will contribute greatly to the attainment of this goal. But we set no ceiling on the demand that can be created for nickel and we must do whatever is necessary to assure that future supplies will always be more than adequate. As a consequence, we are actively continuing our exploration in Canada and throughout the world for still further sources of nickel."

Natural Gas as Fuel

"Earlier this month we started using natural gas instead of oil as a fuel in the multi-hearth concentrate roasters in the Copper Cliff smelter," the chairman announced. "This is the first step in the substitution of natural gas for oil in a number of the Company's metallurgical operations at Copper Cliff, and is an example of the economies and improvements we are constantly effecting. Long-term

studies of the potential use of natural gas in these operations resulted in arrangements making provision for delivery to us of up to 10,000,000 cubic feet per day of this fuel now made available by the recently completed pipeline from western Canada."

Market Development

The Company's market development efforts in the field of nickel uses were further intensified in 1958, Dr. Thompson stated. Assured nickel supplies made it possible to place greater emphasis on the commercial development of past research achievements and to shorten the time between laboratory findings and their use in market expansion.

"Steps were also taken toward substantially increasing research, both for basic knowledge in our field and for specific technical developments, designed to protect and expand existing markets or develop new ones," he said.

"We continued to sponsor projects in outside laboratories to supplement our own work and to

(Continued on Page 6)



Another of the Nickel Refinery's top 10-pin bowlers, Andy Vasko, is shown here with his wife, daughter Kim, 4, and son Jeff, 2. They live in Port Colborne.



Mr. and Mrs. Oscar Bigras of Sudbury with Liette, 9, Denise, 7, Monique, 6, Carol, 5, Ronald, 12, and Bob, 11. Oscar has worked at Stobie mine since 1947.

INCO FAMILY ALBUM



Mr. and Mrs. Al Leclair, Sudbury, with Jean-Gilles, 10, Andre, 3, Shirley, 14, Gaetan, 7 months, Monique 5 and Paulette 8. Al is a stope leader at Garson mine, where he has worked since 1947.

Mr. and Mrs. Hector Gervais, Coniston, with Robert, 14, and Guy, 10. Hector is a maintenance mechanic at Coniston smelter.



Walter Hirnyj of the nickel reverbs at Copper Cliff smelter with his wife and Patricia, 4, Johnny, 19 months. They live in Sudbury. Mrs. Hirnyj is a daughter of Pete Maychos of Frood mine, who recently retired on pension.



Mr. and Mrs. Bob Spriggs, Lively, with Barbara, 3, Dyann, 9, Coleen, 6, and Sheila, 7 months. Bob works in the office at the Iron Ore Plant.



Here's assistant safety engineer Lyall McGinn, Creighton mine, with his wife and Gloria, 5, Ken, 4, and Dianne, 7. They live in Lively.



Public Demanded Second Performance of Carnival



Three of the Indian characters who appeared in the Medley of Nations pageant at the Sudbury Skating Club's 8th annual ice carnival were David Carscallen, centre, Darlene Pearce on the left and Sharon Williamson on the right. In costumes representing Italy the three pretty misses in the picture on the right lent colour and sparkle to their number. They are Peggy Lynn Brunton, Carol Gerbase, and Meeka Littlejohn. Scores of youngsters took part in the brilliantly produced show.

Presenting their 8th annual ice carnival the Sudbury Skating Club again outdrew the Arena's capacity and a repeat show played to a full house again the following week. From pint size to professionals the acts were good, with the little people as usual almost stealing the show with their cute costumes and uninhibited ways.

Theme this year was a Medley of Nations, with interesting numbers staged for each gaily costumed group. There were Irish, French, Dutch, Chinese, Italian and Indian men and maidens, to name a few, plus an assortment of hunters, purple people eaters, spacemen and others. Professionals and senior soloists contributed much to the show with their fine talent.

One of the biggest jobs according to Mrs. Walter Paul, for many years an ardent worker and booster at the club, was making the costumes. There was more pattern cutting and sewing going on than at a royal wedding, she said. Many a poor Dad wore undarned socks for weeks while plaids, cottons and calicos were basted and stitched by Mom. It was generally agreed that the results were worth the effort though, an opinion which was obviously shared by thousands of the general public.

Arthur Simon

Retired now on service pension from Froid, Art Simon is wondering how he'll ever get around to visit the widely scattered members of his family: Dell is stationed in France with the RCAF, Edith (Mrs.



Art and Mrs. Simon

C. Powers) lives in the state of Washington, Clement is with the RCMP at Montreal, and Robert is attending Ohio State University. A grand homecoming reunion looks to be about the best solution, which would probably be especially okay with the five grandchildren.

Starting with Mond at Levack in 1923 Art and his brother Oscar were kept on for a time to drive drifts during the mine shutdown following the fire in 1929. They transferred to Froid in 1933.

At Froid Art worked in the stopes, then became a fill raise tender, working for many years with another well-known Froid pensioner, Bob Cook. Art also saw service as a fireguard, and spent the last seven years as a pumpman.

"A good company to work for —

they always treated me first class," was his observation about Inco.

They Won Coveted Shift Curling Tankard



Winners of the "Little Briar," annual shift curling classic at the Copper Cliff rink, here receive their trophy from Andy Ballantyne. From the left they are George Curry, Steve Pinkos, Howard Fletcher, and skip Billy Young. They received nifty little radios as individual prizes.

He liked the men he worked with and enjoyed the jokes they played — on him he still laughs over the time they tied his pipe to the tail of a live mouse and turned it loose.

Arthur's family moved from Cartier to a farm near Larchwood the year he was born, 1894. He married Exilda Menard at Chelmsford in 1919.

A couple of years ago Art built a smart, modern new home opposite the public library in Sudbury and when the Triangle called was finishing up some interior painting. "This is just for something to do," Art said. "I sure miss that old gang at Froid, they're a good bunch of fellows."

Steve Sywy

Retired now from the smelter at Copper Cliff on service pension Steve Sywy readily admits that he enjoyed his work there. "I like to work," said Steve "and blast furnace a good place." While Steve is now enjoying his leisure he is also planning on getting a part-time job this summer.

Steve started with the Company back in 1935 at Froid and the following year transferred to the smelter. He worked on the stripping floor, was tapper helper and for the last few years a conveyorman on the electric furnaces. Before joining Inco he had worked out west at farming, railroading and on the trans-Canada highway since coming to Canada in 1926.



Mr. and Mrs. Sywy

Born on a farm in the Ukraine in 1894 he married Nellie Rapowy there in 1924. They have one daughter Mary (Mrs. M. Stenchow) of Toronto, and three grandchildren.

Steve hasn't been back to the old country since coming here and has no intention of going now. Gardening and a part-time job will keep him busy, and with good health he is looking forward to a pleasant retirement.



Marcel Lecompte shows his citation and medal to Nick Duda (right), the man whose life he saved, and Walter Porges (left), pillar leader who was working on the same level and helped get the injured man to surface.

Honor Young Inco Miner Who Saved Partner's Life at Levack

A young Inco miner who risked death to rescue his partner from a stope blast has received the Medal for Bravery of the Canadian Institute of Mining and Metallurgy.

Twenty-year-old Marcel Lecompte was the hero of the dramatic incident which took place on the 1300 level of the International Nickel Company's Levack mine just before midnight of January 31, 1958.

