Wildcats In Quebec

Ten years ago, the search for oil in Canada was concentrated in Alberta. Today the search by Imperial and other oil companies is going on from the Atlantic to the Pacific. After Imperial's discovery in 1947 of the Leduc field, which launched the present western development, the company's exploration program expanded to include Saskatchewan, Manitoba and the Northwest Territories, and then British Columbia. In Ontario, the increased exploration program was continued.

Early this summer Imperial seismic crews began exploration of the lowland areas along the St. Lawrence river in Quebec (see page 19). Last month, Imperial's president, John R. White, speaking at an Imperial family party in Montreal said, "Next year, however, we expect that our exploration work will be far enough advanced that we can actually drill a well or two. These wells will still be mainly for informational value, but they will be full-fledged wildcats with some chance of success (of finding oil)."

Mr. White at the same time added a word of caution: "I might say now that from what we know of the geology of the province, if we find oil we don't expect to find as much as we did in western Canada."

It is also possible, of course, that oil in commercial quantities may not be found in Quebec, or that the search may take years as it did in Alberta where Imperial drilled 133 dry wildcats before bringing in Leduc. The long-term odds against finding a commercially successful oil field in western Canada are 22 to 1—22 dry holes to every successful wildcat. Depending upon the type of country, a wildcat well can cost from $50,000 to one million dollars or more. From 1946 to the end of last year Imperial spent more than $300 million in exploration and producing—more than $90,000 a day, every day of the year.

While the discovery of oil in Quebec—which is already well supplied with imported crude—would not have the same dynamic economic effect it had in Alberta, it would nevertheless be a significant addition to the already amazingly long list of natural resources in the province.

The Man They Called "Sam Slick"... page 2
A century ago Thomas Chandler Haliburton created a wily Yankee pedlar, Sam Slick, and put Nova Scotia so firmly on the literary map that tourists still flock to see where Sam lived—by Earle Beattie

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Distance Is No Object... page 10
Highway trucks will take anything from freshly-picked peas to drilling rigs anywhere in the country. And they die—by Ferguson Cronin

Imperial Enters Petrochemical Field... page 14
A new department has been formed to sell Imperial's chemical raw materials and work on new uses for petrochemicals.

Please, Santa, Send Me A Doll... page 15
As always, little girls all over the world will be looking for a new doll under their Christmas trees. This year, eight out of 10 dolls will be made of oil-derived plastic—by Dorothy Sangster

"Les Cowboys" And St. Grégoire... page 19
The townpeople of the quiet little village of St. Grégoire last summer were amazed and amused at the activities of a western seismic crew—by Michael Jacob

The RCAF's Work-A-Day Heroes... page 22
A lot of Canadians owe their lives to the RCAF's Search and Rescue units, regarded by many as the best in the world—by James Hornick

University Fellowship Program Expanded... page 26
A new fellowship, in the humanities, has been added to the four annually awarded.

New Managers Appointed At Six Refineries... page 28

Facts For The Future... page 29
Future historians are due for surprises when they open the volumes of Imperial's new executive office building.

Where Would We Be Without The Barrell?... page 30
Hardly anybody ever says anything nice about the barrel—one of the most useful tools we've ever had—by Hal Prinse

New Faces On The Campus... page 33
Eleven more young Canadians have started university with Imperial Oil scholarships.

Covers and doll illustrations—by Heest van Rivervist

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Two continents chuckled and sputtered with rage at Thomas Chandler Haliburton's braggart Yankee pedlar, Sam Slick. Between them, Haliburton and Slick put Nova Scotia on the literary map and a century later are the mainstays of a thriving tourist attraction.

For 40 years, 102 drawings of Sam Slick by Canada's greatest artist-historian, C. W. Jefferys, have lain dormant in New York. Imperial Oil has purchased these drawings to add to its collection of Jefferys' drawings and paintings.

The Man they called "Sam Slick"

by EARLE BEATTIE

In the centuries-old gallery of satirical fiction personages—from Don Quixote to Huckleberry Finn—the people of Nova Scotia have long included a rascally character of their own. He is Sam Slick—The first major Canadian literary creation—a Yankee clockmaker and pedlar among the Nova Scotians. His sayings and doings made his creator's books best-sellers in British North America, England and the United States more than 100 years ago.

Sam, riding Old Clay, "half horse, half alligator with a cross of aristocracy," first galled into public view in September, 1835, through the pages of Joseph Howe's peppy journal, The Novascotian. He was a tall, wiry man with hollow cheeks and devilish black eyes, stylishly dressed and ornamented with a large brooch and gold keys. He had an outrageously loose tongue and spoke with the twang of a Yankee "down east-er." Readers met him on a road from Windsor to Fort Lawrence where he had overtaken "the squire"—representing the author—and plied that startled individual with a torrent of outlandish tales and shrewd, biting comments on Nova Scotian behavior. They discovered he was from Stickville in Onion county, Conn., and sold gaudy wooden clocks at 500 spence—clocks that "cost me just 6 dollars and 50 cents." To forest his merchandise on the Nova Scotians, Sam relied on what he called "soft sawder"—flattery—and "human natur'" or glibbility.

In 22 stories of The Clockmaker, first series, Sam Slick cut a wide swathe in the colony, drinking, flirting and scoffing the natives, meanwhile maintaining a running satire on their manners, morals, politics, social values, institutions, and their friends, the British. He accused them of covetous, laziness, ignorance, greed and lack of confidence in their province. "There ain't a livin' soul in Nova Scotia knows his own business real complete, farmer, fisherman, lawyer or doctor, or any other folk," said Sam.

The Sam Slick stories were first published anonymously, but Nova Scotians soon learned that the man who made them roar with laughter or sputter with rage was an eminent judge—Thomas Chandler Haliburton. Scion of a prominent Nova Scotian family, he created the saucy Mr. Slick on a walnut writing desk at "Clifton," one of Windsor's most stately villas. Before he was through he had penned three Clockmaker series and four other books about Sam.

The author's identity did not surprise Nova Scotians for lawyer Haliburton had already made a name for himself as a sharp-tongued orator in the House of Assembly at Halifax. A controversial figure of strange contradictions, he was Imper-

ialist and indignant colonist, ardent reformer and high Tory, serious political satirist and purveyor of pen and witicism for their own sake. Of New England ancestry, he abhorred Yankee ways but founded his literary reputation on a Yankee pedlar and made that character a world figure so lively that Haliburton himself was given the nickname, "Sam Slick."

Haliburton is said to have originated such phrases as "upper crust," "commination fil," and "quick as a wink." His writings have gone through many editions.

As recently as 1915 a Toronto publishing firm commissioned Charles William Jefferys, generally acknowledged as Canada's greatest historical artist, to illustrate Haliburton's works of fiction. In his 102 drawings, Jefferys paid the same attention to accurate detail in dress, furniture, weapons and other trappings as he employed in all his work: illustrations for Chronicles of Canada, Makers of Canada, Pagan of America and other
books he wrote himself, such as Canada's Past in Picture and Dramatic Episodes in Canadian History.

This edition of Haliburton's works, however, was never published and the drawings were taken to New York by a former partner in the publishing firm. Imperial Oil, and showed them from this year to add to its collection of some 1,000Jeffreys historical drawings and paintings which the company had previously bought from the Jeffreys estate. The main collection has been catalogued for showings in towns and cities across Canada. Later a permanent home will be found for it, when Dr. Jeffreys' notes, thumb sketches and slides will be open to students. Copies have already been made available to schools, colleges, libraries and various publications.

