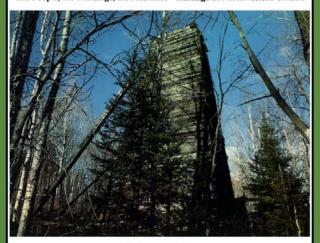


Industry in the Wilderness

The People, the Buildings, the Machines - Heritage in Northwestern Ontario



by Frank Rasky

Industry in the Wilderness

The People, the Buildings, the Machines — Heritage in Northwestern Ontario

by Frank Rasky

Dundurn Press Limited

(with the assistance of the Ontario Ministry of Citizenship and Culture, and the Ontario Ministry of Northern Affairs)

Toronto and Charlottetown 1983

Acknowledgements

The preparation of the manuscript and the publication of this book were made possible because of generous assistance from the Ontario Ministry of Citizenship and Culture, and the Ontario Ministry of Northern Affairs.

The author wishes to thank in particular George Shaw for sharing his engineer's knowledge about the technical aspect of industrial life in northwest Ontario. The publisher wishes to acknowledge as well the ongoing support of the Canada Council and the Ontario Arts Council.

Care has been taken to trace the ownership of copyright material used in the text (including the illustrations). The author and publisher welcome any information enabling them to rectify any reference or credit in subsequent editions.

© Her Majesty the Queen in Right of Ontario, 1983

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise (except brief passages for purposes of review) without the prior written permission of Dundurn Press Limited.

Editor: Kirk Howard

Design and production: Ron and Ron Design Photography Typesetting: Q Composition Incorporated Printing: Les Editions Marquis, Montmagny, Quebec, Canada

Published by Dundurn Press Limited (P.O. Box 245, Station F, Toronto M4Y 2L5 Canada).

Illustration and Photograph Acknowledgements

Canadian National 19, 24-25, 69. Norman Cowan 29 (2nd.) Geological Survey of Canada, 15, 16, 17. Geraldton Public Library 108.

Randy Haunfelder back cover, photograph of author

Heritage Branch, Ontario Ministry of Citizenship and Culture front cover, 46-47, 50 (1st & 4th), 54 (1st & 3rd), 75 (2nd), 85, 94, 99, 100, 101, 102, 103, 104, 105, 106 (3rd), 107, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 122 (2nd), 123 (3rd), 124 (1st).

Dennis Christjiansen 78 (1st), 89 (1st).

Frank Commisso 124 (3rd)

Lake of the Woods Museum 106 (1st & 2nd)

Lucas Photographics 91 (1st)

Charles Macnamara 29 (1st), 30 (1st), 32 (1st), 33, 36 (2nd), 37 (1st)

Kenneth Molson 70 (1st)

Nipigon Museum 10-11, 20, 21 (1st), 38, 95

Donald Nord 67 (3rd), 121, 124 (1st), 125 (1st & 3rd), back cover.

Northern Miner 61

Ontario Archives 50 (2nd)

Ontario Geological Survey 23 (2nd)

Ontario Hydro Archives 9, 78 (2nd), 82-83, 86, 87, 89 (2nd), 91 (2nd & 3rd), 92, 93

Ontario Ministry of Natural Resources 21 (2nd), 30 (2nd), 36 (1st), 37 (2nd), 49, 67 (1st), 70 (2nd), 71, 80, 81, 109, 128

Don Parrott. The Red Lake Gold Rush. 54 (2nd)

Public Archives of Canada 13 (C-943), 23 (first) (C-56826)

Red Lake Public Library 50 (3rd), 57, 59, 79

George Shaw 75 (1st)

Don Starratt 64-65, 67 (2nd), 73, 77

Thunder Bay Historical Museum Society 26-27, 32 (2nd), 35 (2nd), 39, 40 Cam Timlick 35 (1st), 122 (1st & 3rd), 123 (1st & 2nd), 125 (2nd)

Canadian Cataloguing in Publication Data

Rasky, Frank, 1923– Industry in the wilderness

(Dundurn local history series; 1) Bibliography: p. ISBN 0-919670-66-0

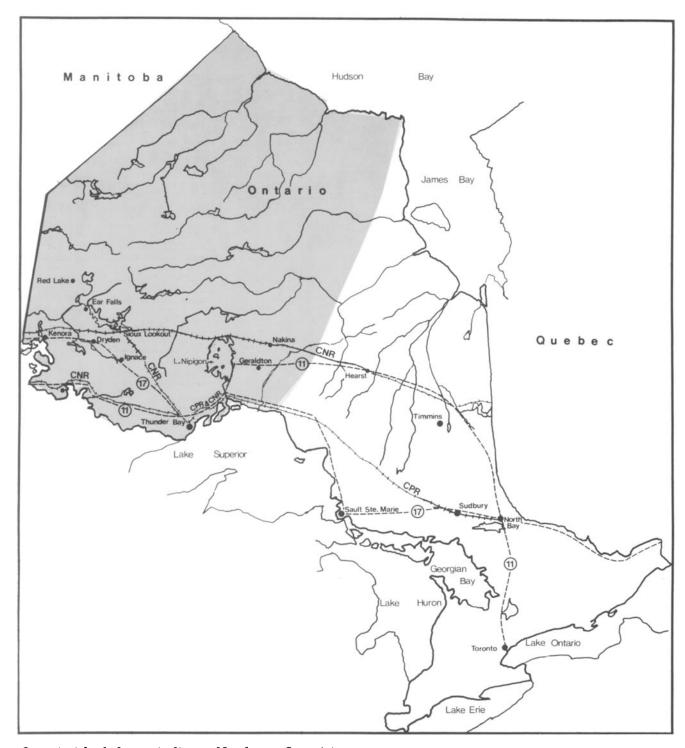
1. Ontario - Industries - History. I. Title.

II. Series.

HC117.06R37 1983 338.09713'11 C83-099038-0

Industry in the Wilderness

The People, the Buildings, the Machines — Heritage in Northwestern Ontario



Ontario (shaded area indicates Northwest Ontario).

Table of Contents

The Setting	8
The Pathfinders	10
The Granite Shield, The Mammoth Pines, The Little Emperor	12
The Father of Northwest Place Names	14
The Duke and Dauphin of Railroad Builders	18
Bushwackers and Gandy Dancers	22
The Lumberjacks	26
Timber Wolves or Lumber Lions?	28
The Upper Canada Cossacks	31
Lumber Lore	41
A Sawmill	42
A Paper Mill	44
The Goldseekers	46
The Klondike of New Ontario	48
How they spent it	53
Mining Lore	58
A Gold Mine	62
Getting Around	64
They flew by the Seat of Their Pants	
Freighter Bob Starratt pushed 'em through	72
Harnessing Hydro	82
Hydro Power and its People in the Northwest	84
Hydro's Lady Rum-Runner and Cowboy Gun-slinger	88
Hydro Lore	90
A Hydro Electric Power Plant	96
Monuments in the Wilderness	98
Pioneers	120
Where to Enjoy Your Heritage	
Recommended Reading: A select list	

The Setting

If you're a first-time visitor to northwest Ontario, you may be inclined to say that you see nothing but wilderness. "A landscape of emptiness," scoffed one tourist. "Just miles and miles of rock, river, and everlasting Christmas trees."

His myopia was understandable. Many of us wear similar blinkers that restrict our vision. The region may appear to be a Siberia that is uncivilized and without a past. "Impracticable and forbidding," Sandford Fleming, chief engineer of the Canadian Pacific Railway, wrote with dismay in 1872 of the bush country north of Lake Superior.

He must have been tempted, like the mapmakers in the days of Christopher Columbus, to dismiss the unknown terrain with the warning, "Here be dragons." Indeed, for many people primitive terror seemed to lurk in the granitic rock and jackpine jungle of Superior's brooding north shore. A primeval fear was embodied by the Ojibway and Cree Indians in the legends of their spirit monsters, the Windigo and howling Manitou. E.J. Pratt captures its spooky presence in his epic poem *Toward the Last Spike*:

On the North Shore a reptile lay asleep — A hybrid that the myths might have conceived, But not delivered as progenitor Of crawling, gliding things upon the earth. She lay snug in the folds of a huge boa

Torpid upon a rock-and-mineral mattress. She was too old for death, too old for life....

That mythology of the forbidding forest — untamed and untenanted, inhabited only by hobgoblins of fantasy and perhaps a handful of primitive people — lingers until this very day.

This book is designed to banish the dire legends and celebrate the very real achievements of the people who pushed back the wilderness. Granted, the northwest corner of Ontario that they occupy does not boast lush wheatfields and still remains sparsely settled — at last count, no more than 250,000 people, a fraction of the

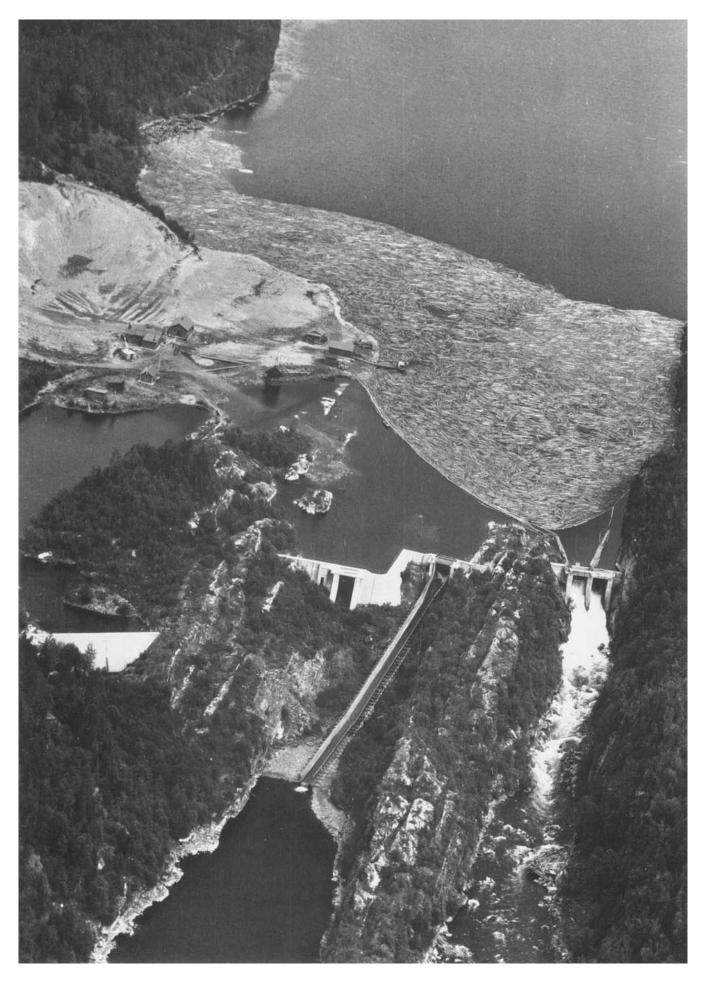
province's close to nine million. It's all the more astonishing, therefore, that this tiny populace set in a huge and uncaring land, at first glance, untouched by the Industrial Revolution, managed to create an industrial civilization. A visitor, viewing their mine headframes and castle-like pulp mills looming out of the jackpine jungle, might well be reminded of the spectacular pyramids of the ancient Mayans soaring from the Yucatan rain forests of south Mexico.

These industrial pioneers, who paraded through the wilds of the Ontario northwest, were an extraordinary cavalcade of trail-blazers: surveyors and railroaders, bushwhackers and bush pilots, lumberjacks and timber magnates, gold hunters and their grubstakers, hydro men and pulp-and-paper men and the women who followed them.

They were an adventurous folk and left behind a glorious heritage of industrial technology in camps and mines and mills, in trestles and bridges and dams. By using your powers of observation — and imagination — you can detect many of their evocative relics, some mouldering in ghost towns, others very much alive and in use in bustling communities.

The following stories and illustrations illuminate the accomplishments of these people and give voice to the inanimate things that remain today as monuments to their ingenuity in the bush country. Consider this book your guide as you explore some of the marvels to be found in northwest Ontario's great outdoors museum.

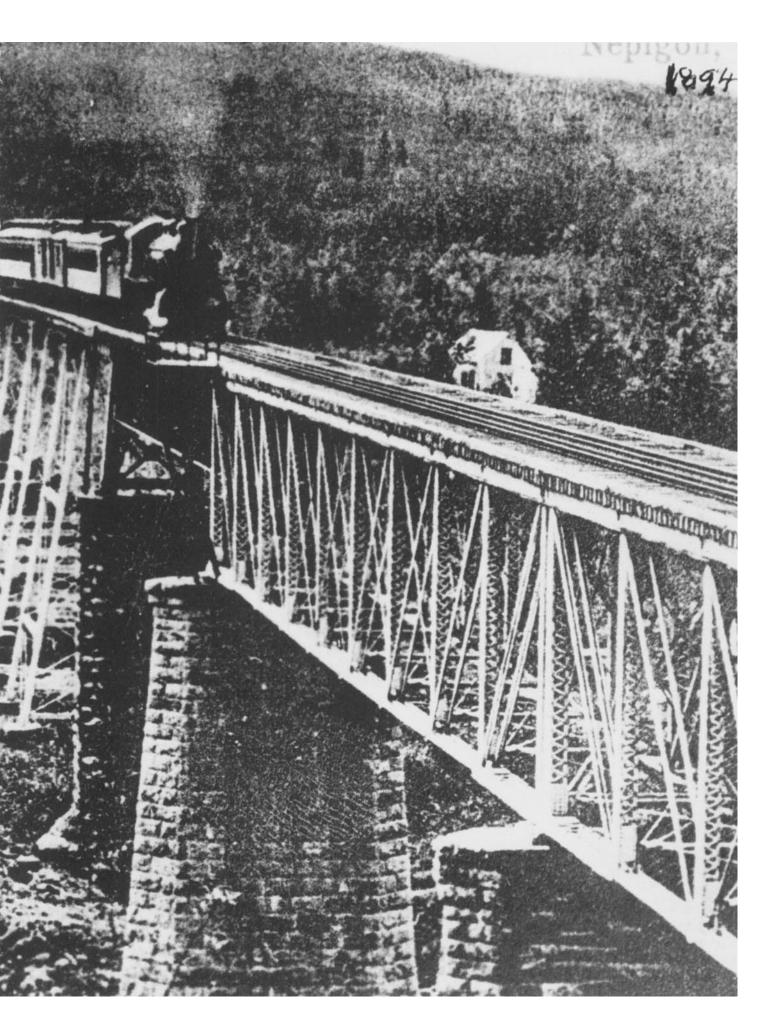
On Long Lake, the logging industry once used this control dam and diversion channel at the south end of the lake. By 1980, the logging flume that dominates this view was discarded.



The Pathfinders



An 1894 photo of the Nipigon River bridge shows that the trestle has been fortified with concrete and steel. In the background, behind the CPR mail and passenger train, a boardinghouse can be glimpsed.



The Granite Shield, The Mammoth Pines, The Little Emperor

A big land of bedrock and bush, bigger than Britain and Canada's Maritime provinces combined; a miner's joy, a lumberman's delight, and a farmer's curse. In the simplest of industrial terms, that sums up the more than 400,000 square kilometres of land and lakes and muskeg (well over 160,000 square miles) that sprawl across northwest Ontario from Lake Superior to Hudson Bay.

Nature has shaped the region's economic destiny. It all squats atop the granitic jewel box called the Precambrian Shield. This means it rests on a solid foundation of North America's oldest rocks, formed up to three billion years ago. During that period, ice sheets scooped out the more than one hundred thousand lakes that now dot the area and dumped the rich earth elsewhere. They left behind a sandy topsoil that is skimpy and acidic, devoid of fossils and too thin generally for cultivation.

As compensation, layered throughout the naked bedrock, scoured and sandpapered over the Ice Age eons, and sometimes visible like veins of green cheese, are fine-grained volcanic outcroppings. They are known to geologists as Huronian greenstone belts and to prospectors as the mother of minerals.

These streaks commonly produce a mother lode of gold and silver and such base metals as iron, copper, lead and zinc. In northwest Ontario they have proved to be very fecund indeed. Since 1925, when gold was discovered in the heart of the area at Red Lake, a payload of \$1.3 billion worth of minerals has been gouged out of the Shield. The annual mineral yield being dug out is now valued at \$540 million.

Few of the early travellers appreciated this craggy Pandora's box of hidden riches. Sailing up the St. Lawrence in 1534, Jacques Cartier cursed the "frightful rocks" glowering on the north shore and damned the whole Canadian Shield as "the land that God gave to Cain." The explorer told the King of France "there isn't a cartload of dirt in the whole of it."

He had no way of knowing the Shield's dearth of top earth was a blessing. The granite's skinny crust — sandy, swampy, rocky, a veritable sour porridge masquerading as soil — was a perfect breeding ground for the "green gold" that has turned out to be more precious than

the spice the explorers sought in Cathay.

But minerals aren't its only riches. Thirty million acres of commercial Boreal forest currently stretch in majestic splendour from Superior to the lowlands of Hudson Bay, where they gradually dwindle into what the Indians call "the land of little sticks." The close to four million cords harvested annually are worth \$165 million, and the forest products fashioned from them have become northwest Ontario's sovereign industry.

But furs, not forests nor minerals were the basis of the region's first industry. Pierre Esprit Radisson, co-founder of the Hudson's Bay Company, had eyes only for beaver peltries when he paddled from Ville Marie de Montréal as far northwest as the "shores of that sweet sea," Lake Superior. He reported back to King Charles II of England, who then organized the fur trading company in 1670, that there were lots of "lucre to be had" in *le pays sauvage*, the Savage Country.

The Hudson's Bay Company's monopolistic control of the fur trade was challenged many times. But 170 years later, in 1840, Sir George Simpson, the reigning grandee of the Hudson's Bay Company, was very much worried about a new sort of competition. The Little Emperor, as the despotic governor was nicknamed, was alarmed by the new breed of interlopers swarming into his fur domain.

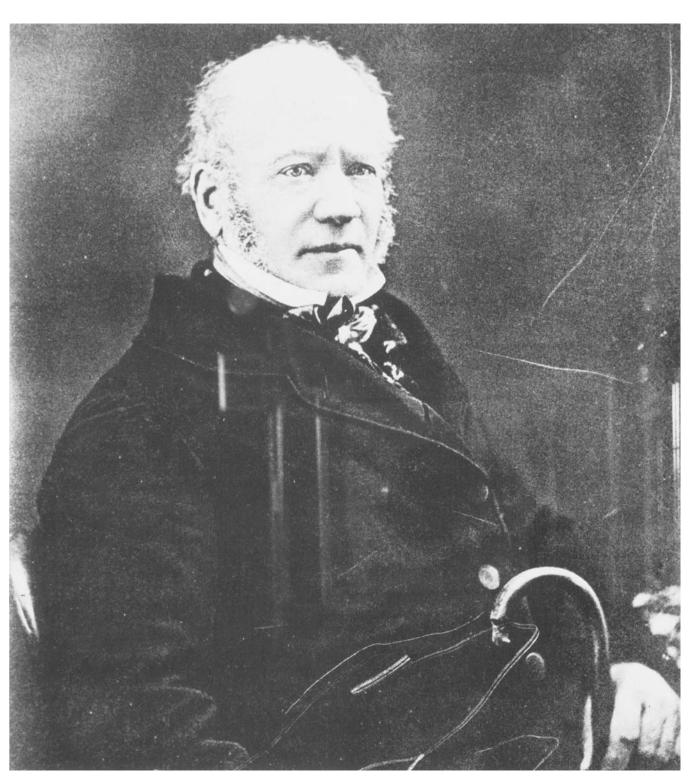
He had thought his problems were over in 1821, when the venerable H.B.C. (derisively interpreted by some as meaning "Here Before Christ" and "Here Before Canada") had amalgamated with its major fur-trading rival, the Northwest Company. But the new invaders were different. They were brash entrepreneurs from the Ottawa Valley pushing northwestward to set up sawmills near his forts strung from Lake Timiskaming (the Indian word for "deep water") to Thunder Bay (from the French voyageurs' "baie de tonnerre").

To Simpson they represented unwelcome change. Simpson feared colonizers of any kind. The intruders might interfere with the company's monopolistic control over cheap Indian labour and the humble Scottish "servants" who operated the fur trading posts. Simpson actually urged the chief factor in charge of Fort Timiskaming to burn down the virgin forests usurped by the invading sawmill entrepreneurs: "How would it do to Girdle the Trees & make Charcoal of the Timber? A Word to the Wise, eh?"

But it was as futile as pushing back the ocean tide. By 1860, when Simpson died, Lake

Timiskaming had been taken over by a whole throng of timber merchants surging ever northwestward. Seven years later, the Dominion of Canada was born and in 1869, the young Dominion had acquired the H.B.C.'s territory for 300,000 English pounds and was preparing to build a nation-wide railroad.

Finally and belatedly the Industrial Revolution had come to the bushlands of the northwest. But first surveyors were needed to map out the trackless territories where the rails were to be laid.



Sir George Simpson, the Little Emperor, who governed the Hudson's Bay for 40 years with an iron fist as though it were a fur factory, is shown in a rare photograph shortly before his death in 1860. He sought

vainly to repulse interlopers of any kind for fear that they would interfere with the company's monopolistic control over its fur empire.

The Father of Northwest Place Names

When they ultimately made him an honorary chief, the Ojibwa Indians gave him the name of Wasagisik. It meant Clear Sky, for they had always found him as dependable as a cloudless sky. After all, for as many moons as they could remember, he had portaged and camped with them, spoke their language, and listened with great interest to their folklore. He was forever trying to pry out the mysteries of the paths they pursued on the lakes and rivers that gleamed throughout their forest land as numerous as the stars in the sky.

To his fellow pathfinders of the Geological Survey of Canada, Dr. Robert Bell was "the father of place names." During his more than 40 years with the Survey, the Toronto-born geologist with the spade beard, sharp binocular eyes, and allencompassing curiosity gave names to at least 3000 topographical features — more than any other Canadian mapmaker.

A good many of the names remain affixed to today's maps of northwest Ontario. He had a passion about "expanding knowledge of our great unknown territories." He was obsessed with the idea of exploring all the rivers running north through Ontario into Hudson Bay. He descended most of them to the mouth and made track surveys of them and their principal tributaries. He believed in giving credit to the Indians who were the first residents, and felt that many of their place names were sheer poetry.

Wabigoon Lake was an expression of their appreciation of its lovely water lilies, meaning "covered with flowers like white feathers." Manitouwadge was "cave of the great spirit." Keewatin was "where the northwind comes from." Nakina was the steadfast cry of the Indian guides, shouting as their yellow birchbark canoes shot the rapids, "Nakina! Nakina!" which meant, "Hold on! Don't ever let go!"

Some of their names managed to fuse geographical location with an almost lyrical musical lilt. The Chukuni River came from "chu chua," meaning small currents. Uchi Lake meant "obliquely from one side." Ogokie was "joining to." Atikokan was "buried bones of the caribou." Nipigon was contradictory, interpreted as "clear, fast water" or "dirty, murky water," depending on which Indian was translating the word.

Some places destined to achieve fame in the region's gold rush had their genesis in myths of

great melodrama. Red Lake ("misque sakigon") was said to be the home of a supernatural monster which when slain vermilioned the waters a deep blood red. Sioux Lookout ("qua-nee-now-ungung-powana") was supposedly the Ojibwa lookout post for sentinels vigilant against raiding war parties of the southern Sioux or more likely the Saulteux (pronounced "Sootoo") Indians.

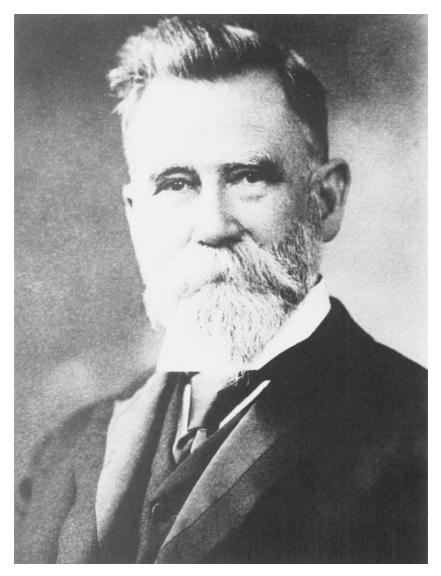
Some names originated in the early days of the fur trade. Lac Seul was French for the Lonely Lake thus named by a trader who felt lonesome in his solitary outpost. Rainy River was derived from Lac La Pluie so named because Indian customers at the fort complained it was "Lake raining all the time." Rat Portage was the gateway to the muskrat country -"waszush onigum" in Ojibwa which the French traders altered to Portage du Rhat. When the Maple Leaf Milling Company established a mill there and objected to putting the word "rat" on its flour bags, the city fathers adopted a name based on the first two letters of three communities: Kenora was an amalgam of Keewatin. Norman and Rat Portage.

Bell delighted in whimsical names (Confusion Lake, Unexpected Lake) or fanciful names (Caramat, which was Tamarac spelled backwards). But the names that Bell loved best paid tribute to his scientific colleagues (Klotz Lake, for example, named after the German astronomer, Dr. Otto Klotz).

Bell was one of those multi-gifted men who rejoiced in every aspect of science. As a boy, he would collect rocks and fossils, living flowers and frogs, on nature rambles with his father, Rev. Andrew Bell, a Scottish Presbyterian minister who helped found the Geological Survey in 1842. The son joined the Survey at the age of fifteen, its youngest member. He found time to acquire degrees in medicine and applied science at McGill University and to teach chemistry at Queen's University in Kingston.