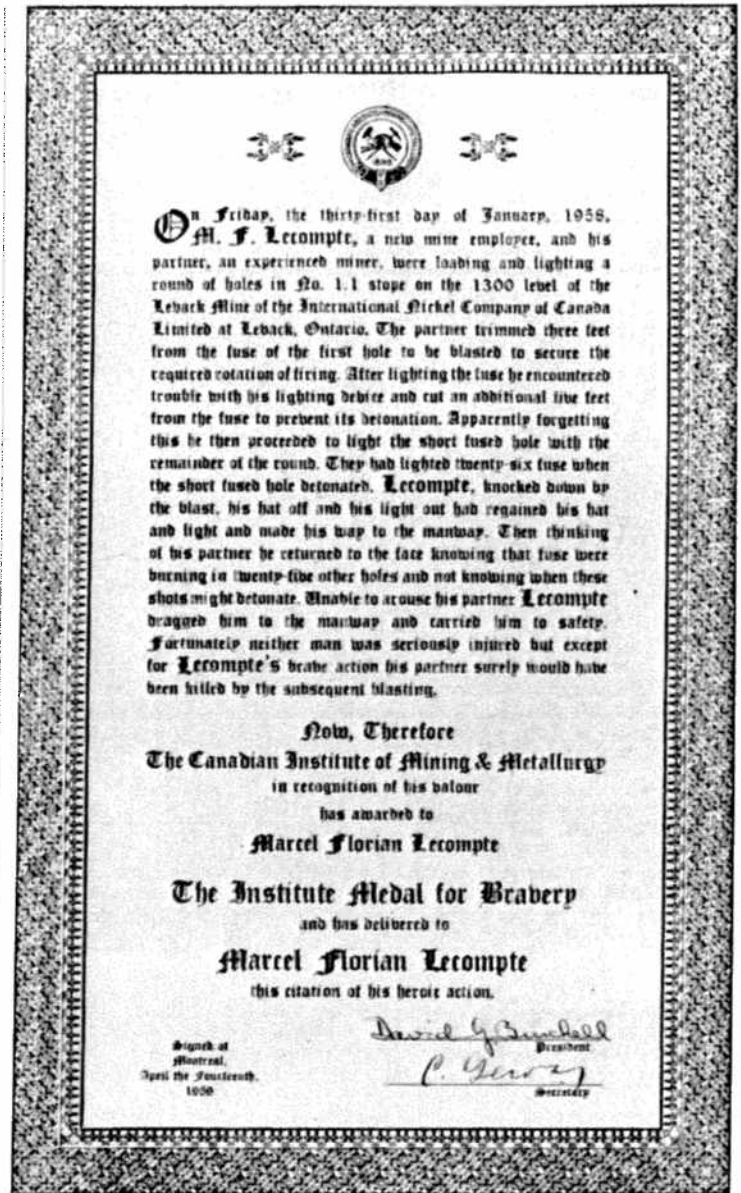
One shot of the blast had fired, knocking Nick Duda unconscious, and the fuses were burning in the

other 25 holes of the round. Lecompte was staggered by the blast. About to escape by the manway he realized his partner was injured and went back to get him, then dragged him 20 feet to the manway and took him down 14 feet of ladders to safety on the gangway seconds before the blast went off.

At the recent annual dinner of the CIMM in Montreal's Queen Elizabeth Hotel, a distinguished audience of more than 1500 Canadian mining men stood in tribute while a citation of his brave act



The scene at the annual dinner of the Canadian Institute of Mining and Metallurgy in Montreal as Dr. H. J. Fraser, the institute's past president, reads the citation before presenting the Medal for Bravery to Marcel Lecompte. On Mr. Fraser's left is R. E. Stavert, president of the Consolidated Mining and Smelting Co. Ltd., and on his right Hon. Alvin G. Hamilton, federal minister of northern affairs and natural resources, and Dr. J. C. Sproule, president-elect of the CIMM.



A photo copy of the citation setting forth the details of Marcel Lecompte's valorous deed.

was read. He was then presented with the medal.

A handsome unassuming young fellow, Marcel Lecompte spoke modestly of what happened that night in the mine. "I really didn't think much about the danger. I knew the shots were going to go but I had to get Nick out. I realize now that I would never have been able to live with myself if I hadn't gone back for him."

Marcel has since been transferred from Levack to Creighton no. 3 shaft. He is ambitious to become a welder and will start a course of instruction in Sudbury soon. He is not married. His brother Ron works at Levack mine.

The Medal for Bravery was instituted by the late E. A. Collins, assistant to the vice-president of Inco. He read the citation at Toronto in 1944 when the award was presented to Valmore Belanger of Garson mine for an act of heroism under circumstances remarkably similar to those at Levack on January 31, and in his remarks on that impressive occasion he said in part:

"In the fairly long history of this medal it has never been awarded except in cases where the workman risked his life to aid a fellow workman, and acted in the full knowledge of the existing danger. In other words it is not awarded for foolhardiness but only for calm, cool, thoughtful, deliberate courage in the face of known danger.

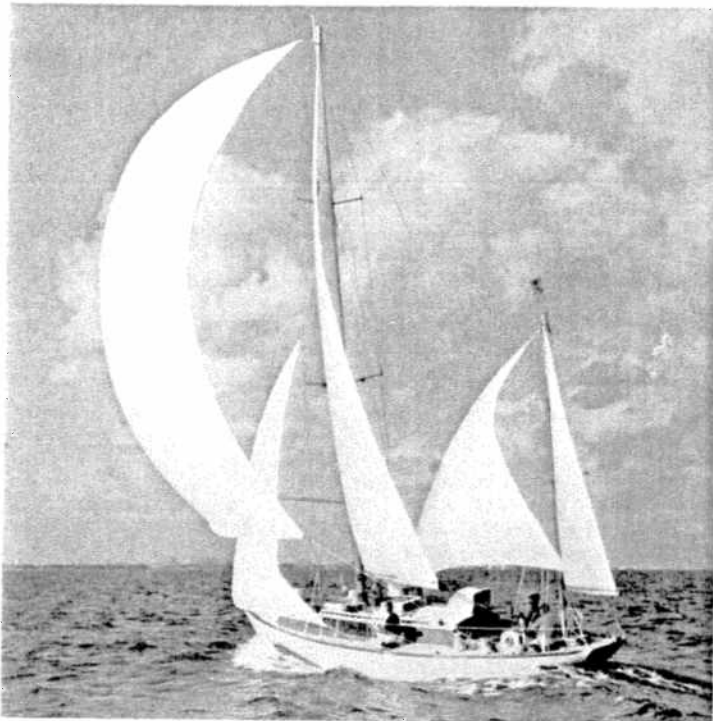
"The mining industry is proud to have such men . . . as employees. By their brave acts they have placed the industry on a pedestal of achievement to which few other industries can attain.

"All honor to these men who by their brave deeds raise the common level of life to a higher, more exalted plane, and who teach you and me that there is something more in life than thought of self."

Nickel Silver Springs

Springs made of nickel silver, an alloy of nickel, copper and zinc, are used in telephone relay equipment because they maintain their properties for many years and can be used in damp locations and corrosive atmospheres.

Again Triumphant in Bermuda Race



A sight of breathtaking beauty is the 38-foot yawl *Finisterre*. Superbly designed, lovingly built and masterfully handled, she has won for owner Carlton Mitchell his unprecedented second victory in the 635-mile Bermuda Race. She has that "something extra" that astounds even the experts. *Finisterre* is equipped with fuel and water tanks of monel nickel-copper alloy, a monel alloy shaft, main mast step, and centre board pin. Mr. Mitchell says, "Monel alloy parts have never given me any trouble, and I'm sure they have been part of *Finisterre's* continuing success."

Electrorefining

(Continued from Page 2)

co-operate closely with steel producers and other nickel consumers in development of new and improved nickel-containing products. The Company, along with other metal mining companies, participated in the support of sponsored research on uses of cobalt, selenium and tellurium, by-products of its Canadian operations. During 1958 it also joined with other major North American copper producers in initial steps leading to the development of a program to broaden and increase the market for copper. This supplements the work which has been carried on for many years by the Copper Development Association in Great Britain, of which our United Kingdom affiliate, The Mond Nickel Company, Limited, has been a member since its inception."

"Common Market"

Dr. Thompson referred in his address to the European "Common Market" (European Economic Community), which began to operate on January 1, 1959, when a treaty became effective through which France, West Germany, Italy, Belgium, the Netherlands and Luxembourg agreed to abolish all internal customs barriers within the next 14 years, and to permit the free flow of labor and capital which, together with equalization of industrial conditions, wages, etc., will tend to build the six nations into an industrial and perhaps, in time, a political unit.

"As a result of this treaty," the

chairman said, "there have been many significant developments in these countries. That these will have a profound effect both on the size and the geographical distribution of the nickel market on the Continent is certain. There has also been an accelerated movement by many companies, chiefly



Frood Carpenter Shop Boys Wish Ed the Best

Presenting Ed Belfrey with a handsome watch upon his retirement on pension from the Frood carpenter shop, foreman Eli Simon expressed the feelings of all when he wished Ed the best of health and happiness for many years to come.

Ed started with the Company at the Copper Refinery in 1934. He worked for several years in the Open Pit steel shop before going to Frood. He was born in Victoria Harbor and took to the lake boats as a young man. Later he worked at the paper mill in Espanola and

played a rugged game of hockey with the local team.

