Leadership a Tradition

Seventy-five years ago—in 1880—Victorian parlors, stuffed with horse-hair furniture and antimacassars, were lit by kerosene lamps; the Marquis of Lorne was governor-general and Sir John A. Macdonald was prime minister of the 13-year-old Confederation of seven provinces and the Northwest Territories that was Canada. The North American oil industry which had begun some 25 years before in the flat, boggy fields of Lambton county was getting into its stride. The oil age was underway.

But the future of the Canadian oil industry never looked blacker. It was fighting for its very existence. Not even a protective tariff had been able to shield it from the merciless competition of the oil fields of Pennsylvania. Its export markets had been lost and its home markets were fast slipping away. Canadian oil companies were folding almost daily.

To stem this tide, seven small refiners from London and Petrolia, at a meeting in London on September 8, 1880, decided to pool their resources and form the Imperial Oil Co. Ltd. This year, Imperial—it is now Imperial Oil Ltd.—celebrates the 75th anniversary of this historic little confederation of Canadian oil pioneers who wouldn’t admit defeat.

Before the century was out the new company was selling its products from coast to coast. It had helped supply the railroad on its march across Canada and built a chain of marketing terminals through the wheat fields of the west. In those years it established a tradition of leadership and service to Canadians everywhere. In keeping with that tradition Imperial was the first company in Canada to use aircraft in the north; build a service station; install a fluid catalytic cracking unit and introduce the five-day, 40-hour week.

This year, the Review, itself 38 years of age, will salute Canada’s oil pioneers, and does so in the knowledge that their courage and enterprise still live in the industry’s men and women—in people like its researchers, refinery managers, geologists or its welders drilling deep in the north.

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Photo Credits: Hunter (P. 6); Emanuel Hahn (P. 11); Rowell (P. 16 to 20); Bollinger (P. 25); MacMurdie (P. 28 to 32); Staff (inside front cover, P. 7, 8, 9, 33); Curran (back cover).
Oil Field on Top of the World

by MICHAEL JACOT

Bush-wise trappers and prospectors called it Imperial's "mad venture". But six men struggled 1,100 miles down the treacherous Mackenzie and fought black flies, mosquitoes, numbing cold and primitive bush to find an oil field on the edge of the Arctic.

Drillers cut away bush to put up this rig at Norman Wells in 1919.

Just outside the Arctic circle, between the Franklin and the Mackenzie mountains, snug to the banks of the greatest river in Canada, lies Imperial's Norman Wells refinery, complete with its own oil field. It is the most northerly oil field and refinery in the free world. Its products—gasoline and fuel oil—serve an area of more than a million square miles.

In 1919, when the first wildcat well was drilled there, few people believed that it was possible to drill an oil well on the top of the world. The 1,100-mile journey down the Mackenzie with tons of equipment was in itself a monumental task; the clearing of the site, and the actual drilling an amazing feat of improvised engineering. But the almost incredible part of the story is that, if the drilling had taken place only a short distance from the one spot chosen out of the two million square miles of Arctic, they wouldn't have hit oil at all.

Of the six-man crew, R. Chatvaire, Emery Dubuc, Jim Heslop, Sam Byers, Ed Wilson and Joe Lavoie, who waited that July day in 1919 at the railroad of McMurray for the boat to take them to the drilling site, only one of them had been north before. They had been pumped full of stories by bush-hardened prospectors and trappers, who treated the expedition as a joke. Jim Heslop, who now works at the Giant gold mine in Yellowknife, says, "They told us of mosquitoes so big you shot them with a .22 and roasted them; of others that had been trained to sit on a feller's shoulder and sing."

The party had been warned in Edmonton of bitter winter winds; 60-below-zero temperatures; ice and snow that cut you off from the world for months at a time; the summer heat, the flies, dust and tangled bush. They had also been told that they would have to stay encamped in this wilderness for a whole winter until another party was sent to relieve them in the spring.

"By the time we had man-handled our equipment onto the old wood-burning paddle steamer, Northland Call, there wasn't a man among us who wasn't wishing he was some other place," recalls Heslop today.

Jim, tall, bespectacled, soft-spoken, came out from Wales in 1912. "We weighted the Northland Call to the gunwales with drilling gear, rigging, pipes, drums, tanks, cooking gear, and food. One of the heaviest items was an ox, which we christened Old Nig. He was to be used to haul timber and machinery. Nig was the only calm one among us," he says. (Eleven hundred miles away, at the other end of the great Mackenzie river, two other not-so-calm men were literally gnashing their teeth, as they awaited the arrival of the drilling crew. They were "Ted" Link, then plain Mr. Link but today..."

Ted Link, geologist in charge of the historic expedition, surveys land on top of Bear Mountain, 40 miles south of Imperial's first well.

The first crude oil from the well and an excited crew on hand.

Imperial Oil Review, February 1935
Dr. T. A. Link, consulting oil geologist) the man in charge of Imperial’s operations in the area, and his assistant Jack Ziemann. The pair was fast running out of food.

Navigating through the rocky shoals and sand bars of the Mackenzie was mainly by guess and by gosh. Most days a stop was made to cut wood for the ship’s boiler. It took two weeks to negotiate the 300 miles to Fort Fitzgerald and the disastrous, rushing waters of the “Rapid’s of the Drowned”. Here all cargo was unloaded and humped across 16 rugged miles of semi-bush country to Fort Smith where it was loaded onto another boat. The ground was a quagmire. It took two weeks to complete the switch to the Northland Trader.

“For two weeks on the Trader we ate nothing but beans and sowbelly,” says Heslop. “The boat was packed with trappers, traders, animals and equipment. There was enough cigar smoke, sweat and caused to start another war. Lanouette disappeared ashore at one stop. He sauntered back looking well fed and happy. The skipper cursed him black and blue for holding us up. Once aboard he opened his bulging coat, and displayed two dead ducks. It was the only break in the food all the way down.”

**RAN OUT OF FOOD**

Six weeks after they started, the party rounded the bend at Fort Norman to see Ted Link and Jack Ziemann paddling furiously upstream towards them in a canoe. “We finally ran out of food and set out to find the boat,” says Ted Link. “Believe me, food—even if it was beans and salt pork—never tasted so good as it did on that boat.”

Fifty miles down river was the wildcat site. Once the equipment was ashore Link and Ziemann left for Fort Smith to record claims. Before they left, Emery Duboc, leader of the drilling party, asked “Where shall we drill?” Link marked an arc with his arm, “Anywhere around here!” They found out later when drilling development wells, that if they had drilled a few hundred yards away in the one-shot wildcat venture they would not have found oil!

As the southbound boat with Link aboard rounded the bend in the river it blew a long farewell. Silence ensued in and the six wildcatters looked at one another. “With no radio, no aircraft and no boats during the winter our last connection with the world was broken,” remembers Heslop. “It was an awful feeling, that sudden realization we were on our own.”

They constructed a rough and ready, but cozy camp. The weather was mild; and they started drilling. Because of permafrost (the permanently frozen bed of ice and mud), drilling began with a pick and shovel. Jim says, “We dug two inches of ice and mud at a time. When the sun had raised the next layer we began again.”

**CRASHED BIT THROUGH ROCK**

Eventually they cut through the permafrost and erected an improvised wooden derrick. Drilling was by cable-spool method—crashing through gravel and rock by letting a heavy bit on the end of a cable drop into the hole. It was not a very fast way of doing it, but it eventually reached oil. First showing came at 100 feet, and they took some of it to fire the boiler.

By that time the ice was 10 feet thick on the Mackenzie and the thermometer was hitting well below zero. Duboc decided to give up until spring.

That winter was the toughest they ever spent. It was intensely cold. The snow piled up around their little hut so that it was often impossible to get out. Nerves became frayed and small grievances mushroomed into sulking ailments.

Spring seemed a long way off. Heslop says, “Chauvain and Lanouette disappeared. They re-appeared carrying some skins, mostly weasels. They had made traps and set lines. This prompted the rest of us to go on the prowl for bears. We were soon eating bear steaks.”

At night, with the wind and the wolves howling round the sides of the cabin, they huddled by the log fire and read books or played poker. “We only had about two dollars among the six of us,” grins Heslop today, “so we played for weasel skins. They changed hands so often that all the hair was worn off some of them.”

Christmas Eve was a memorable day. Out of the swirling mist of snow there suddenly came the yapping of dogs. The men rushed to the ice-bound Mackenzie. Soon a black speck appeared on the river. As it neared them the speck became a man and a dog team. He had come 40 miles from Fort Norman with mail. The excited Lanouette turned to Chauvain and kissed him. When Chauvain struggled away, Lanouette ran and kissed the mailman.

Next day the hut was transformed. A bright fire blazed in the grate; the table was decorated with brightly-colored paper, and Joe Lanouette, the cook, excelled himself with moose meat, vegetables, and a “wine” brewed from potato peelings and prunes.

Christmas was followed by a tragedy. Old Nig finished all the hay they had collected for him before freeze-up. They butchered him. “It was like the passing of an old friend,” remembers Heslop.

