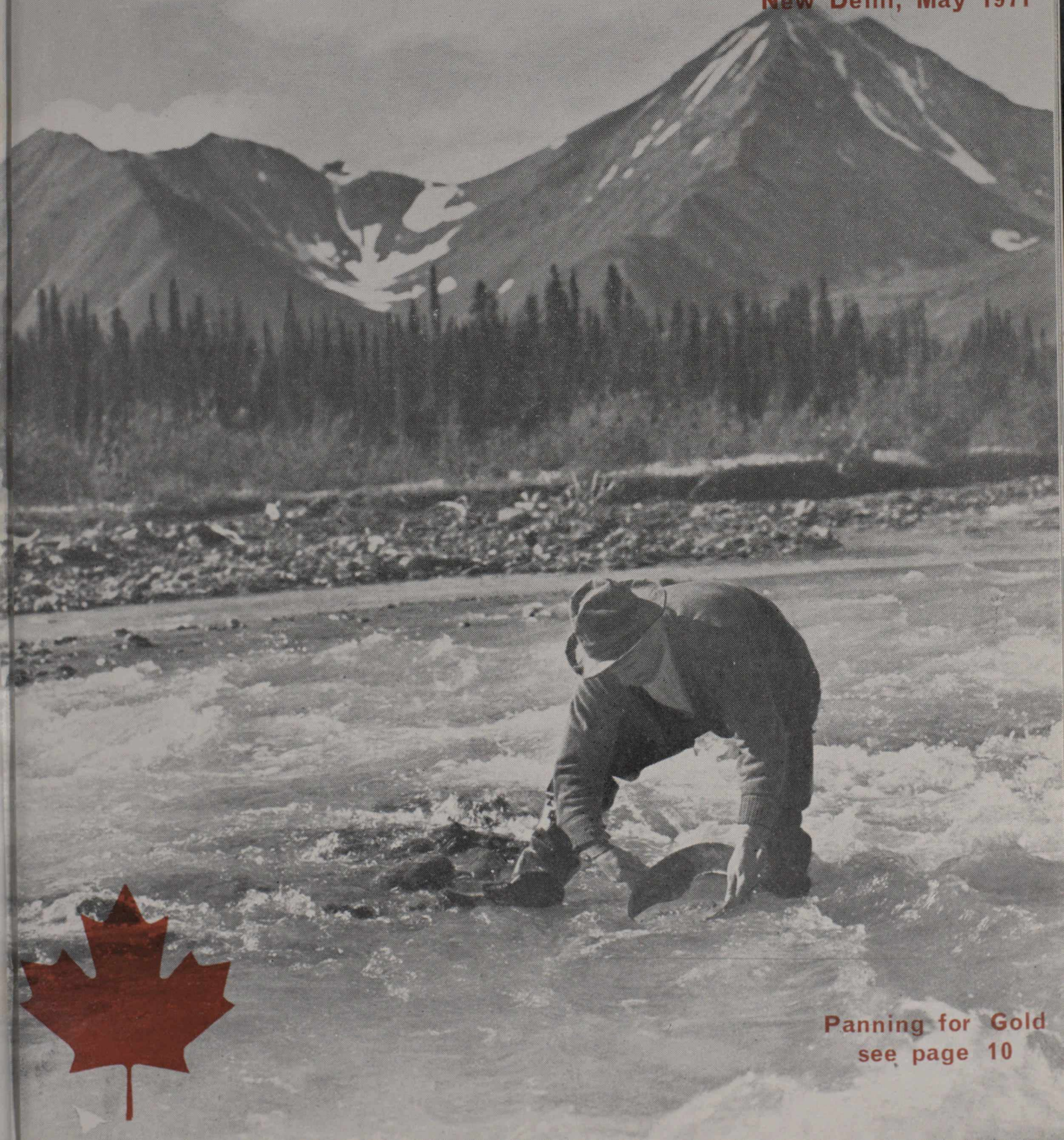


CANADA

New Delhi, May 1971



Panning for Gold
see page 10

VISIT OF CIDA PRESIDENT

The new President of the Canadian International Development Agency, Mr. Paul Gerin-Lajoie, visited India from April 2 to April 10. Mr. Gerin-Lajoie recently succeeded Mr. Maurice Strong as head of CIDA, the Agency responsible for administering the Canadian Government's program of international development assistance.

The visit by the President was part of a tour through Asia. He attended the annual meeting of the Asian Development Bank and visited India, Malaysia, Thailand and Vietnam. He saw Canadian assisted projects in each country and spoke with Canadians attached to a number of these projects. While in the capitals, he discussed the Canadian assistance program with ministers and officials concerned.

Mr. Gerin-Lajoie arrived in Madras on April 2 and travelled to Idikki, the site of a hydro-electric development project being carried out by the Kerala State Electricity Board for which Canada is providing \$25 million in loans and grants. The Canadian firm of Surveyer, Nenninger and Chenevert of Montreal is providing engineering consultancy services. Following a day at the dam, which will be the largest arch dam in Asia, the President met with two Canadian agricultural teams in Hyderabad involved in technical assistance activities supporting Indian agricultural research in dryland farming and groundwater. In Bombay, the President saw the Bhabha Atomic Research Centre, Trombay, the site of the Canada-India Reactor, Canada's major contribution in the field of scientific research in India.

In New Delhi, the President had discussions with President Giri, Prime Minister Gandhi and other Ministers and officials concerned

with development assistance. He also signed two Canadian development loans worth Rs. 30 crores (\$43 million). One loan for Rs. 28 crores (\$40 million) will be used during 1971-72 to finance the import of industrial commodities, fertilizers and fertilizer materials. This was the tenth commodity and fertilizer loan signed by India and Canada since 1967. At Rs. 28 crores it was 33% larger than those provided in each of the last three years. The increase was due to the rapid utilization of earlier loans as well as increased demand for fertilizers and industrial commodities. The loan provides India with funds for the purchase of copper, lead, zinc, nickel, asbestos, woodpulp, newsprint, ferroalloys, aluminium, synthetic rubber, sulphur and several varieties of fertilizers.

Canadian industrial commodities contribute significantly to the development and operation of important sectors of the Indian economy. Fertilizers are essential to increase food production and while domestic fertilizer production is increasing rapidly, it has not yet caught up with demand. Fertilizers from Canada are helping to fill this gap.

The second loan was a Rs. 2 crores (\$3 million) line of credit for use by the Oil and Natural Gas Commission. It permits the ONGC to buy part of their equipment, material and service requirements in Canada on a continuing basis during the remainder of the Fourth Five Year Plan. The equipment and materials will be used in the ONGC's continuing oil exploration and development programs. As one of the world's leading gas and oil producers Canada has a technologically advanced oil and gas equipment industry and is able to supply a wide range of exploration and development equipment. This was the second loan Canada has provided the ONGC. In the fall of 1969 Rs. 1.4 crores (\$2 million) were provided for the purchase of oil well casings. In 1964, a Rs. 84 lakhs (\$1.2 million) grant was also provided to the Commission for the import of construction equipment.

Both loans were on the usual soft terms granted for all Canadian development loans to India during the last five years: they are repayable in fifty years including a ten year grace period; there are no interest, service or commitment charges. **These terms are the softest available to India from any source.**

Mr. Paul Gerin-Lajoie

Mr. Gerin-Lajoie became President of the Canadian International Development Agency on November 16, 1970. He left the Federal Government's Prices and Incomes Commission where he had been Vice-Chairman to succeed CIDA's first President Maurice F. Strong, who became the U.N. Under-Secretary General for Environmental Affairs with responsibility for arranging the International Conference on the Human Environment which will be held in Stockholm in 1972.

Prior to that Mr. Gerin-Lajoie had been the first Minister of Education for the Province of Quebec, where he was responsible for a program of growth and modernization in the Province's school system, and did much to promote international co-operation in education. A Rhodes scholar, he has published many works on economic and political subjects, including a well-known study on constitutional law, and has represented Canada at many international conferences. He has served during his career as President of the Junior Bar of Canada, legal counsel for many government commissions of enquiry, member of the Quebec Legislature for nine years, and Vice-Prime Minister of Quebec for two years.