Ed was married in 1920 to Gladys Fox, who died early this year. Their family of five are Sister Lucille of Sudbury and Sister Magala of North Bay, both teachers; Bill of the Iron Ore Plant, John of Sudbury, and Eddie, in the Canadian army.

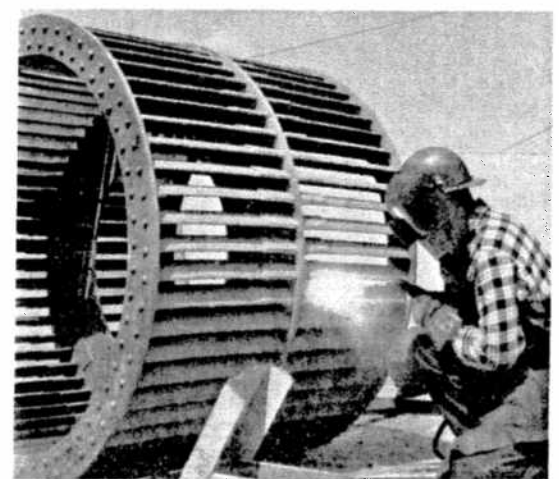
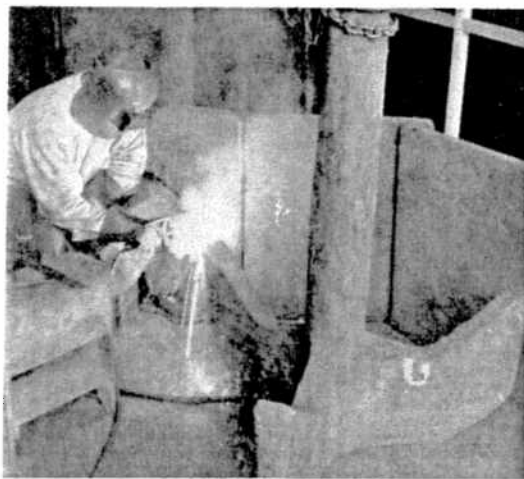
Except for a visit to his sister on the Pacific coast this summer Ed has no plans for the future except to stick close to home and cheerfully enjoy the privileges of retirement.

from the United States, to establish branches and factories inside the area, or to combine with established European companies so as to obtain the advantage of operating within the framework of the Community.

"We have no manufacturing facilities of our own within the European Economic Community, but many of the largest consumers in that area have been users of Inco's nickel for about 60 years, with all the friendly commercial relationships that this implies. Over 30 years ago we established

four Nickel Information Bureaux in this area to supply technical information concerning nickel and further the expansion of the nickel market. These Bureaux are staffed by nationals of their respective countries. They function through personal contacts and participation in the work of technical societies. Their activities are supplemented by distribution to a large and carefully selected technical audience of technical information and periodicals published in the languages of the areas in which they circulate."

New Inco Electrodes Give Abrasion Resistance to Crucial Wear Points



Ni-Hard is the famous nickel-chromium white cast iron that is used where resistance to severe abrasion is a must. Now the Inco-Hard "1" electrode has been developed for applying this powerful wear-resistance on cast irons and low alloy steels.

In the Company's continent-wide

advertising campaign to promote Inco-Hard "1", the above photographs are prominently displayed. The first shows Carmen Bray overlaying the crucial points of a chipping anchor with Inco-Hard "1" electrodes to provide an ultra-hard surface for chipping slag and other

residues off the inside of converter stacks at Coniston smelter.

Handling the torch in the other picture is Alex Nickason of the Copper Cliff shops, who is hard-surfacing the cast iron blades of a fan that handles hot gases laden with highly abrasive dust at the iron ore plant.



When it came time to parcel out the loot at the annual stag of the Copper Cliff Curling Club the other night, who should step forward to pick up the Single Rink trophy but past-president Jack Lilley, flanked by W. Mason and W. Aggiss; their fourth man, not present, was W. R. Cook, vice-skip. Another popular victory, judging by the applause, was Doug Walker's win in the new Toronto-Dominion Bank event; he's shown on the right, above, with the new trophy and two of his henchmen, Don Harry and Vince Lalonde; their lead (no doubt sent to fetch a cigar for the skip) was R. Stabback.



Only complete team on hand for the prize-giving was the winning foursome in the Inter-Rink, shown on the left above: Ron Silver (skip), Fred Cooper, J. J. Blackport, and E. Zanetta. In the other picture are Bill Allen and Bill Young, who along with Ray Forth and Steve Pinkos won the Waterbury trophy for shift curling; they had the special pleasure of receiving their prizes from Bill Waterbury himself, just back from Honolulu and looking like a million.

Curling Season Ends in Glory At Annual Stag

The curtain came down on the 1958-59 season at the Copper Cliff Curling Club at the annual meeting and banquet held at the new Legion Hall.

Despite the curtailed schedule four of the club's six regular events were completed. After prizes and awards were presented to the winners and runners-up, the officers and committees for the coming year were elected. Heading the slate was George Burns, who succeeds R. R. Saddington as president.

Vice-president is Jack Piggot, secretary-treasurer is Alvin Nickle and assistant secretary is Jake Powell.

The following men will represent the various departments on next season's general committee.

Frood, Keith Segesworth; Creighton, Norm Silverson; Mines, C. H. Stewart; mechanical, Wally Flowers; smelter, Bill Livingston; mill, Dick Sheridan; refinery, Bill Brown.

Town curlers will be represented by Fred Rinaldi, and Lively curlers by Alf Roberts. The general curlers are represented by John Quance.

Committees were named as follows:

House, Earl Stoneman, chairman; shift, Wally Johnstone, chairman; competition, Jim Rutherford, chairman, Vince Lalonde, Alex Illis, Tom Crowther; ice, Doug Gathercole, chairman, Bert McCormack, Pat Ogilvie.



Mel Luck, seen above with the microphone, was entertainment chairman of the greatly enjoyed stag party; officers of the club seated behind him are Jake Powell (assistant secretary), Alvin Nickle (secretary), George Burns (president), Bob Saddington (past president). The telecast of the final Stanley Cup match between Montreal Canadiens and Toronto Maple Leafs was followed closely, as the photographs show, and the tremendous spread of good food catered by Red Pianosi also got a very solid play.



Plate Shop Party Again a Great Success



Biggest and best yet by a goodly margin was the verdict of the 130 couples attending the annual dinner and dance given by the boys in the plate shop at Copper Cliff smelter.

Staged at Sudbury's Caruso Club, the classy affair had corsages for the ladies, hats, balloons and other merrymaking novelties, an excellent dinner and dancing to the smooth arrangements of Bert St. Onge's orchestra.

In the accompanying photo-

graphs are shown some of those enjoying the big annual get-together, at which the platerworkers and their ladies are joined by a widely representative gathering of friends.

The gents in the bottom picture, Alex McCarthy, Pat Grassi, Bob Kelly, Tony Laurich, and Reno Tessarolo, had every reason to wear big smiles — they were members of the committee that planned and staged the very successful event.

Toivo Auvinen

In a do-it-yourself world Toivo Auvinen is a standout. Not only does he turn out the finest of picnic tables and benches in his basement workshop but he even makes the planks he uses in his work. He cuts choice cedar logs, rips them with a saw and trims them with an adze into planks. His work is of such high calibre that he never has caught up with the demand.

Retired now from Frood on a pension, he is able to devote more time to his hobby or craft. Toivo admits that he comes by ability naturally, his father being a first class mason, carpenter, builder or what have you.



Toivo and Mrs. Auvinen

Born on a farm in Finland in 1904, Toivo came to Canada in 1928. Until 1936 he lived in Montreal, operating a rooming house there for many years. In 1937 he came to Frood and became one of the better pillar miners there. His last years were spent working on the level.

He married Lydia Miettinen at Montreal in 1928 and they have two sons and a daughter; Mary is in Toronto, Heikki is a barrister with a Sudbury law firm and Jackie is still at school.

Toivo has a fine camp at Armstrong Lake that he built himself. His father, on a trip to this country some years ago, made the doors and fireplace for him.

To put in the time lately Toivo has been refurbishing many of the chairs that were damaged in the Sampo Hall fire, all the while dreaming of that trip back to Finland scheduled for this summer.