Spring came at last, and the ice on the Mackenzie began to rot in the sun. In June they started on the well again. They were down only 300 feet, when on July 8th, round the bend in the river came the first batch of the year with Ted Link and a relief crew. “We were so overjoyed with relief,” says Heslop, “we couldn’t even raise a cheer.” Nevertheless some members of the party elected to stay on. The others sailed upstream back to civilization.

Link went on his way to explore some 40 miles farther down river. He had only settled in at his exploitation camp a short time when one of the crewmen rushed upon him from Norman Wells. Oil was bubbling up in the pipe! Link shook him away. “Don’t disturb me until you see it gushing out,” he said.

The well gushed at 900 feet. It was capped and Link hurried back to Edmonton with samples. The gamble that had its beginning 130 years before had succeeded. For it was in 1789 that Alexander Mackenzie noticed oil seepages at Fort Norman. R. G. McCorkell of the Geological Survey also reported seepages in 1888. In 1914 T. O. Bowsworth—later Imperial’s chief geologist—confirmed these reports and staked three claims. Now Imperial’s “mad venture” had proven the existence of an oil field.

Soon one of the biggest oil rushes of the day hit the Mackenzie. Boats flocked with prospectors; many small western companies sent drilling parties; geologists and oil men came from Britain and the United States. Imperial drilled three more wells—two successful and one dry hole—and left the area to await developments.

In 1921 the company installed rough and ready equipment to supply a type of fuel oil to the Mackenzie missions and fishing boats, but the operation was so costly that the field was closed down again. The immediate market was not large enough to warrant production. To take the oil to civilization was uneconomic. It is about 1,500 miles by rail and water from Norman Wells to Edmonton and 1,100 miles by water to Fort McMurray, the end of the rail line from Edmonton.

In opening up the Wells, Imperial became the first company
to use aircraft commercially in the north. Several trips in and out of Norman Wells were made in the late Twenties. Today the plane has become such an essential part of the north that in winter many a settlement would be lost without it.

Imperial's early flights were not without mishap. The company then had two Junkers. One crashed-landed on the ice at Fort Simpson and smashed its propeller. It might have been stuck there until the spring breakup if the mechanic, Bill Hill, had not— with a now legendary improvisation—made a new propeller from dog sledge runners and moose-hide glue. Similar repairs were carried out on the other plane when it crashed-landed with Link in it at Fort Norman. Link says he had $35,000 on him with which to buy chum from the Indians. He threw it out of the window when the plane hit the ground. "Someone picked it up and handed it to me when I climbed out of the wreck," he recalls.

It was 10 years before an outlet for Norman Wells oil was found. In the early Thirties Gilbert Labine flew to Great Bear lake, 300 miles to the northeast and discovered great silver and radium-bearing ores. In 1932 a small refinery was built to supply the Lahine mines. The output was 500 barrels a day.

Norman Wells' first superintendent was R. W. Mackinnon, a small energetic man who grew to love the north country so much that he asked to be buried there. He now lies in the Norman Wells graveyard. Mackinnon first visited Norman Wells in 1921. The next year he made a memorable trip by dog team from Norman to Edmonton. It took 45 days. He spent 27 years in the north and his name is still a legend among the Indians and Eskimos along the Mackenzie delta.

The refinery capacity gradually increased. Yellowknife gold fields opened up in 1933, and the refinery output rose to 1,100 barrels a day. To reach the Lahine mine on Great Bear Lake the first products pipe line in Canada was built across the dangerous Bear River Rapids.

Then came World War II; 1942 found the Japs occupying the Aleutian Islands, their guns pointing at Alaska. The Alaska highway was built to transport and supply troops. But a modern army needs gasoline and oils. It was decided to build a 595-mile pipe line from the Wells to Whitehorse, and three product pipe lines from Whitehorse to Skagway, Fairbanks and Watson lake in Alaska. Imperial undertook to drill up the Norman field, and the U.S. engineers were to build the pipe lines and a refinery at Whitehorse. The project was named Canol, a contraction of Canadian oil.

It took 25,000 men and 10 million tons of equipment and materials to build 1,000 miles of road, to string 1,000 miles of telegraphs and to lay 1,000 miles of pipe lines. The project took 20 months. Special barges were built to take supplies down the Mackenzie and a chain of airports was constructed along the river banks.

The pipe line was completed in the middle of the night of February 16, 1944. Then came the test for the gallant little oil field at Norman. Imperial had promised 3,000 barrels a day and a handful of crews had been out drilling up the area. In all, they completed 60 wells, and the field surpassed expectations. A 30-million-barrel reserve was proved, and at one time as much as 4,000 barrels a day was produced from it. With the peace, Norman Wells settled its feathers and reduced production to its present 1,100 barrels a day.

Norman Wells refinery today is a far cry from the rude little hut that sheltered the six pioneer wildcatters. Its white buildings, gleaming process units and storage tanks can be seen from the air for miles. It has a modern 17-bed hospital, an air strip with a hotel attached, a baseball park, movie house and dance hall, church and tennis courts. Its rows of neat frame bungalows, bordered with gardens of dahlias, phlox, primroses and sub-arctic flowers, spread along the Mackenzie's east bank.

During the summer 90 people are employed there; many take their wives north with them. The winter staff is only 36. Food, supplies and staff are flown in from Calgary and Edmonton.

HOSTELRY OF THE NORTH

For the people of the north—the miners, trappers, travellers and prospectors—this refinery on top of the world is more than a refinery. Through the years its dormitories have served the weary, the lost and the wayfarer as the hostelry of the north; a place where no matter the hour of the day or night there would be a smiling welcome and assistance in the event of trouble. This oasis of civilization in the almost unbroken vastness of the sub-arctic has often proved a haven in times of sickness; times when its doctors and nurses were the only medical aid within hundreds of miles. But most of all it is a vital link in the supply line that keeps the north open.

Without the Norman Wells field and refinery, heating oil, diesel fuel and gasoline would cost much more in the north than they do—they would have to be transported anywhere from 1,000 to 2,000 miles by rail and water from Edmonton. Even with a refinery so far north, nearly half the retail price of oil products at most points goes to pay transportation costs. But in spite of the difficulties of sub-arctic operations, Norman Wells prices compare favorably with other refineries in Canada.

Norman Wells' products serve Yellowknife, the gold mining centre, Aklavik, the Arctic trading post, Uranium City, Canada's uranium centre, and dozens of small settlements like Hay River, Providence, McPherson, Simpson, Good Hope, Resolution, Wrigley and Arctic Red River. In tiny camps alongside silent mountains and lakes, beside the tented poles prospectors stand oil drums from Norman Wells.

The little party of drifters who set forth that July day in 1939, didn't know what was starting up...
Marion, in work clothes, plots a pilot's course before he takes off under contract. But it wasn't always thus. Her flying school had just settled in a solid black earth in 1953 when she hit a major crisis—she was told that Barker Field was scheduled for real estate development. She had to find another location. She needed a field big enough for runways and yet close enough to the city for her students.

For a year she scoured the surrounding countryside. From the air she picked out possible sites and later called on the owners; but on one wanted airplanes around. Farmers were afraid they might scare their prize fowl or farm animals. Her diligence had almost turned to desperation when Dr. P. F. MacFarlane, a dentist with a farm at Maple, offered her a landing field.

Marion took possession on a raw January day last year. Swiftly she and many air-minded friends erected a prefabricated house to serve as a combined flight office and home, and levelled the field. In the spring she installed a 1,000-gallon tank for aviation gasoline and Imperial's tank truck drivers were soon familiar with the instructions: "Take a sharp left turn one mile west of Maple." By July most of the preliminary hard work was completed and Marion started planning and practicing for the opening day air show.

Amidst all this ground level bustle, flying operations were carried on. On sunny weekends and Wednesday afternoons her three part-time instructors gave lessons while Marion converted the pasture into an airfield. The rugged terrain was hard on the light Chipmunks, Aerocons and Canuckvs; tail springs and gas tanks, often split during take-offs or landings. Marion serviced her own planes (except when welding was required) and helped with the 15 others parked on the field.

That same day she would operate her own airport. This would have been a hilarious suggestion to the little girl who used to play in front of her Bellwoods Ave. home in west Toronto. Marion was the youngest of four girls and, unlike her sisters, completely fascinated by flying machines. "Even since I was so high," she says today, levelling her hand three feet off the ground, "I have been cracking my neck at airplanes."

She started flying in April, 1939. She was 17. A Toronto flying school advertised for pupils, and, on an impulse, Marion phoned for her first lesson. She "took to the air like a bird" but paying for the lessons was a real problem—duch instruction cost $9 an hour, solo flights. $7. Marion could afford only 15 or 20 minutes at a time. She earned $12 a week at a wrapping paper factory which she split three ways—room rent, food and flying.

"Mother didn't like it at all," Marj remembers. "She tried to discourage Marion from flying although she was very proud of her." But the flying continued and so did the licences. Marion received her commercial licence in 1941 and her instructor's a year later.