The CIDA President in discussion with Dr. I. G. Patel, Secretary in the Dept. of Economic Affairs and the Canadian High Commissioner, Mr. James George.



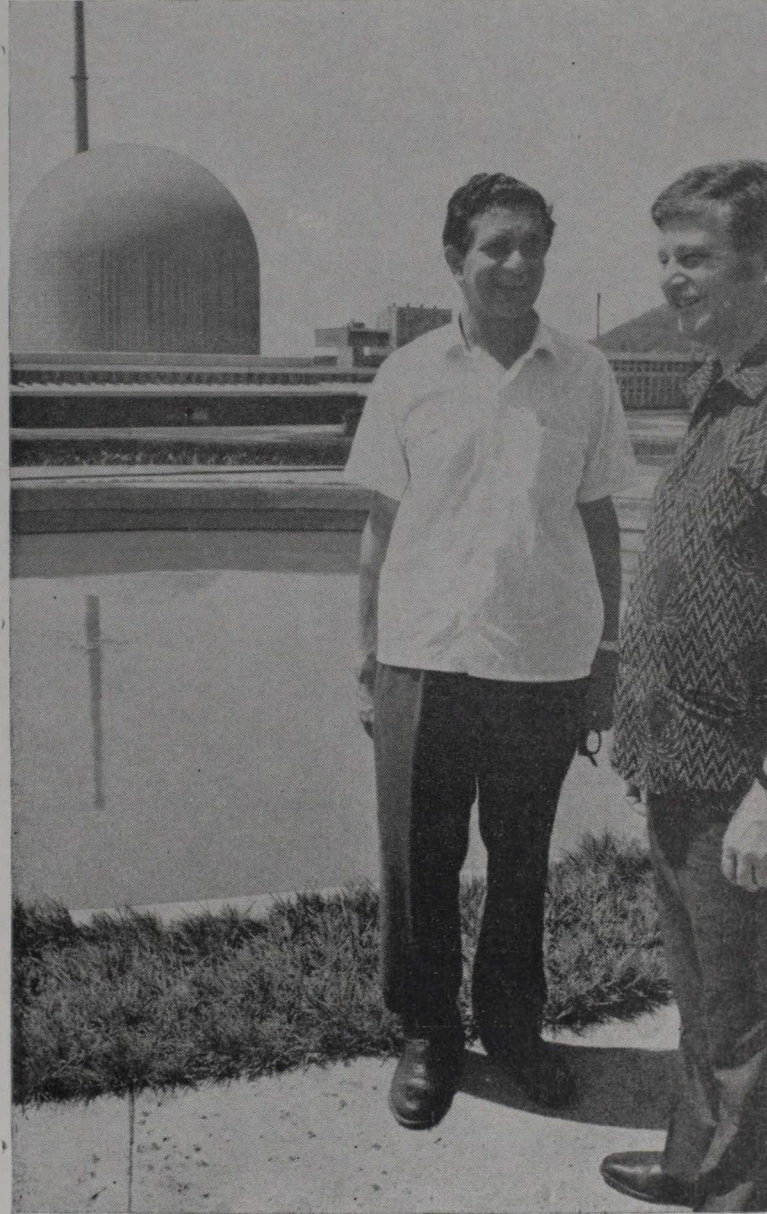
Prime Minister Indira Gandhi greets Mr. Gerin-Lajoie.



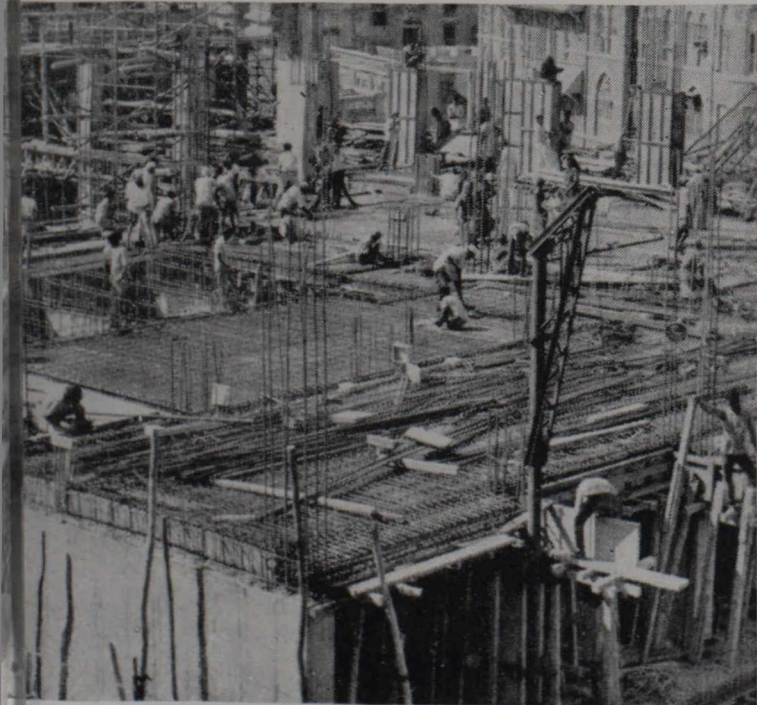
Mr. Gerin-Lajoie viewing the Idikki Arch Dam. Located on the western side of the Nilgiris, in Kerala, the project is changing the face of the Periyar Valley. With an installed capacity of 780MV (for peaking), Idikki will be the biggest hydro-electric scheme in South India. The 560 feet high arch dam will be the first arch dam in India and the highest in Asia, over three times the height of Niagara Falls. Besides cheap power, the project will irrigate 150,000 acres via canals downstream.



In Hyderabad, Mr. Gerin-Lajoie visited Literacy House sponsored by the Andhra Mahila Sabha. He was welcomed Dr. C. D. Deshmukh, former Minister of Finance, Government of India, and Dr. Durgabhai Deshmukh. Below: Literacy House under construction. World Literacy of Canada with the support of CIDA provided Rs. 400,000 to assist the Andhra Mahila Sabha with the construction of the building.



Mr. Gerin-Lajoie with Mr. H. N. Sethna, Director, outside of the Canada-India Reactor building, Bhabha Atomic Research Centre, Trombay. The experimental reactor is Canada's major contribution to India in the field of scientific research. Since it went into operation in 1960, it has been used for the development of nuclear fuels and cooling systems for power reactors, for fundamental atomic research, and for the production of radioactive isotopes for use in scientific and applied research. Canada was responsible for the design and supply of the reactor including the containment shell and principal auxilliary equipment.



CANADIAN PROS IN INDIAN OPEN

In March the 1971 Indian Open Golf Championship was played in New Delhi. Now that this tournament has been included in the Far Eastern Circuit, its prestige has been considerably enhanced and a contingent of 80 professionals from abroad took part.

The 80 included Americans, Philipinos, Japanese, Taiwanese, Australians, New Zealanders, British and two Canadians—Stan Homeniuk from Winnipeg and Skip Morin from Montreal.

After much excitement the event was won by one stroke by Australian Graham Marsh from his fellow countryman David Graham. Homeniuk, a mature golfer with a good reputation back home, gave glimpse of what he could do with an early 2 under par round but as the tournament progressed, he found that he could not put his game together. When driving well he had the mortification of missing the shorter putts so necessary for good scores. Then again when his putter started to work, his driving lost its consistency and length. Homeniuk finished with a total score of 297 which placed him almost midway in the field.

Morin is a young newcomer to pro golf. His rounds in the Indian Open were erratic but, although he was unable to escape the cut, he showed promise. Both he and Homeniuk plan to return next year.



In Bombay, Madame Gerin-Lajoie visited the Ort Vocational High School for Girls assisted under a joint program by CIDA and the Canadian Ort Federation of Montreal. Above: Madame Gerin-Lajoie with the Headmistress in the school's language laboratory.