Photographic reproductions of the Haliburton drawings were presented to the Haliburton museum in Windsor this fall. A similar set will tour the Maritime provinces. Other Canadians will be able to see the drawings in book form, Sam Slick in Pictures, a collaborative effort of the Byrnes Press and Imperial Oil, scheduled for release in the fall of 1956.

Those who visit the Haliburton Memorial Museum will see the illustrations in a century-old setting: Judge Haliburton's own home which the Nova Scotian government rescued from decay in 1939. Better known as "the Sam Slick place," the 14-room house has been restored to its original form. Many pieces of Haliburton's furniture have been located by curator Florence Anslow and installed in their old settings. Among these pieces are Haliburton's desk and the original Sam Slick shelf clock from Plymouth, Conn.

Haliburton's life story, with its curious paradoxes, is as fascinating as the tall tales that Sam Slick told. His great-grandparents were part of the pre-Loyalist fleet of settlers from New England who settled in Nova Scotia around 1760. The author's grandfather became an lawyer and a judge; his father studied law in Halifax and from 1806 to 1832 was a member of the House of Assembly, after which he became a judge of the Inferior Court of Common Pleas. Haliburton's mother, daughter of a Loyalist officer who served under Wolfe at Quebec, died a year after his birth in 1796. Haliburton was raised by a stepmother, a woman of strong aristocratic tendencies who placed him in the best social environment.

Windsor, with a population of 1,500, was then the centre of a prosperous farming community with fine homes, orchards and dairy farms blanketed by hills and wooded mountain slopes. It had developed a social class in which rank was measured to a hair's breadth and had evolved a culture of its own. King's College founded them in 1789, and later moved to Halifax, was the first British colonial university and a preserver of the Tory spirit.

Young Haliburton was educated at King's College grammar school and at the College, where he studied Greek, Latin, Euclid, logic, rhetoric, theology and other subjects under two learned doctors who modelled the institution after Cambridge and whose influence Haliburton took his first trip to England after his graduation in 1815 and returned there again in 1816 to marry Louisa Neville. He began a law practice at Annapolis Royal about 1812. In 1841, in the former capital of the province and the first permanent settlement in America north of Mexico, he absorbed the folklore and history which led him in 1824 to write what is today the first book, General History of Nova Scotia. (Some scholars question his authorship of the book as it was not issued under his name.)

Lawyer Haliburton proved a popular advocate in Annapolis and, at the age of 30, he was elected in 1826 to the House of Assembly. His descent on Halifax proved a sensation. According to The Novascotian, he "fairly charmed the town with the champagne and the rosy sparkling of his eloquent wit." But he constantly dismissed his political friends and foes by sudden shifts in his position, described by one historian as "audacious belligerency."

At Province House in Halifax, a bitter contest raged between the elective House of Assembly and the Crown as represented by an entrenched Council of Twelve which had veto powers on all legislation. The powerful Council included the governor, the bishop of the Church of England, the chief justice, the provincial treasurer, the collector of His Majesty's customs, the attorney-general, the surveyor-general and three associate judges of the Supreme Court. All but one were from Halifax and the same social set, and nearly all were Anglicans, although four-fifths of Nova Scotians were dissenters.

Haliburton started his career in the House by praising the Council of Twelve for its "prodigious intelligence" and "senevolent views," and early in the session he convinced that dignified assembly with laughter by a humorous style he was to employ later with Sam Slick. He scored the idea that Nova Scotians should have the power to regulate their own commerce. But on the next important debate he delivered a brilliant address in support of a popular cause. The Roman Catholics of Nova Scotia had petitioned for removal from the Assembly oath of a declaration against popey which barred them from membership in the House. Haliburton came vigorously to their defense. Joseph Howe, then taking notes for The Novascotian, is said to have been so excited by Haliburton's speech—probably his greatest—that, in the unexpected joy of listening, he forgot to take notes.

Two weeks later, Haliburton reverted to his ingrained Tory prejudices by opposing a bill relieving debtors from unjust arrest and imprisonment. A week after that, he was back in the common cause, defying the Halifax magistrates who wanted a bill to stop Sunday riding, side of anything but fish and milk. "It is aimed at the poor and helpless," he declared.

But Haliburton's most spectacular attack on the King's Counsel, and one that brought him province-wide notoriety, was on a bill providing for treasury support of common schools.
river. There he lived in elegance with his wife, stepmother and children. He built wharves at the water’s edge, put up six storerooms, started a new industry in the town by quarrying granite under the hillside, built a bridge across the Avon, and carried on a little farming. No one could say that the man who called Nova Scotians for being sluggards was not himself an example of industry. He relaxed by throwing lavish parties for the Windsor elite.

And from “Clifton” emerged the amazing Sam Slick. Describing to goad Nova Scotians into a new faith in their province and new activity, the first Clockmaker series was issued in book form by Joseph Howe in 1856, before the series had finished in Howe’s paper. It was the same year in which Howe and a majority of Reformers were elected to the House.

Sam Slick proved an immediate success, not only in the colony but in England where the book was pirated, in the U.S. and in German translations. Englishmen took the uncoached Yankee trader as a typical specimen of the new American breed and found him novel and entertaining. Americans liked the bragging home-boy who could outsmart the loyal colonists and poke fun at John Bull. To create him, Haliburton had drawn on frontier literary lore of the Davy Crockett type and a stock character in New England writings, the shrewd Yankee trader. But he brought into play a vivid imagination and his own keen observations as a high-spirited youth, a lawyer, and a judge of the small debts court where people of all classes noisily presented their grievances.

But few readers appreciated Haliburton for the political and social satirist that he was. With typical words, Sam Slick said of Nova Scotia: “There is neither spirit, enterprise, nor patriots here; but the whole country is as inactive as a bear in winter.” Monkeyshines charmed all during, he said, “do the blue-noses of Nova Scotia... it’s all talk and no work; now, with us (Yankees) it’s all work and no talk in our shipyards, our factories, our mills and even in our vessels.” But, Mr. Slick added of Nova Scotia, “I never see or heard tell of a country that had so many natural privileges as this.” These, he said, were good harbors, minerals, forests, fish and farmland, an excellent climate.

What Nova Scotia needed first, he said, was a railroad from Halifax to Windsor—a project of Haliburton’s and Howe’s “just so this here railroad will beget a spirit of enterprise.” Sam, the trader, saw in farming the hope of Nova Scotia: “Agriculture is not only neglected but degraded here. What a number of folks there seem to be in these parts, a ridin’ about, tied out real jam in their go-to-meetin’ clothes, a doin’ nothin’.” Other sketches told of abandoned farms, decaying houses and lazy farmers. Sam’s solution for rural depression was hard work.

Englishmen laughed at Haliburton’s ironic praise of U.S. democratic powers, “Congress makes war and peace... and snaps its fingers in the face of all nations of Europe,” and his boast that Americans “speak English better than the British.” Their laughter was a little more wry when he added: “The English are the boys for tradin’ with; they shell out their cash like what in front of hiding, they are fleshy bodied, bullet-headed folks, I vow; sulky, ugly, temperamental, vicious critters, a pawin’ and a roarin’ the whole time.” It was, of course, a Haliburton satire on American braggadocio.

Joseph Howe and Judge Haliburton grew further apart politically and personally as Howe and the reformers pressed their case for self-government. Despite this the two friends went to England together in 1838 where Haliburton was lionized as his second Clockmaker series came off the press. This time Nova Scotians were lampooned less, the Americans more. Reversing the position he held in his History, Haliburton now came out against elective Councils in opposition to Howe, whose reforming zeal he stigmatized as “the intrigues or talents of one man.”