She was now ready to make a career of flying. She instructed at St. Catharines, Ont, for a few months and worked in the control tower of the RCAF training school at Goderich, Ont. Then she enlisted with Vi Milstead, another Canadian woman flyer, in the Air Transport Auxiliary. This was the British women's group which delivered pilots and aircraft where and when they were needed in England or on the Continent. Of its 107 women flyers from the Commonwealth, only three were from Canada.

Though she had less than 100 hours in the air to her credit in the next two years she flew 49 different types of aircraft including Harvards, Hurricanes, Spitfires, Swordfish and Tiger Moths. She was over France in Anson and co-piloted on a Flying Fortress for an ocean crossing trip.

Like many other pilots unfamiliar with the English countryside, she was lost a couple of times. While flying a mission with two other planes she turned around to find they had disappear-
ed. The clouds were banked so deep she couldn't see below, but she took a chance and "went down praying I wouldn't crash into another plane." Flying up and down a railroad track for half an hour didn't help her sense of location or her fuel supply. Boldly she struck out across country and on the other side of a big hill I found the most beautiful landing strip that side of the Atlantic ocean.

When she returned to Canada gasoline still was unavailable for civilian flying, but right after V-E Day when control were lifted, she started instructing at Buttonville, just outside Toronto. The following year, 1946, she transferred to Barker Field to work for the Henderson Flying School. By 1948 she was its manager, and two years later, owner of the school.

Within another two years she had turned it into one of the friendliest and busiest flying clubs in the country. But she had barely doored her proprietor's cap when she received notice to move the flying school. Deep in debt and knowing nowhere else to set up business, she asked for and obtained another part of Barker Field. A voluneer working crew rallied round, tore down the flight office and rebuilt it on the new site.

It was then she learned how to lay cement blocks; a skill that stood her in good stead three years later when she had to leave Barker Field altogether and set up operations from scratch at Maple. One Sunday at Maple an admiring audience—much of it male—watched her lay a cement wall, block by block.

Work of this nature has given Marion muscles like steel. This masculine strength in so feminine a figure comes as quite a shock to people meeting her for the first time, but it has saved her life at least once.

FROZEN TO THE CONTROLS

She was instructing a student when he panicked and went into a spin at 4,000 feet. Halfway down she realized to her horror he had blacked out and frozen to the controls. While the plane was plunging to an unscheduled landing she broke his death-like grip and pulled out of the spin. He levelled off at 600 feet. Accidents like that rarely happen because Marion demands that students and pilots at her field fly "by the book." She herself takes no chances and insists that others also have the greatest respect for the air. Since 1942 she has helped hundreds of pilots to get their first licence—she won't even hazard a guess at the exact number. "The number doesn't matter—whether its one or 100 it's the satisfaction you get that counts," she says. "When one of the lads get a job with TCA I feel as if I cornered it myself."

But she gets an even bigger boost when one of her women students gets a licence, for, says Marion, "Any woman who wants to fly can make a career of it today. There are more openings for us now, especially as instructors, than there ever were. After all, when you're up in the air, it doesn't matter whether you are a man or a woman—it's how you handle the plane that counts."

Marion's whole life is devoted to her flying career. Even her social activities centre around the flight office, which after sundown, resembles an air force mess. Some of the gang usually stay to watch television while Marion pores over accounts, log books or plans for the future—plans that include another runway, 2,000 feet long; overnight accommodation for flyers and perhaps a swimming pool and tennis courts.

She lives alone at the airport but isn't nervous—partly because of Prince, her part-Collie, part-German Shepherd watch-dog, but mostly because she owns two revolvers and "can shoot the light off a candle at 10 paces".

Marine airport, once a farm field. It took three weeks to level its rugged surface and create a landing strip. Marion owns three planes.

"Here's how to swing the prop," Marion tells George Peters.
In praise of petroleum

by STEPHEN LEACOCK

Let us take of the blessings that have accrued to humanity from the advance of our civilization in such things as mornings, mathematics, music and the manufacture of moonshine. I want on this pleasant anniversary occasion to get down to rock bottom and talk about petroleum.

Man has been called by Aristotle a rational animal; by others a laughing animal; and by others again distinguished as a tool-using animal or as a fire-making animal. But in my day the true distinction between humanity and all the rest of the animal kingdom is that man is the animal that uses oil. The others don't. They can't. They don't know how. As a result, man, the oil-user, can beat them at their own game. The scavenger is equal in its flight. The horse has lost its speed. Unless it can make its legs rotate with gasoline its future will get dark, its doom grow certain. The whale pants along behind the power boat: and no one cares for the whale's pants. He hasn't any anyway. Even the skunk holds his own—or lets it go, on a narrow margin of superiority.

Still man among the animals in this, his latest age, the Oil Age. The other epochs that have gone before look tame beside this rapid, moving, explosive period. There was first the Ice Age—long, slow and dull in the extreme. In the Ice Age nature scarcely moved. Primitive man sat immovable in his white bear skin on a chunk of ice, naked in the wrong place, gazing at the blue ice cliffs and the leaden sea. Life moved with incredible slowness. Courtship lasted 12 years. It froze slowly into matrimony and stagnation, and at the end white death threw a mantle over everything. Then came the Stone Age—not much better. Primitive man, now covered with hair as the result of sitting on the ice, spent his time in piling up huge stones, set on end to form circles. It took 120 years to raise each stone. Often it fell down and crushed its builders under it. They had to stay there. This was the beginning of tombsstones, the only invention of the Stone Age.

Then came the Iron Age—much better, far more movement, something doing at last. Man now learned to make iron spears, axes, hammers; he could now crack his head open in one blow. Life became much shorter and much merrier. After the age of iron came the Bronze Age, or the Age of Alcohol. This was brought about by the invention of wine and the finding of the wheat plant and the discovery of Scotland. This age lasted all through the centuries of Rome and Greece and medieval and modern world down to our own time. It had in it other features beside the use of alcohol—such as the invention of writing and printing and castle building and shipbuilding. But its leading feature was that man became a boozing-using animal.

This last age, as its speed increased, broke all of a sudden into the Age of Oil. All of a sudden, so it seems now, man learned the uses of petroleum. How long it had had to wait. Primitive man slopped round in the marshes in pools of petroleum and never knew it was there. The ancient Britons mixed it up with a blue weed that they called "woad" and then stained themselves blue with it, feeling pretty saucy and smeling like a gasoline station. The Chinese knew of petroleum as far back as the Ming dynasty, but they used it only as hair oil.

The Persians knew of it and used it for making chest plasters. The North American Indians, the Senecas, found petroleum oozing out of the ground in the valley of the Alleghany river, but only used it to make Seneca oil for rheumatism. Thus their childish pride in their own name prevented them from the great discovery still to come.

Then came the world an American settler called Ker, and he gathered up the oil into barrels and drained the mud out of it, and soaked an old suit in it and made a torch. But even then the other settlers didn't catch on: they only saw that Ker had burned up a good shot. Such is always the difficult upward path of progress: there is money in it. The telegraph, when first invented, was called an "interesting toy." No one would buy it. The telephone was, for its earlier years, only an amusing novum, the despair of its inventors and patentees. Something of the sort might have been expected in the case of petroleum. The world was slow to realize its full potential. As Longfellow said: "We know not half we have," and we are told that "the uses of petroleum are as yet slowly coming to be understood."

The Good Old Days of the Oil Age, age, which now all, is life moving along. Love and friendship, joy and sorrow move fast. Good news and bad news circulate the globe in a second. Kings rise and fall, republics roll over sideways, elections go off with a pop—all too fast that is. We are even the beginning is finished it is.

And at the end the rapid motor bus rushes man to oblivion with a last faint smell of gasoline as his requiem.

This article was written by Stephen Leacock for a special issue of the Imperial Oil Review published in September, 1930, to mark the company's 50th anniversary. His observations are as pertinent this year when the company celebrates its 75th anniversary.

In Orilla public library is this bronze head of the author by Elizabeth Wyn Wood. It was put there by the Stephen Leacock Memorial Committee.
A unique volunteer grass-roots film network has taken movies to isolated villages, country crossroads and Atlantic outposts. In less than a decade, this war-born venture has made Canadians the largest users of information films in the world.

Snowden School was a welcome blaze of light on the lonely concession road one windy night last October. Snowden isn’t on the map; the nearest settlement, Bishop’s Mills (about 100 people) is 4½ miles away. Officially the school is No. 19, Wolford Township, Greenville County, Ont., but the teacher is Mrs. R. Snowden and several of the pupils are Snowden—and so, Snowden School.

“Film showing tonight,” announced a poster in a Gothic window of the old building. Inside the one-room, eight-grade school, Mrs. Snowden, an alert, self-spoken woman, was waiting for her audience. On the blackboard at one side of a portable film screen were natural history notes made during the afternoon school screening.

The projector, stencilled “Unit No. 2 Greenville County Film Council”, was threadied up. Mr. Snowden had picked it up along with the screen and films that morning at Bishop’s Mills where they had been used, afternoon and evening the day before.