But he was happiest when roving out in the field for the Survey, a geologist's hammer or surveyor's compass in hand, a hundred-pound packsack on his back, and whether wading through hip-deep quagmires or fighting off clouds of black flies, cheerfully recording in his log book the natural phenomena around him. His mania was such that his Glasgow-born wife, Agnes, was compelled to rough it in the bush with him, cradling their infant daughter, Margaret, on her back in an Indian-style moss bag.

Hardships meant nothing to him. Once, after



Dr. Robert Bell (1841-1917), director of the Geological Survey of Canada from 1901 to 1906, was responsible for a good many of the place names of northwest Ontario. He charted the region's water-

ways, recorded the northern limits of its coniferous trees, and did the reconnaissance mapping needed for laying tracks for the CNR.

a forest fire destroyed his food cache of beans, bacon and bannock, he virtually starved for nine days without complaint. But he was concerned on another occasion when a hungry pack horse ate the precious field notes of one of his assistants.

He scolded his colleagues for not taking the trouble to scribble down the folk tales of their Indian guides. He himself chronicled more than two hundred of these legends, and while serving as acting director of the Survey, he offered this sage advice on the art of eliciting the stories:

"Do not attempt to make notes while they are talking; otherwise they will soon stop... . It is rather difficult to start a good storyteller, but once going he will warm up to the subject and tell you quite a number... . You will have to humour them a good deal, say with a plug of tobacco, to get them to start. While in camp on a rainy day, or on a cool evening around the fire, is a favorable opportunity."

He took notes with lapidary care, and he was a pioneer in determining the northern limits of Ontario's coniferous trees. He spent hours recording them on large-scale maps, devising his own symbols to differentiate the species. He is probably best known for being the first to detect the gold potential of Red Lake. Following a preliminary survey in 1869, he was to chronicle in the restrained prose of a scientist the presence of Huronian greenstone layers there which tend to harbour gold:

"The whole lake (which is of considerable size) lies within a wide belt of Huronian rocks, among which several of the rare variety are well-developed, and they were formed to contain some interesting minerals...."

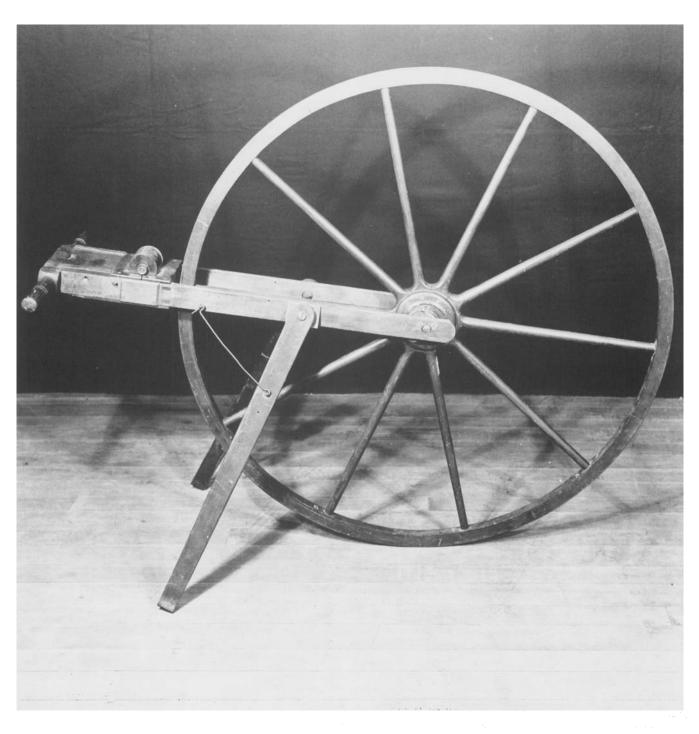
Bell lived to be 76. Before slipping off his surveyor's packsack for the last time, he wrote with justifiable pride, in 1904, of how he had single-handedly done the lion's share of the preliminary reconnaissance needed for the new transcontinental railroad then under construction.

"When the construction of the Grand Trunk Pacific Railway was first proposed in 1902, the region to be traversed was found to be already fairly well-known all the way from Quebec to Winnipeg," wrote Ontario's greatest geographer. Speaking in the third person, Bell said the bush country's topography, timber, soil, climate, fauna, flora and mineral resources, previously a well-kept secret, were now revealed to the public. It had taken him 35 years of exploring, he said, but it illustrated the value of being an all-around scientific surveyor.

"The results of all this work, which had been fully reported and illustrated by maps, enabled our public men to judge of the feasibility of the undertaking," he concluded with a modulated flourish, "and much time was thus saved in arranging for the construction of the railway."



The Gunter's Chain, even more awkward than the Wheelodometer, was used by nineteenth century surveyors for measuring distances. It was 66 feet — or one chain — long and consisted of 100 iron links that tended to kink and tangle when the chain was drawn along the ground. From 1850 on, each surveyor was supplied with a "standard" wooden yardstick, marked with scale graduation in inches and links. The ungainly chain was finally superseded in 1900 by the steel measuring tape which is still in use today.



On his survey field trips, Dr. Robert Bell used this awkward Logan's Wheelodometer, developed by Sir William Logan, founder of the Geological Survey of Canada, as a means of "facilitating measurement over rough terrain."

The Duke and Dauphin of Railroad Builders

A Canadian historian likened them to the confidence artists in Mark Twain's *Huckleberry Finn* who milked \$87.75 from a gullible crowd. That pair of scallawags did it with a tearful story in which they pretended to be the impoverished duke and dauphin of France. This parallel does a disservice to William Mackenzie and Donald Mann, the audacious pair of railroaders who rolled back the wilderness of the northwest frontier at the turn of the century.

In the first place, the knighthoods won by Sir William and Sir Donald were bonafide titles, awarded by a nation grateful to the founders of the Canadian Northern Railroad. In the second place, both would have laughed off the bogus duke and prince as penny-and-dime operators, patently lacking in promoter's finesse.

A truly first-class promoter, the Canadians were quite aware, requires two essential attributes: guile and gall. He doesn't depend on the classic "o.p.p.m." — other people's private money — but rather he fattens on the taxpayer's purse. And he doesn't aim at extracting a few dollars, but rather he sets his sights outrageously high on multi-millions.

Mackenzie and Mann pulled off the feat of building a totally redundant railroad based on virtually nothing but a magnificent gift of gab. They acquired in the process the equivalent of a quarter of a billion dollars in public money. Their combined private fortune was estimated at forty million dollars. Yet they had the nerve to keep coming back, silk top hat in hand, pleading broke and begging for more.

Mackenzie was the nimble money juggler and Mann was the hustling, blustering, cigarchewing construction boss. But they shared several characteristics. Both were former Ontario village farm boys, Mackenzie from Kirkfield, Mann from Acton. Both were earnest, bearded Scottish Presbyterians, totally humourless. And though both professed to believe in the power of prayer, they helped God a little with what they called gumption and get-up-and-go.

Mackenzie, an ex-schoolteacher and tiecutter, was the first railroad subcontractor to bring a piano into the construction camp for an evangelical prayer meeting. He'd gather the crew together on Sunday evenings to sing "Mr. Sankey's hymns."

Mann, a onetime ministry student and lumber camp foreman, was a powerful figure with arms like logs and was known to challenge camp troublemakers to a duel with axes. But he was also given to mysticism and in later life became a spiritualist.

They were great bluffers, forming their partnership in the late 1880s when as railway contractors each tried to outsmart the other in a swap of mules. They teamed up to launch their first railroad, a small line in Manitoba about a 160 kilometres long. They built it by persuading farmers along the way to do the grading and moving of loads without payment. They derived revenue by cutting firewood near the tracks and delivering it to Winnipeg in flatcars which they "borrowed" in Canadian Pacific Railway yards, according to their auditor, "without asking anybody's leave."

Their fortunes soared because they were the right men for the times. It was an expansionist era, ripe for promoters with grandiose dreams of building grandiose railroads. The CPR, by successfully driving the last spike at Craigellachie on 7 November 1885, hammered home to politicians the importance of intercontinental railways as vote-grabbers.

Consequently, Sir Wilfrid Laurier, declaring that the twentieth century belonged to Canada, was soon prepared to embark on schemes for no less than two new intercontinental lines. In the ringing phrase of another speech of his, the iron horses would "penetrate the north land and give Canada breadth as well as length."

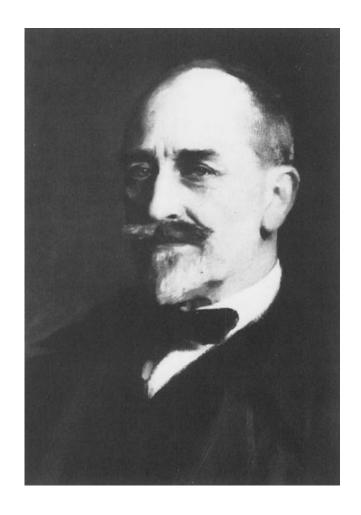
One was the National Transcontinental-Grand Trunk Pacific, whose eastern half, crossing Ontario, was subsidized by the federal government. By 1910, it linked Fort William on Lake Superior with Sioux Lookout.

The other line was the Canadian Northern Railway, built by Mackenzie and Mann with considerable backing from the Dominion of Canada. By 1915, it joined Port Arthur on Lake Superior with such future northwest Ontario mining centres as Longlac, Beardmore and Geraldton.

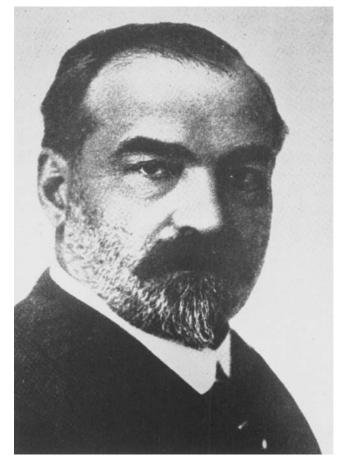
In immediate revenue-producing terms, both lines were disasters. Their tracks ran virtually side by side for hundreds of miles. Both went bankrupt. The National Transcontinental line went under, more than two hundred million dollars in debt, after completing close to 6500 kilometres of track.

The Canadian Northern was a more colossal fiasco. Time and again, though governments changed, Mackenzie and Mann kept returning, asking that their tottering railroad be bailed

Sir William Mackenzie (1849-1923) was the financial wizard with the "golden tongue" who talked the Liberal and Conservative governments into putting up more than a quarter of a billion dollars to build the Canadian Northern Railway. R.B. Bennett, before becoming Conservative Prime Minister of Canada, assailed Mackenzie for his "shameless mendicancy," "greed for wealth" and "falsifications and subterfuge." But his seemingly redundant railroad became the backbone of the Canadian National Railways and opened up northwest Ontario to industry.



Sir Donald Mann (1853-1934), his construction bosspartner, was in charge of pushing the tracks through until the railroad's ribbons of steel extended for 16,000 kilometres. Mann was a burly railroader who started up the hard way in north Ontario, axe in hand, cutting ties in the tamarack swamps. He once struggled all night through knee-high snow with 100 kilograms of flour and a side of pork on his back to feed a starving camp. He spent his money in the 1930s as a globetrotting spiritualist, leaving behind at his death a relatively modest estate of \$110,755.



out by the public purse before it utterly collapsed. Mackenzie, with a personal fortune of well over twenty million dollars, seemed not embarrassed at all about refusing to use his own assets, yet crying aloud from his castle overlooking Toronto Bay that the Canadian Northern must be rescued, revived and resubsidized one more time.

The impecunious millionaire's plea for another fifteen million dollars for the railway was rewarded. But when Mackenzie was back again within a month, Sir Robert Borden, the prime minister, called a halt.

Evidently Mackenzie was not just a mercenary railroad baron immune to feelings. Borden issued this moving report to parliament:

"On July 14th, 1917, I had an interview with Sir William and I definitely informed him that the Government could not grant any further aid and must take over the Canadian Northern in its entirety. Sir William was a man of iron nerve and this was one of the only two occasions on which I saw his self-control desert him.

"Knowing my decision was final, he was silent for a moment. Then he completely broke down, with audible sobs that were most distressing."

On 30 September, a bill to nationalize the Canadian Northern became law. Two years later, in 1919, the National Transcontinental line was also taken over by the government. The integrated system, embracing more than 32,000 kilometres of track, became the Canadian National Railways.

It was heralded as the world's biggest railroad. But the glory days of railroad-building were over.

Though the two transcontinental lines were money-losers initially, their impact on the development of northwestern Ontario was profound. They transformed transportation from a waterway system to one using land-based rail. Their divisional headquarters, such as Sioux Lookout and Jellicoe, mere specks in the wilderness, formed the nucleus of what were to burgeon as boom towns. The railroads became an industry in themselves, requiring trestles and ties and maintenance services, but also helping to stimulate the growth of large-scale mining and pulp and paper industries.

Perhaps the most vital impact of the railroads was the incentive they furnished in attracting a labour force. Workers who came to build the railroads stayed on. Prospectors, lumbermen and commercial fishermen — they, too, began converging on the hitherto unpeopled bush country.



Laborers were paid \$1.25 per day to pour concrete for this CPR track underpinning near Nipigon at the turn of the century.





"Gandy dancers" take time off from preparing a railroad bed to pose for this picture.

Bushwhackers and Gandy Dancers

To describe what we have suffered
Is past the art of man,
But to give a fair description
I will do the best I can.
Our food the dogs would snarl at,
Our beds were in the snow,
We suffered worse than murderers—
Up in Canaday I O!
— Railroader's Ballad at turn of century

A bushwhacker, also known as a stumper or swamper, was part of a railroad advance gang who went ahead of the steel to axe and blast a path through bush and bedrock and muskeg. During the building of the Canadian Northern and National Transcontinental Railways, he was commonly paid \$1.75 for a day that might last eighteen hours.

A gandy dancer was a railroader in the maintenance extra-gang, whose jaunty name was derived from his gait as he tamped down the ballast gravel between rails with a long iron Gandy Company tamping bar. For his labours, he was lucky to earn \$1.35 a day.

To Edwin Bradwin, both were unsung and deplorably underpaid heroes of northwest Ontario's industrial revolution, and he thus sang their praises in his book, *The Bunkhouse Man*: "We are prone in Canada to ignore the heroism of men such as these in obscure places. The youth of the Dominion know more of the storied March of Hannibal or the Crossing of the Alps than of the accomplishments of men on frontier work."

Bradwin himself is something of an unsung Canadian hero. He was a schoolteacher from Bruce County, Ontario, a huge, enthusiastic reformer with a railwayman's handshake, who in 1904 first went to the northern construction camps on behalf of Frontier College. Started five years before by a Presbyterian minister, Rev. Alfred Fitzpatrick, it was a unique institution designed to bring adult education to bush workers.

Bradwin became the College's crusading principal; until his death in 1954 at the age of 77, he insisted that its instructors must all be labourer-teachers. They worked during the day alongside of their students and conducted classes at night in the railway boxcars, bunk shacks, sod-roofed hovels and tents where they lived.

Bradwin was appalled by the working conditions, and his book was a searing indictment of the railroad sub-contractors who exploited the

men. Thanks to his campaigning against this form of "semi-serfdom," the Ontario government took steps to improve the workman's lot.

The college is proud of some of the celebrated teacher-workers that Bradwin recruited in the early days. They included two zealot physicians, Dr. Norman Bethune and Dr. Benjamin Spock. Some of the most vivid documentation of the railroad worker's plight was provided by Rev. James R. Mutchmor, later Moderator of the United Church of Canada.

Working as a navvy on the Transcontinental Railway on behalf of Frontier College in northwest Ontario from 1911 to 1914, Mutchmor recalled how he and the other men were outraged by the deductions taken out of their pay and the exorbitant prices gouged out of them by the company store.

"I saw men paid off with a revolver on the table," he remembered. "They were so sore! The men had to buy everything from the company ... their own overalls, shoes, caps. In winter time, they had to buy their winter clothes. They were charged about three times the prices. For these, they couldn't go anywhere else. As a result, it actually was necessary for the clerks to have a revolver or two around because the men were of a pretty ugly temper."

He got used to the squalid, vermin-ridden bunks in the railroad boxcars. "We had to make our beds out of small poles, you see, and we didn't have any spring mattresses at all. Small poles, and we would get a tick and fill the tick with straw and it took quite a little bit of experience in the beginning. You would put in too much straw and roll off. If you got just the right amount into the tick, you would get a pretty reasonable bed. Of course, you would be very tired and just go to sleep, that's all."

What shocked him most was having to work seven days a week on grading: "They would hew a plank out of a tree, make a plank, and we got a wheelbarrow, and we had a shovel, and there was no big machinery in those days, and with strong backs, they would work eighteen hours on it — and on Sundays!"

The only good thing about the railway camps, according to the temperance advocate, was the company ban on booze. "There was no drunkenness because there was no liquor," he said, with measured approval.

What Bradwin and Rev. Fitzpatrick most objected to was the company's attempt to demean the soul and humanity of the so-called unskilled railroad worker. Fitzpatrick quoted



Dr. Norman Bethune, long before he won fame as a workers' hero in China, stands with hands on hips at a bushcamp near Whitefish, Ontario. Despite "lack of time and sore hands" after working as a bush-

whacker by day, he wrote that he enjoyed teaching English at night to his Croatian workmates. Third from right, wearing a fedora and scarf, is Frontier College founder Rev. Alfred Fitzpatrick.



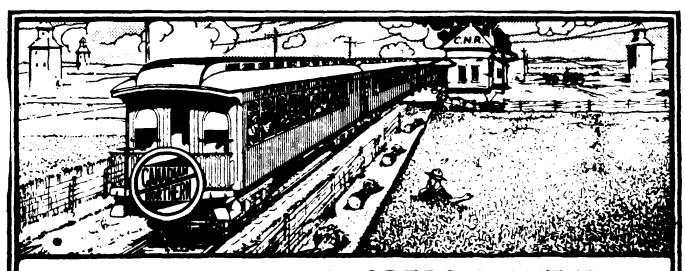
Bushwhackers here are shown punching out by hand the "coyote holes" for dynamiting the boulders while building the CNR north of Lake Superior. One man held a steel hand drill in position while three or four others swung sledge hammers in rhythm to dig out

a blasting hole. This was loaded with powder and lit by a long fuse. The men took cover in shanties to avoid being hit by the boulders hurled in the air by the explosion.

the industrial philosopher, Thomas Carlyle, "All true work is sacred. In all true work, be it but true hand labour, there is something divine." And Fitzpatrick added, "The human body really does count; a man's hands are as aristocratic as his brain."

Bradwin ended his book with the reflection that a frontier workman might be spare of speech, but like all artisans, he was endowed with an invincible spirit. "These are not beaten men of a beaten race. A knowledge of this causes one to enter a bunkhouse humbly."

As for the work camps in the hinterland, Bradwin was glad that the company men were gradually realizing how vital it was to enhance these work quarters. "The bunkhouse is as necessary to Canada as the bungalow," he wrote sixty years ago. "Indeed the building of camps should be an art throughout the Dominion, a prideful point in our history as when, some centuries removed, cathedral building in Western Europe was the mark of the age."



40,000 FARM LABORERS WANTED

\$12.00 TO WINNIPEG

SPECIAL TRAIN SERVICE

Leave TORONTO Union Station 11.00 P.W. - Aug. 17th, 19th, 31st, and Sept.2nd through trains with lunch counter cars attached

EXCURSION DATES

Aug. 17th and 31st From Toronto east to Chaffeys Locks and Kingston, also north to Thornies.

DESTINATION TERRITORY.—Tickets one-half cent per mile (minimum 50c) till Sept. 39th, 1916, west of Winnipeg to any station east of Calgary, Edmonton and Tannis, Alta. mETURN FARE AND LIMIT.—One-half cent per mile (minimum 50c) to Winnipeg on or before Nov. 30th, 1916, plus \$18.00 from Winnipeg to original starting point.

For tickets and leaflet showing number of farm laborers required at each point, also wages paid, apply to nearest C.N.R. Agent, or E.M. Fisk Station Agent, or J.A. Patterson Town Agent.

CANADIAN NORTHERN ALL THE WAY

The Canadian Northern and Grand Trunk Pacific Transcontinental railway systems competed fiercely in their ads for passengers travelling to Manitoba.



GRAND TRUNK

RAILWAY.

Special Settlers' Trains

-FOR-

MANITOBA

-AND THE-

Great North-West.

ONE of these Special Trains will leave Belleville each WEDNESDAY during the months of MARCH and APRIL.

An experienced Official will accompany each train.

REMEMBER — this is the SHORTEST route. Only First Class cars used.

LOWEST RATES.

For Tickets and all information apply to U. E. THOMPSON,

Agt. Grand Trunk Ry.
Bridge St., Belleville.

3/21/82

d8m

The Lumberjacks



A ship appears to don wooden wings as it contends with a massive log boom.



Timber Wolves or Lumber Lions?

"Jock," said the Laird of Dumbiedykes to his son and heir, "when ye hae naething else to do, ye may be aye sticking in a tree. It will be growing, Jock, while ye're sleeping."

That piece of canny advice was cited by a Montreal timber magnate named James Little in a speech that drew smiling appreciation from an audience of *nouveaux riches* sawmill capitalists attending a Forestry Congress. They relished the story, for at the turn of the century the demand for railway ties and trestles was so great that it seemed that any smart lumberman could make a killing by harvesting green gold from what appeared to be inexhaustible stands of white pine.

A major industry was burgeoning in northwest Ontario and a tough breed of frontier entrepreneurs, sharp as the blade of a double-bitted axe, was ready to slice up a lion's share of the profits to be made. Many opened sawmills in the booming new railway towns that semicircled Superior's Lakehead like horseshoe nails—raw, unfinished towns like Fort Frances and Ignace, Kenora and Dryden. Sawmills were also springing up in the twin grain elevator ports of Fort William and Port Arthur. Other sawmill titans had already made their mark in the Ottawa Valley, and were venturing northwest, sniffing out fresh territory.

Charles Winnans Cox was perhaps typical of the Canadian tycoons. Cox was a flamboyant grandstander pulling strings and wielding political pressure on behalf of his fellow lumber magnates in the Lakehead region. He was a strikingly handsome ladies' man, with a movie actor's chiseled features, even after a woman flung acid at his face in 1933. He was called "C.W." by his intimates, "Charlie" by the people of Port Arthur who elected him mayor for fifteen years, and nicknamed "Sue Me" by his enemies who claimed that was his belligerent answer when they asked him to pay his bills.

He was once described as a maverick "always in or on the brink of a consummate rage." He was a former cowpuncher turned lumberman who often wore a Stetson and lumberjack's mackinaw wool shirt while flashing diamond rings. "I started life with nothing more than a packsack," he bragged of his sawmills in Port Arthur and Hudson. His opponents maintained that he was a freebooter who avoided paying

Crown fees for pulpwood he exported from lots staked out as mining locations.

Cox merely laughed. "Do you think any other mayor is talked about as much as I am?" he asked at city hall. People shouted back a resounding "No!" and continued to vote for him.

They also elected him member of provincial parliament for two terms in the Liberal government of Premier Mitch Hepburn. On two occasions, Cox voted against his own party on regulations restricting lumbermen, and when Hepburn declared him "out of order" and sided with the opposition, Cox stormed out. Before he died in 1958 at the age of 74, Cox told reporters, "I am the voice of one crying in the wilderness."

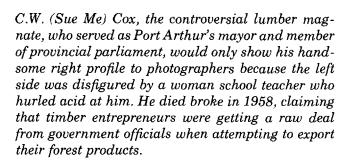
Cox's voice sounded more like the howl of a wolf to J.P. Bertrand, the late Lakehead historian. In an unpublished manuscript he wrote in the 1960s, Bertrand denounced northwest Ontario's lumber magnates as a pack of predatory timber wolves. He condemned them as plunderers, who trespassed on Crown reserves, raped the virgin white pine forests, and upheld the looter's credo: "Cut out and get out."

His attack is part of the modern conservationist's demonology which depicts pioneer lumbermen as ogres — complete with axes for horns and the tail of a curling ribbon from a bandsaw. They are accused of eating up everything but the sawdust, leaving a trail of stumps in their wake. The charge is only partly true, according to their defenders. The early lumbermen left stumps, but they opened up the frontier and left towns and mills as well.

"They weren't timber wolves," claims one of their modern spokesmen, Bill Beatty, manager of public affairs for the Great Lakes Forest Products mill at Dryden. "They had the courage to tackle the wilderness, and in my book, they were lion-hearted entrepreneurs."



Expert axeman Charles Macnamara (left), and a fellow lumberjack tackle a terrific trunk.







Alligators used to haul logs.



Teamsters had competitions to determine which teams could haul the heaviest load of logs on winter roads

polished to glare ice smoothness. One record "brag load" consisted of 306 logs.

The Upper Canada Cossacks

The lumberjacks who axed and sawed and river-rode the tall timber of Ontario's northwest were gifted yarn-spinners. They could out-brag Cyrano de Bergerac. They could out-lie Baron Munchausen. They could out-wench Don Juan. And the black bears they wrestled and the lakefuls of logs they corraled could test the strength of Paul Bunyan himself.

The tall tales they swapped around the bunkhouse barrel stove were essential to boost the morale of these French Canadian *bûcherons* from the shanties of the Ottawa Valley. Of these footloose blue-nosers from New Brunswick and clod-hoppers from Manitoba. Of these Scandinavians and Finns (invariably lumped together as Swedes). Of these Ukrainians, Poles and Yugoslavs (collectively called Galicians).

Romancing was an escape from the grim realities of bush life: their arthritis from wading through icy streams to grapple with log jams; their loneliness from being "bushed" in an isolated lumber camp; their economic thraldom to the big timber companies.