While Howe went home to carry on the fight for self-government, Haliburton stayed in England where he wrote his book, Babbles of Canada and a pamphlet, A Reply to the Report of The Earl of Durham, in opposition to Durham’s support of responsible government. But the tide of events was against him and, by the time he returned home to Nova Scotia, Durham’s report had been accepted. That same year Haliburton brought out the third Clockmaker series and his Lettering of the Great Western, a collection of amusing stories he had written for passengers en route to Nova Scotia.

The third Clockmaker, which accused the British of ignoring the value of the colonies and further satirized the reformers who “agitare the country,” broke the uneasy bond of friendship between Howe and Haliburton. Howe was particularly bitter because he had just used his newly-won influence to help Haliburton become a Supreme Court judge.

By 1848, with Lord Elgin, Durham’s son-in-law, as governor general of Canada and Sir John Harvey as governor of Nova Scotia, the reformers controlled the executive council in Halifax and formed the first responsible government of Nova Scotia. They called themselves the Liberal Party. Howe was the province’s first native provincial secretary. Haliburton had meanwhile published still another volume of Sam Slick stories, The Amusee, in which Sam and the squire journeyed to England with the versatile pedlar cast as a member of the U.S.legation. This time the English got “many a laugh” at the Yankee’s expense as his provincialism was ruthlessly exposed.

Two more Sam Slick books were to come off the presses before Haliburton left Nova Scotia in 1856 to live in England. (His interest in “Clifton” declined after his wife died in 1841.) He published it in 1851. With forty-two tales and fantasies, wherein Sam as the confidential of the U.S. president was sent to spy on Nova Scotia fisheries. Two years later Sam appeared for the last time in Nature and Human Nature, continuing his voyages to Nova Scotia ports. At one village, Ship Harbour, he spoke Gaelic and went square dancing, to round out a legendary reputation as salesman, diplomat, artist, horse-tamer, sailing master, and linguist.

While still at “Clifton”, Haliburton edited two collections of American humor and folkways and wrote The Old Judge, a series of anecdotal tales and political philosophy.

In England, the restless, energetic Nova Scotian was elected to the House of Commons in 1859 as the member from Lunenburg, Cornwall, and the following year he published his final book, The Season Ticket, which he called “a stew of various kinds.” Visiting his homeland later, he bought lands in Upper Canada, now named after him as Haliburton county. Haliburton died in 1865, two years before Confederation, which he at first opposed, then supported.

Happily before he left his native Nova Scotia, Tory Haliburton and Reformer Howe had been re-united. Many who disagreed with “Mr. Sam Slick” felt as Howe put it in a personal poem to his friend:

Here’s health to thee, Tom, a bright banner we draw To the friends that our bosoms hold dear, As the battle go round, and again and again We whisper, "We wish we were here.”

Fast-seeing at Joseph Howe was, he could scarcely visualize how Thomas Chandler Haliburton would still be “here” for generations of readers. Last year more than 12,000 visitors called at the Haliburton Memorial Museum to go back a century to the days when Sam Slick rode Cold Cly on rough colonial roads. Windsor then had a six-horse stagecoach route to link it with the rest of Nova Scotia. Today, it lies on a much basiner Highway No. 1 from Halifax and on the Dominion Atlantic (CP) railway westward of the apple-rich Anna polis Valley. It has a population of 3,500, two newspapers—the Windsor Tribune and Windsor Hunt Journal—radio station CFRB, and new industries. It still ships gypsum to Canadian markets, but also manufactures textiles, lumber, fertilizers, cement, plaster and other products. Once a year some 20,000 people converge on the town to take in the Hants county exhibition, said to be the continent’s oldest country fair.

In other ways, Windsor hasn’t changed. It still has quiet streets, shaded by elms and maples. Its Avon River still rises 30 feet daily as a foaming yellow tide surges in from the Bay of Fundy to retreat hours later and leave the river a shallow mud- dy channel. And, like the tide, its Yankee pedlar still keeps coming back @
THE CLOTHMAKER

CHAPTER XVII.

A CURE FOR SMUGGLING.

Wonders never done least, men most done, said the Clockmaker. Just see the difference between these folks here to Liverpool and them up the bay of Fundy. There nature's give them the finest country in the world,—she has taken away all the soil from this place, and shook it out there, and left nothing but rocks and stones here. There they just vegetate, and here they go ahead like anything. I was credibly informed, when Liverpool was first settled, folks had to carry little light ladders on their shoulders to climb over the rocks, and now they've got better streets, better houses, better gardens, and a better town than any of the bay cities. The poor people live as a family: they work here, and do a great stroke in the timber business.

I shall never forget a talk I had with Ichabod Gates, before he and his bride left for a tide-waiter. Ichabod had a large store goods; and I was in there one evening, drinkin' tea along with him, and he was a great deal of fun about smugglin'. Says he, Mr. Slick, your people raise the trade here; they do smuggle so; I don't know as I ever shall be able to get rid of my stock of goods, and it cost me considerable of a sum too. What a pity it is they don't people, instead of carryin' freights of money from the West Indies, wasn't employed more to protect our fisheries and our trade. Why don't you smuggle then too, says I, and meet 'em in their own way?—fit for rast—diamond cut diamond—smugglin'.—I mean, you're sailors' rights are our maxim. Why, says he, I ain't just altogether certer that it's right; it goes ag'in my conscience to do the like o' what is, and I must say I is a fair deal. In a general way, I've observed what's goin' onther devil's back is commonly lost under his belly. It don't seem to wear well. Well, that's uncommon, too, to be so thin skinned, said I; for conscience as usual don't have a body as thick as the sole of one's foot, you may offer it with leather to make it look decent like, but it will bear a considerable hard scrubbins' without anythin' over it. Now, says I, I will put you on a truck that will serve you without bringin' extra on your conscience. Do you just pretend to smuggle and make believe as if you were again the whole log in it. It's safer and fill out as profitable in the real thing, and besides there's no sort of risk in it in the world. When folks hear a thing is smuggled they always think it's cheap, and never look in the bargain; they hate directly—it's a grand bust that. Now always load your vessels at night, and let folks hear a cart again into your place between two and three o'clock in the morning; fix one o' the sides so it will squawk like a pig, and do you look suspicious, mysterious, and uneasy. Say, when (as a chap says, I guess you were up late last night), as one questions, and I'll tell you no lies. There are so many pusser's eyes about now, a body has to be cautious, if he don't want to get into the centre of a hole. If I'm up late, I guess it's nobody's business but my own I am about anywheres; but I hope you won't make no remark about what you see or hear.

Well, when a fellow acquires a thing, do you just stand and look at him for a space without sayin' a word, inquirin' like with a duller's look, as if you didn't know as you could trust him or no; then just whisk, put your finger on your nose, and say, 'you've the wind up stairs.' Take a candle and light it, and say, 'foller me now, and take him into the cellar. Now, says you, friend, don't betsy me, I beech ye, or ye'll do ye harm. If you do any about this place—people will never think of you, because you've just kept dark about it. I'll let you see some things, says you, that will please you, I know; but don't blow me—that's a good soul. This article, says you, stakkin' up one that cost three pounds, I can afford to let you have as low as five pounds, and that as cheap as six pounds, on one condition,—but mind you it's them terms only,—and that is, that you don't tell any one, not even your wife, where you get it, but you must promise me on the word and hirum of a man. The criter will fill eight right into the trap, and

swear by all that's good he'll never breathe it to a livin' soul, and then go right off and tell his wife, and you might as well you a thing into afilterin' stone as into a woman's ear; it will run right there, and she'll go unrightful to her neighbours of the bargain they got, and swear them to secrecy, and they'll tell the whole country in the same way, as a secret of the cheap things Ichabod Gates has. Well, the criter will fill eight right into the trap, and come and see your house from top to bottom, and the secret will make your fortune, for, as they can't find nothing, you will get the credit of doing the others in great style.