Before leaving Bombay the President and Madame Gerin-Lajoie were honoured at a reception given by the Indo-Canada Friendship Society and the Bombay Hospitality Committee.



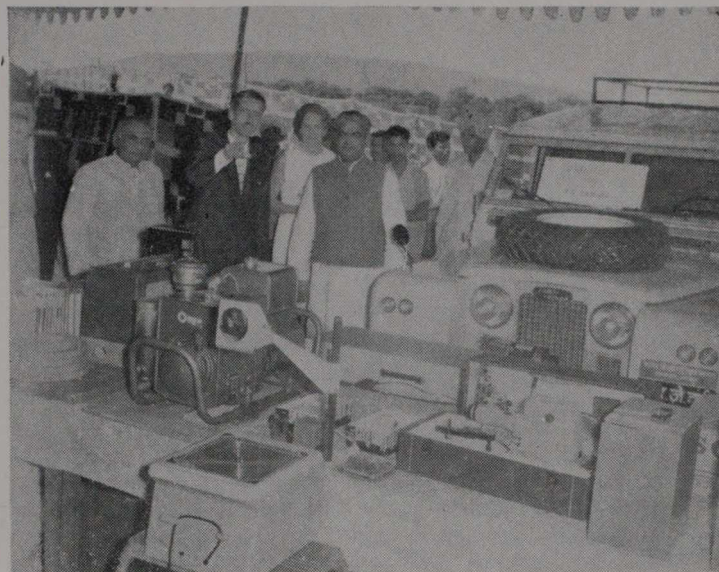
Stan Homeniuk of Winnipeg.

PROJECT 100

In 1967, the school children of British Columbia celebrated Canada's Centennial in a unique way. They collected funds for the purchase of mobile educational resource vehicles for donation to social welfare agencies in a number of Commonwealth countries.

Two vehicles were presented in India. One to the State Institute of Science Education at Udaipur, Rajasthan, included a variety of equipment and teaching aids for science education in rural Rajasthan. The second vehicle included audio-visual teaching aids and is in use with the Bengal Social Service League of Calcutta. It is used in the training of teachers and in adult literacy work in and around Calcutta.

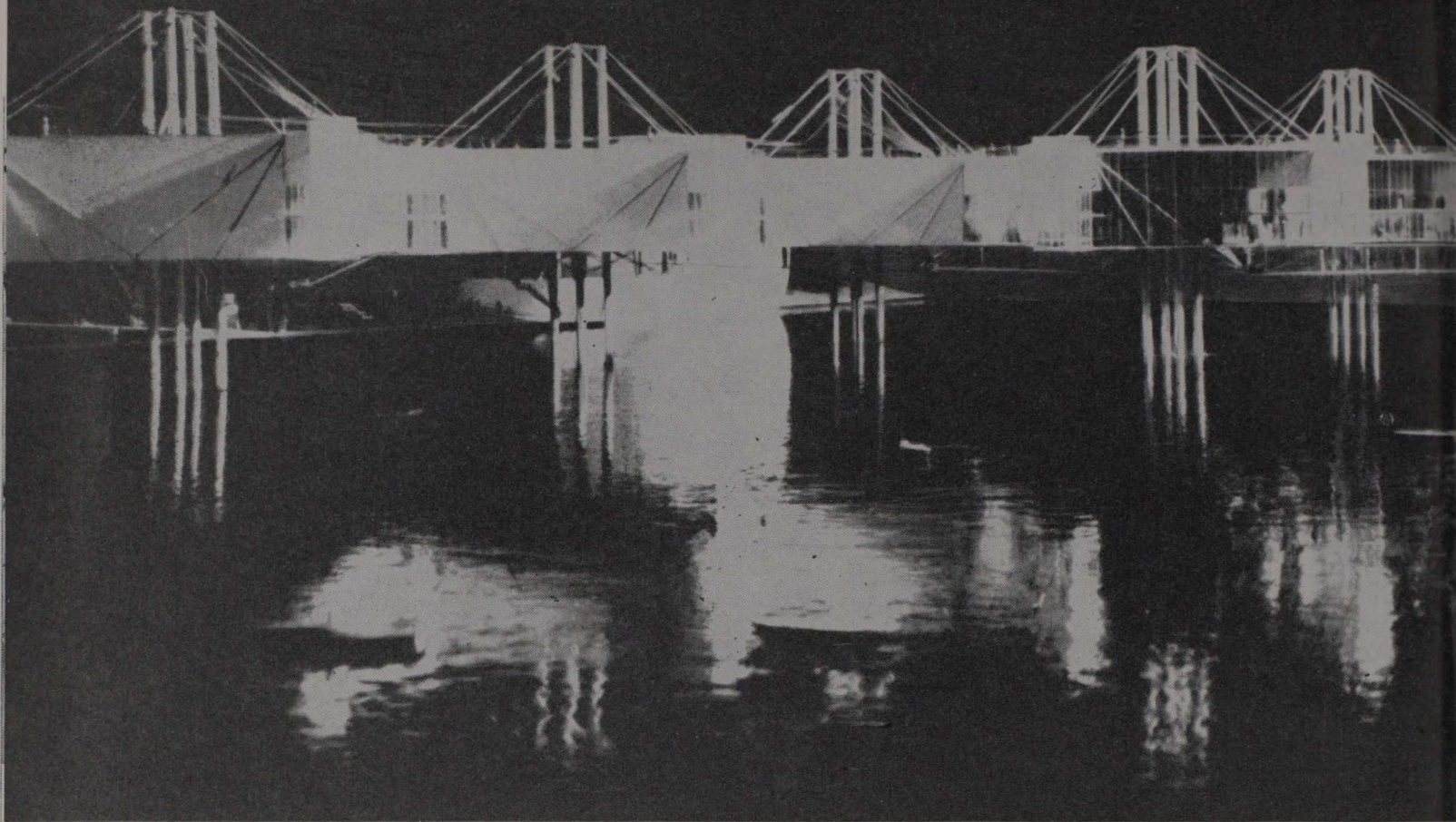
With each vehicle the Project 100 provided grants of \$6,000. The grants have enabled the recipients to purchase additional books and equipment suited to their needs and provides funds for the operation and maintenance of the vehicles for some time.



The vehicle that was presented to the State Institute of Science Education in 1968, with some of its equipment. L-R: Shri Barkat Ullah Khan, Minister of Education, Government of Rajasthan, Mr. and Mrs. James George and Shri Mohan Lal Sukhadia, Chief Minister of Rajasthan.

Mr. George presenting the final operating grant to Mr. S. N. Maitra of the Bengal Social Service League. Mr. Maitra is also Associate Secretary of the Indian Adult Education Association.





The five-pod Exhibition Pavilion of Ontario Place. The two floor levels and the top deck are 35, 45 and 70 ft. above the water.

The Place To Go

ONTARIO PLACE

Ontario Place, to open this month, will be an exciting, stimulating, dynamic new development of Toronto's waterfront—a major urban recreational area presented in terms of the 21st century. A Government of Ontario project, it will consist of four man-made islands joined by a bridge, enclosing an inner bay and situated south of the Canadian National Exhibition grounds. A quarter-mile seawall will be provided by sinking three retired lake freighters. It will protect the Marina and inner bays.

The islands will be beautifully landscaped to provide large parkland areas for the visitors' recreation and enjoyment. Paths will lead to beaches and observation points and a wide variety of exciting and unique facilities, including many attractive restaurants and interesting boutiques.

The 80-acre complex will comprise the five-pod Exhibition Pavilion, the Cinesphere theatre, the 350-boat Marina and the open-air Forum. Approximately 33 acres will be taken up by the four newly-built islands and onshore parking. Ontario Place will be open seven days a week, from May to October.

Five-pod Exhibition Pavilion

The Pavilion comprises five large "pods", dramatically suspended on tabular columns which rise 105 feet above water. Four of the five will contain exhibits to show the world "who Ontarians are and where they are going." The fifth pod will house an outstanding restaurants and banquet facility.