Win Safety Award

Safety superintendent A. E. O'Brien announced on April 22 that Creighton mine operated 100,000 shifts without a lost-time accident in the period from January 17 to April 7.

This is the ninth time Creighton has qualified for the 100,000 Safe Shifts award since 1944. All Creighton mine personnel who worked during the period and were on the payroll at its completion will receive two theatre tickets, good for admission to any theatre in the Sudbury district.

Congratulations, Creighton! Well done!

Large Turnout Celebrated Ninth Anniversary of Garson Employees Club



Although some who had planned to go just couldn't tear themselves away from the telecast of that wild final game between the Canadiens and Black Hawks at Chicago, the Garson Employees Club welcomed a large crowd for its ninth anniversary dance. Art Gimpoli and his band dispensed smooth orchestrations, and there were special favors for the ladies. In the accompanying pictures snapped by the Triangle camera, the couple on the right are Mrs. Tom Ballantyne and Ernie Ashick, of Garson, and next to them are Mrs. Jack Piggot of Copper Cliff and Bob Brown of Creighton, saying hello to Mr. and Mrs. Ted Flanagan (backs to camera) of Garson.

Joe Desjardins

Joe Desjardins was born in Quebec in 1894 and moved to Copper Cliff when he was 6 years old, but it was not until during the second world war, some 42 years later, that he finally joined Inco. He worked as a fettler in the reverberatory department at the smelter, spending almost all of his 16 years of service on No. 2 furnace.



Mr. and Mrs. Desjardins

Previously Joe had worked for many years in saw mills and lumber camps around Espanola and North Bay, years he now wishes had been spent at Inco.

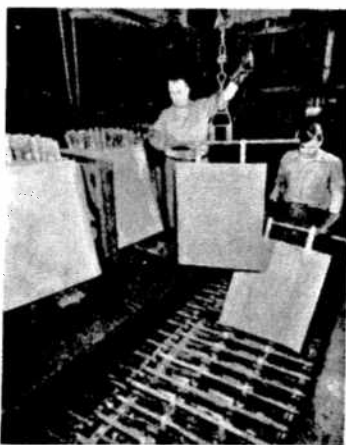
In 1916 Joe married Eva Labrique at Espanola and they are very proud of their seven children, 22 grandchildren and three great grandchildren. Their son Rene works in the sinter plant at Copper Cliff; daughters Marie (Mrs. P. Paquette) and Elsie (Mrs. O. Laferriere) are both in North Bay, and Yvonne is Mrs. E. Gauthier of Quebec; Odile married Aurel Albert of Creighton, Theresa's husband L. Quesnel is with the Sudbury city police, and Noella

is the wife of McKim township police chief Bert Guillett.

Joe is taking things easy now and looking forward to the warm summer weather. He will always have a warm place in his heart for his old friends at the smelter.

Gets Color Stability From Nickel Pigment

Nickel, which is used in making over 3,000 alloys, is now serving industry in yet another role. This



The Front Cover

Its 10-day growing period ended, a 135-lb. cathode of pure nickel is hoisted from one of the 1600 electrolytic tanks in Inco's Nickel Refinery at Port Colborne. At the same time a "starting sheet" of pure nickel is suspended in its place to continue the plating cycle. Lionel Audy and Clement Lepitre are the two bridgemen in the picture.



versatile metal, it has recently been found, contributes color stability to yellow paint pigments.

The problem of developing a yellow paint that would retain its yellowness through years of outdoor exposure had long perplexed the paint industry. Of all paints, yellow was especially susceptible to the ravages of sunlight, heat, moisture and corrosive atmospheres.

But now there's no longer need to "wonder where the yellow went". Two new nickel-containing pigments, Sun Yellow N and Sun Yellow C, have been developed to make yellow paints that retain their color even in temperatures of over 1,000 degrees F.

Besides imparting the yellow color, nickel, which is present to the extent of about three per cent, contributes to the pigment's high durability and chemical resistant qualities.

The largest market for the new nickel-base pigments is in house paints and masonry finishes. Their durability is attested to by the fact that manufacturers of cement asbestos house shingles, intent on getting a color that will last as long as the 20-year-guaranteed shingles, almost invariably specify the nickel-titanium dioxide pigments, according to Harshaw Chemical. They are also widely used to give aluminum sidings much-needed protection against sun, salt air, acids and other corrosive elements, as well as in finishes for automobiles and household appliances.



Picture Tells the Story!

This man still has the sight of both eyes! As a dramatic example of the wisdom of wearing appropriate eye protection the above picture is eloquence itself. Had Henry Bertrand not been wearing safety glasses his eyeball would have been shattered as surely as the lens shown here. Henry was hammering a mould door bale, wedge at the Copper Refinery when a splinter of steel flew up and struck his safety glasses. A new employee, having started work April 6, Henry needs no further convincing or reminding that safety equipment and regulations are designed for the good of the employees, that eye protection really means "I" protection.



Referee Denny Trudel watched in shocked disbelief as Louis Papineau, deeply aroused at the ungentlemanly tactics of Paul DeGalles, suddenly seized that very bad guy by the hair and flung him about the ring.

Stainless Steel at the Home Show



The variety of uses for stainless steel in the modern home was the theme of Inco's outstanding exhibit at this year's National Home Show in Toronto. Picture shows Phyllis and Marie DeCosmo in the kitchen of the display, where the wall refrigerator and freezer, automatic dishwasher, wall oven, and counter-top stove with built in exhaust hood, and wall tile, as well as the pots and pans, were all made of gleaming, easy-to-clean nickel-containing stainless steel. In the dining area stainless steel was featured in flatware and hollow-ware as well as in beautiful appliances such as an electric frying pan, a submersible coffee percolator, and a steam iron with stainless steel sole plate.

Science is, I believe, nothing but trained and organized common sense, differing from the

latter only as a veteran may differ from a raw recruit.—Thomas H. Huxley.

It's the Merry Month of May(hem)!

What with spring, the demerit system and income tax descending on the winter-weary wage earner in rapid succession, the return of the grunt and groan boys to the Sudbury scene may have escaped the notice of some. But not, of course, the real, rabid rasslin' fan; he (or she) is again out in force, helping the hero and villifying the villain, by fair means or foul.

Wrestling returned to the Inco club in Sudbury late in March and introduced yet another temper taunting, eye gouging villain. Reputedly one time French heavy-weight champion, strutting strong-man Paul DeGalles, complete with wavy blond tresses and fancy trimmed jacket, appeared on the scene and caused a minor uprising. His treatment of newcomer Bob Paree in the opener, and popular Louis Papineau the following week, made the fans forget their woes and turn their wrath full blast on DeGalles.

The ramp from ring to dressing room became, for DeGalles, a sort of no-man's-land with snipers on both sides. Only an instinctive knowledge of just when valor should defer to discretion has so far saved him from a fate worse than many of his countrymen suffered during the revolution.

This season could be tough on villains in more ways than one. That bugbear of villains everywhere, constituted authority, has decreed that lawlessness shall cease and right and justice again prevail. The Ontario Athletic Commission has issued an order to wrestling referees: enforce the rules, be strict but fair, or lose your license.

The axe quickly fell on one well known mayhem arbitrator, when

North Bay's beefy Joe Dempsey having his license revoked. This was a popular decision with many fans but apparently did little to squelch the ebullient Joe. Like all good wrestlers he bounced right back, this time as a manager. His protege is the "Mask", a hooded behemoth whom Joe claims is unbeatable. His first appearance was a rather unimpressive win over newcomer Dennis Pella in the opener.

Pella is a local product hailing from Gatchell. This was his first appearance in Sudbury and promoter Kasaboski, who has high hopes for his future, plans on developing him around the circuit. 'Tis said that it's harder to be a hero in your own home town than elsewhere, so young Pella will have the chance to prove his metal elsewhere first.

With some of the southern wrestling circuits winding up their winter schedules local fans can look forward to a more varied diet of headliners. Such favourites as Don "One Man Gang" Evans, the mad Montreale Maurice Vachon, the midgets and others will be featured.