The audience arrived: nine children (who had seen most of the program that afternoon), two babies and 13 adults—Johnsons, Korims, Kalicyzkis, Wilsons, Snowdens. The men were still in work clothes for it was harvest time. A small Snowden, proud of his responsibility, turned out the lights, the projector whirred, the music slowly found the right key and Snowden School’s 1954-55 film season began.

Mrs. Snowden ran the projector and introduced the films: News of the World, a roundup of non-topical travelogue items; Hunting with a Camera, a natural history film; Search for Home, a study of adoption problems; Eye Witness No. 44, a roundup of Canadians covering a Prince Edward Island farmer who also has a paper route he serves by plane, Toronto’s Hospital for Sick Children and the wood carvers of a Quebec village; International Fishing Match, 1952; and Underground East, the story of the building of the Interprovincial pipe line to bring Alberta crude oil to eastern Canada. The first five films were purchased by or for the National Film Board; the last is an Imperial Oil film.

There were motherly clucks from the women during the adoption film and murmurs from the men at the fantastic pipeline machinery. They waited expectantly while reels were changed between each film. When the show ended the group broke up, and, chatting merely about homeless children, pipe lines and plowing, moved out into the gusty night. “They’ll talk about those films for days,” said Mrs. Snowden.

Snowden School’s screening is one small statistic in a unique network of 16 millimetre documentary information in cultural films. The network, sponsored by the National Film Board but sustained by a voluntary effort almost without parallel, is as complex and varied as the nation which developed it. Often unnoticed in the big cities the country-wide film system has had a profound effect on rural and small-town Canadian life. “The program . . . has met a need in thousands of rural districts and undoubtedly enriched the life of these communities,” says the Canadian Federation of Agriculture.

The network embraces more than 10,000 voluntary organizations across Canada which, by deliberate government intent are becoming less and less dependent on government aid.

Film showings aren’t easy to organize. There must be a trained volunteer projectionist, a hall with blinds and electrical outlets must be found; the projection equipment weighing about 50 pounds must be transported and set up; often a stove must be fired; seats arranged; films unpacked, threaded on the projector and re-packed; and finally the whole set-up must be taken down ready for the next showing at the next hall.

**INC ID DURING THE WAR**

It’s a tribute to Canadians’ thirst for knowledge, their zeal for committee work and their sense of community responsibility that, on the average last year, an audience of 50 people sat down (and sometimes stood) to see a program of information films every three minutes. A total audience of 10,085,000 at 200,000 separate screenings saw these films through the NFB-sponsored network. An additional estimated four to six million people saw them through other channels. It all adds up to Canadians being, per capita, the highest users of information films in the world.

How did this network begin; this “remarkable example of improvisation with limited resources’’ as the Massey Report called it?

It was a war baby. The newly-formed National Film Board suddenly had imposed on it the task of building an information film network and producing the films to serve it—films on victory loans, rationing, inflation, war production, manpower, recruiting and other vital war information. City dwellers could see many of these films in commercial theatres but many rural areas were reached only by the NFB field man who took his films, projector, screen, amplifier and often a portable electric generator from town to hamlet; 20 to 30 communities a month, usually two showings a day.

Often a weather-stranded field man paid for his lodging with a showing for a farmer’s family instead of his scheduled audience. One field man recalls a particularly rewarding showing. It was Christmas week and his car had shuddered to a halt in prairie snowdrifts. He struggled to a nearby farmhouse and was warmly welcomed by an elderly farmer and his wife. After supper he proposed a show. He and the farmer wrestled the
The switchover from NFIB-operated circuits to locally-operated circuits didn’t happen smoothly and automatically but slowly with many false starts and by many methods. The pattern has worked out like this:

Snowden school represents the smallest unit in the network — a showing point. Along with 19 other showing points (the number varies from year to year), a group of circuits constitutes an area film council. Some film councils, in turn, get together to form a regional federation of film councils.

Grenville County Film Council, for instance, was organized three years ago with the appointment of a rumpled-haired, enthusiastic plumber from Oxford Mills, Harold Patterson, as part-time secretary-treasurer. At first, an NFIB representative worked closely with Patterson, helping to enlist support and holding projectionist training classes. Today there are 60 showing points in Grenville County (Canadian total, 5,476) organized into three circuits (Canadian total, 591). Each showing point gets eight or nine new films programs each year.

Except for the film programs supplied by the Board, the Grenville operation is self-service. Each showing point pays the council $20 a year granted by school boards or raised by silver collections. The fees pay for equipment, maintenance, shipping charges and Patterson’s salary. Patterson is on the air and day call and combines his film trouble shooting with his county-wide banking calls.

The Grenville County Film Council represents the earliest stage in the evolution of the distribution network. This year Grenville is taking a step into the next stage — a part of the network which is even more independent of the Board, and, in many ways, more important.

Films usually find that the monthly basic circuit program does not fill all their needs. They may have to put together a series of notable films, such as some of Norman McLennan’s unusual animated productions, or Imperial’s prize-winning The Loon’s Nest, easily available. The Parent-Teacher Association may want to show a series of films on mental health. A Board of Trade may want films to support a traffic safety drive.

The answer to these many needs is a film library and the 402 film libraries in Canada are as diverse as the needs that prompt them. They may be housed in public libraries, universities, schools, private homes or the local fire hall. Some are supported by film councils alone, others get municipal and provincial grants. Almost all get donations of NFIB films and films sponsored by business and industry, but the majority of library films are purchased.

COUNCILS BUY SELECTED FILMS

It usually isn’t economical for a single film council, like Grenville, to have its own library, so they join an area purchase pool. Grenville this year bought a share in a library of about 200 films which has a dozen other film councils as shareholders. Films are bought from the best Canadian commercial producers, industry, and from other countries. The recently-formed Edmonton Area Film Federation, for instance, allocated $1,200 for new films; only half was used to buy NFIB films.

While many rural film councils operate film circuits and participate in a joint library, an urban film council is more likely to be interested only in a library. Take Barrie, Ont., for instance, where a film council was formed in September. Twelve men and a woman met in the newly-decorated high school. Like all film council members they were there, not as individuals, but as representatives of 11 organizations: two school boards, two recreation boards, five churches, the Canadian Legion and the Food Council of Canada.

A small start, but film councils have a habit of growing. Peterborough, Ont., for instance, has about 200 member organizations — an Ontario Film Club at General Electric, from the Rotary to a teen-agers club.

Film councils also have a habit of stimulating other community activities. In St. John’s, Nfld., a town of 70,000 people, an NFIB volunteer was secretary of the Newfoundland Film Council. A few weeks later St. John’s has 16 other film organizations—a Home and School Club, Boy Scouts, Girl Guides and a young people’s club.

In Victoria, B.C., the film council sponsors children’s film programs which are handled by Parent-Teacher Associations in outlying districts. In Alberta, B.C., the film council’s children’s program is shown Saturday afternoon in a department store.

In Washemond, N.B., a school teacher asked if she could take a couple of film showings. She wasn’t sure her community could make $500 to support NFIB in the film council. Also, she wondered if she could show the films in her home, rather than in the school? The NFIB field man demurred; home showings might exclude some members of the community. The school had no electricity, the teacher explained, and so home showings were approved. Eleven months later the membership fee was paid, the school had been wired for electricity, fixtures replaced, and there was enough money left over to buy a radio-phonograph for the school.

In many western communities the film council joins with the RPAC to sponsor children’s showings on Hallowe’en. Result: a delightful entertainment for the whole community.

The Junior Chamber of Commerce in Winnipeg has a roster of 75 trained volunteer projectionists. They put on film showings for shut-ins, children, homes, seniors, etc. One man has been giving up three nights a week, several one or two.

In the early days—though no Hollywood-type features were shown—cinemas were showing enough free NFIB films to compete for their customers. By war’s end, when the network was firmly entrenched, most owners believed that the NFIB films interfered with their business. Some theatre owners even became interested themselves. The president of the Saskatoon Film Council recently was a local theatre manager.

The activities of the 462 film councils and 402 film libraries add up to a lot. A measure of the impact of NFIB films to which citizens have taken over distribution from the government is the fact that about two-thirds of the total audience sees films from libraries—films, which to a great extent, they paid for—and one-third see them on programs, where the films are supplied by the NFIB. A few years ago the proportion was 50-50.

This development is important for another reason, says Dr. A. W. Trueman, government Film Commissioner. “Some see in the NFIB-sponsored network the dangers of a controlled outlet for partisan propaganda. The danger doesn’t exist. The network is controlled, not by the Board, but by the film users themselves. Any attempt to use it for partisan purposes would be repudiated quickly by the film councils and adults.”

Business and industry are playing an ever-increasing role in the film network and production of documentary and cultural films. For instance, the network of NFIB circuits.

Films usually represent a big investment in production and print costs, but a good film will earn the undivided attention of hundreds of thousands of Canadian. Often it gets not only attention but organized discussion after the show.