Each pod has two floor levels and a top deck at 35, 45 and 70-foot heights respectively. Each level—90 x 90 ft.—has a floor area of 8,000 sq. ft. The top deck will overlook the city, the waterfront and the lake, offering exceptional vantage points for dining and viewing. The west entrance to the Pavilion will be by way of a two-level glass-covered bridge, 25 ft. above the water, leading from the entrance plaza on shore.

Cinesphere Theatre

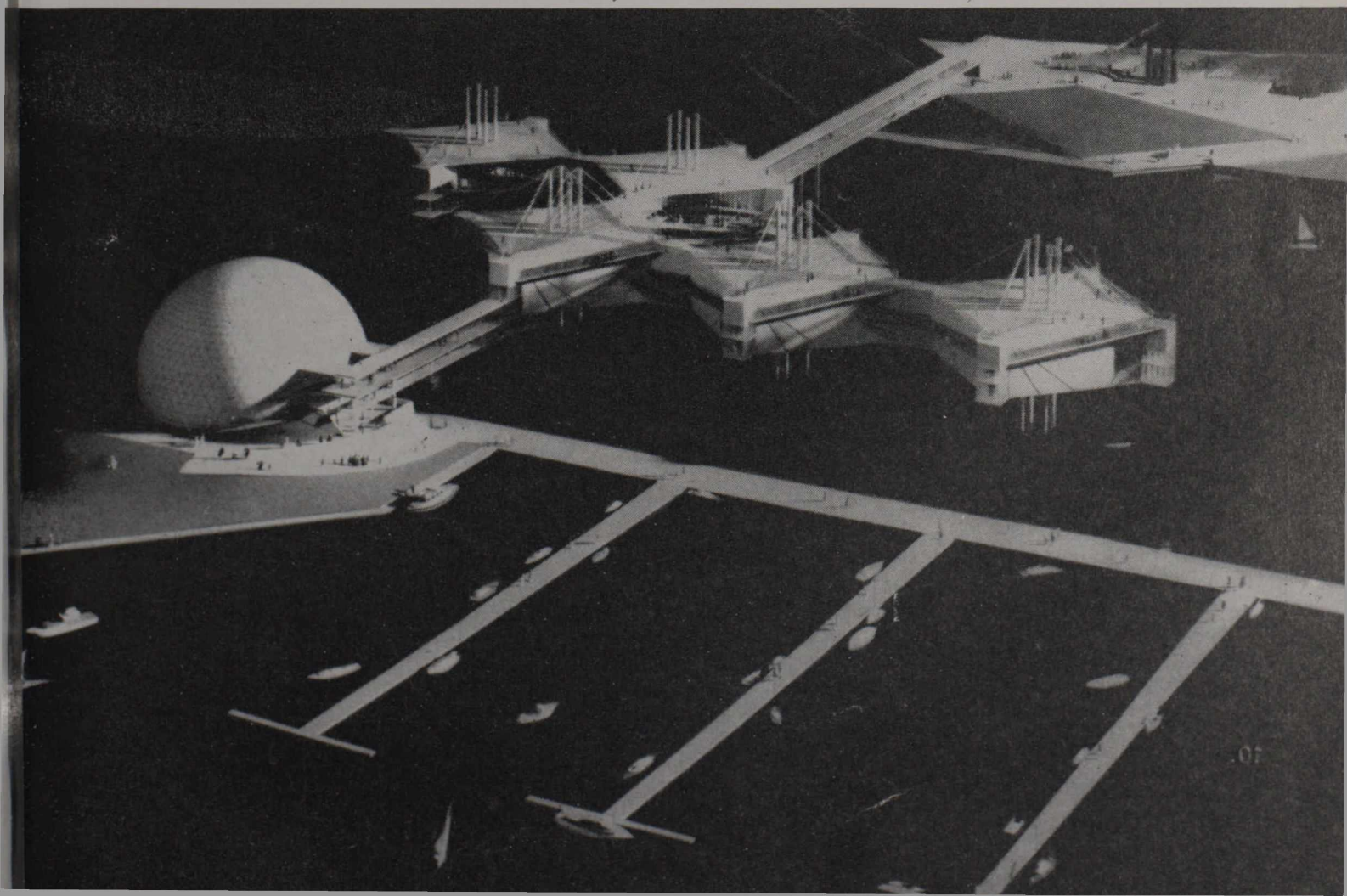
Ontario Place will boast the world's most advanced theatre, the 800 seat "Tri-O-Drome" Cinesphere. It will incorporate two Triodetic reticu-

lated dome structures. The outer dome will be clad to the underside with white procelain enamel steel panels. Both outer and inner domes incorporate tubular structural elements and aluminum Triodetic connectors. Total height of the Cinesphere will be 84 ft. 3 in. and diameter 120 ft. Spectaculars, experimental and exceptional films will be shown including the giant 70 mm films produced by Ontario for Expo 67 and Expo 70.

Open-air Forum

The Forum, an open-air amphi-theatre catering to an audience of 6,400 for concerts and festivals, will be covered with a Triodetic multiple-latticed hyper enclosure incorporating the Triodetic method of connection. The eight hyperbolic paraboloids will be supported on only four columns with a maximum spanning, point to point, of 170 ft. The structure will consist of a network of galvanized steel tubular components covered with a translucent roofing material of Climatite. The circular stage will be provided with special lighting and sound equipment.

Tri-O-Drome Cinesphere and five-pod Exhibition Pavilion are connected to the west entrance on shore by a two-level bridge. The Marina is in the foreground.



KLONDIKE STAMPEDE



Entry into Klondike country was through the 3600 foot Chilkoot Pass. It was often hidden in fog or blizzard and was the nightmare of all who came in search of gold.

From Canada: This Land, These People, published by Reader's Digest Association (Canada) Ltd. c 1968. Originally printed in Reader's Digest, April 1940, condensed from The Kiwanis Magazine (April 1940), c 1940 by Kiwanis International.

His last silver dollar flipped tails and George Carmack went downstream—to fishing that was worse than ever, and gold that sent thousands of men slogging over the Chilkoot Pass on the Trail of '98

By Jo Chamberlin

Early one morning in May 1896, "Siwash" George Carmack sat gloomily in front of a trading post in the far Canadian Northwest with his Indian squaw, Kate, and two Indian friends, Skookum Jim and Tagish Charley. Broke again after 11 years seeking gold, he would have to do what he had done before in such straits—catch salmon to dry and sell. He flipped his last silver dollar to decide whether he should set his nets up the Yukon River or downstream.

The coin fell tails and Carmack went downstream to a tributary, the Klondike. The salmon were few and Carmack, disgusted, decided to try prospecting again. Bob Henderson, a miner, suggested he try his luck in a certain valley. On August 17, the party stopped beside Rabbit Creek. While Carmack dozed, Skookum Jim, to pass the time, filled his pan with gravel and washed it out. As the muddy water cleared, Jim's eyes popped wide. In the coarse gravel, pin-head nodules, black and heavy. Gold and plenty of it!

Skookum Jim yelled; Carmack and Charley came running. They panned other spots. They had struck it rich! The excited men staked out claims and hurried off to record them. Henderson was forgotten. Carmack blew into the saloon at Forty Mile, drank and babbled of his luck. When his listeners were skeptical, he thrust a fistful of gold under their noses. They stampeded. Sourdoughs struck out for the new diggings without waiting to get proper clothes or equipment. Drunken men were thrown into boats and hauled along by their friends. Claims were staked out far above and below Carmack's. Within a few weeks, the Yukon was afire with excitement.

For a year, the outside world had no inkling of the news. On June 16, 1897, a steamer from Alaska docked at San Francisco. Down the gangplank clumped bearded men in worn and dirty clothes. But they staggered under burdens of gold, stuffed in old coffee pots, jam jars, paper bundles and moose-hide pokes—\$750,000 worth. Next day another ship brought miners with \$800,000 to Seattle. Newspapers screamed the story of the richest strike in history; untold wealth in the Klondike, millions still to be had.