Well, well, said Ichabod, if you Yankees don't beat all nature; I don't believe on my soul there's a critic in all Nova Scotia would shiteg a' such a scheme as that, but it's a grand joke, and comports with conscience, for it parallels pretty close with the trick; if I don't lay it to you, be sure: I'm going to dress up this blessed night, and hide away a porcell of your goods in the cellar,—put some in the garret and some in the big-house. Begin and sell to-morrow, and all the time I'm to Liverpool I'll keep a ruminin' and out of your house; sometimes I'll just come to the corner of the fence, put my head over and draw it back ag'in, as if I didn't want folks to see me, and sometimes I'll make as if I was again' out, and if I see any one

nomin' I'll spring back and hide behind the door; it will set the whole town on the look-out,—and they'll say it's me that's smuggin' either on my own hook or yours. In these days he had a great rush o' custom, particularly after night-fall. It was few alive to see how the critters were bannished by that hoax.

On the fifth day the tide-waiter came. Mr. Slick, says he, I've information th'—. Glad to hear it, says I; an' other information, if it would be a poor tool—that's a fact. Well, it brought him up all astans. Says he, Do you know who you are stakin' to? Yes, says I, I guess I do; I'm talkin' to a man of information, and that bein' the case, I'll be so bold as to ax you one question,—have you anything to say to me, for I'm in a considerable of a hurry? Yes, said I, I have. I'm informed you have smuggled goods in the house. Well, try to say, I can say, what many galls can't boast on at any rate. What's that? says he. Why, says I, that you are samish-tempered. Mr. Gates, said he, give me a candle—I must go to the cellar. Sartainly, sir, said Ichabod, you may siren where you please: I've never smuggled yet, and I am not a-going' now to commence at your time of life. As soon as he got the candle, and was again' down to the cellar with Gates, I called out to Ichabod. Here, says I, Ichabod, quick for your life—snooze your time, and run upstairs as hard as we could leg it, and locked the door; the stoker heers' that, up to and arter us hot foot, and bolt open it. As soon as the stoker, the man of adams of that, we out o' the other door and locked that sly, and down the back stairs to where we started from. It was some time before he broke in the second door, and then he fullered us down, lookin' like a proper fool. I'll pay you up for this, said he to me. I hope so, said I, and Ichabod too. A pretty fine o' day this when folks can fare and race over a drunken man's house, and smash all afore him this way for nothing, ain't it? There shows you broke all to pieces will come to smutchin', you may depend—I is a joke in a joke, but that's no joke. After that he took his time, marked the cellar, upper rooms, lower rooms, and garret, and found nothin' to sear; he was all cut up, and amnin' vexed and put out. Says I, Friend, if you want to catch a wazoo, you must watch him carefully: now, if you want to catch me assumilg, rise considerably airly in the mornin', will you? This story made Ichabod's mother's almanac; he had smuggled goods to sell for three years, and yet no one could find him in the set, or tell where the man he bid 'em away to. At last the secret leaked out, and it fairly broke up smugglin' on the whole shore. That story has done more our twenty officers—that's a fact.
DISTANCE is no object

Vic Scott is a genial, burly truck driver who, five nights a week, can be found somewhere between Toronto and Montreal. If he is not having a snack in one of those all-night restaurant havens which cater to those who drive through the lonesome hours, he will be pounding along behind the wheel of an enormous 14-wheeled trailer transport—a veritable rubber-shod boxcar whose gross weight might run to 60,000 pounds.

Scott, who is 51, has spent all his working life behind the wheel of a truck, and his experience reflects the growth of an industry which, although about 39 years old, has found its stride only during the last five years.

Today, commercial trucks—representing an investment of one and one-half billion dollars—carry almost everything from gold to garbage. It is estimated that highway trucks now carry 13 percent of all freight in Canada. In addition trucks carry to and from rail points almost all the freight carried by trains.

It was 1920 when Scott, a farm boy of 16, started driving a truck in his father's general cattle business. "It wasn't much like this," he said recently, indicating the spacious, heated interior of his cab. "We had only hard wheels, there was no cab at all—just a bit of a roof—and in cold weather you wore so many clothes you could hardly drive."

Trucks at that time had this in common: they weighed a great deal more than their cargo, and it was a brave man who would drive one very far out of town. But as pneumatic tires came into general use and truck design and construction improved, a new industry was born.

In the first year for which records were kept—1914—there were 384 trucks operating in Canada. But the Battle of the Marne in September of that year, in which Marshal Joffre launched a successful counter-offensive with the help of an army which traveled in Paris taxis, emphasized the importance of motorized transport. By 1916 there were 3,519 trucks in Canada, and when Scott began to drive his solid-tired bone-shakers four years later, the number had risen to 22,310.

Scott drove many different kinds of trucks, each one a little larger, more comfortable and more efficient than the last. He drove a coal truck for three years. Before he began working for Inter-City Truck Lines seven years ago, he had been six years with Direct-Winnies Transport, both tours of duty being spent on the 360-mile Toronto-Montreal run in those frightening 50-foot-long tractor-trailers. The way Scott can manoeuvre one of those giants in a crowded truck depot or on a treacherously snow-covered or icy highway makes a woman with a baby carriage look like a beginner.

At one time truck drivers were among the poorest paid in the labor force. Now they are among the best. For a five-day week the average highway transport driver earns from $90 to $110, and if the work is there and he wants to do more of it—"the drivers call it being "hungry"—he can earn up to $130 for a six-day week. And transport drivers earn their money. They are on the job from 12 to 18 hours a day and see little of their families except on week ends. Driving a truck in today's traffic conditions is not the easiest, nor the safest job in the world.

Compared to shipping or railways, highway trucking is a young industry, but it is already a big factor in this country's high standard of living. In the huge, sprawling territory that is Canada, railway lines are still the principal and (over long distances) the most economical ties which bind together our 3,800,000 square miles. And, in fact, the railroads, carrying four-fifths of the nation's freight, were among the first to recognize the importance of the trucking industry and the essential complementary service it could bring to the transportation facilities already offered by the railroads.

As long ago as 1919, an Ontario Royal Commission on transportation found: "In many instances they (trucks) have stimulated business, and by giving frequent and expedient service to outlying areas, have assisted in the decentralization of industry and the commendable building up of prosperous small communities distant from the large cities."

Trucks have also expanded many farm businesses and the operations of market gardeners. Largely because trucks can shuttle directly from producer to consumer, perishable food items like corn can be bought at big city markets the same day they are picked. Comparatively isolated districts like northern Ontario can get a bigger variety of fresh fruits from the Niagara fruit belt because it is no longer necessary to order in car-loads. Northern retailers gain too, because special packing is no longer necessary in order to preserve the freshness of soft fruits like plums and peaches. And since they can be bought in smaller quantities, such foods need no longer be put into storage on arrival. The result is fresher quality for the buyer.
A typical example of food economy is the itinerary of the package of frozen peas which might now lie in your refrigerator. On the day those peas were right for harvesting, a truck rolled into their garden. The dew was still on the pods when they arrived at the packing plant. Shelled and graded and quick-frozen, they were moved in a refrigerated motor truck to a refrigerated storage warehouse, and from there they were carried, again by refrigerated truck, to the retail grocer.