Before a company-made or sponsored film is accepted for NFIB distribution it passes a tough screening. Some films are rejected time and again. The reason: their only real fault—there can’t be because of the diversity of subject and approach—a film has to be of or about a Canadian subject and be presented in an interesting way. It cannot contain any advertising references, though sponsor credit is allowed.

Imperial DISTRIBUTES FILMS

The NFIB-sponsored network is not by any means the only outlet for information films. Many films, like Imperial, distribute films through their offices across the country. Companies can deal directly with film councils and libraries, through commercial distributors or through the Canadian Film Institute, which runs a national library at Ottawa. But for many companies, NFIB distribution is a worthwhile target, for films placed on circuit distribution automatically reach 400,000 people.

When circuit distribution of a film has been completed, the prints are rotated among film libraries to reach additional large audiences. Imperial’s The Loon’s Nest has left an NFIB audience of 853,233 and is still going strong. An additional 562,852 Canadians have seen it through non-NFIB channels. Through the NFIB network 462,042 people have seen Below the Wheat and 661,839 have seen Newfoundland Scene.

While a continually increasing measure of volunteer distribution is NFIB’s aim for the network, there are many Canadian areas too remote or too sparsely settled for the film council movement to penetrate. In these, the NFIB and other government agencies will play their former role.

On fish piers and in community halls, Newfoundland and Labrador outporters, many of them for the first time, are seeing films. Ten patrol boats of the Department of Fisheries, outfitted with projection equipment and film programs by NFIB, hold screenings during their regular calls at the outposts. Department of Transport planes take projector and films to settlements in the far north on an irregular schedule. Some northern commercial airlines carry NFIB films without charge as a service to the communities where they call.

The National Film Act (1950) calls on the NFIB to "interpret Canada to Canadians." In partnership with thousands of organizations and hundreds of thousands of people, the Board believes it is doing this successfully. As a teacher from Nova Scotia writes: "The folks in this end of the country are enjoying the showing films. It is educational and inspiring for us all, especially for the old people and girls and each of the older ones who have been away from home a very little or not at all. It is good for our young ones to know the goodness of our country so they will feel like sharing it on a larger scale."
Deep in Canada's uncharted north the unceasing search for oil continues despite Arctic winds, sub-zero temperatures and the monotonous isolation brings

by ROBERT COLLINS

The Otter, the camp's lifeline, with supplies and a relief crew

THE HARSH CLANG of the first breakfast gong brings you up, half awake, from your army-style bunk. The oil heater and electric lights are glowing inside your trailer. Outdoors in the pre-dawn blackness it's a numbing 45 degrees below zero.

You scramble into woolen underwear, thick socks, shirt, trousers, sweater, rubber-sided boots and parka. You must vaguely feel that this is Saturday or Sunday, although it doesn't really matter. You've a "roughneck" in the Northwest Territories working on an Imperial wildcat—a well drilled in an area where oil has never been found—and your shift is a straight "six weeks on, two weeks off."

You sprint between long rows of aluminum-sided trailers to the washroom—the first of several paradoxes. Your camp is a tiny speck in a wilderness of snow, frozen muskeg and struggling spruce, 300 air miles and 420 road miles from civilization's nearest outpost. But this washroom trailer has electric razor outlets, a gleaming electric washing machine, a shower and a white porcelain basin with hot and cold water taps.

In the cookhouse you wolf down fruit juice, cereal, bacon and...
Another shift over, the men head for the bunk in their aluminum trailers and a snooze before mealtime. Cookhouse is building on right.

eggs, strong coffee, mountains of roast and jam. The kitchen "Bunkie" says "Chicken tonight, fellas," so you know it must be Sunday. (The food's another paradox. Even back home in Edmonton, Calgary or Camrose, you've never had it better. After all, how many housewives can serve steak, chicken, strawberry shortcake and three kinds of pie, all in one week?)

Then you trudge the 100 yards across to the drilling rig, the cold knifing through your clothes. The rig towers 140 feet above you like an overgrown Christmas tree, bathed here and there with floodlights, and boarded at strategic points to shelter you from the blood-chilling wind. The steady thrum-rumble of the diesel engines and rotary drill has dinned in your ears all night but you're used to it. You start the day's work with the other floorman, the mechanic, cathead man, derrick man and driller. You're an important cog in Imperial's dogged search for oil in northern Alberta, B.C., and the Territories—the roughest, toughest oil hunt in the country.

WILDCATING A TOUGH JOB

For despite all the conveniences and comforts of the drilling camps, winter wildcatting in the north is still a tough job. Portable electric power plants, specially constructed cabin-trailers and frequent supplies of fresh food make it possible to operate throughout the winter at maximum efficiency, but they still can't do more than take the roughest edges off a rugged life.

This unceasing search for oil for Canada—winter and summer, day and night it continues—by geologists, seismic crews and wildcat drillers, is pushing back one of Canada's last frontiers. Working often in uncharted territory, trodden before only by trappers, these rock-hounds and drillers are adding vital pages to our knowledge of the almost unknown north.

What's it like to drill an oil well with the temperature anywhere from zero to 60 below, in some of the loneliest corners of Canada? What are a northern wildcat's problems?

"Distance, weather and morale are the main problems," says Charlie Vissel, Imperial's drilling superintendent in Calgary. "I guess patience and a sense of humor are the biggest assets.

"Take weather and distance, for example. People simply can't realize the distances we travel up north. Believe it or not, moving accounts for 30 percent of northern wildcatting costs. One move a few winters ago, we travelled 1,000 miles. And we have to move in the coldest weather, of course. If that muskeg isn't frozen it won't support our tons of equipment."

So headaches begin with the move. Caravans of trucks loaded with massive draw-works, diesel engines and 30 to 40-foot lengths of pipe rumble over frozen choppy trails, slashed from the bush by bulldozers. The trucks are treated with Arctic lubricants but no driver shuts off his motor overnight. If he does he'll have to roast it with a flamethrower before it will start again.

The trails are incredibly rough; a caravan makes only 10 to 30 miles an hour. Steel springs and frames, made brittle by the cold, crack and break like pretzels. It's even hard on buttons. "Last winter, after 10 hours on a bush trail, my braces tore all the buttons off my pants," says wry little Ted Robinson, a camp attendant. "From now on it's a belt for me!"

When the long, cold, bone-shaking ride is over there's the slow finger-freezing job of assembling the rig. For instance, last winter Imperial had a camp at Russell Creek, about 200 miles north of Peace River town. The operations boss, or "foolpush", was on hand, his derrick about to go up. At one side, two flamethrowers—they resemble king-sized blowtorches—were heating a drum of diesel fuel which had congealed during the cold trip. A brush fire was roaming beside the derrick.

"We've had that fire going two days," he said. "We have to dig an eight-foot pit there for the suction pumps. There's six feet of snow in the ground and the 'doser can't dent it so we're thawing it out."

But this was a comparatively mild day—about 25 below zero. What happens in cold weather?

"Well, last month at another site it got down to 63 below," he answered. "Ordinarily on a wildcat you pull the pipe up periodically to take samples of the strata and maybe change the bit. But during that spell we just left the drill stem down, three nights in a row. We tried to pull it up once but when the cold air hit the warm pipe you couldn't see it for steam."
At Peace River, pilots are up at dawn to ready the Beaver and Otter. There’s so little winter daylight they don’t lose any by sleeping...

Toolshop Mack
Brown (right) inspecting Cliff McInroy’s bird.
In six weeks a man can grow a long one; but it usually goes once his wife sees it.

But cold weather is a lesser problem once the drilling begins. Isolation, and its effect on morale or in accidents, is the bugbear. Accidents are rare in Imperial camps. Safety experts are constantly showing films and briefing the men on careful working habits. But accidents do happen and there’s also the danger of fumes, appendicitis or some other ailment requiring doctor’s care. Each camp is linked with Peace River by two-way radio but sometimes reception fades out. Two Imperial bush planes shuttle constantly to and fro, landing on lakes or bulldozed airstrips but, naturally, bad weather grounds them. If there’s an emergency and the radio contacts out or planes aren’t flying—well, the toolshop tries not to think about such situations.

Even without emergencies, six weeks in the middle of nowhere can prey on a man’s mind. Here, as Charlie Vinzer says, a sense of humor comes in handy. This was evident last winter at the Island River wildcat in the Territories, just over the Alberta-B.C. boundary and 200 miles west of the Mackenzie highway. There, in the little office-trailer with its single bunk, heater, desk and two-way radio, sat toolshop Mack Brown who’s been with Imperial since 1929. Brown, a stocky man with horn-rimmed glasses looks like a college professor and talks like Bob Hope. His wisecracks are a company legend. Wherever Brown is, it’s a happy camp.

“IT takes a good man to lick me,” says Brown. Then, thoughtfully, “...but it sure doesn’t take him long. . . .”) Brown has several other morale-boosting factors on his side. Northern workers receive a special bonus: on time-off, the company flies them to Peace River and back.

(A driller packs his gear for the trip home.
“You know me,” grins the driller. “Two glasses of beer and I just go wild.”
“So do I, so do I,” sighs Brown, “especially if I have to pay for them.”