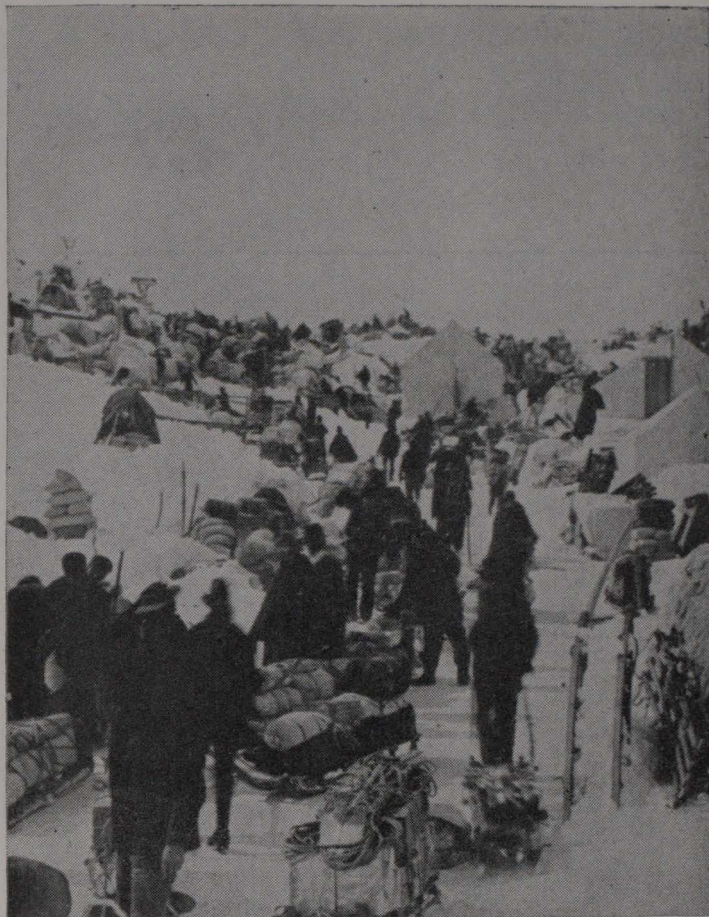
Times were hard in '97, jobs few. A hundred thousand people started for the strike. The farmer left his plow, the bankrupt fled his creditors, the factory hand laid down his tools. Alaskan steamers were jammed with college professors, bankers, lawyers, doctors, gamblers, "con" men and loose women. Warned to wait till the following spring lest they arrive too late to prepare for the deadly winter, the gold seekers paid no heed.

The Klondike River is in Canada, just east of the Yukon-Alaska border. The favored route was by steamer to Skagway or Dyea in southernmost Alaska, on foot over the Chilkoot mountain pass into Canada, by scow through a series of lakes and streams to the Yukon River and down it 500 miles to the gold fields.

Chilkoot Pass, 3600 feet high, often hidden in fog or blizzard, was hard work even for toughened Indians; to office-bred gold rushers it became a trail of terror. It was lined with the sick and beaten—also with thieves and sharks, male and female. It was treacherous. At Sheep Camp, just below timber line, 70 men were buried alive in one April avalanche.

Each man's equipment ran from 800 to 1500 pounds, so that he had to toil up the steps hewn in the ice of the steep, boulder-strewn canyon trail again and again. Unless he hired Indians to help, it usually took a man four weeks to get his goods to the top.

The long string of toiling men, thousands of them, looked from below like ants at work. They struggled and rested, struggled and rested. The pace was that of the weakest. You could not hurry. Neither could you rest except when others did, without losing your place in line. Arctic winds and rains whipped through thin tenderfoot clothes, chilling and killing.



On the summit of Chilkoot Pass, tons of freight, separated by narrow paths, were cached. At the approximate boundary line between Alaska and Canada, a customs house was built and every stamper had to register and pay entry duty on his pack.

There was confusion, squalor, death. Men quarreled with their partners, dividing their goods bitterly—even to sawing boards in half. Money was worth less than resourcefulness and courage. Sharing a few beans, lending a blanket, or a pipeful of tobacco—these things made men brothers.

To conquer Chilkoot was something to be proud of—but it was not the end of the ordeal. Down on the other side of the pass, men felled trees and sawed them into planks for crude scows—several weeks work. They pushed the scows on log rollers from lake to lake, eventually reaching the swift-running, terrifying upper Yukon. In Miles Canyon, a narrow chute of racing water between high rock walls, many were drowned. More died amid the flying mane of spray in White Horse Rapids. Rude crosses, tin cans, blazed trees marked the graves of broken

bodies and broken hopes. Of those who started only one in four got through to Dawson City. Sixteen weeks on the trail was accounted pretty good time.

There never was a boom town like Dawson. Where once had been the lone shack of trader Joe Ladue, a town of 20,000 sprang up in two years. Scows and flatboats packed the waterfront; tents, log cabins and shanties lined muddy streets thronged with howling Malemute dogs and bearded men. Saloons and dance halls ran 24 hours a day. It was wild, mad, wide open.

Fresh food was unobtainable and many a newcomer's teeth fell out from winter scurvy. Milk from the one cow was \$30 a gallon. Butter was \$3 a pound. Flour went up to as high as \$120 for a 50-pound sack. Eggs were \$1 each, if you could get them. A restaurant featured oyster stew at \$15—when it had the oysters. A meal of bread, bacon and beans was \$5 to \$10. Doughnuts and coffee cost \$1.25; a piece of pie, 75 cents.

Life centered in the saloons. Conspicuous on the bar were scales for weighing gold dust. One porter gathered enough gold from spittoons and floor saw-dust to buy a good mining claim.

What gold roulette and faro in the back room didn't get, the dance-hall girls did. Champagne cost \$60; the bottles were refilled with soda water and sugar and sold to drunks who wouldn't know the difference. The girls, modishly gowned, danced with sourdoughs in moccasins or heavy boots at \$1 for three minutes, to the "professor's" banging on the piano. As most of the miners hadn't bathed in months and couldn't really dance, the girls earned their money.

Tex Rickard ran one joint. Chief competitor was "Swiftwater Bill" Gates, who had struck it rich on Claim No. 13. Swiftwater, a former dishwasher, strutted Dawson in a Prince Albert, a stiff hat and lots of diamonds. He offered a girl her weight in gold to marry him. She took the \$30,000—but didn't marry him. To win this same girl, who was fond of eggs but not of him, Swiftwater cornered the egg supply at a cost of \$2300. He talked of importing 200 schoolmarms from Boston to be offered to lonely miners as wives at \$5000 each. In the fall of '98, a crowd actually waited at the dock when the prospective wives were supposed to arrive on the Yukon steamer **May West!** Two Englishmen arrived in

Dawson with expensive bicycles, though there was no place to ride. Another Britisher arrived flat broke, but sold his supply of marmalade for enough to stake him six months. A restaurant proprietor announced that "a perfectly preserved mastodon had been found in the Arctic ice." He would serve mastodon steaks at \$10 each. He really served beef. It was a town joke.

As more wives came in, a demand for reform arose. Eventually the better element won, and the red-light district was moved to the city limits—a few blocks away.

Names now familiar dotted the roster at Dawson City. Young Robert W. Service was there, a clerk in the Canadian Bank of Commerce. Rex Beach lived in a cabin below Dawson prospecting and cutting wood for river steamers. A fellow named Jack London came too late to make his fortune and spent a winter arguing socialism.

Gold was washed out of the soil with the help of a 'rocker'. The 'rocker' was placed over a water trough and water was scooped from the trough by hand and poured over the soil in the 'rocker'.



Some claims sold for fabulous sums, but proved to be no good. Others that yielded fortunes went for a drink of whisky, or a live pig. Gold worth \$400,000 was taken from one claim 90 by 300 feet. A "forgotten fraction" 13 feet wide yielded \$20,000. There were claims where gold ran \$1000 to the pan. At best, it wasn't all profit. It took a lot of labor at \$15 a day to cut wood for fires to thaw the thick layer of frozen muck above the gravel that might or might not yield gold.