What motivated them to come? The railroads had opened up a new caravan trail for the rootless, the driven, and the questing.

During the Depression, many were itinerant farm boys who did threshing on the prairies in summer, and in winter migrated east to the logging camps to do tree felling or "bullwhacking" (hauling sled loads of logs behind a team of oxen or horses). Others were professional "bindle stiffs," nomads cramped by civilization's fences, who rode the rods from bush camp to bush camp, eternally carrying a hobo's bindle of tattered blankets in their packsack along with their double-bitted axe and "Swedish fiddle" (steel-framed pulp saw from Sandviken in Sweden).

A rare few were like William Kurelek, the late Canadian-Ukrainian artist, determined to prove to his immigrant father that he, too, could endure the hardships of the bush. In the 1940s, he returned from a northwest Ontario camp at Neys with a folio of charming paintings he proudly published under the book title of Lumberjack.

Whatever their reasons, the "bushers," "cutters" and "timberbeasts" headed northwest. They joined the ranks of a hardy crew described in the nineteenth century as "an incorrigible, though perhaps useful race of mortals, called lumberers, whom, however, I would name the Cossacks of Upper Canada."

And a roistering, swaggering bunch they were, if we are to believe the mythic lore that sprang up around their exploits.

Their bard was Stewart Holbrook, an American lumberjack in the 1920s, who chronicled the whoppers they told and their real Herculean feats in a lively history, Holy Old Mackinaw. He readily acknowledged that French Canadians were the most agile white water daredevils on the continent. With a hooked peavey pole or spiked picaroon in hand, and wearing their shin-high bottes sauvages, which were drive boots studded with quarter-inch steel calks as sharp as the claws of a cat, they herded log booms with the confident élan of bronco-busters. It was said of one of these "water hogs" that you could throw a bar of yellow soap into the river and he would ride the bubbles to shore.

Holbrook wrote that two of the toughest loggers were Ontarians. T.C. Cunnion, a squat, powerfully built man, estimated to be three feet across at the shoulders, entertained lumber-jacks by wrestling bulldogs. He usually introduced himself by bellowing jovially, "I am T.C. Cunnion, the Man Eater from Peterborough, Ontario." Also from Peterborough was the legendary Silver Jack Driscoll, a silver-haired moose of a man, who boasted he could fell an ox with his fist and twist horseshoes with his bare hands.

It was said of these shantymen, as they were sometimes called, that they lived in trees, hanging by their tails, and that they would eat hay if you but sprinkled whisky on it. That was stretching the truth, but not too much. The lumberjack shanties, which continued to be used in northwest Ontario camps until the 1920s, were almost as primitive as a cave dweller's abode.

Their life in and out of a cambuse (French Canadian patois for a shipboard provision room) has been preserved in a picture collection, now in the Archives of Ontario, lovingly photographed at the turn of the century by the late Charles Macnamara, a lumberman from Arnprior. A hundred loggers might be shoehorned into the single room of a low, windowless, smoky spruce cabin, about 12 metres by 13 metres, with an adzed pole floor, bark roofed, moss stuffed between chinks in the logs. Apart from a grindstone, the only furniture was an open fire, set in sand and stone, always blazing in the centre of the *cambuse*, directly beneath a 3 metres square hole in the roof. The loggers squatted around the fire, while the cook ladled out from a grimy pot into their tin plates, according to a folk tune of the day:



This axeman is disregarding the superstition that if you sharpened your axe on Sunday, you'd cut yourself on Monday. Logger Bob Duff posed for Charles Mac-

namara beside the stove in a shanty northwest of Black River in 1909.

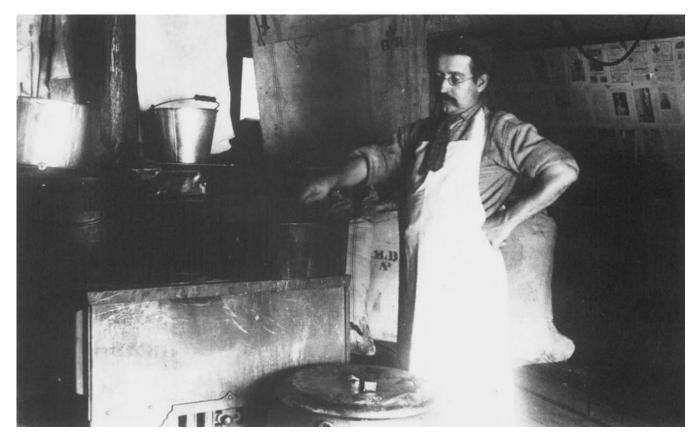


Loggers' sleeping quarters were somewhat improved in the 1930s — each lumberjack slept in a bed of his own.



The cook was god-almighty of a cambuse shanty, presiding over the pot of pork and beans bubbling over

the open fire in the centre of the smoky, bark-roofed, one-room cabin.



In the early 1900s, a stove replaced the open fire in a shanty, but a knowledgeable cook continued to bake the beans in a beanhole dug in the ground—regarded by loggers as the only fit way to treat a bean.

The cook in the picture looks unduly stylish. "The fact is," wrote Macnamara, "that when he saw I was going to take his picture, he went to the bunk and got out the necktie and put it on."

Beans that are sour, porridge thick as dough ... Blackstrap molasses, squaw buns hard as rock, Tea that's boiled in an old tin pail, And smells just like your sock ...

More accurately, it was the ripe smell of two hundred wool socks. Before going to sleep in their triple-decker "muzzle loader" bunks, two or three men crammed together on a verminous mattress of hay, they would hang up their sweaty socks, from hay baling wire to dry. Some, though by no means all the men, would remove as well their plaid mackinaw wool shirts and sturdy Melton cloth pants.

"Because they were soaked right through with spruce gum from the woods, your pants, if you took them off overnight, would stand up like a suit of armor," recalls Alex McCrimmon, a leathery, 75-year-old Kenora lumberjack, chuckling at his bit of hyperbole. In 1933, he remembers being paid \$16 a month, plus room and board, by the Minnesota and Ontario Paper Company, known to every Kenoran then as the "Mando"; and he cheerfully refuses to criticize the chow served.

"The tea was strong enough to float an axe in, which is the way I like it," he says. "And what if we got sowbelly pork and beans seven days a week? You know, I never got tired of 'em. And, by Jeez, you betcha I love 'em still."

McCrimmon, like virtually every oldtimer one talks to in the bush country, is an incorrigible sentimentalist about the hardships overcome in the days when logging was done by horse and by hand. He says you worked from starlight until starlight then, and you felt glad to have the job. You were awakened by the cookee's 4 a.m. breakfast call of "Daylight in the swamp!" Then you cut and hauled pulpwood "until you couldn't see your axe in front of you."

He laughs when he thinks back on the nicknames that were virtually mandatory in every bushcamp. There was Eddie Sigurdson, the "push," "bull of the woods," or camp foreman, traditionally a bull-roaring martinet; they nicknamed him "Good Fellow Eddie" because he was a gentle boss, prefacing a command with, "Be a good fellow and please do this." His opposite was nicknamed "Whispering Moore," because, of course, he hollered orders so loud you could hear him a mile away. In point of fact, there was a real northwest Ontario lumberjack nicknamed Paul Bunyan — but only because he was a mean shrimp of a man, ornery as a buzz saw, and you were wise to steer clear of the runt.

Looking back on his 50 years as a lumber-

jack, McCrimmon says that the recollection that stands out most forcibly was the immense pride you took in your craftsmanship. An axeman would point to a spot in the forest, and fell a 30-metre pine so skilfully, even in the teeth of a head wind, so that it would tumble and hit the designated spot precisely on target. He would take his pet axe to bed with him, tucking it under his "turkey" or packsack that was his pillow, and in the morning, its blade would be filed so keenly sharp that he could shave with it.

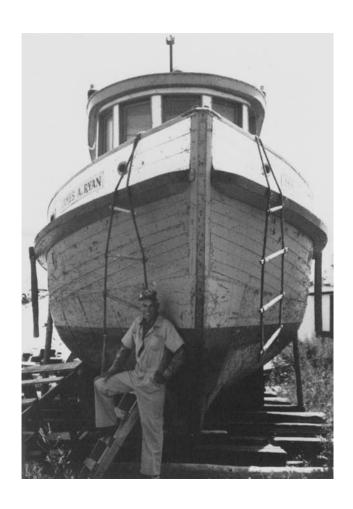
A teamster would be vainglorious about his 800-kilogram Clydesdales and Percherons: pampering them like children, talking to them like friends, filing down their teeth when need be, buckling them up with their own five-centimetre grooved birch snowshoes. As camp barn boss, in charge of thirty horses rented each winter season from Manitoba farms, Mc-Crimmon remembers what a tremendous fuss was raised when one of his teamsters hauled a record-breaking 306 logs piled on a bobsled over glazed ice roads.

Though he almost wept when the horses were let out to pasture around 1938, McCrimmon delighted in trying out the wide assortment of log-hauling machines that supplanted them. There were primitive "FWD"s — four-wheel drive trucks, which stalled easily in the bush country — and he remembers having a heck of a time getting part replacements from Winnipeg or Toronto. There were bizarre gas engine and steam engine haulers set on sleigh runners and tracked wheels. Then there were the magnificent caterpillar-style webbed tractors themselves — Fordsons and Internationals largely, capable of pulling a train of up to thirty sleigh loads of logs.

But the elite of the logging trade were the captains of the tug boats. McCrimmon achieved that exalted status as the skipper of a number of steam-winched alligator boats (so named by their inventors in Simcoe, Ontario, because they could winch themselves across portage land from one lake to another, like alligators). But the apex of his career was reached in the 1960s when he was captain of 160-horsepower tugboats with Cummins Company diesel engines. They were named after lumber camp foremen, such as the James A. Ryan, the George A. Potts, the Isaac Saldren, and to the people of Lake of the Woods they were at one time like living beings, more celebrated than movie stars.

"She used to be the queen of the lake,"

Alex McCrimmon, 75, a lumberjack for 50 years, stands on the docks at Kenora beside the abandoned James A. Ryan that he used to skipper. "In my day, a captain was proud to say he could run his steam 'gator or diesel tug on heavy dew — and, by Jeez, we usually could."





Teamsters would brag about the ability of their horses to perform a task without instruction. Here John Jensen, barn boss of the Pigeon Timber Co. near Nipigon,

which used to own 450 horses, communes with his 720-kilogram Percheron, Paddy.

McCrimmon mused recently, standing on the dock and staring at the hulk of the abandoned James A. Ryan. "I mind the time when I had her pull a bag boom of 124,000 cords of pulpwood, and that's a lot of wood. But now there ain't no more wood on Lake of the Woods. It's bone-dry of pulpwood, and the days of the tug and the boom and the log drive are gone."

Vanished, too, are most of the logging camps in the region. The Great Lakes Forest Products mill at Dryden has dispensed with them entirely. The loggers in its work force of 1600 employees are picked up in a free bus and are driven to work, like suburban commuters. They're more stable than the rip-roaring lumberjacks of yore; they're vastly better-paid, earning a decent unionized wage of more than \$10 an hour for a 40-hour work week, but they're far less colourful than the logging pioneers.

Today's lumberjack is a hard-hatted "woods technician" no longer dependent on a strong back and powerful biceps because he is no longer a manual labourer. His axe has been replaced by a powered chain saw. Mechanical tree harvesters and hydraulic slashers and other grotesque monsters, worth more than a quarter of a million dollars each, reach out with prehensile claws of steel to dump a score of felled logs by the roadside, where they are picked up by huge 20-wheeled trucks and whisked to the mill. New pulp mills have introduced extensive automation and a host of labour-saving machines.

Curiously, the Upper Canada Cossacks of another era do not resent the industrial incursion of these newfangled robots. "They may be exciting, like the way we looked forward to playing with shiny new toy machines in my day," says Alex McCrimmon. "But somehow they don't excite me like the old machines I know. Oh, how I loved the feel of those old donkey engines we used to use in the bush trade!"

They seemed like living things to him with a voice and a soul. They breathed and sweated, snorted and shivered, coughed and protested. "Maybe I loved those old machines because they were a part of my life," he said. "I look at old pictures of them, and I think of my youth. Oh, by Jeez, I loved those days in the bush and I wish they were back!"



This man, yielding a broad axe, and the dog were seen in a northern Ontario forest in 1919.

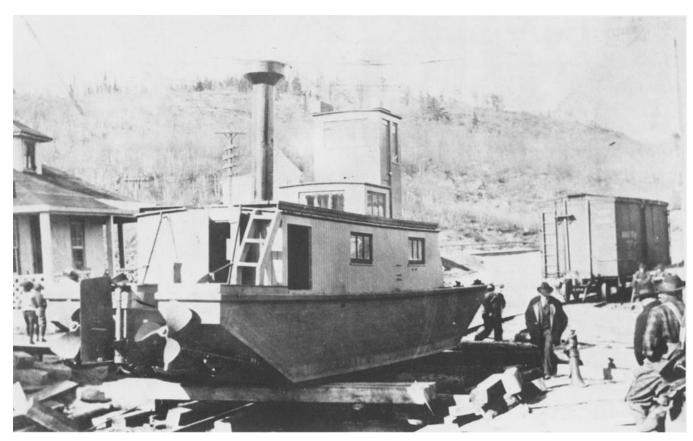


A cook takes a break at the doorway where hot kitchen air meets a fresh atmosphere.

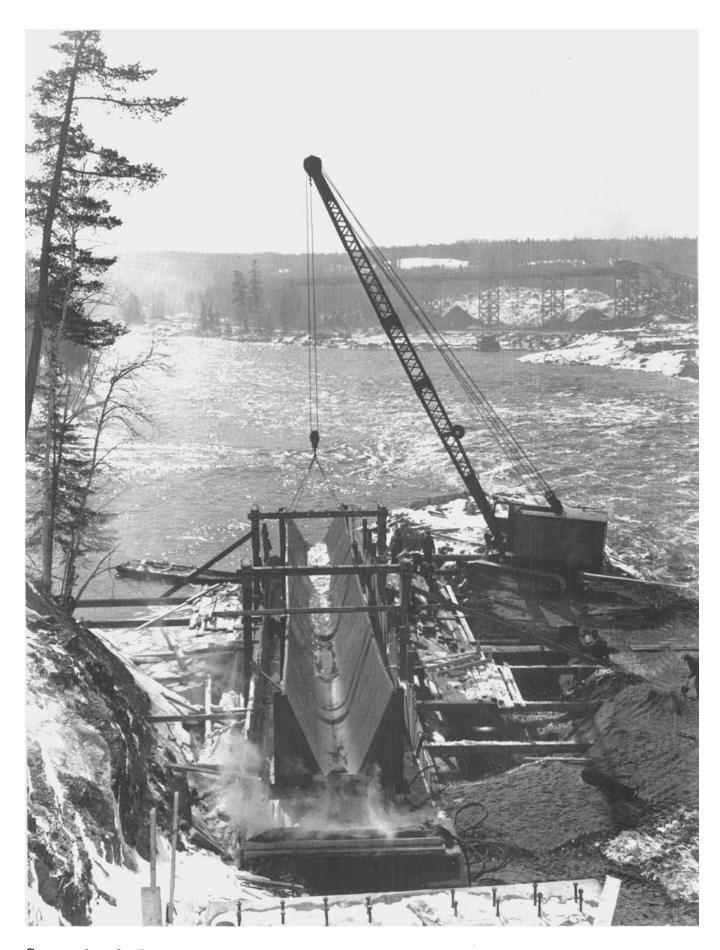


A cant hook — which to a layman looks like a stick with a hook hanging on it — was an effective tool for building a skidway, or storage pile of logs. The pair

of cant hook men here are rolling a log up two sturdy "piling skid" poles. It was a tricky business, because a heavy log could roll back and crush a man.



Logging alligator in makeshift drydock, Chapleau 1919.



Construction of a flume at Pine Portage.



A jack ladder—a form of escalator—carried logs from the boom in the Kamanistiquia River into the

 ${\it Great \ Lakes \ Forest \ Products \ mill \ at \ Thunder \ Bay \ in } \\ the \ 1940s.$



The highest acclaim for a river drive lumberjack was to call him "catty" — meaning he was nimble as a cat

on a log in midstream. These men are using a pike pole to unscramble a log jam.

Lumber Lore

Incredible though it may seem, the fact is that forest fires in northwest Ontario do have one virtue. The awful things give slow Mother Nature a boost and help jackpines to regenerate. The flames heat up the jackpine's scaley, resinous, serotinous cones, forcing them to release the seeds, which then whirl down on propellor-like wings, and propagate in the ashes.

To a lesser degree, the fire gives a similar boost to the breeding of black spruce. Its cones are semi-serotinous, meaning its resin holds the scales closed, but does not protect its seeds quite as zealously as the hard, imprisoning cones of the jackpine.

Both coniferous softwoods, the jackpine and black spruce are the two mainstays of the pulp and paper industry, the sovereign money-maker of northwest Ontario. Here's a compendium of lore about that industry, and the logs and loggers that make it work:

What's a jackpine like? An oriental pagoda, 10 to 20 metres high, 30 to 60 centimetres in diameter, with a tough resilience enabling it to put down roots in granite cracks and thin sandy soil.

What's a black spruce like? An enduring, evergreen candelabra, 8 to 30 metres high, with a diameter of 16 centimetres to one metre, noted for its ability to flourish in swampy muskeg.

What's a white pine like? A stately steeple, 30 to 50 metres high, one to one and a half metres in diameter, the onetime monarch of the square timber trade in the nineteenth century, when it was used as masts for ships and lumber to build homes, but since dethroned by the jackpine and black spruce.

What's a skid road? One of the two colourful logging terms which have crept into the English language, but corrupted into "skid row." It once was the iced road over which a team of oxen or horses pulled a sleigh load of logs. In its debased form, it means a dumpy part of town where drunks — not necessarily lumberjacks after a spree — nurse hangovers.

What's a haywire outfit? A second logging term that has sneaked into the English language by the back door. Originally, it was simply the wire that bound together the baled hay for a teamster's horses. It came to mean a lumber company that was broke, busted, strung together in flimsy fashion, altogether a crazy place.

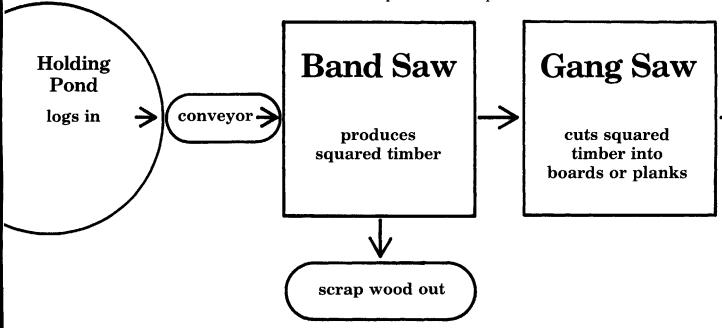
What's a timber limit? It dates back to the seventeenth century, when the British colonial government attempted to reserve prime timber for naval masts by blazing trees with the "King's broad arrow." When that didn't work, it introduced licensed areas called "timber berths" or "limits," where a lumberman could cut to the limits of his lease and no farther. The penalties for trespassing on the Crown's timber reserves were severe, approximating those against swearing, heresy, fornication and murder. But the days of timber poaching and piracy are over. Lumber companies today operate under Crown licences issued for up to twenty years, pay "stumpage fees" for the scaled volume of wood harvested, and co-operate with the Ministry of Natural Resources in planned forest management.

How long does it take to grow a tree in northwest Ontario? It varies, according to the species. Generally, a jackpine matures in about 70 years and spruce takes approximately 90 years.

A Sawmill

Despite mechanization, the basic procedure at a sawmill has not changed much over the years. Nowadays most of the logs are transported to the mill via rail or huge tractor trucks and trailers. In a few of the more remote regions, a floating corral of thousands of logs are still chained together in the form of a loose raft called a bag boom and hauled downstream or across a lake to the mill.

On arrival they are stored in a holding pond. The water helps protect the logs from fire and attack by insects and fungi. They are sorted into piles of similar sizes and then lifted forty tonnes at a time by a conveyor called the "hydraulic elephant" and dispatched into the mill for saw-



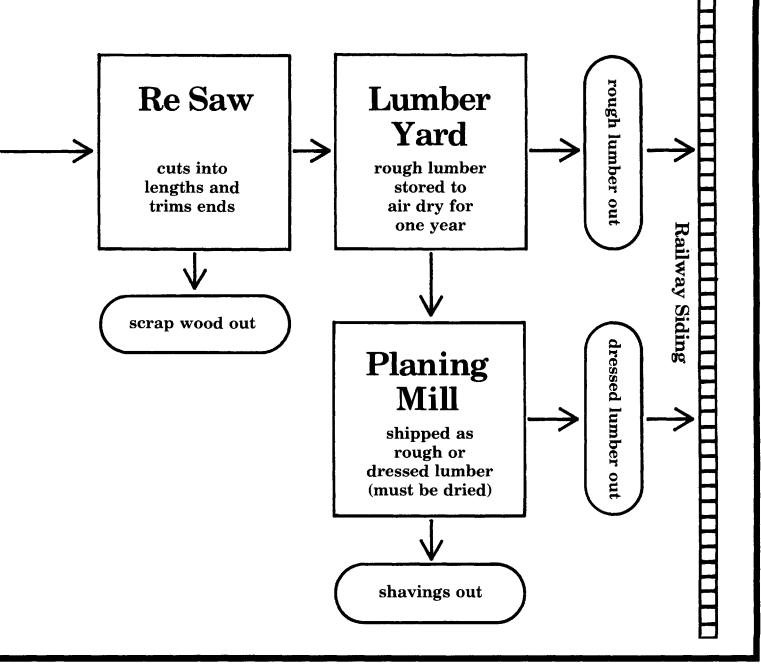
ing into boards and planks of various sizes. The power band saw or circular saw, driven by belt from an engine or electric motor, are widely used.

The newly cut timber, which contains much moisture, is heated dry in kilns or simply stacked in the open air of the lumber yard to dry out; then shipped out.

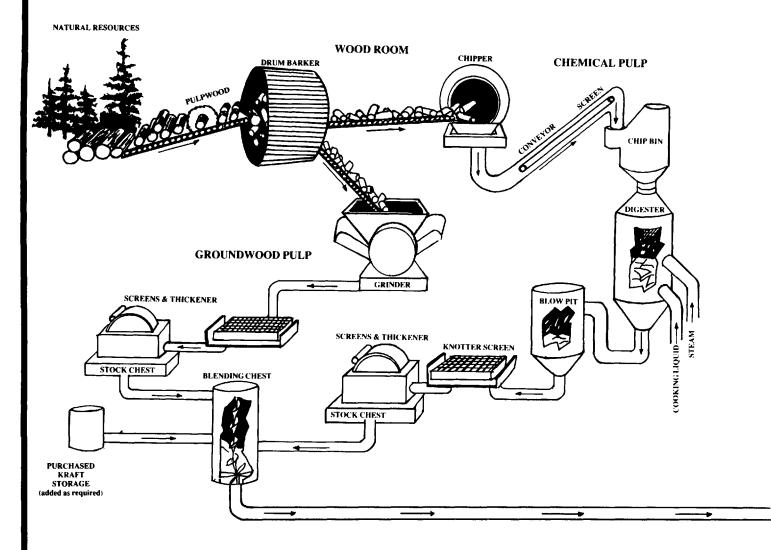
Some timber is sliced not into boards but into a thin ribbon or veneer, and sheets of the veneer are glued together to form plywood. It's a fairly simple process. Individual sheets of plywood are obtained by unrolling a tree in a peeling machine. After a barked log has been elaborately softened in hot water, it is held in

the machine by spikes at either end and turned against a long blade parallel to it. The blade can be adjusted according to the thickness required, which can be as little as .3 millimetres.

The machine peels a log more skilfully and evenly than one can peel an apple and a slicer cuts the emerging veneers into required lengths. After being dried in special kilns, the sheets are coated with glue. They are arranged together so that the wood grain of one sheet is at right angles to the grain of the next sheet, which makes the plywood very strong. Then they are compacted together in a hydraulic hot press.



A Paper Mill

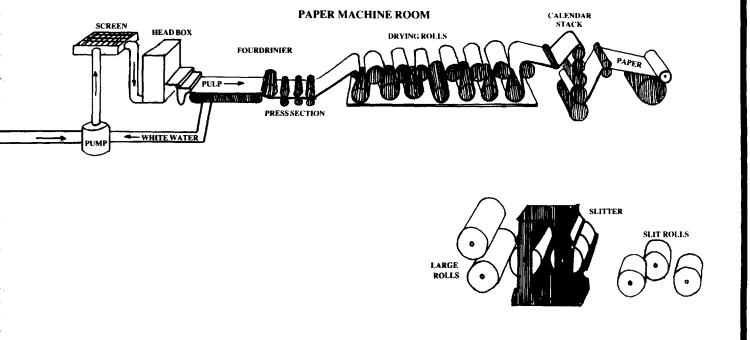


When Johann Gutenberg of Mainz in Germany developed the printing press in the fifteenth century, paper was made by the expensive process of grinding up linen rags. It wasn't until 1873 that another German named Friedrich Keller invented the cheap process of manufacturing paper from wood pulp and the process has not changed much over the years.

The paper turned out by the pulp mills of northwest Ontario ranges from newsprint and fine stationery to the rugged wrapping paper known commercially as "kraft," from the German word for strong.

The semi-liquid, porridge-like pulp itself is made in one of two ways. One way is to grind the logs into shreds with a revolving grindstone. The other is to cook the wood chips with chemicals, thus dissolving the lignin which cements the wood fibres together.