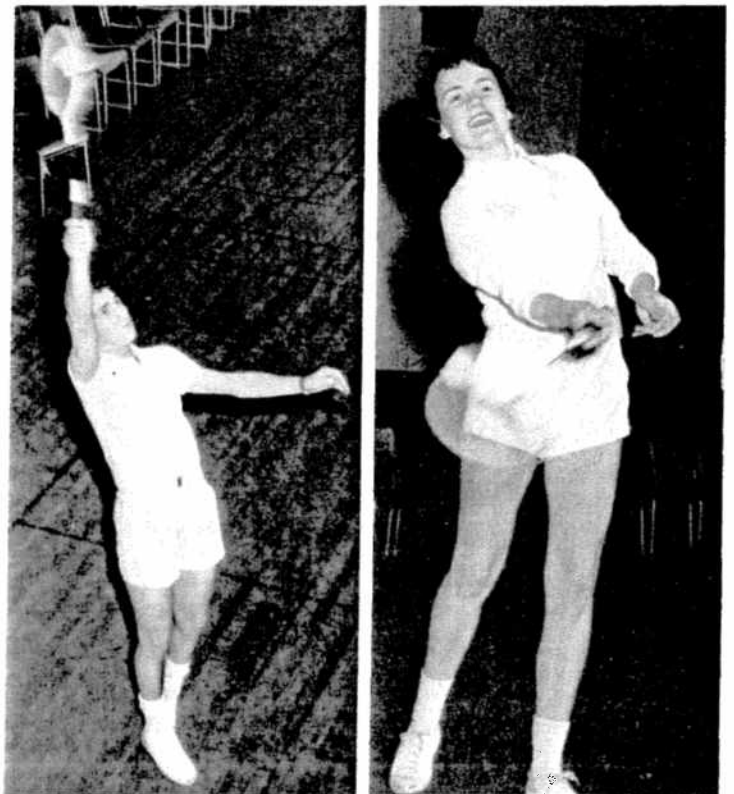
Club steward Vern Tupling anticipates a good wrestling season with exciting cards scheduled each Monday night at the Inco Employee Club.

For those who like their pleasure at the boiling point this is for you, and while the old Greco-Roman gladiators may well roll over in their graves, it still is a really good show.

Hard to Melt

It takes a temperature of over 4,400 degrees Fahrenheit to melt the precious metal ruthenium.

Creighton Club Produces the Champions



Following the trail blazed by Eddie Hreljac, now one of Canada's top players, two more graduates of the Staples badminton school at Creighton Employees Club were in the sports spotlight in April. Inco geological department's Wally Saffie staged a major upset by beating Tom Stefanko, also of Creighton, for the Nickel Belt men's championship, and pretty Marie Barbe took the ladies' singles title for the third year in a row. The tournament was held at the Inco Club in Sudbury. Pictures show the two young stars in action on their home courts.

Ladies' Curling Club Holds Prize-Giving in New Legion Hall at Copper Cliff



The first banquet to be staged in the beautiful new Canadian Legion Hall at Copper Cliff was the annual season's windup party of the Copper Cliff ladies' curling club, and a rousingly successful affair it was, too. The president, Mrs. Irene Kuzmaski, presided over the presentation of trophies and individual prizes. In the picture on the left, above, the victors in the Canadian Legion event, Mrs. Eileen McAndrew (skip), Mrs. Peggy Dimmock, Mrs. Monita Roy and Mrs. Winnie Parry, receive their trophy from the Legion president, Dick Dopson. On the right Mrs. Betty Kerr is presenting the Robert Brown trophy to Mrs. Grace Howe, Mrs. Marian Rumney, Mrs. Maureen Wilson, and Mrs. Lynn Forster.

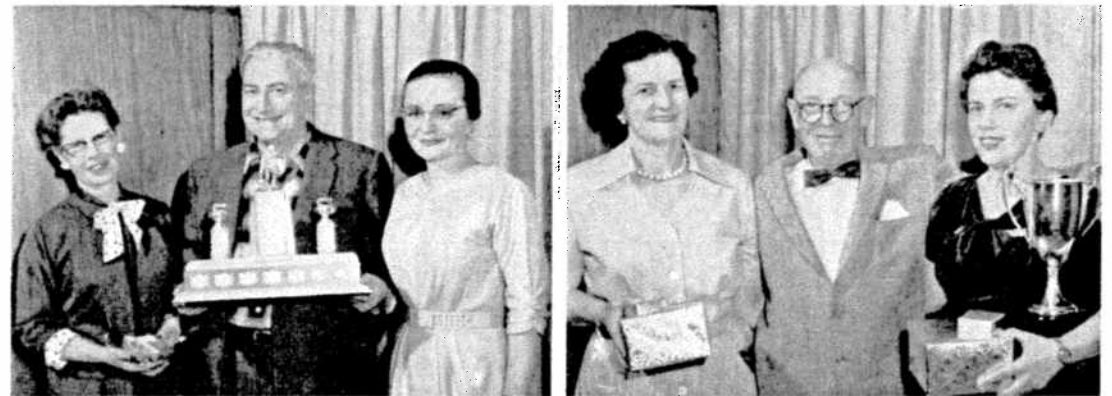
Liked the Slag Dump Best of His Jobs

Since taking a disability pension last summer John Kontturi is much improved in health, the additional rest having done him a world of good. He had worked for the company at Copper Cliff since 1923.

Born in 1899 on a farm in Finland John came to Canada alone in 1923. After a few weeks with an extra gang near Cobalt he came



Mr. and Mrs. Kontturi



In the group on the left Mrs. Edith Harkins (skip) and Mrs. Cal Koropatnik receive the Copper Cliff Jewellers trophy from Doug Walker; absent members of the winning rink were Mrs. Jerry Pappin and Mrs. Julie Illis. On the right Mrs. Ev Hostrawser (skip) and Mrs. Peggy Dimmock with the Will Jessup trophy and its handsome donor; other members of the winning rink were Mrs. Jerry Pappin and Mrs. Dorothy Foster.

looking for a friend at Copper Cliff. His friend had left but he found another in Inco, where a good job was given him almost immediately.

John recalls starting on the old ball mill, located where the coal plant now stands. He went to the sand bins from there, spending 24 years on that job. His final 10 years were divided equally between



Here Bill Darrach presents the Darrach trophy to Mrs. Bea Forsyth, Mrs. Irene Kuzmaski, and Mrs. Aura Moland; the other member of their team was Mrs. Dorothy Foster. On the executive of the ladies' curling club for next year are Mrs. Lynn Forster, president, Mrs. Jean Wright, vice-president; Mrs. Marian Rumney, secretary; Mrs. Merle Allen, treasurer.



Business Girls' Curling Champs Get Trophy

Another highly successful curling group from the distaff side, the Inco Business Girls' Curling Club, completed their first season with a dinner at the Copper Cliff Club. Skip of the championship rink, Eleanor Love, is seen above receiving the club trophy from R. R. Saddington in the absence of the donor, T. M. Gaetz; other members of her rink, left to right, were Ann Helovanik, Harriet Maddock, and Rose Schitka.

the slag dump and the reverbs. "I liked it best on the slag dump," he said.

In 1926 he married Linnea Vesanen at Copper Cliff. Their son Arni works in the machine shop at Copper Cliff.

John has a camp at Black Lake where he spends all the time that weather will permit. He is finding that retirement with a good pension is pretty easy to take.

Nickel "Stamper"

To guard against imperfections in high fidelity records, the "stamper" discs, used to press the records, are electroformed with pure nickel. Nickel is used because it can be plated with microscopic accuracy, resists corrosion from the plastics used, and can withstand deformation from the 80 tons of pressure required for each pressing.

140 Boys in Creighton-Lively Conservation Club



The awarding of sweaters is a pleasant part of any evening's business at the Creighton-Lively Junior Conservation Club. The chairman, Wally Neven, is seen in the centre background presenting a sweater to Don May while Doug Mineault, Doug Blackport, Ron Roy, Wayne Chase, Mark Dumencu, Denis Levesque, Brian Trigg and Ricky Sandberg await their turn. In the foreground young Jim Farnand proudly displays the rifle he won in the club's ticket selling contest and Garry Neven happily holds his prize, a sleeping bag. In addition to Wally Neven, other officers shown from left to right are Bob Forth, George Angus, John Baird, Terry White and Jim King.

One of the biggest and most active junior conservation clubs in the zone reaching from the Soo to Parry Sound is the Creighton-Lively Junior Conservation Club. Formed some seven years ago at the instigation of the senior club, the group originally counted seven members. Today the membership has reached the 140 mark.