Any claim vacant 60 days was open for new filing. A Mountie would be on hand at midnight to see that new claimants staked it out properly. Then it would go to the man who got to a recorder first. Two dogteam drivers raced from abandoned claim No. 40 and tumbled inside the recorder's office, unable to gasp a word. The recorder, Solomon-like, divided the claim between them. It proved worthless.

By September '98, 17,000 claims had been recorded and precious few yielded fortunes. Disheartened men took jobs shoveling, or cutting wood. Latecomers hung around Dawson for a while, then sold their goods and started home. The high prices collapsed. In 1899, news of rich gold finds on the beach at Cape Nome, 800 miles west, drew thousands away from Dawson. Almost as swiftly as it had grown, it collapsed to a town of 2000.

What became of the Klondike sourdoughs?

Siwash George Carmack, who for 15 years had fought blizzards and gone hungry without being ill for a single day, died of pneumonia in a Vancouver hospital. Bob Henderson, whose tip to Carmack started it all, never struck it rich. He was given a government job, died poor. Swift-water Bill Gates had matrimonial troubles and, after dodging the law for years, was killed in a miners' camp in Peru.

Some who never really panned gold did best. Rex Beach made a fortune with his novels. Robert W. Service lived prosperously from such ballads as **The Shooting of Dan McGrew**.

The Klondike gold rush had permanent effects. It gave decisive impetus to Vancouver, Portland and Seattle. It led to the opening of Alaska. Many defeated prospectors, caught by the spell of the north, stayed on to fish, trap, trade. Alaska and the Yukon began to pay rich dividends in other things as well as gold.

He Created Dan McGrew and Cremated Sam McGee

By Wallace Rayburn

Robert W. Service found his own gold in the Yukon, in his own way. The bank clerk who wrote **The Shooting of Dan McGrew** wrested literary fame and good hard cash from his days in the Klondike—and went on writing the rest of his life. His goal: to complete 1000 poems "if the Lord of Scribes will spare me to finish the task." He **was** spared and he **did** score his 1000.

After leaving Canada's North, Service lived quietly in the South of France, with no fondness for publicity.

He wrote virtually until his death in 1958, aged 84. His two volumes of collected verse contain more than 1700 pages. But his fame rests mainly on the ballads he wrote down North.

The Shooting of Dan McGrew is one of them. It starts, "A bunch of the boys were whooping it up in the Malamute saloon," and goes on to describe how "a miner fresh from the creeks, dog-dirty and loaded for bear," had an encounter with Dangerous Dan McGrew and how "the lady that's known as Lou" stole Dan's worldly wealth when he got the worst of the shooting match.

Service spent the early part of his life in Glasgow. At six he wrote his first poem, in the form of a grace in which the mealtakers called upon God to bless the scones "Aunt Jeannie makes" and spare them all from stomachaches. At school he found he had a talent for storytelling and the other boys would crowd around while he told yarns, foreshadowing the fact that most of the Service poems that are famous today tell a story, often as farfetched as he confesses his school-boy tales were.

By the time he was in his late teens he was working in a bank and writing verse in every spare moment. When he was 20 he left Scotland

for Canada, and spent several years drifting around before reverting to his old job of bank clerk, first in Victoria, then in Whitehorse and finally in Dawson.

Had he stayed in Scotland, it is doubtful whether his verse would have brought him fame and financial reward, because one of the main things that sells Service is his subject matter—the rough, tough life in the Yukon. His verse is so successful in capturing the spirit of the pioneer days that some of his admirers still find it difficult to believe that it was as a very English-looking bank teller that Service spent most of his life here, not as a grizzly prospector.

The Dan McGrew ballad was written after a 20-minute stroll in the woods. Service had been asked to write something suitable for a recitation at a church social. He took a walk one evening after work: the poem took shape in his mind and he wrote it down when he got home. However, it was considered too red-blooded for the church affair. Other poems were dashed off with equal facility and when Service had written about 30 he decided to have them printed for distribution among his friends. He sent them to a publisher with a check for \$100. A few weeks later back came the check—and a contract, for the publisher thought they were worth more than private distribution.

That was in 1907, and the sale of that book of verse and nine others left him free of financial worries.

Service was never particular where he got names for his characters. The heroine of his novel about the Gold Rush, **The Trail of '98**, got her name of Berna from the label of a brand of condensed milk that Service used in the Yukon. For his early poems Service chose names from the ledgers of the Whitehorse bank. He wrote a now-famous poem about a man from the Southern States of America who could never get used to the cold of the Yukon and eventually died from it. His partner found that taking the body back to civilization was too much of a burden, so when he came upon a wrecked lake boat he lit a fire in the boiler. "The flames just soared, and the furnace roared—such a blaze you seldom see. And I burrowed a hole in the glowing coal and I stuffed in Sam McGee." When he looked in to see how the cremation was coming along, Sam was sitting up with a smile on his face and re-

marked that it was the first time he'd been warm since coming to the Yukon.

The name Sam McGee had been taken from the ledgers and soon after publication of the poem Mr. McGee, taking a very poor view of the whole thing, withdrew all his money from the bank. Until the day he died, his life was made miserable by all and sundry asking him: "It is warm enough for you?"

Service was always careful to describe himself as a writer of verse or a rhymster, never as a poet. These rhymes gain new popularity as each new generation discovers him. **Songs of a Sourdough**, his first book, has sold millions of copies in English and North American edition. No other living English versifier—or poet—approaches anywhere near the number of copies sold or the income of Service. He was able to retire before he was 40, and his accumulated wealth was in the six-figure class for many years.

Since saying good-bye in 1912 to Dawson, where the cabin he lived in is now a tourist attraction, Service spent his life in France. Handsomely gray-haired, he was proud of his erect figure and said he kept fit by eating copious quantities of potatoes (22,000 a year, he claimed) and chewing every mouthful 30 times.

At Monte Carlo, any flutter Service had at the gambling tables was limited to using his secret system to win enough money to pay for his lunch, then he stopped.

Life in the Klondike centred in the saloons. Fortunes were lost and won by the turn of a roulette wheel.



Saskatchewan's Fabulous Potash Pile

Since 1958 Canada has been assisting India in its requirement for potash. Last year \$8.7 million worth of this valuable fertilizer left Canada for use on India's farmlands. Nearly all of this was mined in Canada's prairie province of Saskatchewan. The development of these mines was in itself an epic mining adventure. A report on the first mine at Esterhazy by LAWRENCE ELLIOTT.



Late in the summer of 1955, a Saskatchewan newspaper reported, hopefully, that drill rigs were searching for oil in the southeast corner of that wheat-growing province. The story ended on what seemed an afterthought: "Commonwealth Drilling will do some potash coring at the same time."

Daydreams of an oil rush were quickly dashed—Commonwealth hit not a single gusher. But the mile-long rock cores that were drilled out launched a 100-billion-dollar mineral boom. For there, packed in a 450-by-50 mile subterranean sweep, was disclosed the world's greatest deposit of potash—enough to fertilize all the earth's arable land for the next 500 years!

Half a dozen companies, racing to pry the glistening crystal from the ground, committed 150 million dollars to an epic five-year battle against this hemisphere's most perverse geology. Finally, in September 1962, having achieved near miracles of mining engineering, International Minerals & Chemical Corp. (Canada) Ltd., jubilantly sent the first of the five-billion-ton lode to market. The importance of this discovery to a world of inexorably contracting farmland is incalculable, for only by increasing the food yield per acre can man win the race between human fertility and soil fertility.

Potash, a generic term for soluble minerals containing potassium, is as old as time and yet thoroughly up-to-date. As the only economic source of potassium, it is vital in the production of batteries, soap, television tubes, vitamin pills, fire extinguishers, even astronauts' breathing gear. Yet all these needs together do not match its importance as a fertilizer ingredient. Without potash, plant leaves would wither, crops shrivel, and, in a terrifyingly short time, all life on this planet would end. Thus, nine of every ten tons mined in Saskatchewan will go back into the soil. Small wonder that news of the potash corings stirred agronomists and governments around the globe.