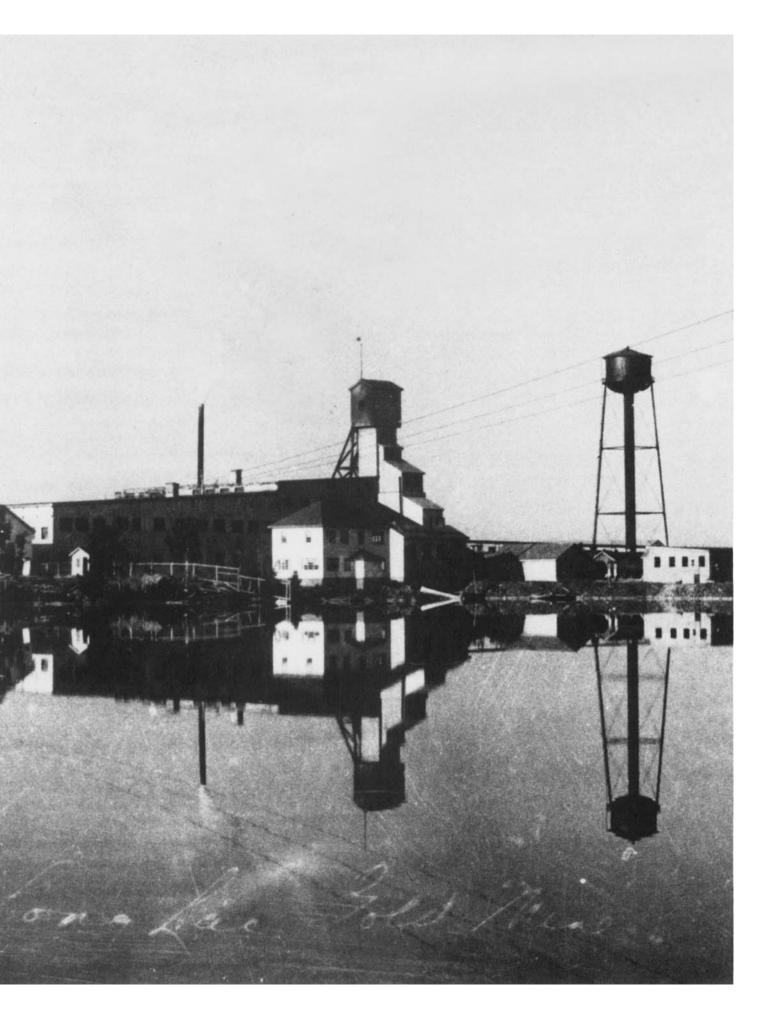
Either process calls for the pulp to be sieved free of impurities, thoroughly cleaned with water, steamed, dried, mangled, pressed by enormous "calendar" rollers, and finally shipped out in enormous rolls each seven kilometres long and up to eight metres wide. It takes about two tonnes of wood to make one tonne of paper. The heart of the process is a paper-making machine called a Fourdrinier after the original makers. It's about 100 metres long, a moving belt with 500 meshes to every square centimetre, designed to sieve out water from the wet web of pulp fibres. After some of the water is removed, the paper goes through a maze of rollers, first to press more water out and give a uniform surface and secondly to dry out completely.



The Goldseekers



Little Longlac Gold Mine, 1930s.



The Klondike of New Ontario

Through Lac Seul they came o'er the
Ear Falls terrain
Up the Chukuni to Pakwash and Snake,
To Twin Island Lake, through Gullrock and Keg
To the waters now known as Red Lake.
Then lo and behold, the discovery of gold
Brought people by hundreds to prospect and stake,
Planes flew day and night, a prospector's delight,
And boats almost covered the lake ...

"The Ballad of Red Lake" by Robert O. Stark

"Look at this visible gold!" said excitable Lorne. "Looks like we found it!"

"Ain't that what we come for?" said taciturn Ray. "Just take a look at mine."

With that exchange of dialogue, the brothers Lorne and Ray Howey ushered in what was billed at the time as the Klondike of New Ontario. It was 25 July 1925, and the pair of amateur prospectors from Haileybury had spent the past two weeks on a futile treasure hunt. They had chanced upon a geological report from the Ontario Department of Mines. It hinted of gold-bearing quartz veins evidently visible in the greenstone layers of Precambrian rock on the shores of Red Lake, 2011 kilometres northwest of Toronto.

With their picks and pans they had searched vainly the southeast end of the lake — a lobster-shaped, reddish muddy body of water, 40 kilometres long, three kilometres wide, extending claws into 250 kilometres of indented shoreline — and were ready to give up. But then a bolt of lightning literally helped them make a lucky strike. It struck a spruce tree which toppled not far from their camp.

Before leaving, the two brothers decided to make one last try, each from a different direction. Thanks to the uprooted tree, they stumbled upon exposed outcroppings of quartz glittering with yellow filigrees of gold. "I was so happy," Lorne later said, "I could have wept with joy."

He confided the secret to Jack Hammell, a breezy former prizefighter under the boxing ring name of "Whirlwind Jack," who had become one of the shrewdest mining promoters on Bay Street in Toronto. Invited to come up and examine the lucky find himself, Hammell performed like a whirlwind. He promptly staked out additional claims for the Howey Syndicate, and got a promised \$500,000 backing under option from the

rich Dome Mines of Porcupine. The word leaked out, and in January of 1926 the stampede was on.

Ultimately an estimated 8000 greenhorns and sourdoughs were infected with Red Lake gold fever. They scrambled to stake more than 10,000 claims in lake-pocked, swampy and granitic gold fields stretching from Favourable Lake on the west (which proved to be most unfavourable) to Pickle Crow on the east (as quirky as its name and as erratic as its promoter, Jack Hammell, but which eventually produced \$35 million).

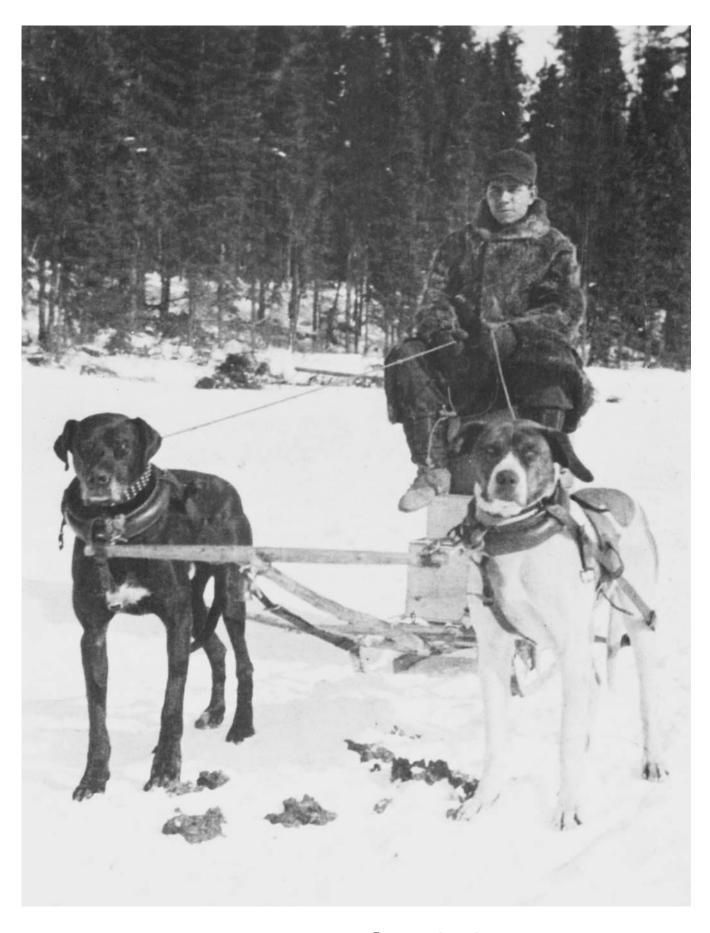
Altogether, since the original Howey discovery, fifteen productive mines in the Red Lake region have yielded \$800 million worth of gold bullion. Of that total, the present Campbell Red Lake mine, ranked as the richest producer in North America, has been responsible for \$500 million alone.

But the last of the great gold rushes was significant not merely because it was a financial bonanza. It gave rise to innovations in the milling of hard rock gold and transporting heavy equipment in the north country. It cradled commercial aviation in Canada and parented the whole field of bush piloting. And, in the phrase of that master promoter, Jack Hammell, it "cracked open the north." It drew world attention to the mineral potential waiting to be wrested from the bush country in the far reaches of the Canadian Shield.

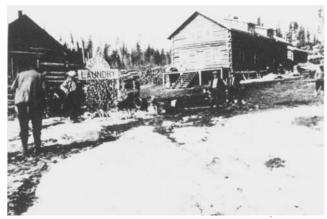
A headline in the *Boston Post* in 1926 blared: "'Mush On' Goes Out the Cry — While Yet Another Impatient Prospecting Party Hits the Trail for Red Lake." From the four corners of the earth they came to mush to the new Klondike. They seemed to be seized with an uncontrollable wanderlust, abandoning wives, jobs, orderly lives, for what purpose?

"I think many of us were romantics, seeking the escapism glamourized by Jack London and Robert W. Service," says Don Parrott, who admits to being influenced by both. Now retired at 67 after close to half a century of prospecting in the bush country, the Winnipeg-born author of *The Red Lake Gold Rush* sits in his modest apartment in Thunder Bay beside the railway tracks. He browses through his scrapbooks of yellowing news clippings and faded snapshots, and reminisces about the great adventure of his life.

He believes it took a certain kind of dogged, strong-minded individualist to persist in scrabbling for hard-rock gold. He thinks many of his



Dog teams hauled people and goods along snowy trails to places that were inaccessible by plane or boat.



The Café Hotel (right), and the Red Lake Laundry were town landmarks in 1920.



Prospector John Jones, third from right, posed with a group of Indians for a picture taken in Red Lake, 1925.



A lone inhabitant wanders along MacKenzie Island's rolling Main Street in the early 1940s.



This "Duck Walk" crossed the swamp in the foreground over to Howey Mine. In front of the mine are the Catholic Church and the Provincial Police Station.

fellow Red Lakers had the traits of the wild brier rose that thrives tenaciously on the granitic Canadian Shield.

"Call us eccentrics, if you will," said Parrott, a lean, flinty man, with a liking for cowboy boots and bright shoelace ties, a rat-trap memory for geological details, and a passion for preserving Canadian history. "But whatever you call us, you'll have to grant us a lot of colour and character. It sometimes seemed that everybody who settled in Red Lake was a bigger-than-life character. And God knows, plenty of us were naive characters, when we set out to mush north up the Red Lake trail."

The trail began in Hudson, a whistle stop at the end of steel named after a builder of the Canadian National Railway. In January of 1926, this pinprick of civilization in the virgin bush was invaded by the first wave of stampeders. They were a motley rabble, bearing picks and pans and 40-kilogram packsacks, but most of them woefully unequipped for the gruelling, fiveday trek over frozen lakes and rivers to Red Lake 85 kilometres north.

"Some journalist said the slogan on everyone's lips was 'Red Lake or Bust.' But I'm willing to go on record that it was 'Mush, you
S.O.B.'s!" That was the vivid recollection of
Gordon Shearn, an immigrant from Bristol,
England, who was deafened by the bedlam in
Hudson. "Every train was loaded with gold
seekers, many suffering from a bout with John
Barleycorn," he wrote. "The din of dogfights,
drunks, howling dogs, whistling trains and
roaring planes made Hudson the noisiest town
on earth. It was hard to find a tree stump without a dog attached to it."

He didn't dispute the estimate of another journalist that the trail to Red Lake was blazed with 3000 dead husky dogs. But he doubted whether the mutts pulling the sleds were genuine husky dogs. Huskies were in such short supply that they were fetching up to \$200. Consequently, entrepreneurs were cleaning up, it was said, by dognapping bulldogs and fox hounds from as far away as Winnipeg and selling them to greenhorn prospectors at premium prices.

Shearn got up the nerve to hire himself out as a professional dog team driver. Eventually, he wound up with \$100,000 by staking Red Lake's other present producer, the Dickenson Mines Ltd.

He was luckier than Hans Pokolm, a bumbling greenhorn from Gdansk, Poland, who walked all the way up the Red Lake trail with another Polish newcomer, Otto Reinfandt. "We had no map, no compass, no parkas, and we were carrying two suitcases each," Pokolm recalled dolefully. They wore ordinary overcoats and had one pair of snowshoes between them — which they didn't know how to use. "We put on the snowshoes backwards — I never saw a pair before in my life — so after a while we carried them, too, because as soon as we'd take two or three steps, we'd take a header into the snow."

They finally stumbled upon a huddle of tents and shacks and asked a man how far it was to Red Lake. "This is it," he said. "That's all there is."

"My God, I can never tell you the disappointment I felt," Pokolm later recalled with amusement. "When I left my little village in Europe, I dreamed of picking up nuggets of gold off the streets like hen's eggs. Instead, I found a couple of shacks, a frozen lake, wolves, everything buried in snow. And far from there being gold in the streets, there were no streets! The hard-rock gold you had to dig deep out of a mine only ran about five dollars' worth to one ton of ore."

Nevertheless, Pokolm zealously joined the throngs of newcomers staking claims optimistically named "Big Lode," "Rajah," "Zeus" and "Red Lake Tiger." Only veteran prospectors were able to get a chuckle out of the claim named "Sanshaw." It was an inside joke, signifying that the staker was going ahead with the diamond drilling and sinking of a shaft, though the mine did not have the blessing of John Shaw. He was the Nova Scotian mining engineer, so severe in his appraisal of a mine's potential that he was nicknamed "Turn 'Em Down" Shaw. (One claim that did win his approval was the McKenzie Red Lake mine, from which, according to his son, Toronto engineer George Shaw, his late father made "a tidy sum.")

Though the majority of stampeders did not strike it rich, they earned themselves some picturesque names. Parrott recalls that there were four Bill McDonalds in the Red Lake gold camps, and to distinguish between them, miners nicknamed them "Windy Bill," "Cranky Bill," "Happy Bill" and "Squeaky Bill" McDonald.

The nickname that most tickled Parrott was the one awarded to a promoter named George S. Clark. "He was a good talker, and when buying and selling claims, was admired as a champion bull-shooter," says Parrott. "So everybody called him B.S. Clark instead of by his initials of G.S. He was so widely respected under that

monicker that Clark himself proudly signed his cheques with a 'B.S.'"

To Murray (The Hairy One) Watts, who recently died, aged 72, probably the best-known of the stampeders, the heroic figures of Red Lake were its prospector-promoter pugilists. "They had the real pioneer spirit, wouldn't be beaten by the odds, and used their wits as well as their fists," he said shortly before his death in October, 1982. It is a pretty good summation of Watts himself. A modest millionaire, he had retired to his hometown of Cobalt, after an illustrious career in mine exploration across the Canadian Arctic that began 55 years ago in Red Lake.

He was then 17 and visited the region's gold camps as an apprentice prospector for a mining syndicate. Later, in the mines he explored from Ungava to the Coppermine, travelling via canoe and dogteam, the Eskimos named him Merkooleek, meaning The Hairy One. But his boxing skill had already won him the nickname of The Cobalt Kid, and he was thrilled at the prospect of meeting his prize-fight idols who had rushed to stake claims at Red Lake.

There was Jack (The Nova Scotia Kid) Munroe, former mayor of Elk Lake, Ontario, and heavyweight boxer. He won knockout bouts with the mat king, Kid McCoy, and laid out world heavyweight champion Jim Jeffries for the count of nine in Butte, Montana in 1903. Though he was still a big-shouldered giant with a triphammer punch, he had to quit the ring because a bullet in the First World War had badly injured his right arm. Watts remembers one of his mining promotional stunts that drew international coverage: he hired two prospectors to mount guard with rifles when showing a *New York Times* reporter a gold brick.

Then there was Bill (Hardrock) Smith, who didn't do too well at Red Lake, but in 1931 promoted the Little Long Lac and Hard Rock mines in gold fields that produced more than \$100 million. Watts recalled boxing with Smith at that period when they were both prospecting together in the Shonia-Birch Lake district of northwest Ontario. "I learned a lot from his contagious enthusiasm," he remembered. "Hardrock would wake me up, exclaiming in the tent, 'Kid, this is the day! We're destined to find the big one today. Let's get going!"

And finally there was the incomparable Jack (Whirlwind Jack) Hammell. Watts believed there was no salesman of the Ontario northwest so eloquent and buoyant. When you knocked him down, he'd spring right up again, said Watts.

He bucked up spirits when Red Lake over the years was coping with one of many down periods of its boom-and-bust economy. And he did it so zestfully in a rich, slangy style. Watts felt Hammell spoke for all mine promoters when he once said:

"Mining's a tough racket. Mines don't kiss you every morning. It's not all peaches and cream up there. She's a sweet country and there's lots more gold. All you've got to do is to go up there and look at it."

How they spent it

The ultimate story of a Red Lake prospector whooping it up with his pay lode is told of the late Hans Pokolm. They say he threw a champagne party in the royal suite at the Marlborough Hotel in Winnipeg. He piled corn flakes on the rug a foot deep. Then he demonstrated to a lady friend how to snowshoe through the stuff like a true Red Laker.

Pokolm was never a millionaire. But he did make a modest pile from the more than 1000 claims he staked. In the classic tradition, he spent it all on wine, women, and song. He died in 1981 at the age of 75. Before his death, he told a reporter for the Toronto *Globe and Mail*: "Money was never a dominating factor with me, though I enjoyed spending it. It was the chase, not the finding, of gold that counted."

That could serve as the epitaph of these three prospectors who made a lucky strike.

Sandy McIntyre, one of the first stampeders in the Red Lake gold rush of 1926, was the archetypical prospector with a lifelong craving for unshackled freedom and bottomless glasses of booze. He was a red-bearded, henpecked Scot, who changed his name from Alexander Oliphant when he escaped from his nagging wife in Glasgow to become a roving goldseeker in the mining camps of north Ontario.

He wasn't much of a prospector — "Sandy couldn't tell the difference between granite and greenstone," according to Red Lake historian Don Parrott — but he was a lucky one. He made his reputation in 1909 by staking what eventually became the \$200 million McIntyre Porcupine mine adjoining the rich Hollinger gold mine in South Porcupine.

McIntyre drank his way through the \$8,000 pittance in cash he received and allegedly was cheated of the rest of his claim. "Easy come, easy go," he said philosophically, as he wheedled grubstake money from his cronies. "Give me a handout, because I'm flatter than Scotch whisky in a saucer."

The Hughes brothers, Jim and Billy, made a fortune by buying a one-eighth interest in his Porcupine property for \$25. The two promoters then offered the penniless McIntyre a bonus if he found gold for them in the Kirkland Lake area. Luck struck again and he sniffed out the nucleus of the fabulously lucrative Tech-Hughes mine. The Hughes brothers kept their promise

and gave him 150,000 shares in the property. Once again, McIntyre's fondness for the bottle was his downfall. He sold the shares for \$4,500, spent a little on buying two black horses that caught his fancy, and guzzled down the rest on a mammoth binge.

At Red Lake, he was grubstaked by friends who hoped his luck would rub off on them. It didn't. But McIntyre enjoyed himself at the camp, swilling homemade whisky and living in a cabin with a young woman prospector who called him "Darling Sandy Daddy."

He ended his days as a handyman, living on a small pension of \$150 a month, at the Porcupine mine bearing his name. In 1939, at the age of 70, he died broke at Christie Street Hospital for First World War veterans in Toronto.

George Campbell, discoverer of Campbell Red Lake, the western world's richest gold mine, was regarded by most people as a millionaire. But he wasn't. He merely behaved like one. He acted like a Hollywood version of a millionaire — a debonair Gene Kelly from the backwoods who suddenly struck it rich.

He appears to have rehearsed for the role a long time. Born in the small town of Massey, Ontario, he was the youngest of a family of eight. He seems to have envied the good fortune of his two prospector brothers who shared in the discovery of that "staircase of gold," the Dome Porcupine mine.

Well before his own extraordinary discovery began to pay dividends in the 1940s, he was a dashing figure of a man. He always wore a dark brown lucky fedora with the brim turned down at a rakish angle. There was a cigarette dangling perpetually from his lips. He entertained his friends by playing romantic tunes on the piano, and doing it superbly, though he couldn't read a note.

At 15 he lied about his age to join the Canadian Expeditionary Force in France during the First World War. Afterwards he did some prospecting in the Dome area of Porcupine. But the Red Lake gold rush of 1926 was like a bugle call to adventure, and he spent the rest of his life in that region, delivering mail by dog team, freighting for the mines with Bob Starratt, and always seeking "the mother lode of all the gold in Red Lake."

Actually, it had been staked out in February, 1926, but the ore-bearing body was buried under a morass of gravel, swamp and muskeg. It was not until almost 20 years later, in February



Gold Mine at Porcupine.



The man who discovered the Campbell Red Lake Mine is seen doing what he does best.

Goldminers G.S. Clark and J.E. Hammell, nicknamed B.S. Clark and Whirlwind Jack, were known for sharp verbal skills which paved their way to success.

ruary, 1945, that diamond drilling by Dome Explorations at a depth of 53 metres struck 75 centimetres of visible gold splattered like drippings from a yellow candle. But an additional \$2 million was needed to bring the mine into production and Campbell began selling some of his 200,000 shares for as little as 10 cents.

However, for four years he lived it up, like a child given the key to the candy store. He bought a black, nine-passenger Packard for \$6,400 just to drive it on a sight-seeing tour to the Grand Canyon. He bought a motor boat, Lady Ripples, that would speed him around Red Lake. He took flying lessons from the famous bush pilot Harold Farrington and bought four planes — a Stinson, a Travelair and two De Havilland Moths — so that he could fly at whim to Toronto on alcoholic sprees. He'd book several suites at the Royal York Hotel at a time, and while his chums would watch the nightclub shows in the Imperial Room at his expense, he'd be drinking and listening to the radio broadcasts of the baseball games.

His wife, whom he'd met while she was working for Kerts General Store in Goldpines, persuaded him to go on the wagon. But she was too late. He had never revealed to her he was supposed to take pills for a severe heart condition.

On 27 February 1948, at the age of 49, he died of a heart seizure in the log cabin that he called Hell's Acres. He was buried in the Post Narrows Cemetery at Red Lake and his restless spirit made the last journey in his own aircraft flown by Harold Farrington.

Jack (Whirlwind Jack) Hammell was the basis of several bigger-than-life characters in the novels of Courtney Riley Cooper, the *Saturday Evening Post* fiction writer of the 1930s. Little wonder, for almost everything Hammell did was on a heroic, outsize scale, the very stuff of human drama.

He was a mining promoter from the farm community of Beeton, Ontario, who developed a Damon Runyonesque, New Yorkese vocabulary. He used it eloquently to charm millions out of the flintiest financiers in order to create northwest Ontario mines at Howey, Hasaga and Uchi, Starratt-Olsen and Pickle Crow, and also at Flin Flon in Manitoba.

He was a broken-nosed bruiser of a man, as strong as a bull and sometimes bull-like in his pugnacity. Yet he was a sentimentalist with a soft spot for bush pilots and prospectors down on their luck. He was known as their godfather because of his unique creation in 1927 called NAME — Northern Aerial Mineral Explorations. He maintained as many as eight planes, operating from 34 northern air bases, and 100 prospectors in the field were paid \$150 a month and their grub, plus 10 per cent of any find that proved worthwhile.

A banker once asked him why he didn't save himself money by merely giving prospectors a few dollars for their trouble. Hammell's vituperative reply has been preserved.

"You lily-white eater of soft meat," he roared. "You pin-headed, elongated gas bag. I've been on the trail with those men. I've worked, slogged and starved with them. I hope all your goddamned millions sink into a bottomless swamp — and you with them."

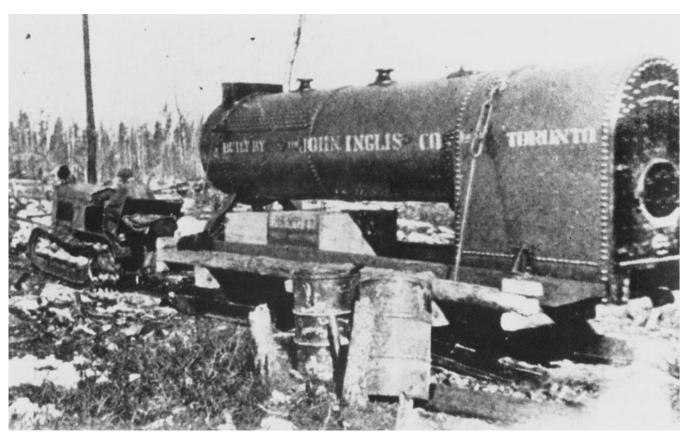
He had a rough-and-tumble background. At 17, he was a bouncer in McConkney's famous restaurant and dance hall in Toronto. One night he foiled a robbery and badly beat the two thugs in the process. The grateful owner staked him to boxing lessons in Chicago. He soon became a welterweight prizefighter in a travelling circus, billed himself as "The Terrible Miner" in vaudeville bouts with the Canadian pugilist Jack Munroe, and quit the ring in New York to work in a stockbroker's office. As a part-time reporter, he also picked up underworld argot from gangsters, which served him in good stead in the tough mining business.

Yet he had surprisingly wide interests. He was a patron of ballet and opera, served as a director of the Ontario College of Art, and was an authority on several esoteric branches of paleontology. He spent \$400,000 decorating his sumptuous estate in Oakville with Chinese antiquities acquired from the Chicago World Fair of 1933.