Present director of the club is Murray miner Wally Neven, who not only guides the boys but also turns his basement into a club-room for their semi-monthly meetings. As many as 90 boys have crowded in for a meeting. Wally spends many hours weekly working with and for his boys and unhesitatingly admits he enjoys every minute of it.

In the zone there are 12 junior conservation clubs, Lively's junior chairman George Allan told the Triangle, the majority of them in the Sudbury district. Most are sponsored by a senior club and their original object was to help keep boys off the streets and also teach them an appreciation of their great outdoor heritage. Learning how to conserve and use the bounty of nature is now the basic precept, the boys being taught many outdoor skills along with a sense of responsibility as to how they should be used. As Wally explained it the boys work, play and study conservation to help future generations.

Courses in map and compass reading, bush survival, first aid and fly tying are among those taught by qualified instructors. Safe gun handling is another course offered (one member took special classes so he could qualify and accept the rifle he had won in the club's ticket-selling contest).

Tree planting, fishing trips and hikes are also a part of the fun and training, with a smelt-fishing junket the most recent outdoor project. A number of ice-fishing

trips to the Elliot Lake area were made during the winter, and last summer many of the boys were taken camping on the French River and given an opportunity to put into practice some of the things they had learned. Educational movies from the Department of Lands and Forests and guest speakers are also frequently on the agenda.

One special activity of this group that Wally is particularly proud of is the fire patrol. As a member of the Lively volunteer fire department Wally suggested that the boys aid in preventing grass and bush fires by patrolling the Lively area. That was in 1956. The response

was so good, he said, that since then grass fires have been cut by 60%, and a number of potential fire starters have been converted to fire preventers.

Another feature of this club is its unique executive setup. In addition to the regular executive an appointed staff helps with the administrative detail. The staff consists of boys who have spent several years in the club, are past the 16-year age limit, and are familiar with conservation. There is a junior chairman and three assistants, George Allan presently holding the chairman's post assisted by Bob Wellington, George Angus and John Baird. The regular executive has Terry

White as president, Jim King as vice president and Bob Forth, secretary.

Membership in the club is confined to boys from 9 to 16 years of age and the initiation fee is 35 cents. The club is becoming so popular, Wally told the Triangle, that new applicants must now go on a waiting list.

Each meeting is opened by the boys reciting in unison. "I give my pledge as a Canadian to save and faithfully defend from waste the natural resources of my country, its soils and its minerals, forests, waters and wildlife." Regular business and the evening's activities then follow. A pop break allows the bows to blow off steam.

Points are given for attendance, behaviour, tests and other objectives, and club sweaters are awarded to the boys who have earned the required number of points.

Meetings are held every second Monday evening and to a dedicated man like Wally Neven they are a fortnightly delight.

Appointments

The following appointments were announced by R. H. Waddington, general manager of Inco's Ontario division:

In the purchasing department, Copper Cliff, effective March 1, O. E. Boucher to the position of purchasing agent, mining and smelting division, replacing J. L. McClellan, who has retired; J. T. Colquhoun to the position of assistant to the general purchasing agent; J. H. Holtby, assistant purchasing agent, transferred to the Manitoba division of the Company.

In the mines department, effective March 9, J. McCreedy to the position of assistant to the superintendent of mines.

RECOVERY IMMINENT

Traffic Cop: "Why did you keep on going after I whistled?"

Driver: "Sorry, I'm pretty deaf."

Traffic Cop: "Well, don't worry. You'll get your hearing in the morning."

Six Tankhouse Pensioners Honored at Stag Party By Refinery Pals



Six Inco pensioners from the Copper Refinery tankhouse were honoured by their fellow workers recently at a real rafter-rattling round-up at the Caruso Club in Sudbury. Chief arranger of the event and master of ceremonies was genial Fred Cooper. Tankhouse superintendent Graham Dick presented each of the retirees with a wallet of money. From left to right in the above picture they are George Gazdle, 21 years, 8 months service; Tony Jaczczor, 21 years service; Alex Lawrov, 21 years 6 months; G. Dick, F. Cooper and George Kolvec, 14 years, 6 months; Filip Pintur, 21 years, 7 months; Jan Mraz, 26 years, 7 months of service. Each of the guests made a brief speech of appreciation and good wishes.

Trophies and Prizes for Seventh Season's Curling Presented at Levack



It being trophy time again in the Nickel Belt, the girls of the Levack curling fraternity gathered at a turkey dinner in their town's handsome new Legion Hall and honored their champions. On the left above Miss Louise Dolci presents the Dolci trophy to Mrs. Dorothy Buckingham (skip), Mrs. Eileen Benoit, Mrs. Georgi McDonald, and Mrs. Jeanette Gaydos. On the right Mrs. Gladys Piccolo is presenting the Matilda trophy to Mrs. Dora Jessop (skip), Mrs. Y. Bouclin, Mrs. Blanche McCue, and Mrs. Nina Sirrka.



Here the Endleman trophy is being presented by Mrs. J. McNamara to Mrs. Mildred McGowan (skip), Mrs. Barbara Lennie, Mrs. Doris Forrest, Mrs. Luella Shank, while in the second picture Mrs. Ann Elliot presents the Doug Shields trophy to Mrs. Eunice Bushnell (skip), Mrs. Marie Young, and Mrs. Blanche McCue; fourth member of this rink was Mrs. Bertha Piccolo. Directing the ceremonies at the happy event was the president, Mrs. Jean Koski. Officers for next season, which will be the club's eighth, will be: president, Mrs. Dora Jessop; vice-president, Mrs. Ruth Mornan; secretary, Mrs. Barbara Lennie; treasurer, Mrs. Helen Drohan.

Poet of the Tailing Line Retires



Presentation of a wallet of money to John Henderson and flowers to his wife was made by a committee representing his friends at the Copper Cliff mill. Picture shows the group at the Henderson home on Howey Crescent, Sudbury, on the left is Harry McGinn and on the right Albert Charron and John Schijns. Retiring on pension, John had 30 years of service with the Company.

John Henderson, the poet laureate of the tailing line, has joined the ranks of Inco's pensioners.

A cheery Scot with a gift for putting his gentle philosophy into rhyme, he brought comfort to many a troubled heart with his

widely published verses.

Born in Lanarkshire in 1894, John left school at the age of 14 to work with his father at the face in the coal mines, crawling in on hands and knees to dig "black diamonds" from the two-foot seam

for two shillings a day. "I could hardly believe my eyes when I first went underground at Frood in 1928," he recalled, "and saw what a modern Canadian metal mine was like."

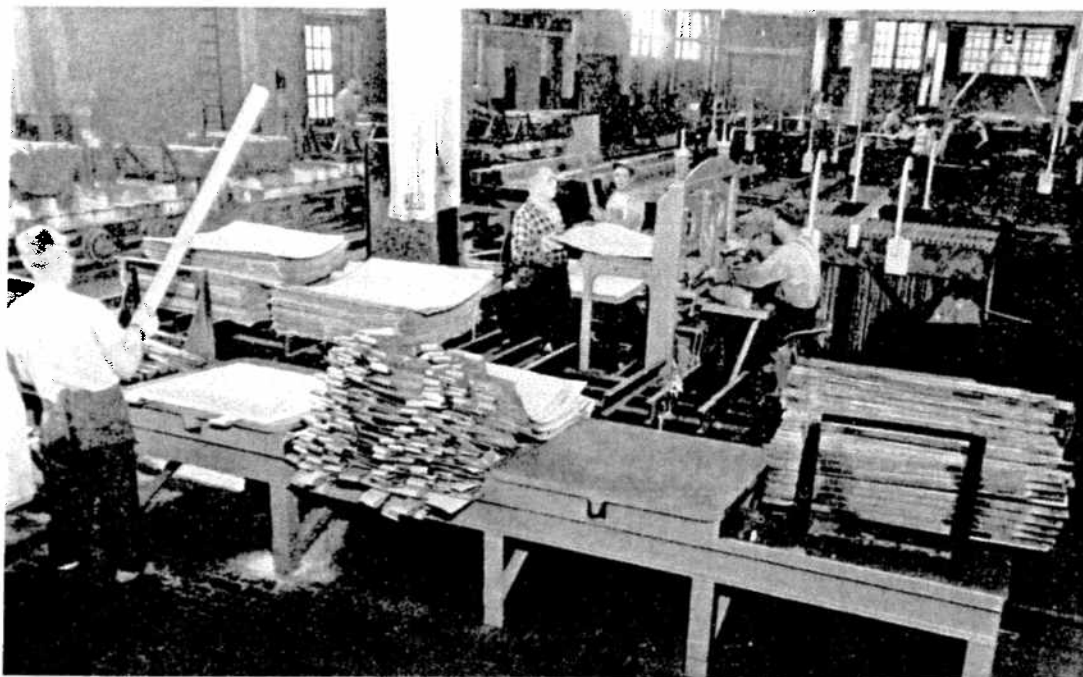
Transferring to the concentrator at Copper Cliff in 1933, John soon became a fully qualified operator on the tailing line, and there remained throughout his time with the Company, enjoying the periods of solitude that went with the job.