Existence of potash deposits in Saskatchewan had been known for a decade. Just after World War II, geophysicists charting the province's substrata had caught electronic echoes that revealed a potash bed more than 3000 feet down. But veteran mining men took one look at the stratigraphic profile and reported that the ore was not recoverable: ten underground rivers

and water-saturated shale and limestone, a hard-rock miner's nightmare, intervened layer on layer above the potash salts. Now, however, the corings—20 test holes at \$50,000 a hole—outlined a deposit far richer than had been suspected, and indicated that persistence, daring and a free flow of risk capital might just succeed in prying the much-needed stuff loose.

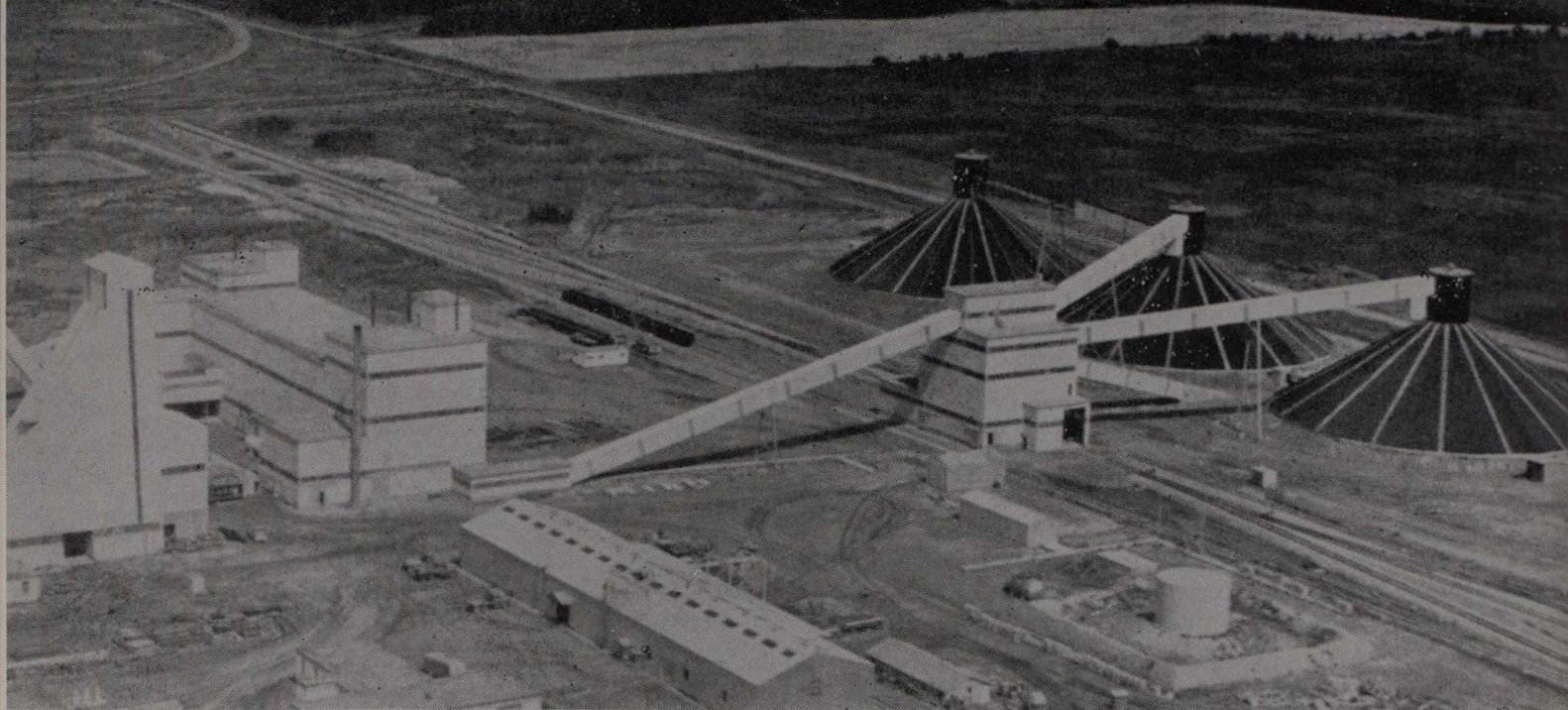
In June 1957, the directors of International Minerals & Chemical Corp., a U.S. business, took a deep breath and voted, "Go!" A Canadian subsidiary was formed. Men dragged great rigs over the bush to make trails. Soon, ground for Yarbo Shaft No. 1 was cleared on a barren plain seven miles northeast of the little farming community of Esterhazy.

It was to be North America's toughest mining venture. To stabilize the water-laden ground, a huge refrigeration plant was built. A minus-20-degree brine solution was then pumped down through 34 freeze holes. Not until 300 feet of the shaft area was frozen solid could any excavating begin. It took a whole year to freeze and line the first 1200 feet with concrete—but the system seemed to be working.

Then, in June 1958, drillers reached the "Blairmore," a 200-foot belt of fluid quicksand under explosive pressure. To penetrate it was to risk the pent-up fury of the ages: water would come tearing through a dime-size opening with the velocity of a bullet.

For nine hard-slogging months the miners tried grouting their way through—a technique for displacing underground water by forcing a cement mixture into every rock pore and fracture. When they had pumped enough cement into the blotter-like Blairmore to lay a sidewalk from Esterhazy to Toronto, a pinhole leak suddenly flared wide. Water surged to within 120 feet of the surface before the pumps regained control and the leak could be sealed off. Back to freezing they went, a tedious 19-month effort—which was suddenly all undone by a rush of water bursting through 29 fractures in a thawing steel pipe.

Then Alec Scott, a strapping Saskatchewan native who had dug mines on the far side of the world, was named shaft superintendent. He promptly flew to Germany to confer with engineers about a new procedure for driving through water-burdened strata. Called "tubbing," it entails



Giant storage bins stand out amid buildings which have reshaped the prairie skyline near Esterhazy, a little farming community in southeastern Saskatchewan. Potash could mean the end of human hunger.

sinking a vertical tunnel whose walls are lined with massive rings of cast iron. IMC's last chance for success and a long shot at best, it would cost the company another two million dollars. But the German firm of Haniel & Lueg thought the technique might work against the relentless Blairmore, and sent a team of experts to Saskatchewan to help Scott.

For a full year, while 836 four-ton iron segments were cast to microscopic tolerances, the entire Blairmore was frozen into a 50-foot-thick pillar of ice. In October 1960, the first five feet were gingerly mucked out, and 11 great sections were muscled into a ring against the frozen sand of the shaft wall. And so it was to go: dig and tub, dig and tub, five feet at a time for six nerve-racking months. Not a single stick of explosive was used, for fear of rupturing that precariously fashioned tube of ice. Instead, men wearing rubber suits against the minus-34-degree cold and working six-hour shifts around the clock used pavement-breakers to drill inch by inch into the heart of the pressure-pent Blairmore.

By now all of Esterhazy was holding its breath. Housewives out marketing stopped at the end of Main Street to study the huge, thermometer-like marker indicating the current depth of the shaft. The Kinsmen Club offered a \$100 prize to the person who came closest to guessing the moment potash would be reached. "It was our mine

now," said schoolteacher Jean Pask. "And the darn Blairmore was **our** problem."

The men finally drove down to the bottom of the Blairmore and 50 feet into the limestone below, tubbing all the way, linking the segments with 17,000 giant bolts. For the first time in history, the Blairmore was buttoned up, beaten.

It took five more months to grout the Three Forks strata and the Souris River, a rampant underground stream. Then, just before midnight of June 8, 1962, a handful of drillers broke through a layer of limestone 3132 feet beneath the silent prairie, snatched up fistfuls of glittering, rust-colored rock and wildly pounded one another's backs. After five heart-breaking years, IMC had a shaft down to the potash.