He made an estimated \$7 million from his mining enterprises and flung his money about erratically. When sober, he was vain and intolerant, a furious battler against trade unions. Drunk, he could be so maudlin as to give \$5,000 to a prostitute or so violent that he smashed autos by driving them into streetcars.

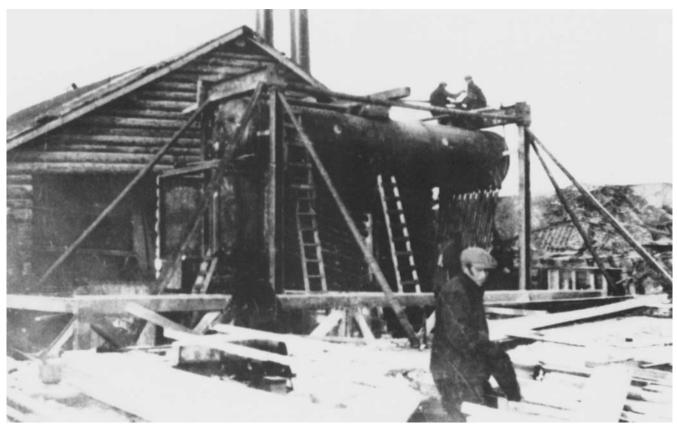
He died in 1958 at the age of 82, and he spent the last day of his life driving around in his new \$14,000 Cadillac, and went to sleep that night in his Oakville mansion, sipping his final bottle of champagne. While he was alive, he was accustomed to drinking one quart of whisky a day. At his death, he left an estate, after taxes, of \$1.5 million. He bequeathed a good chunk of

money to hospitals in Red Lake and Oakville. But he made sure the two nurses who attended to his needs each got \$50,000; they had made the last years of his life happy, he said, "by watering my whisky."



It took two Fordson tractors to haul this 60 horsepower Inglis steam boiler from Hudson to the Howey

Mine in Red Lake in the winter of 1927.



Workmen install a steam boiler at the Howey mine at Red Lake in 1927. That summer Howey sank a 200-metre three-compartment mining shaft 2 metres by 5 metres with a steam-powered mining plant, consisting of two 60 horse-power Inglis locomotive-type

boilers and an Ingersol Rand steam hoist and steamdriven air compressor. This machinery had been hauled into Red Lake 225 kilometres on the winter road from Hudson by three Fordson tractors equipped with snow-track treads.

Mining Lore

The myth still prevails that gold nuggets can be picked up like pigeon eggs from the streets of Red Lake. The fact is that it takes an enormous amount of ore to yield a single ounce of gold at Red Lake's two presently active mines. To extract ten grams of gold, the Campbell mine must pulverize one-half tonne of rock; at the nearby Dickenson mine it's nearly one and a half tonnes.

The myth has been perpetuated by people who have read tales of the Klondike. There the gold found on the banks of the Yukon River was placer or "free gold." This was gold that had already been ground by the elements into dust or nugget form and hence could be mined by any greenhorn with a shovel and a pan and a strong back. But the hardrock or vein gold of northwest Ontario, besides being buried 200 metres underground, must be separated from the rock by mechanical and chemical means, and vast resources of money and machinery are required to wrest it from the earth.

Some interesting facts about the northwest mining game, as prospectors call it.

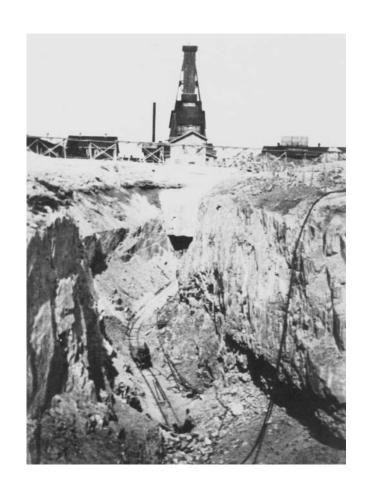
The gamble: Don Parrott, historian of the Red Lake gold rush and a prospector who has staked more than 3,000 claims in vain, has figured out the odds this way: "Only one claim in 3,000 reaches the point of development where a mining shaft is sunk and a mill built. Only one claim in 10,000 will return a penny to its original investors. Only one claim in a million will become a producing mine. Only one claim in ten million will become a very lucrative mine like the Campbell mine." Then why do prospectors and their grubstakers keep gambling against those odds? Parrott's reply: "Why did Jason keep seeking the Golden Fleece?"

Underground traumas: Science has yet to vanquish the so-called "weeping willies"—the nervous tensions and headaches that afflict miners. These fits of melancholy were described eloquently back in the 1930s in Gold, a Canadian magazine of the north, in an article written by J.A. Hewat, an underground miner:

"Powder fumes and bad air ... make the underground man irritable and morose. In time his state of mind grows as dark and gloomy as the stopes and drifts where he labors. I have known many miners who, when working, would lose their tempers at the slightest provocation. I have seen them curse their machines, hit them with steel or wrenches, and one savage in the Slocan get down on his knees and bite his machine.

"I have seen middle-aged men cry with anger when a steel would get stuck or a hole cave in. When everything was going smoothly, they would talk to the machines and pet them as if they were a good horse or a faithful dog. The reason for these insane actions were once explained to me by a cousin, 'Men who work underground can stand it only so long.'"

What's a gold brick? A golden bullion bar generally weighs 35 kilograms and contains close to 1,000 troy ounces. A typical brick delivered to the Royal Canadian Mint in Ottawa has a gold content of 88 to 90 percent; a silver content of 9.35 to 8 per cent; and impurities of 1.90 percent or less.







Open pit mining at the Howey Gold Mine, 1940.

Staking, Trenching, Drilling above ground

Staking: To stake a claim, you must be aged eighteen or over and must possess a miner's license which costs \$5 at a mining recorder's office. It entitles you as a prospector to enter and search for minerals on Crown land in unsurveyed territory as designated on a provincial government map.

As a licensed prospector, you must stake a claim as close as possible to 40 hectares. It's usually done by pacing out four lines in each direction for 367 metres, starting in the northeast corner at number one post and blazing trees or erecting picket posts every 20 metres for 367 metres.

The claim posts on each corner must be at least 1.2 metres high and squared for 45 centimetres, 10 centimetres wide. As a staker you must write on it your name, license number, time and date as well as the name or number of the township.

Within 30 days, you must file your claim at a mining recorder's office. Each claim is accompanied by an appropriate sketch showing the location. In exchange for a \$5 recording fee, you receive four metal tags with a claim number stamped on the metal. The metal tag is nailed to each claim post.

If another prospector disputes your claim, a hearing is held in a mining court and arbitrated by a mining commissioner. If no dispute is filed within six months, you are the registered holder of the claim for one year — provided that you perform 40 days of work on each claim by digging a trench, diamond drilling, line cutting or geophysical surveying.

When you complete 200 days of work, which includes a claim boundary survey performed by a licensed land surveyor, you can apply for a 21-year lease and after that simply pay an annual tax of 25 cents per acre. If you fail to pay a mining acreage tax for three consecutive years, title to your claim reverts to the Crown and it can then be reclaimed by another prospector.

Trenching: After staking a claim on a property where your rock hammer has revealed apparently promising ore, you logically want to determine the length of the seeming vein of gold. So you strip the discovery of vegetation and dig

trenches and test pits to obtain fresh exposures. "Channel" samples are then cut across the full width of the occurrence, using your hammer and "moil" (a short piece of steel sharpened to a point or chisel edge).

Equal amounts of the detached material are gathered on a canvas sheet, thoroughly mixed, the mass halved or quartered depending on the quantity, and then shipped to the assayer. He reduces the sample to a powder, weighs a selected portion, and via chemicals and heat recovers whatever metal may be present. This is weighed on a sensitive scale and the value of gold, or the percentage of metal, per tonne of rock is calculated. His assay should indicate to you whether it's worthwhile going on to the next step of the enterprise — namely, drilling.

Drilling: Diamond drilling helps you ascertain the depth of a promising ore body. What is this magical tool that plays the role of a prospector's X-ray eyes?

It's a rotating bit, about 2.5 centimetres in diameter, whose edges are embedded with small diamonds. This is attached to a hollow rod of steel and driven in a circular motion by steam in the old days but today by electric power. It cuts into the rock and at certain levels the forward motion is halted and reversed. As a result, a solid core of rock — which looks like a broom handle — is hauled to the surface.

This "pulling ore," as it's called, is slipped out of the rod sections. A fresh length of rod is then screwed onto the first and lowered to the bottom of the hole and you continue drilling again.

This continuous process enables you to collect a very long length of core and provides a good cross-section of the occurrence below the surface. Selected portions of core showing mineral or vein material are split in halves. One section is assayed; you hold onto the other section for further study or check sampling.

If the assayer indicates that the sample core is promising, you and your backers are probably ready to sink a shaft below ground and, as they say in the mining field, "shake hands with ore."



This was the 3,000th gold bullion bar being poured at the Dickenson Mine in Red Lake on 19 September 1977. A gold brick weighs 35 kilograms and contains

close to 1,000 troy ounces. When gold is priced at \$1,000 per troy ounce, it would mean that a gold brick would be worth one million dollars.

A Gold Mine

"A gold mine," Mark Twain once said, "is a hole in the ground with a liar at the top." It's an amusing, but not necessarily accurate, definition. More precisely, it's a hole in the ground surmounted at the top by a headframe. And what is that? It's a landmark as familiar to the people of northwest Ontario as the grain elevator is to the farmers of the Canadian prairies.

Technically, a headframe is the rooftop of a mine, which itself is like an immense underground apartment house. The headframe is the superstructure that contains the elevator (called the "cage") which lowers the miners to various floors (called "levels"), halls (called "crosscuts" or "drifts") and rooms (called "stopes").

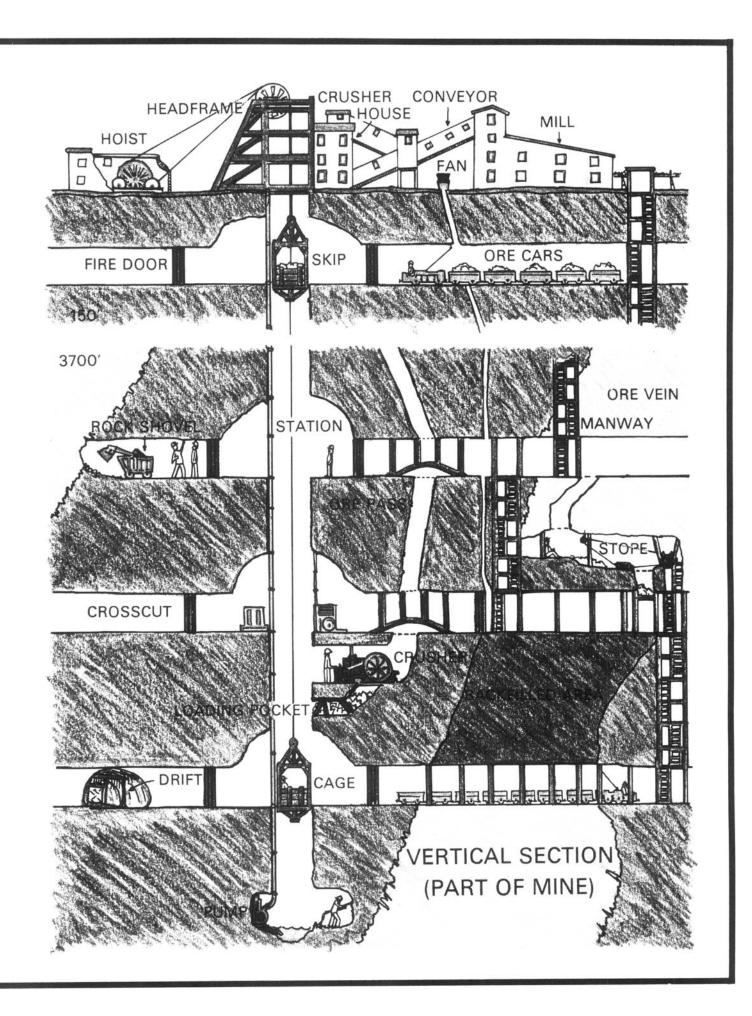
The sketch shows a small, relatively unmechanized mine of the mid-1930s. The underground crew would push the ore tram cars by hand. They would drill into the ore with a handheld jackhammer powered by compressed air. (A stream of water would run through the middle of the drill to cool it and keep the dust down.) They also used dynamite to blast through rock to reach the veins of gold. First they drilled holes in the rock about five centimetres in diameter and about three metres deep. They would load the holes with explosives, blasting caps and fuses. Then they would light the fuses and get out of the stope in a hurry to be safe when the rumbling, thunderous explosion would make the entire mine guiver and shake. Accidents, needless to say, were frequent — especially since miners in the early days did not wear the hard hats, safety glasses, safety belts, dust masks or safety boots with steel-covered toes that later became mandatory safety precautions.

The above-ground facilities in the early days were equally primitive, consisting largely of a boiler fueled by cord wood, a steam hoist, and a steam-driven compressor for the air-operated rock drills.

The early method of recovering gold from the hardrock mines was likewise crude. A stamp mill (a variation of the basic mortar and pestle) would grind the rock fine in water and allow the mixture to flow over a copper plate coated with mercury (a process called "amalgamization"). The mercury picked up the gold and let the waste rock go. Periodically, the mercury would be scraped off the copper plate and boiled off in a furnace. The mercury would be condensed and reused. The residue, that is, gold, would be melted down and cast into ingots.

But a new technique called the *cyanide* process was introduced in the 1910s which revolutionized gold milling in northwest Ontario mines. In this technology, the ore was ground fine in a "ball mill" — a rotating cylinder partly filled with steel balls. A cyanide solution dissolved the gold and a filter separated the waste rock from the solution. Zinc was introduced and it replaced the gold in the solution. The gold precipitated out in the form of fine granules. They were recovered, melted down, cast as gold bricks, and sent to the mint in Ottawa.

Though new technology lowered the labour component in each tonne of ore mined and in each tonne of gold produced, the scale of operation also increased. Today the massive amount of equipment needed to run a producing mine is staggering.



Getting Around



 $Starratt\ Airways\ planes\ lined\ up\ at\ Hudson\ Docks.$



They flew by the Seat of Their Pants

He is an old man now, seemingly as fragile as a sparrow. A diminutive man aged eighty-seven, Harold Farrington is nevertheless a spritely and familiar figure in Red Lake. Cane in hand, sometimes wearing a blue Pikangikum Air Services cap perched at a rakish angle, he takes his daily stroll from the Cochenour Home for the Aged down to the docks. He likes feeding breadcrumbs there to the ducklings swimming under the wings of a discarded Twin Beach and C45H-CFPC Noorduyn Norseman.

The relic planes evoke for him memories of what it was like to be the first bush pilot to make a commercial flight from Hudson to the new gold rush camp at Red Lake. It was a bitterly cold March 3rd 1926, and he was flying a Canuck 'Jenny'. "It was a surplus First World War Curtiss-JN4, capable of a speed of 75 miles per hour, an altitude of about seven thousand feet," and which had been bought cheaply for a thousand dollars by his boss, Jack V. Elliot, owner of the Elliot Air Service in Hamilton, Ontario.

Farrington's passenger was Jack Adair, promoter of Huronian Belt Mines of Toronto. Adair had been chosen intentionally for this debut flight because he'd been in and out of Red Lake by dog team and Farrington thought he could act as navigator in pointing out the unmapped route. As an additional precaution, Farrington took along a sketch crudely drawn on a CNR train schedule. As it turned out, neither of these guides was necessary.

In the open cockpit, bundled up in his pilot's leather "monkey suit," sheepskin-lined boots, and warmed by wool underwear and two sweaters, Farrington peered through his wind-protector goggles at a dramatic scene etched indelibly thereafter into his memory. All the way to Red Lake he could see, like a brigade of marching army ants, a consistently moving black line of men and dog teams advancing across frozen lakes and rivers.

When he landed an hour later in deep snow, he was greeted by prospectors who rushed out of their tents clustered at Howey Bay to give him a rousing hip-hip-hoorah. It was their tribute to the first of many "milk runs" that Farrington was to make by air to Red Lake. It was also the launching of the greatest and most imaginative use of aircraft for commercial purposes that North America had ever witnessed.

Red Lake, though without a landing strip, became for several seasons in 1926 and 1936 the world's busiest airport. There were as many as one hundred pontoon or ski-equipped "crates," as the rickety planes were then affectionately called, landing or taking off in a day.

And Farrington, a laconic, irascible, but brilliant improviser, who used to scare the daylights out of country folk in his home town of Burford, Ontario with his barnstorming stunts, was at the forefront as an aviation innovator. He was the son of a farmer and loved tinkering with machines. Red Lake in its frontier days was the locale of most of his accomplishments. In March, 1926 he is credited with inventing the first portable nose hangar. After flying a Toronto Star reporter named Bill Scott to Red Lake, he had trouble starting the engine for the return flight. He warmed it up by devising a ski-supported hangar of canvas and wood, big enough to fit over the engine and accommodate a kerosene stove and floor pot torch.

On 5 March 1926, he flew in Frank Holmes, a Fox movie cameraman from Winnipeg, to shoot the first newsreel of a gold rush in its initial stages. And the day after, Farrington flew the first airmail letter from Red Lake to the outside world. The back of the envelope carried a special twenty-five-cent Jack Elliot airmail sticker. Inside was a message from mining recorder Herbert Holland to the Department of Mines in Toronto; he urgently requested a fresh supply of application forms because claims were being filed at the rate of a hundred a day.

Farrington shares credit with a fellow bush pilot, Harold (Doc) Oaks, for designing wider tail skis to ensure that the rear end of a plane would not sink into the deep snow of the north country. Their rough sketches evolved into the broad ash skis, featuring a solid wooden pedestal, which were manufactured by the Elliott Brothers, a pair of carpenters at Sioux Lookout. The skis were so successful they were adopted by Admiral Richard Byrd on his Antarctic expeditions.

Farrington and Oaks called upon the services of the Elliott Brothers for another invention later when both pilots were flying for Western Canada Airways, founded in 1926 by the Winnipeg financier, James A. Richardson. The Sioux Lookout carpenters were asked to produce a sectional canoe that could be flown easily by bush pilots. They came up with a canoe cleverly constructed in three sections, which could be stowed inside a plane, then bolted together at its des-

Many of the northwest Ontario bush pilots got their training as flying forest rangers and fire-fighters for the Ontario Provincial Air Service. It was founded in 1924 by Lands and Forests Minister James W. Lyons, with its base hangars at Sault Ste. Marie, Sudbury and Sioux Lookout. A pioneer OPAS pilot was Harold (Doc) Oaks, a doctor's son from Hespeler, Ontario, looking like a debonair Clark Gable in an aviation movie, with his sleek black mustachio, neatly pressed riding breeches and high polished boots. In this 1924 photo, his fellow pilots from left to right are Hec Ptolemy, Duke Schiller, Terry Tulley and Reg Nicholls.



Harold Farrington is shown preparing his Curtiss "Jenny" to make the first commercial air passenger flight to Red Lake on 3 March 1926.



Harold Farrington, still spry at 87, refutes the hackneyed proverb about bush pilots that "there are old pilots and there are bold pilots, but there are no living old, bold pilots."



tination. Previously, canoes were lashed to the undercarriage struts of an already overburdened amphibious plane.

The cargoes carried by Red Lake-bound planes ranged widely, from gold bricks to live goats, sticks of dynamite to crates of fish. The most bizarre commodity handled by Farrington was the frozen corpse of a prospector brought into the gold camp by his sleigh dogs yowling a lament. Farrington stretched out the stiffened body near the stove to warm up overnight and assigned his co-pilot, Dale Atkinson, to fly it to Sioux Lookout next morning for an autopsy.

But rigor mortis had set in by then, and the cadaver wouldn't fold when Atkinson tried to bend it into a sitting position in the front passenger seat. So Farrington calmly wrapped the body in a blanket, and stood it head first in the forward open cockpit, and Atkinson flew it all the way to Sioux Lookout in his Curtis Lark with its feet sticking out in front of his face.

Bush pilots then were noted for their devilmay-care humour. It is said that Farrington originated the expression that when landing on the icy humps of Red Lake, "your plane bumps up and down more often than a bride's nightgown on her wedding night." He belittles attempts to glamourize bush pilots into the coureurs du bois of the twentieth century, or Pilots of the Purple Twilight, as they were luridly designated in a book by the Arctic trader, Philip Godsell. "Hell, we were just glorified taxi drivers," he says gruffly. Others would disagree.

Most of the pioneer bush pilots were, like Farrington, former First World War aviators with the Royal Flying Corps; or, like Doc Oaks, flying forest rangers for the Ontario Provincial Air Service. They were indeed intrepid *voyageurs* of the air. Modern instruments had not yet been invented, and it was literally true that they flew by the seat of their pants. In blizzards, fog and white-outs, they depended on the angle of pressure on their seats for guidance to keep their flimsy planes on an even keel.

There were no maps to guide them over the uncharted wilderness. So they reckoned by the sun or by compass or by God. Their fuel gauges usually broke down. So they measured their gasoline consumption using their watches. They used their sense of smell to sniff out the quality of the fuel, which was distributed in caches. After they had checked it out, they filtered the fuel through the proud symbols of their profession — their battered felt hats.

They were the aristocrats of the bush trans-

portation trade, paid \$400 a month, because even then it was recognized as a hazardous trade. And those who entered it were quite aware that they were adventurers of the lonesome skies, a breed apart, like hockey stars. Their very names are a kind of rough-hewn poetry of the bush country, suggesting deeds of derring-do: Wop May, Punch Dickins, Ethan Crann, Jeff Kitely, Duke Schiller, Metro Kirby, Rex Cliberly, Westy Westergaard, Buck Buchanan, Romeo Vachon, Scarf Hollingsworth, and Arthur Eyquem de Montaigne Jarvis who shortened it to Jock. Red Lake flyers all, they sound like bush pilots.

Farrington pretends to disdain this mystique. "You know why I went into flying?" he says, cackling. "I spent a year in the trenches in France first, and one day I was looking up at the planes flying by, and I said to myself, 'That's the safest place to be.'"

But ask him what kept him in the air since then, flying one million miles in forty-four years, and his crusty facade is gone.

"I guess it must be something like what kids today feel about their motorcycles," he said. "Only my feeling for the flying machine was stronger. When they switched from the joy stick to the wheel, it was like changing skins for me. That flying machine, it's not something you wear. Not something you put on and pull off. It's a part of you. It's you."



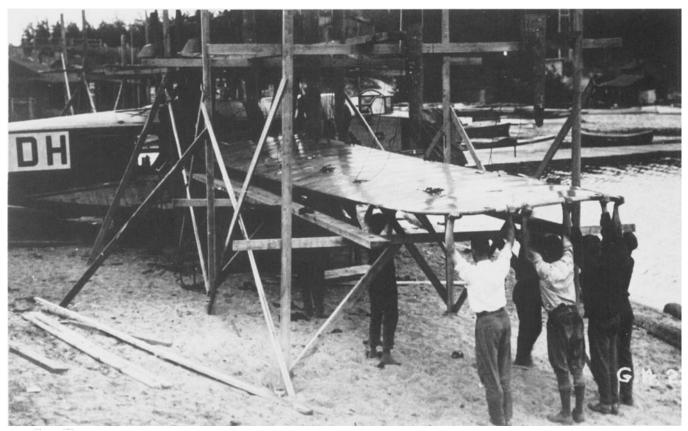
The Red Lake stampede was the first gold rush to use both dog teams and planes, as this photograph in-

dicates. The aircraft of the J.V. Elliott Air Service are shown here in March, 1926.



Western Canada Airways Ltd., established by bush pilot Harold (Doc) Oaks and Winnipeg financier James

A. Richardson, set up this tent office at Goldpines in January, 1927 to fly gold seekers to Red Lake.



This twin-engine F3 flying boat was freighted by train in sections to Sioux Lookout where its parts were carefully fitted together.



A DeHavilland Beaver in flight was a pretty sight in the 1940s.



This Stinson OAW carries as cargo the entire fuselage of a salvaged Gypsy Moth lashed to its floats.

Freighter Bob Starratt pushed 'em through

It's difficult for travellers today to realize that Hudson, a sleepy little backwoods hamlet of less than 500 people, once had reason to proclaim itself "The Biggest Little Town in Canada." Not only that, it spawned northwest Ontario's very own sin centre. That was Goldpines, famed for its hurdy-gurdy girls in Whisky Flats and its gambling den called Bucket Of Blood that lived up to its name.

Hudson was the jumping off point for anybody and anything requiring access to the expanding Red Lake region gold camps. By 1934, when the fixed price of gold soared from \$20 to \$35 an ounce, the camps stretched over an area of 2000 square kilometres, which is roughly the size of New Brunswick.

The man who dominated this bushland frontier was a blue-eyed, fair-haired, tall New Brunswicker, brawny but brainy, a big talker but also a big doer. He was Robert Starratt, variously nicknamed "Lucky Bob" and "Push 'Em Through Starratt." Starratt was not a mining prospector-promoter, though he did work hand in hand with the most loquacious of them whose style was much like his own, Jack (Whirlwind Jack) Hammell.

Rather, Starratt was accurately described by the noted author Leslie Roberts in the *Canadian Mining Journal* of 1937 as the "transportation genius" of the north country. Beginning in 1928 with a borrowed bankroll of \$40, a secondhand Hudson's Bay canoe, an outboard motor revamped from the engine of a Ford tin lizzy, and a horse or two, the former mink rancher built the Starratt Airways & Transportation Ltd. empire. It became one of Canada's leading freighting firms, the frontier equivalent of the U.S. Pony Express, but embracing all elements of overland, waterway and air transport.