He was married in 1918 to Margaret Mitchell, who died in 1947. One of his three daughters is Mrs. John King of Copper Cliff. He married again, taking Margaret Pearse of Ottawa as his wife. After a trip back to Scotland this summer they plan to settle in either Ottawa or Winnipeg.

Walking has always been one of John's favorite pastimes, and he thought nothing of hiking 20 and even 30 miles on a day off. In the course of his work he walked the tailing line trestle from Beaver station to Creighton mill at least once or twice a week, and on these trips the thoughts came to him for his verses.

One of his most popular poems was entitled "Questions to Answer", and here it is:

Before you lift a brother's name,
And drag him down to grief and
shame,
Just stop and ask yourself again,
Is it true?
False accusations like a knife,
Can cause a wound that renders
strife,
Ask, for this may last for life,
Is it kind?
A brother's future is at stake,
Before from him his name you take,
Ask yourself, e'er it's too late,
Is it necessary?
Some day before the Judgment Seat,
With all the evidence complete,
You're asked by the Judge you're
sure to meet,
The reason why.
You drew a brother's fair name
down,
And looked upon him with a frown,
While Christ for him a thorny
crown
Had meekly borne,
Who with His precious blood
brought nigh,
And prepared a mansion in the sky,
While for his downfall, you did try.
What will you say?
Oh, better far be true and kind,
Acting with a Christ-like mind
For none of His are left behind
On that day.
That day when sorrows are no more,
When grief and heartaches all are
o'er,
The voice of the Master on that
shore,
Will say "WELL DONE."



Here's a general view of the sheet gang in action at the Copper Refinery. Johnny Hegoat and Bob McGregor are busy at the punch machine attaching loops while George Kuchmas and Wes Maltby whack the sheets to straighten them, using magnesium sticks which are both lightweight and durable. On the table in the right foreground are some of the copper cross rods on which the starting sheets are hung in the electrolytic tanks; between sessions in the tanks the rods are put through a special machine to clean and buff them so they'll provide good electrical contact in the plating process.

How Starting Sheets Get Their Start at the Copper Refinery

The electrolytic production of copper is a particularly interesting phase of the Copper Refinery's operation. How blister copper, transported from Copper Cliff smelter by hot metal car, is cast into anodes, placed in deposition tanks along with starting sheets, and cathodes of almost pure copper result 14 days later, is a cycle reasonably familiar to many.

"But," some wag has asked, "how does the starting sheet get its start so that all this can get started?" Like the old question as to which

came first, the chicken or the egg.

How do starting sheets get started? In principle by the same method that copper cathodes are formed, that is by electrolytic deposition.

Highly polished blanks of heavy gauge, cold rolled copper 41 inches long by 38½ inches wide are suspended in a tank of electrolyte between copper anodes. In a period of 24 hours pure copper to the thickness of .026 inches is plated to both sides of the blank. The blanks are then removed from

the tank, dunked in hot water to remove the electrolyte, and placed in racks for the "stripper gang" to start work on.

The strippers put on an impressive display of teamwork as they perform their jobs. Using a special tool the sheets are first loosened from the blanks, then are stripped off with long wooden paddles. The sheets are piled neatly nearby, while the blanks are swabbed with a mixture of diesel oil and gaso-

line to make easier stripping, and are returned to the tank to grow yet another crop of starting sheets. This is pretty well a continuous daily cycle.

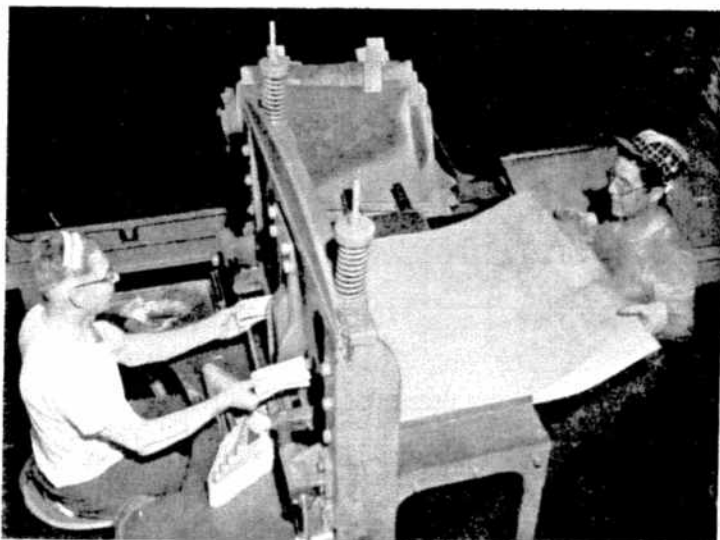
From the "stripper gang" the sheets are transferred to another crew who attach the suspension loops by which the sheets are hung in the deposition tanks. With a magnesium stick the sheets are then pounded straight to help eliminate the danger of short circuiting in the tanks. Next, cross rods are inserted through the suspension loops for holding the sheets in place in the tanks and also to provide the electrical contact. The starting sheet is then ready for action.

When a rackful of starting sheets has been completed one of the eight stiff-legged tankhouse cranes deftly picks up the rack, takes it to where a new section is being charged, and places it in this electro-chemical bath. There, along with their coarser companions the anodes, the starting sheets get right down to work plating themselves into big, bright cathodes, a task taking some 14 days to complete.

The cycle is practically continuous, with new sections being charged daily. This requires starting sheets in large numbers, the average operational day seeing more than 3,000 starting sheets go into action.

Stainless Steels

To be called "stainless," a steel must contain at least 11½ per cent chromium. The addition of a minimum of 8 per cent nickel improves the resistance of stainless steels to corrosion and heat, and increases their strength and toughness. In fact, the most popular type of stainless steel contains 18 per cent chromium and 8 per cent nickel.



On the punch machine the starting sheet is equipped with the copper loops by which it will be suspended in the electrolytic tank during its 14-day growth into a full-fledged cathode. In this photograph George Kuchmas feeds the loops to the machine while Bob McGregor handles the sheets.



In this picture Mike Milosovic is seen stripping starting sheets from the blanks on which they were plated during a 24-hour period in an electrolytic tank. The stripper works fast, first loosening a corner of the sheet from the blank and then stripping it off with a wooden paddle.



From his "office" on the ridge pole, Joe kept a sharp eye on camp security. At the right he ponders a geological problem with his benefactor, Irwin Smajovic, who hopes to renew their friendship in northern Manitoba this summer.

WILL JOE STILL BE THERE?

By Terry Podolsky

Misery acquaints a man with strange bedfellows, said Shakespeare. Had he been living today, he might also have commented that a man living in the bush might make a pet out of a dinosaur. Fortunately for Inco's geological department, dinosaurs are extinct, but almost any indigenous mammal from mink to moose, seems to have the capacity for friendship and the sharing of loneliness with a sympathetic geologist or prospector.

The geological exploration department often seems to have an affinity for birds. Lester the Moak Lake goose, set a precedent several years ago, and for the past two summers eagles have been taking the place of man's best friend in the friendly northland.

Last summer in Manitoba, Irwin Smajovic, leader of a two-man geological reconnaissance party, became the foster father of a downy eaglet no more than two weeks old. Young Joe was soon bedded down in a moss-lined cardboard box which was kept in the tent, out of sight and reach of marauding animals. He thrived on a diet of fresh pickerel and pike, cut into small strips.

Shortly after his first feathers appeared, Joe outgrew his moss-lined box and appointed himself campsite constable. Irwin was able to throw his alarm clock in the lake, because each morning at the crack of dawn Joe let it be clearly known that it was time to eat. Many enticing tidbits ranging from sardines to Chuckwagon Dinner were offered to him but he scorned everything except fresh fish. Feeding was therefore no problem since the campsites were never far from an unlimited supply of pike and pickerel for which the Manitoba waters are famous.