The shipment of meat has been revolutionized by the use of trucks. Farm animals now are loaded onto big transports in the farm yard. The farmer gets his stock to market in better condition, with a consequent saving which is reflected in what he pays for the livestock.

In 1954, according to the Dominion Bureau of Statistics, 74.4 percent of all cattle traveled from farm to stockyards or packing plants by truck, as did 79.3 percent of calves, 74.1 percent of hogs and 63.3 percent of sheep.

Nearly 93 percent of all Canadian milk is shipped from farm to dairy by truck. And a new development which will mean savings all round is the milk tank truck; instead of putting his milk in 10-gallon cans which may have to wait in the day’s heat or cold by the side of the road for the pickup truck, with consequent loss in quality, the farmer pours it into a tank in a milk house kept at constant temperature. Every second day the milk is piped into a tank truck.

In Ontario, 95 percent of farm-grown produce is carried to market on rubber wheels. The Federal Department of Agriculture provides figures which show the growing preference for trucks for vegetable export. In 1944 only 1.9 percent of about 2.5 million bushels of turnips shipped to the U.S. went by truck. Last year trucks carried 69.8 percent of turnip exports, which totaled about 1.2 million bushels. Other sizable exports carried by trucks include lettuce, celery, carrots, potatoes, strawberries and blueberries.

The variety of commodities that trucks carry seems to amaze even the Canadian Trucking Associations; so much so that they have adopted the cocky slogan: “If you’ve got it, a truck brought it.”

In British Columbia extra-long trucks are bringing out timber from areas previously considered inaccessible. In northern Alberta and the Northwest Territories trucks capable of towing 20 tons carry wildcat drilling rigs to isolated spots over bare bulldozed trails. In Alberta and Manitoba trucks carry virtually everything the people wear, eat or use. About three-quarters of all new cars built in Canada are transported to distribution centers by truck.

Over the past 20 years, the highway trucking business in Canada has grown by 400 percent to about $200 million in 1953. While it was to be expected that the industry would mushroom with the current growth of the country’s prosperity and population, trucking has outpaced what would be its natural development. In the 10-year period ending 1953 passenger car registrations in Canada increased by 100 percent, but truck registrations rose by 181 percent. From 1950, when there were 617,194 trucks of all types registered, the truck total increased again to 821,476 last year, representing an investment of about one and one-half billion dollars. And this recent growth, due in large part to the growing popularity of long-distance trucking, was given its first impetus by the railway strike of 1950.

During those nine days which began on August 22, 1950, and threatened almost complete paralysis of the nation’s transportation and inter-city commerce, the trucking industry came of age. Trucking companies found themselves with almost all of the foodstuffs, refrigerators, raw steel, bricks, furniture, mat- tresses and toothbrushes—to name a few—purchased on their loading platforms.

“For two weeks we never went home,” Scott recalls. “The companies asked us to make an extra effort, because if they didn’t get the stuff out of the sheds they would soon be bottled up they couldn’t be able to do any business at all. So all the sleep we had was the cold hour or two we could snatch curled up in the cab by the side of the road.”

No matter where a ship docks—Halifax, Montreal or Victoria—waiting trucks pick up goods from its hold for speedy delivery across the country.

The job those truckers did proved to many manufacturers who had never tried truck transport that modern road freighters had a place in their shipping plans. East-west movement of goods by truck was practically non-existent in Canada before the strike. Now there are some 25 trucking companies licensed to operate between Ontario and eastern and western provinces. Year round at the Quebec-Ontario border a truck passes every five and one-half minutes.

In the spring of 1951 highway transport started over the 2,800 miles between Vancouver and Toronto. Three years ago, there was no such thing as interprovincial trucking as far as Alberta was concerned, but today 320 trucks operate out of that province. One Winnipeg trucking firm has 27 semi-trailers in operation over the long road through northern Ontario to Toronto and Montreal.

Apart from the commodities trucks carry, there are the myriad jobs that trucks now do. Giant earthmoving trucks at Klinvar are transforming savage, impassable country into a site for a new aluminum industry. Up in the Yukon, United Keno Hill Mines, fourth largest silver producer in the world, keeps 250 trucks shuttling 300 miles between shaft and mill, 24 hours a day. Trucks are indispensable in the enormous open-pit nickel mining which has been going on for years at Sudbury, Ont., and they will be essential in working the new iron ore deposits in Labrador.

Building and maintenance of our highways and streets depend on trucks—about 70 percent of all sand and gravel is hauled by truck. The provincial forestry departments depend on trucks for fighting forest and brush fires over vast areas. Apart from air mail service, mail between Calgary and Edmonton is now carried by truck, and mail is also trucked over four Quebec highways. Most of the country’s airports are dependent on trucks for maintaining aircraft and bringing in supplies.

Trucks, like the railroads, are a vital arm of Canada’s military establishment for carrying food, guns, munitions and supplies, and vary from the familiar stake truck to a recently-developed amphibious carrier that can plow through 10 feet of water. When work on the $350 million Trans Canada pipeline gets underway, trucks will haul the lengths of pipe from the nearest railhead and drop them at their destined resting places. And as these words are being read, dump trucks by the hundred are being used in the St. Lawrence Seaway development.

New uses for trucks are being discovered every year. Insulated tank trailers carry asphalt which is kept liquid by heating coils. This eliminates the expensive process of drying the asphalt, shipping it in solid form and re-melting it for use. Gilbert Milne & Co., a Toronto photographic studio, now uses a mobile dark room—an 8,000-pound, closed-in truck from which finished prints can be supplied 10 minutes after pictures are taken. Another new development to take shape this year is the use of short-wave radio so that trucking firms can keep track of trucks on long-distance hauls and also speed up pickup and delivery services with local trucks.

Last year 57,000 new trucks were built in Canada for domestic sale, 10,100 for export. And 716,000 tires worth almost $48 million were bought for trucks alone.

In 1953 trucks paid more than $34 million in registration fees compared to $37 million paid by passenger cars, although the latter outnumbered trucks by better than three-to-one. Trucks also contributed about 15 percent of the $220 million that was paid provincial governments in gasoline taxes.

Vis Scott drives about 100,000 miles a year now and figures he must be close to his two-millionth mile. That’s a lot of driving. But what does he do when he gets home to Campbellford, Ont., for the week end? He takes a drive in the family car.

Does he ever curse those big trailer-transporters which sometimes get into a motorist’s way?

“They don’t get in my way,” he says with emphasis. “I stay away from the Montreal-Toronto highway.”

Vic Scott and his mannequins truck are ready for another night run.

Imperial Oil Review, December 1953
Imperial enters petrochemical field

Company forms new department to handle sale of chemical raw materials and develop new uses for petrochemicals

Although H-bombs and atomic submarines have branded this the age of the atom, to the average citizen it is, perhaps, far more the age of petrochemicals which in recent years have supplied him with plastics, detergents, solvents, and a host of other new products.

In spite of its tremendous implications, atomic research has not yet affected everyday living: but petrochemistry already has revolutionized our way of life. Even experts in the field hesitate to make any long-range predictions about the future of their thriving young industry. They are afraid that even the most conservative forecast will sound too fantastic to be believable. As one oil journal put it recently: "No one knows for sure how big petrochemistry is now; statistics can't keep up with its rapid expansion."

Another estimated that 1955 production in the United States and Canada combined would come to 31 billion pounds of chemicals worth more than $35 billion, or 50 percent of the total value of all chemicals produced in these two countries.