At its peak in the 1930s, Starways, as it was known in its ads, had a fleet of 15 planes, 15 tugboats, 100 barges, 8 caterpillar-style tractors, 80 hauling sleighs, as well as horses and dog teams when required. According to his bookkeeper, the former bush pilot Dale S. (Statistics) Atkinson, Starratt had 150 men on his payroll. He occupied a bustling headquarters office at the constantly busy docks in Hudson and maintained branches in Winnipeg and Toronto. His company linked farflung gold mines, from the Sol D'Or "golden pavement" at Woman Lake to Jack Hammell's Val d'Or holdings at

Howey, Uchi and Pickle Lakes.

More than 12,000 passengers and 20,000 tonnes of freight were shipped out annually. His air fleet, piloted by such flying aces as Harold Farrington and Hump Madden, carried everything from booze to a bride's trousseau at the flat rate of "\$1 per pound — dead, alive, or comatose," as Starratt phrased it. Overweight prospectors, hauling their "turkey" backpacks, paid well over \$200. Starratt's efficiency was such that, by 1939, the passenger fare from Hudson to Red Lake was reduced by his company to \$25 and the air freight rate was "seven cents a pound for each one hundred miles". But his innovative genius was demonstrated in his overland freighting of bulky mine machinery — assay furnaces, shafts and hoists, ore cars and mill liners, weighing up to 3500 kilograms. While fifteen of his competitors went broke, Starratt survived by slashing rates from \$250 to \$45 a tonne. He managed to do it, said Starratt, by adapting to improvements in technology.

His major triumph was mechanizing the laborious portages on the three hundred kilometre Lac Seul-Chukuni River route to Red Lake. In 1926, as a Hudson's Bay Company transportation officer, he'd watched other freighters use cockleshell tugs, with Scripps engines, to pull a flotilla of six loaded freight canoes from the Hudson docks 185 kilometres north to Goldpines.

At this terminus, the freighters encountered Ear Falls, the first of four vicious, boulderstrewn rapids, the other three being Snake Falls, Sam's Portage and Snowshoe Portage. At each of these Rubicons, the cargo had to be unloaded and either dragged by horse and cart, or backpacked by Indians with leather tumplines strapped around their foreheads, through bush trails ankle-deep in muck.

Starratt got rid of the canoes, horses and backpackers and gradually evolved a system of streamlined marine railways. Starratt had wooden barges built capable of carrying a freight load of more than 15 tonnes. A "swing" of six of these scows would go snaking up the sinuous channels of Lac Seul pulled by trim diesel-powered tugs, bearing such names as the *Archibald Blue Nose* and *Northern Prince*, built by the fine local shipwright, Ole Gustafson. At each portage, a cable-equipped railway flat car would be waiting below water to have a barge slipped on top of it. A wood-fueled steam hoist would winch the barges over land on broad gauge railway tracks in a matter of seconds. Waiting to haul



A summer scene of Bob Starratt's heavily loaded docks at Hudson in 1936, with several Fairchilds in the background waiting to take off.



Bob Starratt, smoking a pipe and reading a 1941 issue of Cosmopolitan magazine, relaxes with his

Starways transportation crew at a bunkhouse at the Pickle Crow Mine.

them up to the next portage were a fleet of other diesel tugs, the *Octagon*, *Pentagon*, and *Patricia*.

The wintertime equivalent of these fleets were Starratt's International Diesel Trac-TracTors. These lowslung tractors, with wider tracks than the awkward Fordsons, would navigate through powdery snow, or six-inch slush, or across treacherous frozen lakes, like agile cats. Although the machines weren't Caterpillars, manufactured by Caterpillar Tractor Company of Peoria, Illinois, the freighters who manned them called themselves "cat skinners."

They were paid \$75 a month, worked alternate shifts of eight hours on, eight hours off, and might be on arduous trips to God's Lake or Pickle Lake that might take them away from home for three months. They were like wilderness gypsies, travelling in tractor train caravans. Each tractor in a "swing" would pull six sleighs, with "fifty-four-inch gauge, four-inch by nine-foot runners," travelling four kilometres an hour, and bearing a total payload freight of fifty tonnes. The crews (two drivers per tractor and two cable slingers who did the cooking and hooked and unhooked the sleighs) bunked together in a caboose at the tail end of a train.

Ron Tingley, who is now retired at the age of 66 in Red Lake from Soo-Security Motorways Ltd., the Winnipeg trucking firm that eventually took over Starratt's land freighting, remembers that it could be hectic behind the steering levers of an RD6 crawler tractor.

"What with the cold and all the clothes you had to wear, you could hardly move near the end of an eight-hour shift," he says. "We never stopped except to off-load freight. There was a bit of a trick to sleeping in a caboose because the thing lurched and jolted something terrible. At times, you were in the bunk, on the floor, and frequently part way between.

"Oscar Nymark, the swing boss, used to fire me every time he got jolted out of bed. He fired me four times on one trip, but always cooled off before we got back to Hudson.

"We cached food along the route in the fall, enough to last until spring. Have you ever tasted an egg that's been left all winter in a root cellar?"

Mel Parker, 72, former tug skipper of the *Patricia* as well as swing boss of the cats before he retired to Dryden, regards his freighting days as the happiest in his life. "Sure, your fingers often froze at the steering lever," he says. "You drove an open tractor at forty below. No closed-

in cabins allowed. Otherwise you could drown if the rig suddenly crashed through a deceptive crust of ice.

"But you hit some lovely nights back there, with the swing of sleighs over your back behind you and the moonlight over the hill ahead. I've seen the northern lights play in the sky all night over Lac Seul, and that's a sight for you to remember. I've watched them by the hour, putting on a private show for me. Peaceful. You felt at peace with yourself, freighting."

Cat skinners with a yen for excitement after a long haul found it at the blind pigs, pool halls and chippy parlors clustered at Whisky Flats in Goldpines. All-night poker games were held on the floor above Fred McGannon's poolroom. A waggish sign pinned on the wall read: "Divine Worship commences upstairs at 7 p.m."

The entertainment at Ken Allen's dance hall was provided by Tom Desjardins, a bootlegger of potato home brew, who, it was said, could make a dead pig laugh with his card tricks. Another performer was Dave Wilson, an eccentric prospector with locks of hair tumbling to his shoulders, who won bets by drinking down a bottle of H.P. Sauce at one go.

Bill Humphrey, 79, a former freight hauler now retired to his bachelor's cottage in Ear Falls where he keeps seven rabbits, six laying hens, and studies the Bible, recalls that the action got pretty wild at the Bucket of Blood. The establishment freighted in that apex of sophistication, a player piano. But cat skinners preferred the music of Goldie and Blanche, two hurdygurdy girls with round Lillian Russell figures and sharp eyes for a fat wallet, who charged \$10 to dance to one tune on their hurdy-gurdy, meaning hand organ. The centrepiece of the cabin was an eight-sided poker game table, especially designed so it would not be upset in a brawl. Rowdies were restrained by the proprietor, "Slim" Jaegar, "a giant towering six feet five". Those he couldn't handle were tamed by his bouncer. a black-haired runt named "Bad Wee" Angus, much admired because he wielded a black snake whip with the verve of an oldtime freighter hauling with a team of horses.

The swings of barges and tractor trains went the way of the horse with the coming, in 1947, of Ontario Provincial Highway 105, running from Vermilion Bay to Red Lake. Bob Starratt's mobile empire began crumbling before then with the outbreak of the Second World War. The government requisitioned most of his planes and in 1941 his remaining fleet became the backbone



A portable nose hangar, mounted on runners for easy movement, was devised by bush pilot Harold (Doc) Oaks; having its nose warmed is a Travelair CFA EJX.



The barges of freight used to be steam-winched over land at Sam's Portage — one of four portages between Ear Falls and Red Lake — using this marine railway.

of what is now Canadian Pacific Airlines.

The gaming houses of Goldpines have long gone; the only remaining relic of that gaudy past is the eminently respectable Weir's Goldpines Tourist Camp in the suburbs of the sedate little town of Ear Falls.

Gone, too, is the glory that was Starways. A forlorn sign on the grimy white clapboard office that stands on the rundown docks at Hudson reads: "Starratt Transportation Ltd. Charter Flying." But the company that once boasted of a staff of 150 men and a fleet of 15 planes has been reduced to two men and one flying machine.

The plane's mechanic is Don Starratt, 60, oldest son of the founder who died in 1967 at the age of 79. The pilot is his brother, Dean, 58, and their one plane is a rare Found CF-SDC-2C, one of only 25 that had been manufactured in the 1960s.

Living in the shadow of a legendary father has been hard on the two sons. Yet they idolize him. Prominently displayed in their office, above the clutter of a moosehead and other memorabilia, is a blowup of a norOntairlines booklet given to all passengers. It lauds their father as a leading aviation pioneer of north Ontario.

It's doubtful whether the palmy days of Starways will ever return. Don Starratt, who makes his living nowadays largely by making fibreglass buoys, underscores that point by telling the story of what it was like growing up in the town of Hudson that his father helped put on the map.

"You know, when I was a kid going to school, a plane flying overhead really meant something," he said. "As soon as we heard the sound of the engine, all the boys in the class would put their hands up. We asked permission at the same time to leave the room and use the outhouse facilities. Well, we'd all stand out in the schoolyard, bug-eyed, watching the pilot skim down on his pontoons, like a beautiful dragonfly. What kids get that excited about aviation today?"

There was good testimony to what he had to say on the docks outside. They were once among the busiest docks in the world, with planes landing and taking off night and day. They were tumbledown now and deserted, except for a couple of youngsters, splashing in the water and paying no heed whatsoever to the Starratts' rare plane.

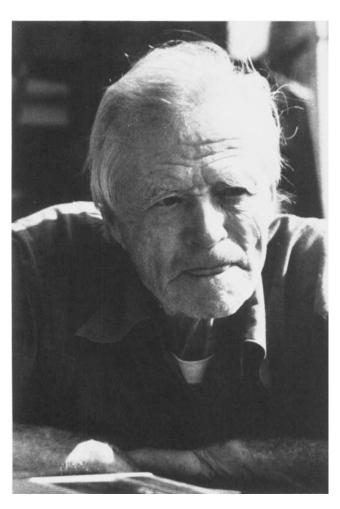
"Warning," declared a red sign ominously to bar strangers from approaching. "This structure is in disrepair."



Before Bob Starratt took over, sheer "bull" muscle power was used at the Hudson's Bay Company log tramway on the Root Portage between Lac Seul and Lake St. Joseph. These men pushed a flatcar, with tireless wheels, and loaded with crates of four-gallon cans of gasoline, over portage poles.



A Starways International tractor train plows through the winter bush in 1941 from Hudson to the Pickle Crow Mine. Note caboose at tail end.

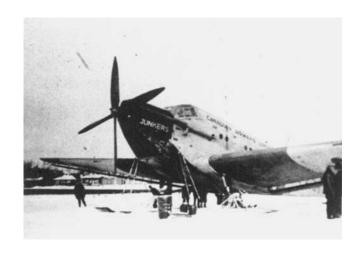


Retired freighter Bill Humphreys says, "I drank too much and fought too much and I have diabetes and rheumatism to show for it in my old age. But I don't regret it — I had a ball."



 $The \ snow-covered \ Ear \ Falls \ marine \ railway.$

The arrival of a Junkers 34 — an all-aluminum plane, manufactured by Junkers Flugzeugwerke of Desau, Germany, and imported by Canadian Airways Ltd. — was a major social event at Red Lake in 1936. Called a flying box car because it carried a payload of three tons, the first imported one was scheduled to transport 12 horses to the Red Lake region. But one frisky mare kicked in the side of the fuselage. A vet was called in to give shots that would put all 12 temporarily asleep. Unfortunately, on arrival, it was discovered that one had died en route.



Aircraft fleets like this one, at Howey Bay in 1936, made Red Lake the world's busiest "airport" — though it had no landing strip. Ranged on ice from the left are a Fokker Super Universal, a Fairchild 82, Fairchild 71, a tiny Waco and two DeHavilland Moths.



Jack V. Elliot and other early bush pilot services issued their own 25-cent air mail stickers in the Red Lake 1926 gold rush.





An amphibious Cyrus Moth was noted for its alleged ability to "land on a dime."



The mother hen of the early northwest Ontario flying machines was the Curtiss HS-2L biplane, commonly nicknamed the H-boat or flying boat. The Ontario Provincial Air Service began in 1924 with a fleet of 13 of these First World War relics. Manufactured in the U.S., the H-boats were lumbering work horses

that stood 4.5 metres high, had a wingspan of 23.8 metres, and from the rear edge of their rudders to the tips of their snub-nosed hulls, they measured 11.8 metres. Their weight: 2.9 tonnes. Their payload: 315 kilograms.

Harnessing Hydro



 $\label{eq:continuous_expansion} Ear\ Falls\ Development-View\ looking\ west,\ down-stream,\ 1930.$



Hydro Power and its People in the Northwest

No industrial development was possible without an economical source of energy. The most obvious source, of course, was wood. It was burned to heat giant boilers of water which generated steam for power.

The sawmills burned waste wood to generate their steam. The mines hauled vast boilers to supply power for their hoists and compressors, which had to be fed from the surrounding woods.

Hydro-electric power was the ideal, but some of the mines were so remote that Ontario Hydro was reluctant to invest the capital in building a dam, a generating station and transmission lines to feed them electricity. Besides, gold mining is so dicey that Ontario Hydro adopted the policy of not spending money until a mine and its satellites seemed assured of a fairly long life. Consequently, certain inaccessible mines — such as the St. Anthony and Berens River properties - had no recourse but to develop their own hydro-electric generating stations. Other privately developed stations were developed to serve towns such as Thunder Bay and Kenora. Ontario Hydro started to build in the 1920s to service industry and the smaller communities. Cameron Falls was the first (opened in 1920), followed by Ear Falls (1929), and Alexander (1930). Most of the others were not built until after World War II.

The people who worked for Ontario Hydro tended to be different from the usual northwest Ontario pioneers. Rae Kiebuzinski, the historian of Ear Falls, the site of a Hydro station since 1929, has noted a subtle distinction.

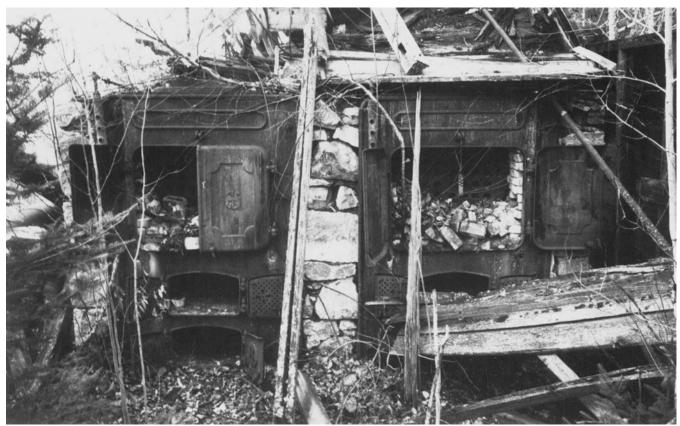
"Employees who live in a Hydro colony are prone to keep separate from the rest of the community," she says. "Though Hydro employees tend to be white-collar rather than blue-collar workers, it's not a class distinction. It's just that they're Hydro people."

Generally, the employees and their families who occupied the self-contained "Hydro colonies" adjoining the power stations lived a comfortable but insular existence.

"It was city suburbia in the bush," recalls Helen Wilson, 85, who was raised in Niagara Falls and now lives in Thunder Bay. She and her husband, Corby Wilson, a retired lineman of 84, spent 12 years from 1928 on as part of the onetime colony of 50 families at Cameron Falls, since deserted and controlled from the Nipigon station, about 75 kilometres south.

On a \$140-a-month income, the Wilsons lived in a spacious, two-storey, wooden frame house, with a garden, lawn, and fine view of the Nipigon River, which they rented from Hydro at \$23 a month. "We didn't have to spend a penny on electricity," says Mrs. Wilson, "because we lived right on top of the power house."

Their urban amenities included a Hydro tennis court, swimming pool, billiard room in the Hydro community hall, milk delivery, a school, and the assurance of year-round bridge-playing partners. "They were the best years of our lives," says Mrs. Wilson. "I hate to say it, but we were so nicely isolated, we didn't suffer one bit from the Depression."



These two boilers still have their stone housing but the covering timber superstructure has collapsed. Installed at the Elora mine in 1908, the boilers were

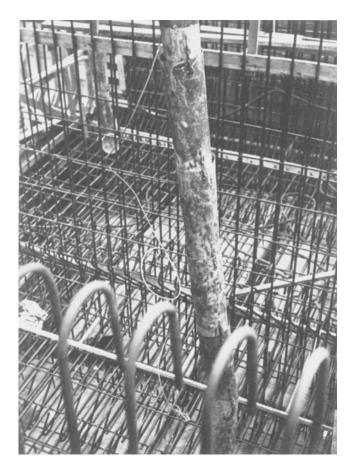
manufactured by E. Leonard and Sons of London, Ontario and supplied power for the hoist and compressor.



Power Plant for the Berens River Gold Mine on Northwind Lake. This mine (open from 1939-48) was one of a few to generate its own hydro-electric power.



Leo Bernier, Ontario Minister of Northern Affairs, used to help his father, Joe Bernier, a professional \$25-a-day diver from Hudson, haul up buckets of muck when Ontario Hydro construction workers were expanding the dam and power plant at Ear Falls. At right of diver is Chris Williams, an Ojibwa Indian diving pump operator, a noted Ear Falls pioneer now 79.



Reinforcing rebars to hold cement, at Ear Falls Development, Unit 4, 6 September 1947.



First transformer arriving at Ear Falls Development, Unit 4, 27 November 1948.



Construction of homes for the staff at the Ear Falls colony was in progress when this photo was taken.

Hydro's Lady Rum-Runner and Cowboy Gun-slinger

A powerful amount of electric energy was needed to run the early gold mines and pulp mills of northwest Ontario. Nobody knows that better than Nellie (Aunty Nell) Roy, now retired in Ear Falls at 75, and George Villiers (Slim) Knisely, retired at 86 to Thunder Bay. In their heyday, they were a legendary pair who expended a lot of their own energy on behalf of Ontario Hydro.

Nellie Roy says that the construction workers building the Hydro power dam at Ear Falls in 1929 would jokingly refer to her as their official bootlegger. But she wasn't really. A former farm girl from rural Manitoba, she was paid \$75 a month to cook for the men and baked 25 loaves of bread daily. Because she owned the first power washing machine in the district, she also did their laundry, charging 15 cents per shirt, and 10 cents for a pair of socks, with no charge for the mending she did. As an additional service, she picked up and delivered their mail by dog team from Goldpines five miles away.

When Hydro issued a strait-laced order, forbidding bush pilots to fly in liquor with the company supplies, Nellie blithely disregarded it. She conspired with the men and her husband, Eddy, a freighter, to have the stuff purchased quite legitimately at the liquor store in Hudson and flown in on the sly. She sneaked the forbidden contraband into her sleigh carry-all, and it was a grand sight to see Aunty Nell make the twenty-five minute trip to Goldpines every Friday, running behind her team of five huskies all the way back to the Hydro camp.

"I'm not ready for the rocking chair," says Nellie Roy, a widow active in community organizations, such as the Ear Falls Metis Association. "I have no truck with loafers or whiners in the handout society. They sit around and ask me, 'How did you survive back then?' Well, in my day, you worked or you starved. You made do with the little you had. Anything extra was a bonus to be appreciated.

"I'm not one for sitting around reading romances. I stick to fact books on the north and western fiction. I want a book to have life in it, like me."

Slim Knisely also likes a life of action. Regrettably, old age has caught up with him, and the tall, heavy former Hydro lineman can no longer scramble up 20-metre-high transmission poles with his gimpy left leg. A "Down Easter"

from the little town of Arkona, Ontario, he quit school at 15, roved the north country, and in 1920 joined Hydro as a dynamiter blasting muskeg when the company was building a power line from Cameron Falls near Nipigon to Thunder Bay.

When the poles were raised and the wires strung up, he began a 40-year career as northwest Ontario's best-known line patrolman. He'd patrol the bush country via snowshoes, dog team, on horseback, and later in helicopters, looking for broken insulators, lightning strikes, sagging lines, and anything else that might interrupt power. His only tools were a telephone hand set he could plug in along the line to report trouble and his lineman's spurs in case he had to climb a pole to take a closer look at damage.

He never bothered with his lineman's belt; he infinitely preferred patrolling on horseback, and people felt safer somehow when they saw Slim riding the lines. He looked dashing aback his stallion with his cream Stetson and six gun. During one trip into town, the Port Arthur police suggested it might be a good idea if he checked his shooting iron with them. Knisely assured the lawmen, "Oh, I just moseyed in for a cup of coffee."

A visitor recently asked his wife, Louise, a spry 84-year-old with a dry wit, "Why did your husband carry a gun?" She answered, "I guess Slim thought he might find a lion in the bush."

Slim Knisely, who is getting a little deaf in recent years, snorted and pretended he didn't hear her.



Nellie Roy, Ear Falls



George Villiers "Slim" Knisely, and his wife Marjorie.

Hydro Lore

One of the most popular notions held by people of southern Ontario is the belief that there's a bottomless supply of untapped water power from the thousands of lakes and rivers in the north country waiting to be harnessed by Ontario Hydro.

It's a great illusion, says Jack Hamer, director of Ontario Hydro's northwest region. Virtually all the exploitable sites, he points out, have already been developed by Hydro.

Kakabeka Falls — the vaunted "Niagara of the north," located near Thunder Bay — is regrettably a rarity. To get cheap water power, you need lots of water falling from heights. But most of the lakes in northwest Ontario are shallow and their river runoffs spill out on gradual declines not very turbulently.

What's more, while Hydro generator units last a long time (they're still using one erected at Ear Falls in 1930) and are cheap to run (especially with modern automation) the installations are expensive to build (anywhere from \$100 million to \$600 million).

In addition, it's costly to maintain transmission lines and service the widely separated customers in sparsely populated northwest Ontario. Hamer estimates there are about five customers per kilometre of transmission line in his region, compared to the 60 to 80 in densely populated southern Ontario.

Number of Hydro stations: most are water-powered. They are located at Kakabeka Falls and Silver Falls (near Thunder Bay); Cameron Falls, Pine Portage, and Alexander (north of Nipigon); Ear Falls and Manitou Falls (both on the English River); Caribou Falls and White Dog Falls (north of Kenora); and Terrace Bay. At present only one is coal-powered at Thunder Bay.

Amount of power produced by Hydro's northwest region: 3.5 billion kilowatt hours of electricity. One kilowatt hour is the equivalent of lighting a 100-watt light bulb for 10 hours. Of the total amount of power, 79.3% is energy generated from water and 20.7% from coal.

Hydro's major industrial customers are the pulp and paper mills (accounting for about 73 per cent of its industrial load), mining (about 23 per cent) and the chemical industry (the remaining 4 per cent). In southern Ontario, the reverse would be true.

Over the past 40 years, Hydro has rerouted three north-flowing waterways and turned them south: Long Lake, the Ogoki River, and Lake St. Joseph. The rechanneling has benefited industry, but raised protests from environmentalists. Hydro is far more cautious now about flooding waterways and revamping their routes.

Automation is on the increase in north country generating stations, and so is remote control. An operator at Thunder Bay now presses a button and the wicket gates begin to close at the Silver Falls generating station 60 kilometres distant. This remote button-pushing easily enables him to control the flow of water through the turbines, and this dictates the amount of electricity generated. Terrace Bay's station is likewise now operated by remote control from Thunder Bay; White Dog Falls and Caribou from Kenora; Manitou Falls from Ear Falls.

How has automation affected employment? As elsewhere, it has reduced the staff required. The Cameron Falls installation, built in 1920, once maintained a "Hydro colony" of staff families numbering 50 living in suburbia-in-thebush dwellings. Now that it's controlled from Nipigon, all 50 are gone.

Helen and Corby Wilson, who lived for 12 years at the snug Hydro colony at Cameron Falls, were first stationed in 1922 at the tiny Hydro community at Pearl, north of Thunder Bay. "We paid no rent because it was a wild and woolly tent colony," recalls Mrs. Wilson. "We slept in the Hydro office the first night and the next day sent for a tent from Eaton's."



Repairing the lines in 1932.





... and now.

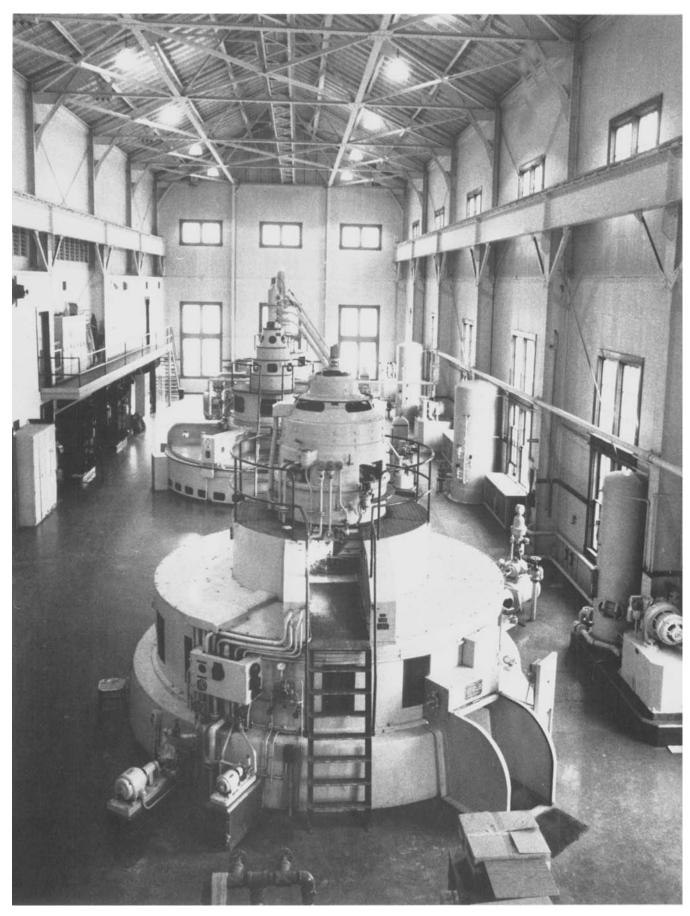


A Hydro lineman in the old days was an agile acrobat-climber doing his repairs poised on a 25 metre pole.