On camp moves, which of necessity are made by air, Joe displayed outright hostility towards the aircraft, but once inside he huddled quietly on Irwin's lap. Flying lessons with his own wings started early in August, and by the middle

of the month Joe had become a semi-permanent fixture on the ridge pole of the tent.

Like Mary's lamb, the eagle followed Irwin closely, and towards the end of the field season he accompanied the party on all bush and canoe traverses. By this time the almost mature eagle, weighing roughly 15 pounds and having a wingspan of six to seven feet, bore little resemblance to the seagull-sized fledgling of the spring. His shiny, well-groomed appearance was an object of Irwin's pride. His talons and sharp, hooked beak, capable of tearing apart a six-pound pike as though it were dough, commanded the respect of all except Irwin.

At the end of the field season Joe was left to his own devices on an island on which there was an inhabited eagles' nest. Whether he was taken in as one of the family or not is not known. Irwin hopes to revisit the spot this coming summer to renew the friendship if Joe is still around.

If, during the course of the summer a travelling prospector or Indian brings back tales of a mature bald eagle hungry for human companionship, Irwin, for one, will not be at all surprised.

QUICK QUIZ

1. Ships travelling the 1200-mile waterway from Montreal to Fort William pass through how many miles of canals?
2. What is the origin of the name of Yellowknife, N.W.T.?
3. What Canadian city has the greatest annual recorded rainfall?
4. When completed, what will be the length of the Trans-Canada Highway from North Sydney, N.S. to Vancouver, B.C.?
5. In what year was the first trans-Atlantic cable laid?

ANSWERS: 3. Long term weather records show St. John's, Newfoundland, has the greatest annual rainfall. 1. 76 miles of canals. 5. In 1858, from Ireland

At the Copper Refinery's Big Dance



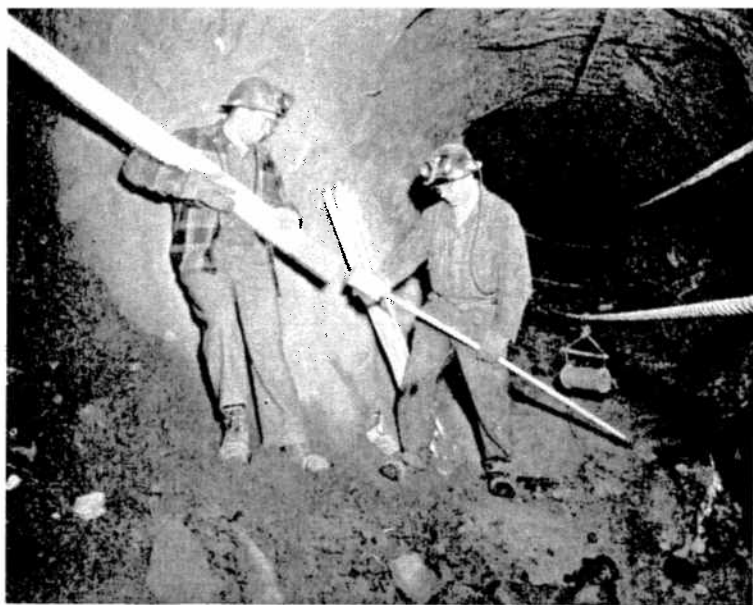
Scotty McCall seems to be about the only one who hasn't succumbed to the strains of a dreamy waltz in this snapshot taken at the annual dance of the Copper Refinery Athletic Association. Held at Legion Memorial Hall, Sudbury, the event drew a capacity crowd and was voted an all-time success.



But the Bob Desjardins and the Ray Millers made a smiling foursome for the Triangle camera. Both the girls were celebrating their birthdays, and thought it pretty nice to have such an elegant big party staged in their honor.

to Newfoundland. 2. From a northern Indian tribe, the Yellowknives, who carried bright-colored knives made of native

copper. 4. Just over 3,600 miles; it will be the longest recognized paved road in the world.



Blasting boss Cleo Gosselin and slusherman Bob Johnson demonstrate for the Triangle camera how they use the new sectional plastic tube to place powder for a blast in a hung-up boxhole in a slusher drift at Creighton no. 3 shaft. The sectional loading sticks are made of the same light plastic material as the tube.

Develop New Safety Device for Blasting Hung-Up Boxholes

A safety advance of great importance has been made at Creighton mine with the development of plastic tube for blasting hung-up boxholes in the no. 3 shaft caving area.

Using the new device, a blasting crew can put powder in place up in the boxhole from a safe position in the slusher drift.

"It's one of the best safety ideas we've come up with yet," was the way underground superintendent Wilf Moore described it for the Triangle. "We're very pleased with the way it is working out."

As many as half a dozen times a shift the flow of ore may become blocked in one of the 14 boxholes feeding into a slusher drift. Since there are more than 50 drifts in operation in the Creighton caving area, the number of hung-up boxholes requiring blasting during a shift to maintain an even pull of ore is often very considerable.

Under the method formerly in use to prepare a blast in a hung-up boxhole it was necessary to climb up in the boxhole and push the bags of powder into place on the end of a wooden pole. Some-

times the powder had to be placed as high as 50 feet up the boxhole.

At Creighton's no. 3 shaft the supervision and engineers hold regular "brainstorm sessions" at which ideas or suggestions are worked out for improving safety practice or operating methods. It was at one of these sessions that the mine supervision finally hit upon a solution to the safety problem in connection with blasting down boxholes, a subject often discussed.

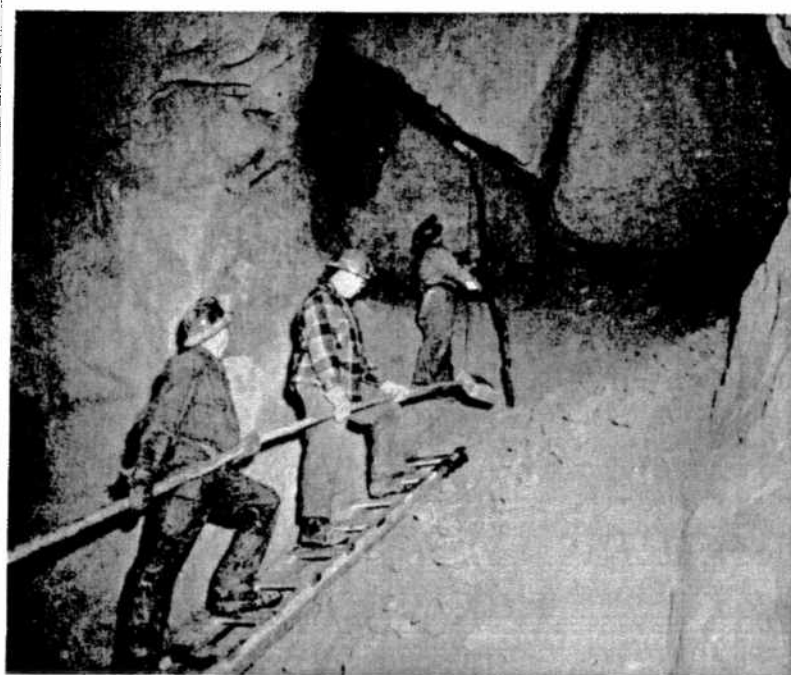
A rubber company and an explosives manufacturer then cooperated with the Company in perfecting the new device.

After much experimenting a light, rectangular-shaped plastic

tube was developed, made in 10- and 20-foot sections with sleeve joints. The tube was made of uscolite, which had the additional safety advantage of being non-absorbent of nitro-glycerine. Sectional loading sticks were made of the same material.

The explosives manufacturer produced powder packed in a cardboard carton which slid easily in the plastic tube and did not roll out of the position when pushed up through the tube into the hung-up boxhole.

Using this device a blasting boss and slusherman can remain standing in the drift and place the powder for their blast just where they want it up in the jammed ore blocking the boxhole.



The picture on the left shows how the blasting boss can remain standing in the drift to the side of the boxhole when placing powder with the new plastic tube. The old method is demonstrated above, divisional foreman Joe Zimmerman climbing up into the boxhole to push a bag of powder into place with a blasting stick.