Even the six-week work shift isn’t too hard to take. The steady routine is really an advantage: there’s no time to be bored. The good food’s another asset. Two-way radio relays urgent messages from home, and mail comes in with each plane or truck.

In the evenings there are card games, pocket novels, portable radios. Brown’s entering roughnecks even drilled a hole in a nearby lake, rigged a packing-crack shaker over it and fished through the ice. Finally, there are one or two movies every week. They’re a boon, too, sometimes even the movies let you down. The night before I left Island River, Brown showed the latest movie.

“Good picture tonight, boys,” he said solemnly. “After this I don’t want to hear any complaints. You fellows watch this, you’ll see how tough it is in some parts of the world.”

Then, with a crash of music and a flurry of snowdrifts, the title flashed on the screen: The Wild North.

There was silence, then a roar of laughter. You need a sense of humor when you’re wintertaking up north.

THE DRILLER THAT HISTORY FORGOT

Unsung and unpraised, Dr. H. C. Tweedel drilled New Brunswick’s first oil well and beat “Col.” Drake as the first American oil driller.

In the summer of 1859 two men began a race—a race to decide who would be the first American to drill an oil well. When the race ended, the winner, Dr. H. C. Tweedel, had lost and the loser, “Col.” E. L. Drake, went on to become an almost legendary figure, popularly regarded as the man who ushered in the American oil industry.

(Commercial oil production in North America had already begun with the discovery of oil in quantity in Ontario’s Lambton county in the 1850’s.)

Drake drilled in the U.S.; Tweedel chose to drill in Canada, near Dover, a small village not far from Moncton in eastern New Brunswick.

Tweedel, whose name has been almost forgotten, was a Pittsburgh chemist and an advisor to the Pennsylvania Rock Oil Co., formed in 1854. At that time the one source of petroleum in the U.S. was natural seepages. Wherever it collected on water in Pennsylvania and New York it was laboriously scooped off the surface, finely bottled and sold as “Seneca Oil”; allegedly a good emulsion for men or beast.

Many humans, besides rubbling it on their bruises, sores, sprains and cuts, were using it as an internal remedy, and farmers had discovered it was also a lubricant for wooden wagon axles.

With business booming, the directors of the Pennsylvania Rock Oil Co. reasoned that if they could pump petroleum from a well, as water was pumped, they’d have a great advantage over their competitors. This, of course, meant drilling a well. Tweedel was fully aware of the opportunities. He had some knowledge of geology and felt he should have charge of the big project. His pride was hurt when his rival, Drake, was given the project instead of him.

He decided that if there was a chance of finding oil by drilling in Pennsylvania, there was a similar chance elsewhere. If he could do it, he would vindicate himself, put Drake in his place, and perhaps make money.

He studied geological reports from all parts of North America before embarking on his venture and his attention was caught by a report that described two seepages at Dover, where Micmacs had for centuries mixed wax paint and softened leather.

He arrived at Dover early in 1859, hired a crew of men, and bought a dozen oxen. He had brought his primitive equipment with him as far as he could by railway, then hauled it by ox team over rutted trails. He built a tower with long pine logs and, with power provided by oxen on a treadmill, he started drilling, about two miles south of Dover.

During the late spring and summer he punch-drilled four shallow wells, the deepest of which went down 190 feet. He hit both gas and oil. While there wasn’t much oil and he’d had trouble keeping water out of his wells, the signs were promising and he was optimistic. They were completed wells and had shown oil was present. Back in Pennsylvania, Drake had been drilling and had so far found nothing. As August moved into September and Tweedel tackled his fifth well, he mentally gloated over Drake and imagined himself bringing in an enormous flow of oil while Drake was still boring dry rock.

Tweedel’s dream of triumph exploded when a messenger handed him a letter from Pennsylvania. As he read it, the color drained from his cheeks and he slumped wearily—the shrug of a defeated man.

He summoned his crew. “Boys,” he said, “we’re all through. Line up and get paid off. Drake has struck oil and his well is giving 25 barrels a day. There’s only room in North America for one real oil well!”

More than half a century later when there was room in North America for all the oil wells that could be found, a Scottish geologist, Dr. J. A. L. Henderson, examined New Brunswick Gas and Oil Fields Ltd., and drilled where Tweedel had drilled.

If Tweedel had had a little more faith in the potential of the oil industry he would have done well for himself, for Henderson brought many small oil wells into production in the area.
He gave the world a brighter light

Nova Scotia's remarkable Abraham Gesner, father of kerosene refining, was also doctor, geologist, flautist, sailor, author and creator of Canada's first museum with a penchant for keeping Micmacs in his attic

by IAN SCLANDERS

A granite shaft erected by Imperial Oil over a grave in Camp Hill Cemetery at Halifax bears this inscription:

Abraham Gesner, M.D., F.G.S., Geologist, born at Cornwallis, N.S., May 2nd, 1797. Died at Halifax April 29th, 1854. His treatise on The Geology and Mineralogy of Nova Scotia, 1836, was one of the earliest works dealing with those subjects in this Province, and about 1852 he was the American inventor of the process of kerosene oil.

This is as good as most inscriptions of its kind, but doesn't really tell much about a man who was one of the liveliest, oddest and most gifted figures of his day in British North America.

Tail and muscular, with mutton-chop whiskers, a firm jaw and deep-set thoughtful eyes, Gesner was part scientist, part dreamer, part showman, part adventurer. He wrote books, played a flute, and, when he was traveling—usually by horse or canoe— carried a little black bag of drugs and medical instruments so he could treat the sick he met along the way.

He charted the minerals of Nova Scotia and New Brunswick so thoroughly that the current mining rush in New Brunswick is mainly a rediscovery of deposits he found and reported more than a century ago. He established Canada's first museum. At one time he had Indians living in a tepee pitched in his attic. He tended an Atlantic coast lighthouse that warned mariners with a brighter, steadier light than they had ever seen before.

And, after an enormous miscarriage of justice had robbed him of a mine that would have earned him at least $2 million, he made a fortune from his kerosene patent and was one of those who fathered the oil industry of this continent.

Abraham Gesner, whose strange career has been almost forgotten, spent his boyhood in the small village of Cornwallis, in Nova Scotia's Annapolis Valley, where he attended a one-roomed school. While his 11 brothers and sisters played games, he read fat scientific textbooks for amusement and collected insects, birds, wildflowers and chunks of rock. The Gesner house was always cluttered with his specimens.

In his early teens he decided to see the world. This was easy for a Nova Scotian of his generation, for "Browne's" vessels were scudding up and down the Seven Seas. Packing his treasured textbooks with his clothes, he shipped before the mast on a square-rigger that carried dried fish to the West Indies and South America and traded it for sugar, molasses, hides, coconuts and coffee.

But his father Henry Gesner, a United Empire Loyalist who took refuge in Nova Scotia at the close of the American Revolution, wanted Abraham to be a doctor, not a sailor. When Abraham came home from a long voyage there was a family council. Henry Gesner's farm was prospering; so was a ship in which he owned shares. He could afford to send Abraham to medical school in England, provided Abraham agreed to apply himself to his studies diligently and give up foolish notions about the sea. Abraham—his father, mother, sisters and brothers sitting around him in a circle—shrugged and agreed.

At school in London, then at medical college, he was a brilliant student. While he was taking his medical course he took geology as a side line. Afterwards he returned to Cornwallis, hung out his shingle, built up a modest practice and married Sophia Webster, daughter of a Kentville, N.S. doctor. He might have finished his life as a rural physician—but he was more interested in minerals than patients.

When a patient tried to describe his symptoms, Gesner would interrupt with a discourse on the formations of the Pleistocene epoch, and when Gesner was needed at a sick bed he was generally off in the wilderness chipping rock samples. He gathered all the minerals he could find in Nova Scotia, wrote and published,
The Geology and Mineralogy of Nova Scotia, and, in 1836, abandoned his practice altogether to cross the Bay of Fundy to New Brunswick, where as a start, he made geological surveys of the Grand lake, Salmon river and Richibucto river districts.

His findings, among them many outcroppings of coal, attracted attention and led the New Brunswick government to appoint him provincial geologist in 1838. In this job he explored New Brunswick from one end to the other. He rode a big black horse wherever the horse could go. Places the horse couldn't go he reached by canoe or on foot. He was never without his flute and his doctor's bag and in isolated settlements he often stopped to deliver a baby or put a splint on a broken leg or minister to lumberjacks stricken by typhoid or smallpox. He cheered his patients with his flute and contended that music had medicinal properties.

He located an amazing assortment of mineral deposits in New Brunswick. But most of them, including those which have sparked a mining boom near Bathurst in the last few years, were either too low-grade to be worked profitably by the primitive methods of the day, or were ores for which no large demand had yet developed. So, by 1842, the New Brunswick government decided a provincial geologist was a waste of money and fired him.