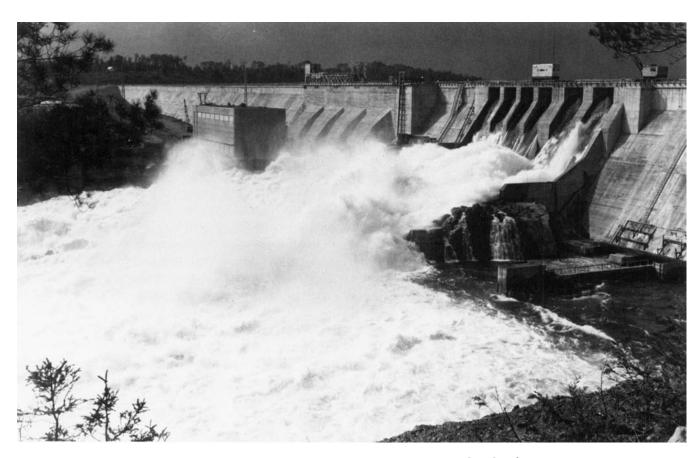
Today Hydro linemen are hoisted aloft in a \$100,000 bucket boom, nicknamed a "cherry picker," whose robotlike arm when fully extended is 14 metres.



Today Hydro lines in northwest Ontario are patrolled by helicopter rather than horseback.



The Ontario Hydro generating station at Ear Falls continues to function smoothly today.



Pine Portage hydro development.

A Hydro Electric Power Plant

It was like "a genie out of the bottle," like "white coal," like a magic force that would "fly invisibly and mystically through slender copper wires." Electricity generated from Niagara Falls was described in those mysterious terms back in 1906 when Ontario formed its Hydro Electric Power Commission, now one of the largest publicly owned utilities in the world.

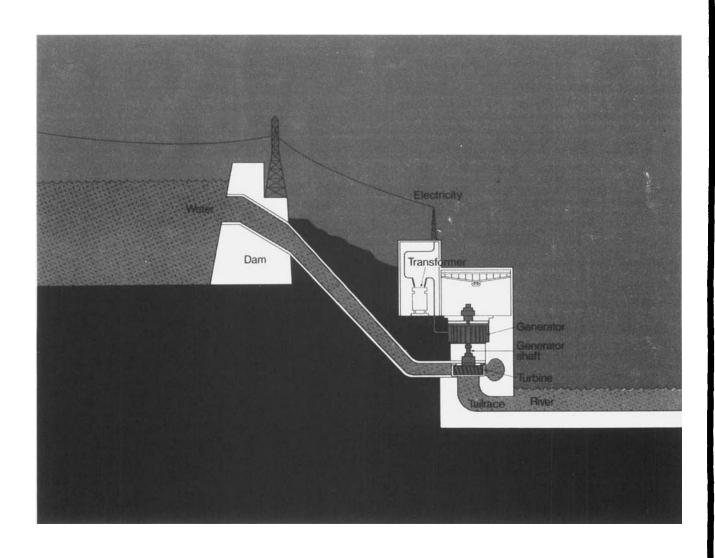
Really there's no mystery about it at all. Hydro electric power is essentially the energy created by a big water paddle wheel. Every child knows a paddle wheel on an axle will spin if you drop water on the paddles. The falling water hits the blades and pushes the wheel around. So, if a paddle wheel was made large enough and a whole river was dammed and poured on the paddles, you would create a powerful driving force.

That's what Ontario Hydro has done at various sites in the province's northwest region. It has built dams across rivers to back up the water and raise river levels ten metres or more. The higher this artificial lake or reservoir (usually called a *headpond*), the more effective the impact.

Thus, when you build a pipe, called the *penstock*, into the dam, the water that has been held back can now be released to rush down the pipe with great force. At the bottom, it hits the paddle wheel, called the *turbine runner*. The runner starts spinning furiously. When the energy created by the falling water has served its purpose, the water runs out through the *tailrace* of the generating station to join the main stream of the river.

Meanwhile, the turbine shaft is connected with the shaft of a machine called a *generator*. The turbine is set spinning by the falling water and this spins the generator shaft. As soon as the generator starts turning, electricity is generated.

The electric current is passed immediately to a special device called the *transformer*. It steps up the *voltage*, which is the "push" behind the current, and the current then starts its journey, via a chain of transmission lines, to the mines and mills and homes where it is to be used.



Monuments in the Wilderness

"A mucky gash in the earth, like the excavation for a sewer in a new suburban street."

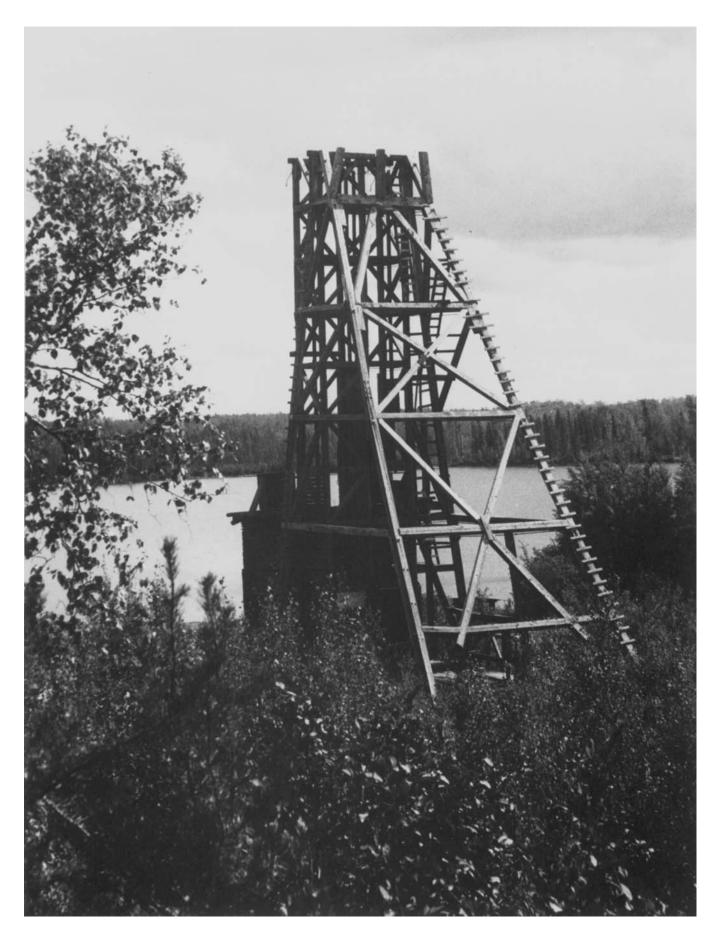
That was the unflattering description given by journalist Allan Swinton in 1926 after flying over the gold camp at Red Lake to write an article for *Maclean's* magazine on "The Trail of Twenty-Six." Swinton clearly had no eye for the beauty of the newly emerging industrial land-scape of northwest Ontario.

There are those today who likewise have no appreciation for the relics and artifacts of that landscape that now remain as monuments in the wilderness. "I don't see it," says Rae Kiebuzinski, author of the history of the Ear Falls region entitled *Yesterday The River*. "I find the people who did the pioneering here utterly fascinating. I wrote my book to share my understanding of them. But the machinery they've left behind? To me, it's ugly junk that ought to be dumped into the nearest scrap heap."

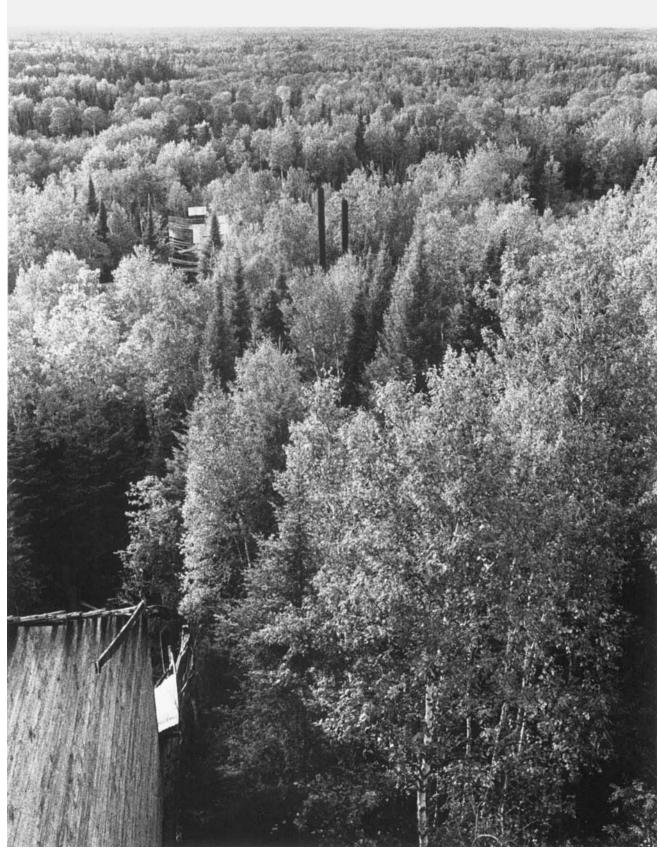
Like Swinton more than a half-century ago, she refuses to acknowledge the special beauty of the man-made things that remain as the industrial legacy of the pioneers. Perhaps it's a perception of beauty that must be developed.

It's a beauty of contrasts that sometimes shocks and startles and is totally unexpected. It's the beauty of rusting steam boilers glowering like dragons from a cluster of pink fireweed. It's the texture of rotting tugboats thrusting their hulls heavenward toward the cool pine treetops before crumbling into muskeg. It's the drama of a mine headframe caught in a grotesque frieze against the horizon.

They may be ugly to the undiscerning eye but to those who go looking with an open mind and an active imagination, they offer beauty. In the following pages are selected examples of a special kind of beauty in the wilderness.



Headframe at Abino Mine, Red Lake, 1976.

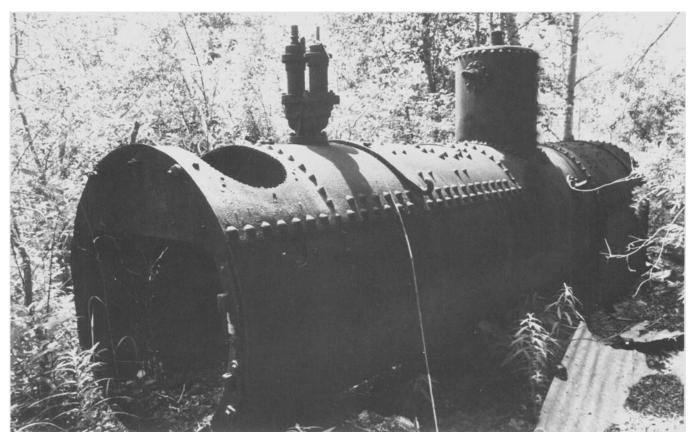


This lovely landscape of tall, steepled trees was the site of the once-thriving gold mining community of Gold Rock, established during the late 1890s in the Manitou district near Dryden. But the inevitable boom-

or-bust pattern set in as the high-grade ore was gradually removed. By 1948 the mines had closed and Gold Rock was a ghost town, once again returned to the forests.



Looking like a crumpled accordion, this abandoned shafthouse at the Laurentian Mine is slowly succumbing to climate and structural fatigue.



Is it a hippo yawning? A wart hog snoring? Neither; it's a boiler from the Jason Mine near Casummit Lake, which produced gold from 1930 to 1951. Visitors can

have fun imagining what relics like these rusting grotesques most resemble.



Some scenes are arresting because they conjure up a pervasive atmosphere. This one is palpably spooky—a haunted house perhaps painted by Dali. In fact, it's an ore house and former aerial tramway at Big Mas-

ter Mine at Gold Rock, a mining community which functioned intermittently from 1897 to 1948 at Upper Manitou Lake, 40 kilometres south of Dryden.

Sam's Portage

Almost all of the dam across the Chukuni River has deteriorated; however, traces are left of the initial notched log construction. To stabilize it, the logs were strapped together and tied to large rocks in the riverbed. In width the dam was equal to the size of a corduroy road and possibly was used as a river crossing point.



The starting rail begins 20 metres below the end of the rapids. Much of the timber from the marine railway has been removed for re-use in construction in the vicinity.



The exit slip is located 10 metres north of the dam. The rails have been removed, and only the rocks which raised the grade, by-passing the rapids, remain. The parts most intact are those at the junction with the dam.





Despite the ravages of time, climate, and man some buildings and machinery remain surprisingly resilient. At Gold Rock, the boarding house at the Laurentian Mine, the cage at the Detola Mine, and the slusher at Berens River Gold Mine.







Desolate silence prevails in the incline shaft of the St. Anthony Gold Mine headframe, located on the north end of Sturgeon Lake.



Early hotels in the region charged gold-seekers 50 cents to sleep on "the soft side of three feet of plank." Not so the Hilliard Opera House Hotel, built in 1898 by Louis Hilliard, a Norwegian immigrant hotelier, shown with his wife and three children. Visiting opera divas like Emma Albani would stay in the hotel's luxury suite after performing in an elegant auditorium which featured a large papier mache lion on either side of the stage. One had green eyes, the other red, and both pairs of leonine eyes would blink to signal the rise of the curtain.





The Marina Inn, Thunder Bay, as it looks today. Built as the Northern Hotel in 1884, this was the best hotel between Toronto and Winnipeg. Royalty and Prime Ministers were entertained here amid all the splendours which a first-class hotel could offer. Stories link it at a later date with the bootleg liquor trade during Prohibition and it now caters to a far different clientele. It is the oldest continuously operating business in Thunder Bay.



Typical of the brick-and-stone houses found in the Canadian National Railway town of Sioux Lookout (population: 3,000), this one-and-a-half storey dwelling has a vaguely cosmopolitan, definitely permanent air. Several houses here were built in the 1930s and have an urban, south Ontario look.



Illustrating the conglomeration of individualistic styles of architecture at the Abitibi Price lumber town of Longlac (population: 2,700) is this painted log house with three graceful dormers jutting from the roof. It's a modern version of an 18th-century farmhouse of Quebec.



This 1980's suburban-style house, with a spacious top deck and feeling of almost stately stability, shows how far modern Red Lake (population well over 2,000) has advanced from the helter-skelter, gold rush days. With its fine hospital, schools, airport and two richly productive gold mines, it's now the sort of town where young and old miners like to settle down.



These one-and-a-half and two-storey, wooden frame homes for Umex base-metal mine workers in Pickle Lake are an example of recent company housing in a one-industry mining community.



 $Geraldton\ in\ 1934\ ...$



in 1936 ...



... Main Street looking south in 1936 ...



... another view in 1936 ...



The "Muskeg Metropolis" of Geraldton was literally a swamp of muck and muskeg in the early 1930s when gold was discovered in the area. Photos on this page

show it going through various stages.

... and in 1940.



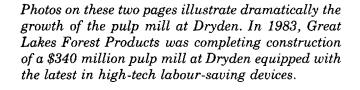
Geraldton's Main Street had become so sophisticated by 1937 that the booming gold town could boast of a Dreamland Dance Hall.



The Dryden pulp mill in 1908 ...



... in 1909 ...

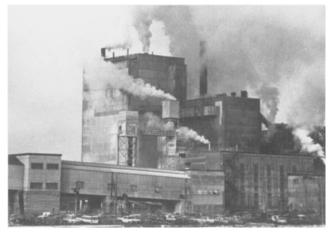




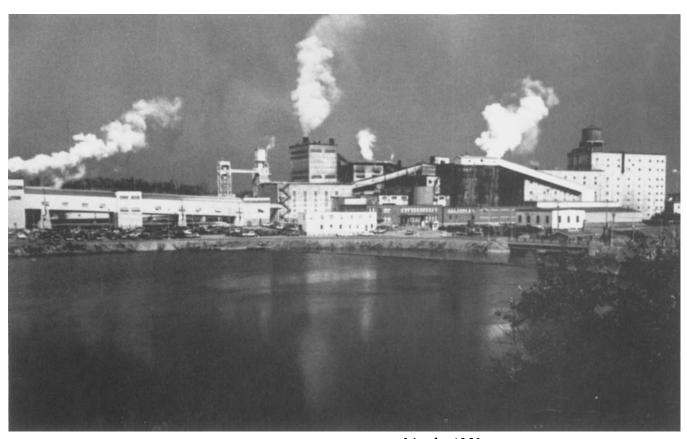
... prior to 1916 ...



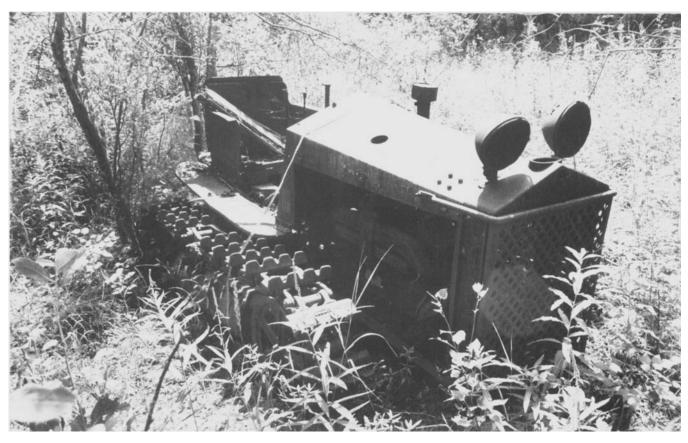
... in 1920 ...



... in the 1930s ...



... and in the 1960s.



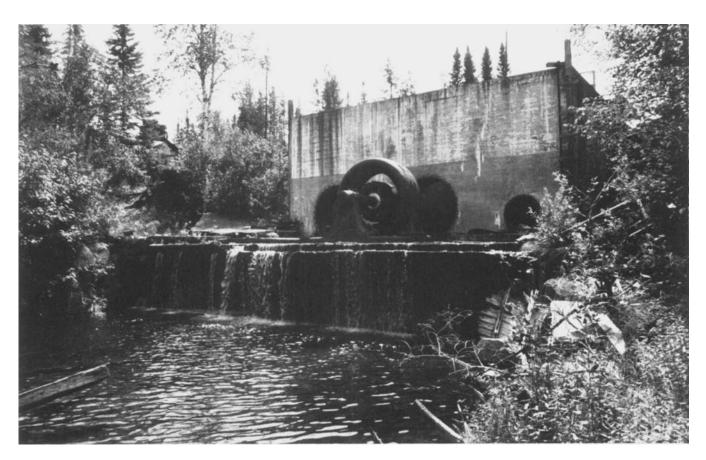
Looking like a metalic dragon slumbering in the bush is this scrapped machine at the former Jason Gold Mine near Casummit Lake.



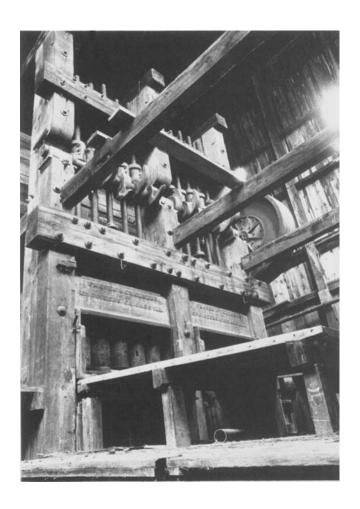
The refining furnace at the old Big Master Gold Mine near Dryden has withstood the ravages of time and scavengers.



Like a wooden skeleton, the rotting hull of a tug lies in the "boat boneyard" on a shore near Hudson. It's an unofficial cemetery of abandoned tugs that used to transport equipment from Hudson to Red Lake. Many of them became redundant when Ontario Provincial Highway 105, linking those two communities, was built in 1947.



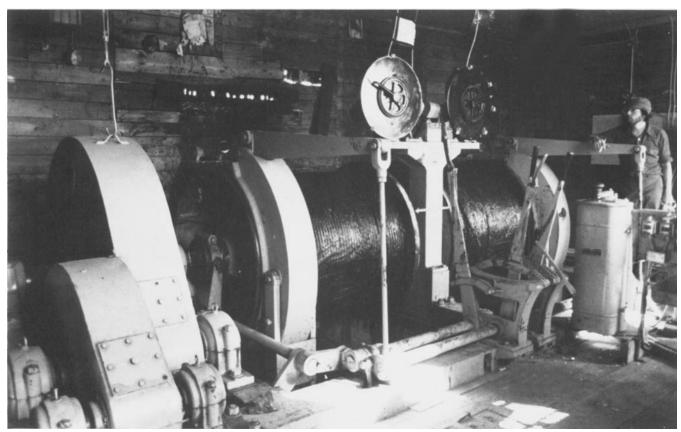
A pastoral mood is suggested in this view of the hydro generating station of the abandoned St. Anthony Gold Mine on Sturgeon Lake.



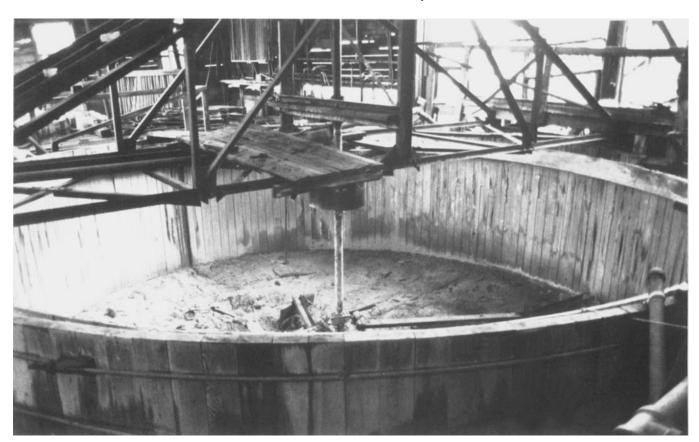
This complex stamping mill, with its imposing wooden fly wheel and heavy frame which turned a long iron cam shaft, used to operate like a sophisticated version of a druggist's mortar and pestle, liberating gold from the waste rock at the Detola Mine near Dryden.



Nakina Railway Station built 1910-1920. Today it serves as a lonely reminder of the past.



The hoist of the Berens River Mine, which produced gold from 1939 to 1948, is still intact today, no doubt because of its isolation.

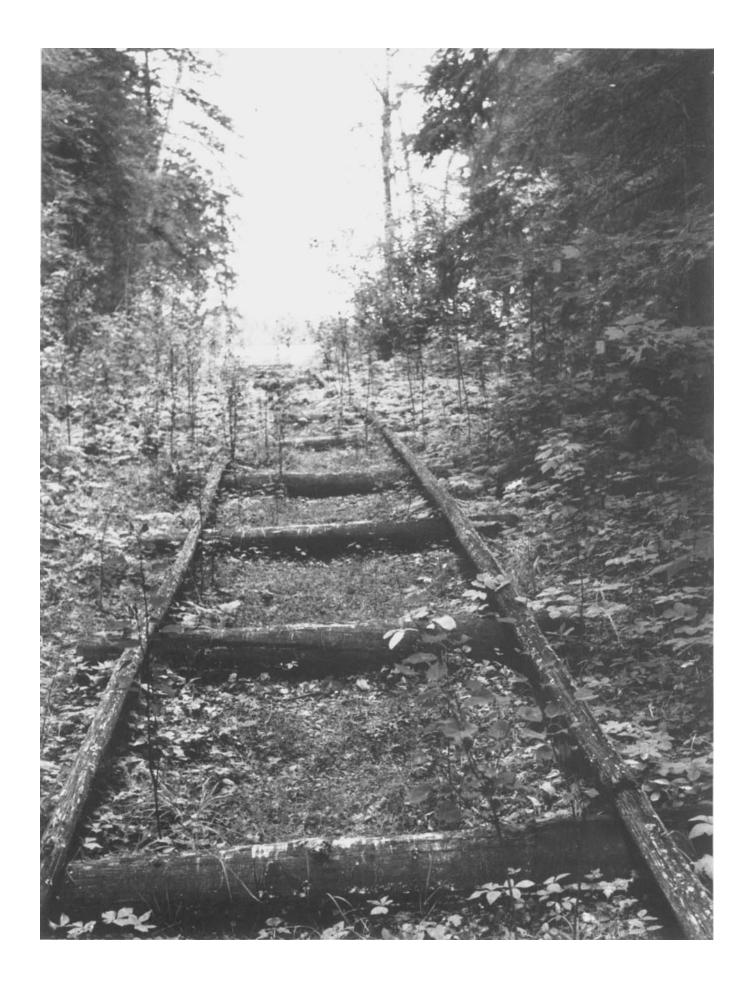


The interior of the thickener in the mill at the Jason Gold Mine, which used to operate near Casummit Lake.