Anyone who tried to compile a list of products made from petrochemicals would find the total running into the thousands, and still the list would be incomplete because there are new ones being discovered or developed every day. But some of the most familiar items include waterproof raincoats, plastic garden hose, frozen vegetable wrappers and water-resistant curtains.

Imperial, which has been watching closely the quiet scientific revolution going on from the beginning of World War II, recently announced its decision to become a more active participant in Canada's mushrooming petrochemical industry. For that reason the company has formed a new department known as the chemical products department.

The new department will be responsible for the sale, and the most efficient utilization of chemical raw materials produced by the manufacturing department. This could involve sales to outside interests or possibly the manufacture of chemical products by Imperial.

To head the new department as general manager, Imperial chose a man whose experience in chemical products dates back to 1929—a dozen years or more before petrochemistry loomed large on the scientific horizon. He is Clayton M. Beamer, who, at the time of his appointment was assistant general manager of the chemical products department of Esso Standard Oil Co.

His last position, along with his previous jobs, has given him a wide practical experience in the manufacture and sale of petrochemicals. His other positions included those of sales manager for the alcohol and chemical division of the Enjay Co., Inc.; head of the chemical technical service department of the Esso Standard refinery at Baton Rouge, La.; and technical service co-ordinator of the Enjay Co.

Although the two senior men appointed to work with Mr. Beamer in the new department are, technically, novices to the petrochemical industry, they are both men who have proved themselves in closely allied fields.

T. B. "Tom" Doherty, appointed manager of the department's technical division, last served as management assistant in Imperial's manufacturing department. Previously he was assistant superintendent at Esso's Sarnia refinery, following service in several positions with the manufacturing department's engineering division. His division's main function is to select and plan production processes.

His counterpart in the sales division is Dr. W. W. Stewart, whose 20 years with Imperial have been interrupted by four years' work on chemicals and explosives for the federal government. Assistant manager of the marketing department's technical division since 1951, he began his Imperial career in research at Sarnia, where he rose to a senior position before entering the marketing department. His division in the new department will not only sell the chemicals and give technical assistance to customers, but will also work on the development of new uses for petrochemicals in Canada.

NOT LONG AG0, a nurse in the maternity ward of a large city hospital was astonished to enter the room of a new mother and find her on the telephone, directing a toyshop to deliver two baby dolls to her hospital bed immediately.

"They're for my two little girls" she explained. "I was afraid they would be jealous of the baby, so I promised them I'd bring home these babies, one for each of us to cuddle and care for."

Fortunately, the young mother lives in these days, and not 100 years ago when a doll was a fragile, stuff treasure to be wrapped in tissue paper and kept most of its life in a bureau drawer. Yesterday's dolls had heads of broom or china which smashed if they were dropped. Wax bodies melted in the sun, kid bodies stuffed with molars or sawdust tore, and stained and smelled if they got wet. Fragile fingers and toes crumpled, glued-on wigs fell off, glass eyes caved in and rattled around like marbles.

Collectors love these old dolls and pay as high as $500 for a rare specimen, but they hadn't much of what the modern psychologist calls "play value."

Today's doll is designed to simulate a little girl's material instincts and to teach her the basic facts of cosmetics.

by DOROTHY SANGSTER

PLEASE SANTA

SEND ME A DOLL

NEW ORLEANS, La.—"DEAR SANTA, I WANT A SANTA CLAUS DOLL FOR CHRISTMAS," wrote a little girl to Mrs. Claus some years ago. "I WANT THE ADORABLE SANTA TO COME CLEAN AND TIDY THE ROOM AND HELP US DO THE CHORES."
Along with its technological and educational advances, however, an almost indestructible doll presents its maker with the very real problem of continuing sales. What can you sell a little girl once you’ve sold her a doll that won’t break?

To help find the answer, they maintain laboratories, hire designers, watch trends, study rival catalogues and listen respectfully to the suggestions of buyers and the prattle of children. A constant stream of experimental new dolls flows from expensive moulding machines. Will they sell or won’t they? One manufacturer says that he revised his doll catalogue, five times in two years, only listing a new number to find it was out, sold, "chopped" and gone by the time the catalogue had been issued.

What makes a doll a dud is hard to say. It may be the color of its eyes, the shape of its cheekbones or the expression on its face. It may be too big, or not big enough. It may be priced wrong. Sometimes a gimmick intended to skyrocket it to sales starvation turns out to be the cause of its destruction. A doll with a ticking heartbeat, for instance, was recently yanked by its maker because of low sales. On the other hand, a doll that cries real tears and another that blows its nose are doing fine. Spectacular but brief are the days of the "personality doll"—a doll patterned after a well-known public figure. A Marilyn Bell doll, which appeared in red bathing suit and goggles two months after the real Marilyn swam Lake Ontario, is a back number today. So is the Coronation Doll, a regal figure in velvet and ermine gown and jeweled tiara. A few years ago, a Barbara Ann Scott doll enjoyed tremendous promotion; today you’d have difficulty finding one.

Coming strips dolls from the United States, like Joan Polaoka, Bonnie Bradis and the Toni doll usually sell fast for a few months and then vanish. Other novelties, like Shirley Temple and the Dionne quintets, end up more fortunately as collectors’ items.

Unpredictable is the word it when it comes to selling dolls.

Today’s emphasis on "cuddly" quality is a new angle on an age-old theme. The child demands a doll, but must have found on the scene almost as early. Archaeologists have unearthed tiny terra cotta figures in the graves of children who lived thousands of years ago in Greece, Egypt and Assyria. Plato wrote about dolls, Sappho dedicated her doll’s purple neckercchief to Aphrodite, Marco Polo described paper dolls favorite for small Chinese girls last funerals. Voltaire, Haydn and Gournou busied themselves writing plays and composing music for still another kind of doll, the string-work marionette. Shadow plays of the Orient are still performed with dolls in India, and in Spain and Sicily puppets five feet tall act out the exciting adventures of Charlemagne. Wealthy Hindu families have been known to stage elaborate weddings between the dolls of different high-caste families, with parades, music and feasting. In Japan, valuable old dolls are kept under glass and are taken out once a year for proud display at the ceremonial Feast of Dolls.

Medicinal men were quick to discover the commercial fetish value of dolls. A man who wished an enemy dead would simply visit the local witch doctor and for a price get a small doll in the enemy’s image, into which, at strategic points, he thrust pins and needles. According to the best witch-doctor theories, the man’s enemy would develop mysterious pains in those same parts and would sicken and die. Likewise a woman mad with love could, in theory, clear the field for herself by melting down tiny wax figures named for her rival, who would waste away as the figures wasted.

Dolls assumed a role as fashion plates in medieval Europe. In 1391 the King of France sent the Queen of England a magnificently set of dolls dressed in his wife’s elegant new wardrobe. A New York collector picks a beautiful paper doll mounted on card, with 25 costumes and bonnets, copies of dresses made by M. Worth, the famous French couturier, between 1825 and 1895. Ever today, fashion designer Jean Patou uses dolls to show off his dresses, and in Toronto, a student at Ryerson Institute dress dolls for promotional advertising.

Dolls have been made of just about everything: ivory, bone, wood, canvas stuffed with papyrus, rug, paper mache, china, bisque (un glazed china), composition, clay, shells, sponges, wax, apples, corncobs, nuts, beads, rubber and rawhide. Rich children have delighted in dolls made of gold and silver and Mooraccan leather.