Minus a position but with tons of rocks, fossils and ores, Gesner rented a room in the Mechanics' Institute Building at Saint John, N.B., arranged his specimens in glass cases, and set himself up in business as proprietor of Canada's first museum. That was the humble beginning of the New Brunswick Museum, now an internationally-known institution.

Gesner, to enlarge and diversify his exhibits, put this advertisement in Saint John newspapers:

"Specimens belonging to the animal, vegetable and mineral kingdoms, fossils, works of art, ancient books and papers, models, inventions, domestic manufactures, and curiosities of all kinds, will be thankfully received, and admissions to the museum will be given for them according to their value. Masters and superintendents of vessels who make donations will be entitled to free admission, and they are respectfully requested to aid in this useful and interesting work. Co-operative seamen brought Gesner specimens from distant ports. Meanwhile, he himself stalked animals and birds in New Brunswick's forests.

Mrs. Gesner, a patient woman, let him stuff his trophies in the attic of their house. He employed several Mi'macs to help him and they picked their tepes there in the attic, where, in the evening, they would squat around an open fireplace, smoking their strong kikliwak and chatting in their soft tongue.

Ironically, one of the functions of a museum is to preserve records, there is no record of what admission fee Gesner charged his patrons, but whatever it was the project was a financial flop. Gesner had to borrow money from two friends, Chief Justice Ward Chipman and Mr. Justice Robert Parker. Unable to repay them in cash, he gave them his specimens in settlement.

The two judges wound up owning not only Gesner's printed rocks, stuffed mammals and birds, but a 1616 Bible, a gallows from a human liver, a "singular substance found on the snow after a fire at Gagetown", the horn of a "sea unicorn", the saw of a whale, the plans of "perpetual motion as discovered by Mr. Richard McFarlane", and "the ammunition box with cartridges, powder, shot, etc., of the greatest and William Cameron." Cobbeit, the fiery English pamphleteer, had once been stationed at Saint John as a corporal in the Imperial Army. Not knowing what to do with such things, Chipman and Parker gave them to the Mechanics' Institute, and the Gesner Museum became the Mechanics' Institution.

Gesner departed for Halifax, where he resumed his medical practice and augmented his thin earnings by writing two more books, Natural Resources and Notes for Incoming Emigrants, and by lecturing on his favorite subject, geology.

In Halifax he cultivated the friendship of the 10th Earl of Dundonald, commander-in-chief of British naval forces in North American waters, a sailor-scientist who had extracted an illuminating oil from Trinidad asphalt and who, in 1813, had patented a new kind of oil lamp.

Under Dundonald's influence, Gesner began the experiments that led to his kerosene process. By 1846 he was distilling kerosene from Nova Scotia coal. That year he went to Charlottetown, P.E.I., to lecture, and took his distilling equipment with him. On the platform of a church hall dimly lit by spattering whale oil lamps, he distilled kerosene from coal while a spellbound audience watched; then he poured the kerosene into a lamp and struck a phosphorus match to the wick. While people gaped with wonder a bright yellow glow, far superior to any they had seen before, lit the room.

They clapped, cheered and stamped when they saw this magic, and Gesner, encouraged by their enthusiasm, a week later unveiled his bag of tricks before a Halifax audience.

One of those in the audience was the great Joe Howe, publisher, politician and oratorical spreadsheet who won responsible government for Nova Scotia. Howe, tremendously impressed, persuaded Gesner to spend a month at Meagher's Beach, distilling kerosene and feeling it into the Meagher's Beach light, until then fueled by whale oil.

In a short book he wrote in 1861, Coal, Petroleum and Other Distilled Oils, he related that "agents of the company found ... great difficulty selling the product. The odor was (then) disagreeable ... The beauty of the light obtained from it, however, was sufficient gradually to overcome the objection on the score of odor."

Gesner, who spent years on the threshold of poverty, was a rich man when he retired in 1863 and returned to Halifax from the United States. He was also a famous man. And he was warned by the knowledge that he had helped give the world a brighter light. In 1866 he revised his work on Coal, Petroleum and Other Distilled Oils, he proudly mentioned that U.S. oil wells were yielding 240,000 gallons a day, with a market for every gallon and that the McKainy Oil Co. of New York had paid dividends of 22 percent on capital stock of $250,000 in four months, thanks to kerosene.

The following year the revised manuscript off to the printer, he shuffled from his study to a room where he kept his beloved collection of rocks. He was pattling with his rocks, shuffling and labelling his mineral specimens, when he died at age of 67. Sixty-nine years later, in 1933, the public had forgotten him, but not the oil industry. That was the year Imperial Oil raised the granite shaft over his grave in Camp Hill Cemetery—across Halifax harbor from the company's 527-acre refinery.
Management Changes in Marketing

Scott Fyfe, formerly assistant manager of the public relations department, has been appointed advertising manager. He succeeds John E. Gibson, now merchandising manager. Adam S. Marshall has been appointed to Mr. Fyfe’s former position.

Prior to joining Imperial in 1948, Mr. Fyfe was a director and Toronto manager of a national advertising agency. Before the war he spent four years on the editorial staff of the Financial Post, and later was publicity executive and executive assistant with the Canada Life Assurance Co. He served for three years with the RCNVR.

Mr. Fyfe was born in Montreal and is a Bachelor of Commerce graduate of the University of Toronto.

John E. Gibson was advertising manager for four years before his appointment as merchandising manager. He succeeds R. N. Bubbs.

He joined Imperial in 1945 as head of the training division of the employee relations department. Two years later he transferred to the marketing department to work on post-war merchandising training programs. In 1949 he became assistant advertising manager, and was promoted to his present position one year later.

Born in Winnipeg, Mr. Gibson is a graduate in chemistry from the University of Alberta and holds a master’s degree in economics from the University of Ottawa.

E. L. “Ed” Moriarty, after four years as sales manager of Imperial marketing division, has become manager of industrial and commercial sales. He succeeds C. E. Tilton who has been appointed assistant to the manager of consumer sales division. Mr. Moriarty’s 25 years with Imperial have been spent in the marketing department. He was in Ottawa for 11 years, seven of them as district manager for Ottawa and northern Ontario.

In 1948 he returned to his home town, Toronto, where he became merchandising co-ordinator for Ontario division. Two years later he became division sales manager.

R. N. “Bill” Bubbs, manager of dealer development, joined the company in 1939. He succeeds J. A. Pope who is now assistant to the manager of the retail sales division. From 1939 to 1953 Mr. Bubbs was with the Manitoba division in his native Winnipeg. He became division sales manager in 1952.

In January, 1954, he moved to Toronto as merchandising manager and held this position until his recent appointment. He served with the RCNVR for two years.

New Superintendent at Norman Wells

J. S. L. “Jim” McMillan, formerly superintendent at Calgary refinery, has been appointed superintendent at Norman Wells, Canada’s northernmost refinery. He succeeds K. M. Mackenzie who, because of ill health, is now at Edmonton refinery. Mr. McMillan has been with Imperial for 22 years and during that time has worked in four of its refineries. He started at Sarnia as a chemist and later went to Ste. Marie, and in 1943 he became loco’s chief chemist and held the position for five years until taking charge of process operations at Calgary refinery.

A native of Glasgow, Scotland, Mr. McMillan received a B.Sc. in chemistry from Glasgow University in 1926. He came to Canada in the same year.

M. H. “Harry” Moher has been appointed manager of the newly-created office sales division of the marketing department. This division incorporates the work of the products co-ordinator, Mr. Moher’s former position, and the office sales and service group. A native of Peterborough, Ont., Mr. Moher has worked in the marketing department since he joined the Princes St. plant in Toronto in 1917. He was head of the order department of Ontario division for nine years and in 1933 he left the division to become assistant to the manager of lubrication sales.

Five years later he was appointed assistant to the marketing co-ordinator and, in 1945, co-ordinator of the products department. In a departmental re-organization a year ago he became products co-ordinator.

John C. Wilkinson, formerly manager of office sales and service, is assistant manager of the new marketing office sales division. He has been with Imperial’s marketing operations since 1925 when he joined as a plant clerk in Toronto, his home town. He became assistant manager of refinery sales in 1945. Four years later he was appointed assistant manager of fuel oil sales and, in 1939, manager. He left this position a year ago to take charge of office sales and service. Mr. Wilkinson is a World War II veteran.

A. A. “Al” Turner, for the past two years manager of the B.C. marketing division, has been transferred to Toronto to co-ordinate marketing training. Except for one year, his 34 years with the company have been spent in the west. He was born and educated in Minnesota, Man., and started to work as sales agent at Porthope, Sask.

After holding various positions in Saskatchewan and Manitoba, he went to Calgary in 1943 as general manager of an Imperial subsidiary. Two years later he was appointed sales manager of Imperial’s Saskatchewan division and division manager in 1948. He left the position in 1951 to head management development at the company’s Toronto offices for a year, and then returned west as B.C. division manager.

Ronald S. Ritchie, formerly assistant manager of Ontario marketing division, has succeeded Al Turner as B.C. marketing division manager in Vancouver. Mr. Ritchie was born near Chatham, Ont., and studied political economy at the University of Western Ontario. He did post-graduate work at Queen’s University and then taught for a year at the Ontario Agricultural College at Guelph.