This assay structure built for what used to be the North Pines Pyrite Mine near Hudson, stood until the site was "cleaned up" — everything was bulldozed.

These ghostly tracks going nowhere are remnants of one of the four marine railways on the freight route from Hudson to Red Lake. Best known of the four was Sam's Portage on the Chukuni River. It was named after an amiable Black, Sam Brown, a steam hoistman who looked after the barges. According to Rae Kiebuzinski's Yesterday The River, hoistmen and stable hands devised their own illicit freighting business in bootleg booze, hiding the contraband in bales of hay. "Upon arrival at Goldpines, each bale was shaken. If it gurgled, alcohol was stashed inside in gallon tin cans."



Pioneers

The Ladies Wore Big Boots and Hats

It's odd the things women remember best about their pioneering days. Kay Tingley remembers thinking that if she were ever to write a book about Red Lake, it would be titled *All The Ladies Wore Big Rubber Boots*.

"We had to because there were no sidewalks and you had to slog through mud roads," she says. She remembers looking at the muskeg and muck, stumps and stones on her arrival and thinking how bleak it was. "I thought it was the end of the world, the back of beyond, and I ached to be back home in Winnipeg."

Yet Mrs. Tingley, a feisty, feminist school-teacher and social worker, now fifty-five, was a relative late-comer to Red Lake in 1951. Interestingly, a Red Lake pioneer of a previous generation, Mrs. Edward Futterer, wife of the manager of the Howey mine, was similarly impressed by a clothing item on her arrival in the gold camp in 1931. In a retrospective issue of the *Northern Miner*, she recalled "the custom of the time demanded that ladies wear hats outside, and wear them they usually did, even in the bush."

The first white woman who came to Red Lake, via a canoe with an attached "kicker" or outboard motor, was accustomed to hardship. She was Peggy Ross, born in 1888 in Canaan, Nova Scotia, youngest of thirteen children of Scottish parents. Yet even she was taken aback on her arrival in June, 1927. She discovered there were no utensils whatsoever available when hired to cook for prospectors. "The men cut bark off the birch trees for plates," she noted, "and they sat on stumps to eat."

Clementine Dupont, who arrived at the camp a month later with her parents, a raw tenderfoot of seventeen "in breeks and size six men's boots," remembered the terrible monotony of their daily diet: salt pork, beans, bannocks, and fish. She recalled how her family would cut out magazine pictures of more appetizing fare, pin them on the cabin wall, and

stare enraptured while chewing fatty pork.

Yet their memories were not all grim. Alice Browne was the wife of a Hudson's Bay fur trader and the first white woman at Goldpines. She was amused by what happened after she laundered her underclothes and hung them on the line to dry. "A group of Indian women came around for inspection, touched the lingerie," she said, "and proceeded to laugh their heads off."



Eugenia (Granmaw Jean) Campbell, 73, widow of the discoverer of the fabulously rich Campbell Red Lake gold mine; the Mae West-like grande dame of Red Lake, she lives alone near the mine in a five-room log cabin as colourful as her own gaudy personality; she answers the phone, "This is the old reprobate of Hell's Acres speaking"; she shocked Governor General Edward Schreyer when he visited her with the remark that her curtains were made from old Eaton's Catalogues and used to adorn a whorehouse; she has surrounded herself with her collection of 3,200 pairs of salt and pepper shakers, 30 scrapbooks, a \$10,000 polar bear rug, and a player piano that tinkles out the tune I've Got a Woman Who's Crazy About Me:

"You want to know my definition of a gold mine town in the bush country? A place where everybody knows whose cheque is good and whose husband is bad. And you know why I've never taken a married man as a lover? I don't believe in prospecting ground already staked, because you can't record the mine in your own name. I'm not financially rich, but I sure am rich in memories. I'm writing down my memoirs in a book that'll need asbestos covers when it's published. I'm a Bohunk from Rossburn, Manitoba, who came here as a young girl and saw this country grow from an acorn to an oak. I'm part of that history. When I die, I want my cabin to be a museum commemorating that past."

Bob McMillan, 75, Kenora, logger for 40 years, mostly as a "buck beaver" or camp boss:

"I started out at 35 cents an hour in 1925 doing bull labor. I worked up to 'walking boss' — walking the men from one camp to another. I don't go along with the guys who get nostalgic about junky old machines. I lasted because I went for progress. Bull work. Muscle work. Too much of it in those days. Nothing to be proud of. Like you called a dishwasher a bull cook — sarcastic like. That was bottom of the heap. As a bushman, I took the good with the bad. You took whatever job you could get and hanged on. The good part was being your own boss in the bush. The bad part was being away from home so much."

Catherine McMillan, 72, proud of being of pioneer stock from "Down East" in Glengarry County, Ontario, especially her pioneer grandfather who helped build the CPR as a blacksmith; married for 43 years to Kenora lumberjack Bob McMillan:

"It's not safe for my husband to sit too close to me to have his picture taken. After all these years, I still resent him being away so much. For a dozen years or so, he was home just two weeks at spring breakup and two weeks at winter freezeup. I had to raise the three kids myself. It's a solitary life being a bushman's wife."

Gerald Bannatyne, 83, retired to the Sunset Leisure Place for Senior Citizens at Ear Falls after working as a Jack-of-all-trades bushman:

"These callused hands of mine have done pretty well everything a bushman can do. I began as a section man building the CNR at 56 cents an hour. I was a forest ranger. Hoistman for the marine railway. Trapper. Pulp cutter. Prospector. What was most fun? Hunting for gold. Never made a dime prospecting. In fact, my pardner and me, we took a bath for \$2,000. But, golly, no other job can beat it. Trying to lay hands on that unattainable pot of gold on the other side of the rainbow — that's what life's all about."

Bob Potts, 71, Kenora, born in Ayrshire, Scotland, a lumberjack since the age of 16:

"I was making \$600 a month in the 1960s skippering a tug boat, compared to the \$30,000 a year they earn today, but I believe I got a bigger charge out of it. I loved being a tug captain. The resinous smell of the logs, the early morning mist on Lake of the Woods, the feeling of absolute self-reliance. You were king of the lake. If your boat smacked into a rock and bent a shaft, you'd pull her ashore and somehow bend the bitch straight again. Then I'd take off my black-smith's hat and put on my skipper's cap, and continue hanging bags of log booms. In the bush, you see, you've got to be a one-man expert on everything."

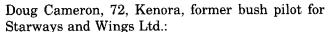






Charles Clark, 68, retired Kenora lumberjack, has a face still scarred from a dynamite accident; he lives in a former "company house" that belonged to the Keewatin Lumber Co., overlooking the docks at Lake of the Woods near what used to be its main warehouse and office:

"My accident? Nothing much. Some dynamite put in frozen holes in a drilled rock cut exploded when I was too nearby. I had both arms busted, couple of ribs cracked, and my neck and mug scarred by powder burns. I was a husky 18-year-old then and got over it. What I can't get over is the change in the warehouse where I was a clerk-timekeeper. Time was when it was busier than hell. Tugs steaming in all the time hanging their bags of log booms. Others bringing in their bargeloads of beef hindquarters to the landing and me, strong as an ox, slinging 200 pounds of beef over my shoulders and sliding her into the warehouse. Now the dock is dead. And the warehouse is this tarted up confectionary store called, so help me, the Pic-a-Pop. When I pass by with my bushman buddy, Alex McCrimmon, we don't know whether to laugh or cry."



"I was 18 when I paid \$5 to fly in my first plane and I was hooked. I had a feeling of sheer exultation. Up there in the early days of flying, you felt literally like a bird, in control of your own destiny. The big exception was if you were caught in a blizzard and couldn't see fifty feet ahead of you. Allan Delamere, a Kenora pilot, flying a sick Indian lad to the hospital in Winnipeg, managed to make it in a blinding snowstorm by following the telephone poles along the railway route. You got a real feeling of accomplishment then. I remember once flying about 9,000 feet up in the freezing cold in a battered old one-engine Waco over a god-forsaken lake in the sub-arctic and thinking, 'Gee, I'm so damn lucky! How many thousands of people would give their eyeteeth to be in my cockpit now!' You know, I really meant it, and I still feel the same wav."

Arnold Appel, 49, Ontario Hydro lineman at Ear Falls:

"If you hate wind, rain, blizzards, lightning, black flies, climbing poles, and not being able to sleep on the job, then I wouldn't advise you to be a lineman in the north country. I've been at it since I was 17, paid 50 cents an hour for a 44-hour week, and I still love it. One good thing about it is that I travel around a lot and I can appreciate the hardships that the old-timers went through. My wife, Joyce, is curator of the Ear Falls Museum, and I'm all for the exhibits she puts on of tools of the trade that were used by pioneers still living. It reminds people today that other people before them had tougher times."







Ysainte (Slim) Bouchard, 74, Nipigon, son of an Ojibwa-French-Scots lumberjack; a lumberjack himself since the age of 12, when he began as a 50-centsa-day teamster for the Pigeon Timber Company; now retired, he likes showing visitors the two-tonne, seven metre-long chain for storm log booms he hauled years ago in front of today's Nipigon Museum building: "I was stronger in those days and really slim, no more than 110 pounds. And I was nimble as a squirrel on top of a log jam in the spring river drives. In those days, there were three lumber companies in Nipigon, and in a peak season you'd be riding 400,000 cords of pine and spruce down the Sturgeon River, 5,000 cords to a boom. Them days are gone and so is a lot of the friendly pioneer spirit. Back then, you didn't need to jump over each other to live. You helped each other. Nobody ever paid a carpenter to build a house. You just bought the material. Then word got around and a couple of dozen neighbors would pitch in and have it built in four or five days. Then you'd divvy out a little money on jugs of beer and celebrate by having a bang-up square dance on the floor of your newly built cabin."

Kay Tingley, 55, Red Lake, teacher and social worker; divorced from a miner, remarried to a retired tractor freighter:

"Mining towns are all the same. Boom or bust. In the bust period, some people would pack their trunks, set fire to their house, then grab their bags off the porch, and look back at the fire while driving away. I like living in Red Lake. You get used to the whistles and dynamite blasting schedules of the different mines. You can feel the explosive air blasts from Campbell and Dickenson, all the way from Balmertown where they're located, eight miles from Red Lake proper. Some parts of town look rundown, but it's not like living in a city slum. In five minutes you can walk away from the ruins of an abandoned mine and you're surrounded by a beautiful lake and forest."

Mia Strom, 75, Thunder Bay; born in Ostersund, Sweden, wife of Gunnar, retired commercial fisherman and Madsen mine carpenter at Red Lake:

"My toughest job? Chopping ice and shovelling snow on our 40-foot-long landing strip at Maynard Lake, so the plane could pick up our daily quota of 900 pounds of jackfish and whitefish we'd cleaned and packed in boxes. My sweetest memory? New Year's Day in Kenora in 1935 when I was working as a waitress for \$7 a week and Gunnar was desperate to find a job. I'll never forget the young Finnish logger, fresh from the bush and woozy from celebrating the night before, who came into the cafe, ordered a coffee, and tipped me \$20. Gunnar says he was probably intoxicated by my beauty. I say he was plain drunk. But for that kind deed, when we were at the bottom of the Depression, he deserves to enter the pearly gates of heaven."







Les Plomp, 59, Ear Falls, song-writing minstrel, blueberry picker, mechanic, fish freighter, boatbuilder, all-around handyman:

"This country is where God comes when He wants a holiday. Bee-oo-tiful! And it's the sort of country where a handyman like me can always make money on a job and then entertain my friends by making up a song about the experience. Funniest song I wrote was about my job in the 1940s hauling sleigh loads of pickerel and white fish by an International TD9 tractor train. Got paid a steady \$100 a month plus room and board. Slept in a caboose in the back half full of fish. Funny thing about it was the smell of fish never once stopped me from getting my shut-eye. My most satisfying song was the one celebrating my reconstruction of the roof of the tug boat Patricia on permanent display in front of the Ear Falls Museum. I did the job for free because I admired the boat-builder who originally put her solid beams together."

Kathleen Potts, 71, daughter of an Austrian section hand working on the CPR, former \$7-a-week dishwasher at Kenora's Kenricia Hotel; married three times, her present husband, Bob, a retired Kenora tug boat captain:

"I remember my mother and other mothers watching with curiosity the big-shots of our town, you know, the railroad contractors, bringing bottles of champagne and roses in their horse-and-carriages to the sporting houses on Railroad Street. The madames were Big Ethel, a hefty blonde, and Mabel, a businesslike redhead. It was a great sight to see the bordello girls, dressed like million dollar babies, with their big hats and long dresses and parasols, strolling across the beautiful lawns in front of their fancy houses to greet their gentlemen callers. Our mothers would go down there to watch the parade, righteous in their criticism, but secretly, I believe, more than a little envious."

Roland Choiselat, 34, elementary school teacher and volunteer curator of Nipigon Museum, which is housed in the former administrative office of a pulp and paper company:

"Why have I volunteered for this job? Difficult to say. Maybe it's because I get a thrill—a real tingle up the spine—when I come upon an old photo or artifact that tells me how people lived and labored. It's like the past was talking to me personally. Right from the outset, because we had no money, we've made an asset of not being able to afford glass cases to contain the items donated to us. Our signs invite visitors to touch, feel, try it out, imagine yourself a lumberjack or miner working with this tool. Of course, a lot of the local people who come here don't have to imagine it. It's their life on display, and they're generous about wanting to share it. I just got a letter from a pioneer miner from Beardmore. Wants to donate a big ore crusher to the museum. I can hardly wait to handle it."







Where to enjoy your heritage

Where to enjoy your heritage locations

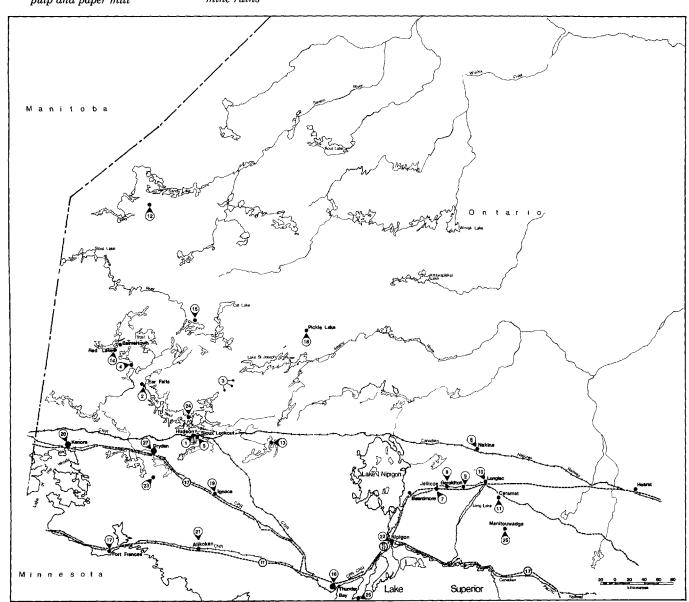
- 1. Hudson: dock, boatyard
- 2. Ear Falls: dam, marine railway
- 3. Root River: three marine railways
- 4. Sam's Portage: marine railway
- 5. Sioux Lookout: railway station
- 6. Nakina: railway station
- 7. Jellicoe: railway
- 8. Kinghorn: railway, sawmill
- 9. Geraldton: mines, railway
- 10. Longlac: RC church, pulp and paper mill

- 11. Caramat: railway, sawmill
- 12. Sandy Lake: mine ruins
- 13. Sturgeon Lake: St. Anthony mine
- 14. Red Lake: town itself, mines, Red Lake Lumber
- 15. Casummit Lake: Jason mine
- 16. Thunder Bay: city itself, pulp and paper mills, railway
- 17. Fort Frances: pulp and paper ruins
- 18. Pickle Lake: Umex, mine ruins
- 19. Ignace: pulp and paper, mine ruins

- 20. Kenora: town itself, pulp and paper, docks
- 21. Atikokan: mine ruins
- 22. Nipigon: town itself, pulp and paper, mine ruins, cemetery
- 23. Gold Rock: mine ruins
- 24. Lac Seul: cemetery
- 25. Silver Islet: cemetery
- 26. Manitouwadge: mine ruins
- 27. Dryden: pulp and paper, docks, town

Remember

- To dress sensibly and especially to wear shoes with thick soles — running shoes don't stop nails;
- 2. To beware of trenches, holes or uncapped shafts climbing out is a lot harder than falling in;
- 3. To check stairs or anything else for soundness before you climb them; and
- To tell someone where you are going before you disappear into the bush and carry essentials such as matches, food, a compass and extra clothing with you.



Recommended Reading: A select list

The Setting

- Arthur, Elizabeth. Thunder Bay District 1821-1892: A Collection of Documents. Toronto: Champlain Society, 1973.
- Bertrand, J.P. Highway of Destiny. New York: Vantage, 1959.
- Lambert, Richard S. Renewing Nature's Wealth: A Centennial History of the Public Management of Lands, Forests and Wildlife in Ontario 1763-1967. Toronto: Ontario Department of Lands and Forests, 1967.
- Litteljohn, Bruce, and Wayland Drew. Superior: The Haunted Shore. Toronto: Gage, 1975.
- Moon, Barbara. The Canadian Shield. Toronto: Natural Science, 1970.
- Nelles, H.V. The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario 1849-1941. Toronto: Macmillan, 1974.
- Nute, Grace Lee. Rainy River Country. St. Paul: Minnesota Historical Society, 1950.
- _____ The Voyageur's Highway. St. Paul: Minnesota Historical Society, 1976.
- Zaslow, Morris. The Opening of the Canadian North 1870-1914. Toronto: McClelland and Stewart, 1971.
- _____ Reading The Rocks. Toronto: Macmillan, 1975.

The Pathfinders

- Bradwin, Edmund W. *The Bunkhouse Man*. Toronto: University of Toronto Press, 1972.
- Jones, Lawrence F., and George Lonn. Pathfinders of the North. Toronto: Pitt Publishing Co. Ltd., 1969.
- Lowery, Bob. The Unbeatable Breed. Winnipeg: Prairie Publishing Co., 1981.
- McNeil, Bill. Voice of the Pioneer. Toronto: Macmillan, 1978.
- Mika, Nick, and Helma Mika. Railways of Canada: A Pictorial History. Toronto: McGraw-Hill Ryerson, 1972.
- Pain, S.A. The Way North. Toronto: Ryerson Press, 1970.
- Regehr, T.D. The Canadian Northern Railway. Toronto: Macmillan, 1977.
- Stevens, G.R. History of the Canadian National Railways. New York: Macmillan, 1973.
- Thomson, Don W. Men and Meridians: The History of Surveying and Mapping in Canada 1867 to 1917. Ottawa: Queen's Printer, 1967.
- Tucker, Albert. Steam Into Wilderness: Ontario Northland Railway 1902-1962. Toronto: Fitzhenry and Whiteside, 1978.

Lumberiacks

- Bedore, Bernie. The Big Pine: The Shanty. Montreal: Fenn-Graphics Ltd., 1975.
- Holbrook, Stewart. Holy Old Mackinaw: A Natural History of the American Lumberjack. New York: Macmillan, 1956.
- Kurelek, William. Lumberjack: Paintings and Story. Montreal: Tundra Books, 1974.
- Mackay, Donald. The Lumberjacks. Toronto: McGraw-Hill Ryerson, 1978.
- Wice, George. Carved From the Wilderness: The Intriguing Story of Dryden. Dryden, Ont.: Dryden Observer, 1967.

The Goldseekers

- Barnes, Michael. *The Town That Stands On Gold*. Cobalt, Ont.: Highway Book Shop, 1978.
- Carrington, John. Risk Taking in Canadian Mining. Toronto: Pitt Publishing Co. Ltd., 1980.
- Hanson, Conrad H. Gems of the North. Red Lake, Ont.: privately printed, n.d.
- Hanula, Monica R., ed. The Discoverers. Toronto: Pitt Publishing Co. Ltd., 1982.
- Hoffman, Arnold. Free Gold: The Story of Canadian Mining. New York: Associated Book Service, 1958.
- LeBourdais, D.M. Metals and Men: The Story of Canadian Mining. Toronto: McClelland and Stewart, 1957.
- Lonn, George. Builders of Fortunes. Toronto: Pitt Publishing Co. Ltd., 1963.

- _____ The Mine Finders. Toronto: Pitt Publishing Co. Ltd., 1966.

 MacDougall, J.B. Two Thousand Miles of Gold. Toronto: McClelland and Stewart, 1946.
- Parrott, D.F. The Red Lake Gold Rush. Red Lake, Ont.: privately printed, 1976.
- _____ The Second Gold Rush To Red Lake. Red Lake, Ont.: privately printed, 1976.
- Stevens, James. Paddy Wilson's Gold Fever. Red Lake, Ont.: Upland Pedlars Press, n.d.

Getting Around

- Ellis, Frank H. Canada's Flying Heritage. Toronto: University of Toronto Press, 1954.
- Main, J.R.K. Voyageurs of the Air. Ottawa: Department of Transport, Government of Canada, 1967.
- Molson, K.M. Pioneering in Canadian Air Transport. Winnipeg: James Richardson & Sons Ltd., 1974.
- Parrott, D.F. Harold Farrington: Pioneer Bush Pilot. Thunder Bay, Ont.: privately printed, 1982.
- Shaw, Margaret Mason. Bush Pilots. Toronto: Clarke, Irwin, 1962.
 Sutherland, Alice Gibson. Canada's Aviation Pioneers: Fifty Years of McKee Trophy Winners. Toronto: McGraw-Hill Ryerson, 1978
- West, Bruce. *The Firebirds*. Toronto: Ontario Ministry of Natural Resources, 1974.

Harnessing Hydro

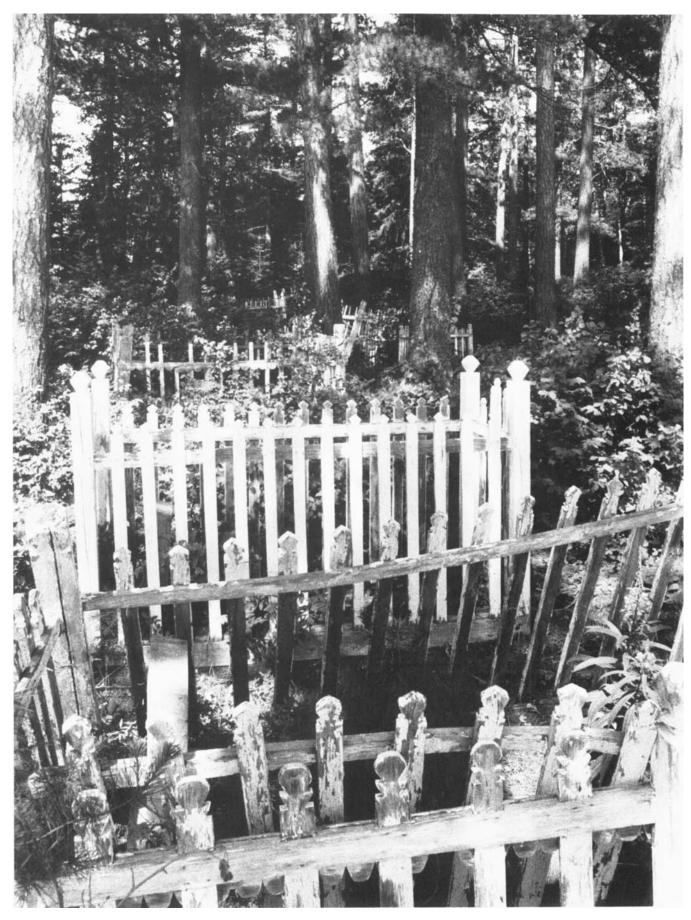
- Denison, Merrill. The People's Power: The History of Ontario Hydro. Toronto: McClelland and Stewart, 1960.
- Donaldson, Gordon. Sausages, Schnitzels & Public Power: A Brief History of Ontario Hydro's First 75 Years. Toronto: Ontario Hydro, n.d.
- Fram, Mark. Ontario Hydro Ontario Heritage. Toronto: Ontario Ministry of Culture and Recreation, 1980.

Regional Histories

- Barr, Elinor, and Betty Dyck. *Ignace: A Saga of the Shield*. Winnipeg: Prairie Publishing Co., 1979.
- Kiebuzinski, Rae. Yesterday The River: A History of the Ear Falls District. Township of Ear Falls, Ont.: n.d.
- Lund, Duane R. Lake of the Woods: Yesterday and Today. Staples, Minn.: Nordell Graphic Communications, 1975.
- Mauro, Joseph M. Thunder Bay: The Golden Gateway of the Great Northwest. Thunder Bay, Ont.: Lehto Printers Ltd., 1981.
- Mead, Florence, ed. Through The Kenora Gateway. Kenora, Ont.: Bilko Press, 1981.
- Mitchell, Elaine Allan. Fort Timiskaming and the Fur Trade. Toronto: University of Toronto Press, 1977.
- Taylor, Bruce. Steep Rock: The Men and the Mines. Steinbach, Man.: Derksen Printers, 1978.

Industrial Archaeology

- Fram, Mark, and John Weiler, eds. Continuity With Change. Toronto: Ontario Ministry of Culture and Recreation, 1981.
- _____Heritage Conservation, West Patricia. Toronto: Ontario Ministry of Culture and Recreation, 1981.
- Weiler, John, of the Heritage Branch, Ontario Ministry of Citizenship and Culture. Our Working Past: Conserving Industrial Relics for Recreation and Tourism. Toronto: privately published, 1982.



A cemetery east of the Anglican Mission at Lac Seul. The wooden fences are weather-beaten and the graves eroded by the changing water levels of the lake.