Until a century ago, children on this continent only had imported dolls: china dolls from Germany with black hair, deep shoulders, and blue eyes in honor of Queen Victoria; Jumeau dolls from France with spun-glass eyes and wigs made of the hair of Tibetan goats; and wax dolls from England, some of them so real that they felt their own skin. Wax dolls were held in the face while the Gay Nineties when German bisque dolls became all the rage among the younger set.

Today a blonde-bisque Dresden head in good condition is worth anywhere from $100 to $500, for doll collecting has become an established hobby in America in the past 35 years, and upwards of 10,000 collectors vie with each other for valuable old dolls. When collectors seek rare “Ninotchka” and expensive Parisian beauties; more modest ones track down “Frozen Charlottes”—10-inch jointless dolls that aren’t so rare and the store don’t command such prices.

Collectors haunt old houses, doll hospitals and country auctions. When an old farmhouse in Vermont was torn down recently, one collector hastened to the spot and discovered a long-haired doll circa 1840 whaled out into one of the bedrooms. Another collector poking around in a shabby Philadelphia antique store moved a collection of pitchers and found a small crimson piece to face to face with an Empress Eugenie doll head worth $100.

Although the first patent for an American doll was issued in 1849 to a Pennsylvania doll-maker named Greiner, it was not until the turn of the century that domestic dolls really hit their stride. Then came an astonishing parade.

There were walking dolls with clockwork mechanism, sleeping dolls whose eyes closed when you pulled a wire, and dolls that drank milk which dripped down their backs into a pan. Singing dolls, creeping dolls and dolls with magnetic fingers that picked up pieces of steel all made their appearance, followed by hardware dolls, softwood dolls, dolls with pewter and iron hands and feet, and rag dolls dressed like Aunt Jemima and Topsey and Red Cross nurses and soldier boys. Ingenious mechanical dolls played the piano, stuffed roses, blew bubbles, and knelt to pray.

In 1954, Canada imported $659,191 worth of dolls from just about every country in the world, and exported $74,400 worth to 24 countries. The majority of Canadian dolls are made by three big Toronto companies: Reliable Toy Co. Ltd., Dee and Cee Toy Co. Ltd. and the Pallan Earle Co. Ltd. Reliable, with 125 dolls on its list, and an estimated annual sale of 800,000 dolls is probably the largest manufacturer of toys in the British Commonwealth.

One of Reliable’s most popular dolls is Saucy Walker, a flirty-eyed walking doll in a dotted pinafere. But that’s after it’s finished.

To begin with, it arrives at the factory in the nadir possible condition as a barrel of flesh-colored powder. This powder is air-dried and heated to 400 degrees Fahrenheit, when the liquefied plastic looks like a middle of pink milk. Now it is injected into molds, where it cools for exactly 45 seconds and comes out in the shape of arms and legs for several dolls, all attached together. These are clipped apart. Somewhat similar procedures produce the doll’s head and body.

Upstairs the various parts of Saucy Walker congregate in an assembly room. Heads are despatched to a make-up department, where three girls with steady hands paint lips and eyebrows onto 400 dolls an hour. In another section legs are cemented together and a special walking apparatus installed. The leg is set into a press, pedaled to take off rough edges, buffed, and attached to the doll’s body. Arms are joined on with rubber bands. In the hairdressing department, meanwhile, a complicated machine with a double-lock stitch is pounding dolls from France with spun-glass eyes and wigs made of the hair of Tibetan goats; and wax dolls from England, some of them so real that they feel their own skin. Wax dolls are held in the face while the Gay Nineties when German bisque dolls
by MICHAEL JACOT

For four months a husky seismic crew from the west worked and played in the serene Quebec village of St. Grégoire.

It was an unforgettable experience for both.

“Les Cowboys” and St. Grégoire

St. Grégoire, 100 miles east of Montreal, was enveloped in a misty rain. Children chattered as they ran back from school to lunch. The old folks rocked on porches, watching spring ting the giant willows lining the main road. Farmers plowed the narrow strips of land which had been family possessions for centuries. The curé, Abbé Albert Labonté, sat quietly in his study reading his breviary. Cattle stood disconsolately in the fields which slope towards the St. Lawrence, and the village dogs shook the clinging rain from their backs.

Suddenly the quiet atmosphere exploded. Across the horizon from the town of Nicolet, seven miles to the west, came an unusual convoy of vehicles, including several automobiles and trucks—one with a small steel tower at the back—and a big box-like van.

The convoy turned into the little courtyard beside the white frame hotel. Children, dogs, and villagers stood at a respectful distance while the vehicles emptied of sun-tanned men.

One grinning fellow said, “Howdy kids, I’m from Texas!”

A delighted howl went up. “Voilà des cowboys!”

Actually it was a seismic party which had come to explore the St. Lawrence lowlands. Imperial Oil had been interested in exploring for oil in the lowlands for a number of years, and in 1954 the company carried out extensive geological and gravity surveys. Now the search was to be continued—over a large area ranging east from St. Grégoire to a point some 30 miles along the St. Lawrence shoreline—with the scientific instruments of the seismic crew. The seismic party’s job was not to drill for oil, but to try to find out the type of rock formations below ground. From these, Imperial’s geologists would be able to tell the best spot to drill for oil—if the right type of formations were found and drilling thought worthwhile.

In reality the project was a sort of experiment. Little seismic work had ever been done in the area before, and Imperial wasn’t even sure that seismic operations were feasible.

The company engaged one of the largest organizations of its kind in the world—Seismograph Service Corp.—to carry out the experiment. It has its headquarters in Tulsa, Okla., with parties working in many parts of the world.

The crew of five Canadians and two Texans which arrived so suddenly at St. Grégoire was from Calgary, the Canadian headquarters of the company. They had come in convoy, 2,600 miles across Canada, and they were just about the biggest thing ever to hit the serene little village of 2,000.

For more than 200 years life at St. Grégoire has been as...
Geologist Paul Simard gets permission to explore farmer’s land

regular as the church bells which sound every morning at 6 a.m. for Mass, and at various times throughout the day. The year at St. Grégoire is divided by the seasons and the feast of the church.

It was almost as big a change of pace for the seismic crew. Their last job had been in the depth of Canada’s northland, hundreds of miles from civilization. Now, here they were in an area that had been settled by some of Canada’s earliest traders.

The owners of the hotel, M. and Mme. Boissinonweau, advanced to meet the party, but they didn’t make the door. It was flung open by a large man with a beard and a long mustache, the party chief, Tony, who is as much at home in the Venetian jungle as in the quiet homes of a French-Canadian village, used to be a football coach at Notre Dame, and he looks like it.

Tony explained in “Texan French” about his job, and what he wanted in the way of accommodation for his men.

“Oui!” said M. Boissinonweau. “There is no need to look. Everyone in St. Grégoire knows where there is oil. It has appeared in many of our wells for years.”

Tony explained that he was not looking for oil, merely surveying underground rocks by setting off little explosions and recording on very sensitive instruments.

He pointed to the truck with the small tower and explained how his crew would drill “shot” holes with their mobile drilling rig. The holes would be 30 to 100 feet deep, and in them a small dynamite charge would be exploded. The explosion would send sound waves in all directions, including downwards through the various rock layers. Some of the waves, said Tony, would reflect, or bounce back to the surface. These reflected waves would be picked up by sensitive little microphones laid along the surface of the ground.

In the instrument truck, a seismograph—the same kind of instrument that records earthquakes—would receive the waves picked up by the microphones and record them as a series of wavy lines on paper. Seismographers, he told them, can calculate the depth and type of certain rock layers from these automatic records. They can tell, for example, from the way a wave moves through the rock, whether it is the kind of rock in which oil might be trapped or in which it might have accumulated.