"WOWIE POTASH" headlined **The Esterhazy Miner**, reflecting the jubilation of the entire area. From the company to each of 69 babies born in Saskatchewan that momentous day went a share of IMC stock. Value: \$39. To Miss Winnie Piercy, Esterhazy's assistant postmistress, who had never been near the mine but had managed to outguess the experts, went the \$100 Kinsmen Club prize. And to everyone in the 12 towns within the 700 square miles officially proclaimed as "Potashville" went some small sense of achievement: sprouting everywhere were big red-and-white buttons with the triumphant tidings, "We Did It!"

It changed Saskatchewan. Gradually diversifying after years of being shackled to a beef-and-wheat economy, the province all at once had a huge new industry—and it has kept on growing. IMC now has two mines worth some \$4,800,000 a year in taxes and royalties alone. More, IMC's dramatic success sparked the flagging hopes of others: eight more companies are now developing their holdings. Four mines are open, six others projected. As for Canada, from the IMC mines alone, the 100-billion-dollar potash pile contributes 60 million dollars a year toward squaring up the nation's balance of trade, and adds another 45 million dollars in sorely needed railroad revenues.

But nowhere have the gains of the great potash strike been more dramatically reflected than in the once-drowsing rural crossroads of Esterhazy. IMC's two mines now employ 4000 persons, with a \$9 million annual payroll. Esterhazy's population, 750 when the mine site was cleared, now is five times that. Its young people, once forced elsewhere to find work, now have opportunity at home.

One day I rode down the hoist into the mine with Alec Scott. We dropped at a stomach-fretting 22 miles an hour (the ore itself comes up twice as fast), whizzing past the iron tubing that fends off the cantankerous Blairmore. When we reached bottom, our headlamps cast thin shafts of light out into one of the seemingly endless "drifts"—22-foot-wide tunnels hewn from the translucent, weirdly beautiful crystal ore. Alongside us clanked a conveyor belt, carrying ore to the shaft base.

We hitched a ride on a rubber-tired diesel truck to a distant mine face. Here a monstrous,

clawing 52-ton "continuous miner" bit into the glistening wall of ore in five-ton gulps, its massive rotating heads cutting a seven-foot circle with every pass, chewing out 19 inches a minute and throwing powder, chunk and boulder back into a shuttle truck, from which it would be loaded onto a conveyor belt. From the IMC mines these \$250,000 continuous miners now send 3½ million tons of potash to market each year.

We followed a load of ore to the mill. In less than an hour, it was crushed, dumped into a slurry where the basic potash was separated from the salts, dried, screened and transported to one of four giant storage bins. It would not be there long: so intense is the worldwide demand for potash that IMC's people work three shifts around the clock, and 140 loaded freight cars leave every day.

"This is a particularly satisfying product to sell," IMC's president Thomas M. Ware said to me. "It can mean the end of hunger on this earth." That's not mere sales talk. From the dawn of civilization, crop failures have doomed men to starvation. Hunger has often been the final goad to violence and rebellion. And no country ever attained the standards of an industrialized society while the bulk of its men and women were bound to the desperate daily struggle to produce food.

As the world's greatest source of a vital fertilizer ingredient that can help to increase the yield of a mineral-starved acre many times over, Saskatchewan's potash pile is thus more than just an exciting and profitable discovery. It is a prime new weapon in the fight for abundance and human security.

Food from the soil and food for the soil. The head-works of a potash mine in the midst of Canada's wheat country.

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CANADIAN ROUNDUP

Ambassador to Peking

China has accepted the appointment of Mr. Ralph E. Collins as Canada's first Ambassador in Peking. Mr. Collins, at present, is an assistant deputy minister with the Department of External Affairs.

Mr. Huang Hua, a former Ambassador to the United Arab Republic, will be China's first representative in Ottawa.

Unemployed Canadians

The Department of Manpower and Immigration and the Dominion Bureau of Statistics announced on April 15 that the number of unemployed Canadians dropped last month by 25,000. The present unemployment rate is 7.8 percent of the working force.

A year ago, the March labour force was 8,067,000, the number of jobless 542,000, and the unemployment rate 6.7%.

Constitutional Conference

A climate of co-operation and a willingness to make progress is being shown by government leaders towards constitutional negotiations, Justice Minister John Turner said on April 15. The Federal Minister was in Edmonton to meet Premier Harry Strom and other Alberta officials to discuss the Constitutional Conference to be held in Victoria from June 14 to 16. Discussions now are at the stage of refining the tentative conclusion reached at the February constitutional conference into some form acceptable to all provinces and the federal government.

Four Federal By-elections Scheduled for May 31

By-elections to fill four vacant Commons seats, three of them previously held by Liberals, have been set for May 31.

Acting Prime Minister Arthur Laing announced the by-elections on April 16 for Chambly and Trois-Rivieres in Quebec, Brant in Ontario and Central Nova in Nova Scotia.

No date was set for a by-election in the Saskatchewan riding of Assiniboia, vacant since the death on March 6 of Liberal A. B. Douglas.

Communications Technology Satellite

Canada and the USA signed an agreement on April 20 for the first co-operative international project for an experimental communications technology satellite. The experiment, to cost Canada \$27 million is to test ways to cut high costs of ground stations which would put reception from satellites within financial reach of small, isolated communities. The Communications Minister said this kind of technology is a must for Canada with its small population and large area.

Consumers Gas Buys Controlling Interest

Energy Minister J. J. Greene announced on April 22 that the Consumers Gas Co. of Toronto has bought controlling interest in Home Oil Co. of Calgary thereby retaining control in Canada. A special debate was held in February when Government and opposition MPs spoke out against a proposed sale to a USA firm.

NDP Leadership Convention

Mr. David Lewis captured the leadership of the NDP on April 25 on the fourth ballot to succeed T.C. Douglas who is retiring after ten years. Mr. Lewis received 1,046 votes to 612 for James Laxer in the contest which started with five candidates. Mr. Lewis said he would try to persuade Mr. Laxer and other "Waffle Group" leaders to stop running a party within a party. Throughout the convention policy discussions the "Wafflers" tried to push the party towards the left, advocating stringent curbs on foreign ownership and widespread industrial nationalization.

Budget Deficit

In a bid to stimulate employment, housing construction and health care improvements without a tax increase Ontario Provincial Treasurer D'Arcy McKeough announced a record budget deficit of \$415 million for 1971-72. The April 26 budget outlined a limit on civil service expansion and salary increases to control government expenses. An increase in the price of beer will provide some added revenue.

Salary Increases

Prime Minister Trudeau announced on April 26 that it is proposed to increase the salaries of Members of Parliament from \$12,000 to \$18,000 and a tax free expense allowance from \$6,000 to \$8,000. Under the proposal Senators will also receive an increase under the same legislation. The new rates will be retroactive to October 8, 1970 when the current session began. Federally appointed judges salaries will go up by as much as \$9,000. The Chief Justice of the Supreme Court will get a \$7,000 increase to \$47,000 annually. Chief Justices of the new Federal Court and of the Provincial Courts will get an additional \$9,000 bringing their annual pay to \$39,000. The proposals are now under study by Parliament.

Increased Postage

The Government has announced plans to increase postage rates for first class letters of under one ounce from six cents to seven cents from July 1 and then to eight cents from January 1 next year.

Kierans Resigns

The Minister without Portfolio in charge of the Post Office Jean-Pierre Cote has replaced Mr. Eric Kierans as Communications Minister. Mr. Kierans announced on April 29 that he was resigning because he could not as a Minister openly criticize government economic policies. He told Prime Minister Trudeau the policies must be re-examined and that full employment rather than resource development be made the main priority. Mr. Kierans will retain his seat in the Commons as a Liberal member for Montreal Duvernay.

B.C. Centennial

The Queen accompanied by Prince Philip and Princess Anne arrived in Vancouver on May 3 for a ten-day Royal tour of British Columbia to help celebrate the provinces' centennial. Governor-General Michener, Prime Minister Trudeau, Lt.-Gov. John Nicholson and Premier W. A. C. Bennett and their wives welcomed the Royal party on their arrival.