He was with the Wartime Prices and Trade Board during the war and joined Imperial’s co-ordination and economics department in 1947. Three years later he was assistant manager and held the position until 1953 when he transferred to the Ontario marketing division.

Howard W. Coxon, budget co-ordinator of the marketing department for the past year, succeeds Ron Ritchie as assistant manager of Ontario division. Born in Tampa, Mexico, Mr. Coxon studied economics and English literature at Cambridge University, England, and received his master’s degree. During the war he was with the British Army Intelligence Corps and then with the Royal Air Force. He came to Canada late in 1949 and joined Imperial’s co-ordination and economics department in December of that year.
The greatest thrill of all

by DOUGLAS HOW

In the immeasurable little job known as The Fishermen's Rest, Mme. Israel Pothier's front room was a mess and her Acadian-French instinct for neatness rebelled. On the table, men from four Commonwealth countries had spread their weird metal and fletched lures and were working over them with the solemn joy of boys making kites. From one end of the room to the other stretched long steel leader wires. At one end, big fish hooks chewed into a door frame. At the other, the leaders were tied to the apparatus that supports Mme. Pothier's drapes. A tanned angler patrolled the wires, roughing them and then lacquering them into soft shades, hard to see, as one more hostage to luck.

"Anything," he said. "We'll try anything to catch tuna."

"If that paint drops on my chesterfield," warned Mme. Pothier, "you'll catch more than tuna."

Her indignation was undiluted frast. Like everybody else in the fishing village of Wedgeport, N.S., Mme. Pothier was happy to be swept up again in the annual mixture of big-time competition and capricious carnival that is the International Tuna Cup Match—the nearest thing in the complex world of angling to baseball's World Series or the finals of Davis Cup tennis play. Like everybody else in Wedgeport, she'd be sorry when the anglers were gone; her year ahead would be one long prelude to when they came back again. It's been that way in Wedgeport for several years now.

The strange thing now to Wedgeport's people, the Acadian LeBlancs and Pothiers and Boudreauxs, is that they laughed in half-belief when two Americans told them in the '30s what would come to pass. They laughed because they couldn't believe men would travel thousands of miles and spend thousands of dollars to exhaust themselves in rod-and-line combat with a giant fish that could more easily be dispatched by harpoon. Above all, they found it hard to believe it could happen here, in hard-up, side-
Road Wedgeport, a village of 1,500 strong set out for five miles along a rocky, evergreen peninsula 11 miles from Yarmouth.

But the Americans, Michael Lerner and S. Kip Farrington, Jr., were of that exotic breed that scents the world for big-game thrills and they knew what they were talking about. They knew that in a mile-wide turbulence of water known as Soldier's Rips, Wedgeport had a liquid gold mine. Its turbulence came from the rising and falling of the tides over an underwater plateau there on the edge of the Atlantic.

The tums came, sometimes in incredible packs, to prey on the herring and mackerel feeding around it. Farrington called to call the Rig one of the three greatest big-game fishing holes in the world and the greatest for tuna. By 1937, he had the Cup Matches going. His and Lerner's hopes have been unfolding annually since.

For three months, from July through September, Wedgeport becomes the Yankee Stadium of the tuna world; with the climax, the Match; covering three days in September. Roosevelt, Gene Tunney, Kate Smith, prosperous men and attractive women have come from the reaches of the globe. Up to $2,400 a day

boats have leave harbor at dawn to be in position for starting time

A guide baiting hooks for trolling. Usually pork or herring is used

Guide Louis Parker has "boated" over 200 of the powerful and elusive sea creatures

Anywhere from 40 to 60 press, radio, television and magazine men and women, mostly Americans, come up yearly for the Cup Matches; some over and over again. Many become ambassadors for Nova Scotia, discovering and broadcasting its charms.

Small wonder, then, that all Wedgeport watches the Rig as Brooklyn watches the Dodgers — in affection and in anxiety — and that the provincial government happily spends $18,000 on the match. For the Rig and, to a lesser extent, the Tusker river are the village's meal tickets and its keys to fame and fortune. When the match teams caught only four tuna in 1953, all Wedgeport groaned. When they caught 20 last year, the best in five years, all Wedgeport smiled.

From four continents, some of the greatest anglers in the world travel some half a million miles to compete. Last year they represented Mexico, the winner; the U.S. Argentina, Venezuela, France, the Commonwealth and Cuba. Each team is selected by a national organizer. Each spends thousands getting and being there. Each has a happy time, for this is perhaps the gayest of all great sports classics, replete with gifts, clam bakes, parties, banquets and reunions beginning well before the match and ending well after it.

It has bred a good fellowship that transcends the competition itself and is quite beyond assessment. As one Latin American said, "I don't care if I don't get a strike...I just like being here."

Bill Saltmarsh, a South African railway tradesman, saved for years to make the trip as a member of the 1953 Commonwealth team. He went home sold on the match, on Nova Scotia, on the Commonwealth. He's traveled far telling his impressions. He's saving harder than ever to come back again—and he didn't even catch a fish.

Saltmarsh was one of that minority of Wedgeport's visiting match anglers who don't range from the well-to-do to the blissfully wealthy. Men come to Wedgeport who think nothing of putting $50 in the village church's collection plate; paying $40 a day in tips to a three-man crew, as the Venezuelans did last year; making $30,000 in match pools and side-bets as one American did last year; and of having $20,000 worth of gear. But among the American millionaires who spend months going on one fishing hole to another, Saltmarsh was as much one of the party as anyone else. That's the sort of affair the match is.

Social, financial and international equations vanish in the lure of the tuna—a dugger, powerful fish that can weigh more than half a ton and travel 60 miles an hour.

The competitors fish for the fighting tuna as national teams; a team can be from three to five anglers. The team which lands the most tuna (by the pounds) during the three-day tourney takes the king-sized Sharp Tuna Cup given by Alton B. Sharp, well-known Boston sportsman.

The boats leave harbor in the dark early hours of the morning to be in position for starting time. From then on its every tuna for himself. The anglers fish him from a rotating "fighting chair" in the stern of Wedgeport's 40-foot Cape Island boats, generally two anglers to a boat, each boat with three guides. There is no restriction on fishing gear and they use stout rods six feet or so long, 12.0 or 14.0 picks five or six inches wide; perhaps nearly a third-of-a-mile of 30-pound line; usually pork or herring as bait; a kidney belt; and the aid of the guides who lure the tuna in and then gaff him aboard when the fight is done. This may be in half an hour or may take much, much longer. Tuna literally have been fought for days.

Hard work? But Wedgeport has built itself up on man's curious willingness to sublimate such exertion on the altar of sport. Tuna have paved the road to Yarmouth, sprewed up the wooden homes, bought cars, put in modern conveniences. They've popularized the Cape Island boats and kept four builders busy. It's been
estimated that Wedgeport tuna mean as much as $200,000 a year to the province.

Yet it's easy to over dramatize this boon. Wedgeport has no poverty any more, but it's not getting wealthy either. In hard fact, the lobster means more to the village economically than the tuna.

A tuna boat can gross $2,500 to $3,000 in a banner year. Guides get only $6 a day, plus tips and a share of the fish caught. A total village take of $100,000—in tips, fees, everything—is a good year. In brief, Wedgeport couldn't live on tuna alone. But tuna combined with lobster, bait worms, herring and Irish moss give it a rounded economy other fishing villages envy.

In the same way, stress on wealth and the size of the fish probably keeps a lot of anglers away. A day on the Rip costs $52, or $12 less if you bring your own gear. So a four-man party would cost $13 a piece. As for size, women have caught tuna six times their size and Wedgeport's record 932-pound tuna was taken by a 64-year-old man who'd never fished them before.

The sceptic may wonder, but such is the emotional payoff that Gene Tunny, a man who has had his quota of significant thrills, said a Wedgeport catch was the greatest of them all and when a Venezeulan finally caught one this year after going blank in two matches, his wife breathed in relief. "Now," she sighed, "he'll be fit to live with next year." @

Guards are paid; then it's farewell, till next year, to big-time anglers.

**Beacon for safety**

Have you ever wondered about that tall refinery chimney with the flame on top—like this one at Regina refinery? It's an automatic safety flare. It does much the same job as the safety valve on your furnace or pressure cooker.

When crude oil is being refined, most of it is turned into vapors and gases. These vapors are made into hundreds of oil products we use daily. The gases are compressed and used as fuel for refinery equipment.

If it's not possible to cool these gases quickly enough, or if a piece of processing equipment has to be inspected or repaired, the gases must be released to relieve pressure. Otherwise there is danger that they might escape and catch fire. Gases which cannot be diverted to other equipment are sent to the automatic safety flare.

At the top of the stack, a small pilot flame burns continuously. When the extra gas comes up, it is ignited by the flame and burns harmlessly. It is an essential form of insurance for the safety of employees, community and plant.