Then some began a series of charming problems, and equally charming adjournments, as the life of the “cowboys”

Delicate seismic instrument is explained to Farmer Loss Castongue.

interlocked with that of the quiet, hospitable villagers.

The problem that day was to find a remote place to store the explosives used in the seismic operation. Tony eventually found a farmer’s field a few miles out of town and cached his explosives.

The next problem came at supper that night. Of the seven grinning men, only one other besides Tony spoke adequate French. He was the man who translates the complex seismic charts and recordings, Tony Lakatos, a Hungarian. The rest of the boys had plenty of trouble with the menu. As one Albertan said, “At first I wasn’t sure if I were ordering frogs’ legs or a red-brand beefsteak.”

Another problem that day was the curiosity of the villagers. The seismic party worked hard and fast. They had a lot to do in four months. They started at 7 a.m. and finished at 5. Every evening a tired group arrived back at the hotel to be asked, “Found any oil today?”

Finally, after days of such requests, Tony hit on a formula: “Yes. We found oil. Very good oil.” A startled silence in the crowd. “Where?”

“At the Eso station!”

This brought roars of laughter each time it was repeated.

One of the biggest and most important headaches was that each time the crew explored on a new farm, permission had to be obtained from the owner. Most farms in the area are small. Big farms are about 50 acres; some have only one acre. It was quite a change from the 1,000-acre parcels of the west. In one place the crew had to contact 21 farmers, many of whom lived miles away, in order to work in one quarter-mile stretch. One of Imperial’s geologists, Paul Simard, was attached to the group as landsman and interpreter.

Seismic instruments are so delicate that they can measure the footfalls of an ant. At each test, an area half a mile on either side has to be kept motionless. Even the wind on the fence wires recorded disturbances. In the west, where the land is so sparsely settled that cows, chickens and people are scarce, there is little problem. But in Quebec with its dense rural population, movement was a constant worry. Once a horse, trotting on soft soil a quarter-mile away, caused as much vibration in the delicate instruments as a minor earthquake.

As each site was surveyed for tests, colored ribbons were

hung on the fences to mark the exact spots to record the explosions. On the first day many of these disappeared. The riddle was solved when a local school recessed and the girls were all found to have unusual decorations in their hair. Cows also took a liking to the ribbons. They ate them as aperitifs.

The ribbons weren’t the only thing the cows liked to eat. The party used a special salty compound to coat their electric wires. One night the crew unsuspectingly left a bucket of it attached to the drill truck in a field. By morning the cows had cleaned out the bucket.

The crew solved the problem of the disappearing ribbons by bringing a handful every morning to give to any children who wanted them. They solved the salt problem by buying a block of salt and placing it in the extreme corner of the field.

As time went the crew began to be accepted into the community. Soon they were invited to watch the village’s most popular game—croquet. In parts of Quebec, croquet is a passion equalled only by an Englishman’s traditional passion for cricket. Some people play all day. One St. Grégoire woman starts her game after breakfast and finishes at sunset.

Eventually the boys were asked to take part in a baseball game. Tony rounded up some of his men. In the heat of the game, Tony’s long-sleeved surname was too much for the local team, so he changed it on the spot to Bergeron—the first word that came to his head. From then on he was always Bergeron. Few had ever heard of M. Koehendorfer, but everyone knew and liked M. Bergeron. In fact, he had difficulty in getting his mail, addressed to Koehendof, delivered.

The village threw open its doors to the boys. They dated girl (one of the seismic crew was married), and cryptic messages were written in pigtails French on scraps of paper and the backs of empty cigarette boxes. In the taverns, snugly situated in the eaves of the hotel, many a local inhabitant turned interpreter. One old man said, “I spent my evenings translating messages from our girls to those gallant cowboys.”

Pence has come to St. Grégoire. The willows lining the main road have lost their leaves and are tinged with frost. The air is still and the streets are quiet. The long convey of automobiles and trucks has left and with it the seismic crew. Its work is being studied and final results will not be known until the end of the year.

But “les cowboys” are not forgotten. In the tavern, in the homes and stores, they still speak of the search for oil in reversent terms. There are memories which will be long in fading. M. Bergeron (as Koehendof) and his free taxi service (on occasion he took emergency cases to hospital in his car, and helped people catch trains), the fair face of a lad from Alberta, and the unswerving fascination of the children. These are things which will remain vivid in the minds of the people of the old part of the New World whether oil is found there or not.
They're a strange and wonderful breed—the men and women of the RCAF search and rescue units. They drop food to starving communities, rescue fishermen adrift in storm-tossed seas and parachute to victims of northland plane crashes.

The RCAF's Work-a-day Heroes

by JAMES HORNICK

Down through the Arctic ether crackled a distress signal. It was from a radio operator on ice-bound Baffin Island. At Pangnirtung . . . he was signalling . . . Off Cumberland Sound . . . Eskimo woman . . . Critically ill . . . Hospitalization extremely urgent.

The message was intercepted and relayed by an outpost on the fringe of civilization. Within hours a team of professional heroes swung into action, for this was work for Search and Rescue, a branch of the Royal Canadian Air Force that sleeps with its shoes on—specially-trained para-rescue doctors, nurses, medical assistants and aircrew on round-the-clock alert; members of a fighting organization but, ironically, specialsists in lifesaving.

Pangnirtung, the maps showed, was a tiny settlement ringed by 7,000-foot mountains. Local weather at this time of year was never ideal, at best chance. To risk a landing would be to court disaster. To refuse might cost a woman's life.

From the RCAF base at Summerside, on Prince Edward Island, Flt. Lieut. MacKenzie and his colleagues set course northward. It was a familiar mission. They were bound for a place few of them had ever heard of, with a name few could pronounce, to help an Eskimo known only as Martha.

Several hundred dreary miles later their Dakota skiplane was within sight of the Baffin coast. Only a few hours of daylight remained; the overcast was thick and getting thicker. The only gap in the mountain barrier, MacKenzie knew, was a fjord. He spotted the opening, dropped to 300 feet and began picking his way inland. Any violent gust might Slam the Dakota into a sheer wall of rock.

Ahead lay a cluster of huts and snowhouses that could only be Pangnirtung; all around—mountains, their peaks obscured in fog. MacKenzie eased his plane onto the snow, gambling that the skis wouldn't break through, praying the landing run wouldn't carry him into the base of a mountain.

A waiting crowd helped bundle the patient aboard. She was barely settled before the pilot gunned the engines, swung into the wind and took off in the fading light, back through the fjord, over the sea.

The adventure wasn't over. Between Pangnirtung and Goose Bay, Labrador, the Dakota's first fuel stop, MacKenzie encountered severe icing. To brace it was out of the question. He was forced down at Frobisher until the weather cleared.

Martha reached hospital at Montreal and at last report was recovering. It had taken six strangers 1,900 miles of hazardous flying to get her there. But Martha didn't know that. She couldn't conceive the planning, the skill and the considerable risks involved in her salvation. She couldn't even converse with her benefactors.

Nearly every week, somewhere in Canada, similar episodes are being chronicled. There's another Martha, another MacKenzie. An aircraft is down, a hunter lost, a ship ahove, a community starving. Whenever the call goes out, from British Columbia to Newfoundland, from the 49th parallel to the Arctic archipelago, the men, women and machines of Search and Rescue are standing by to respond.

No accurate estimate can be made on the number of people who owe their lives to Search and Rescue, but one authoritative source places it at 180-plus. During any average week as many as 60 missions may be undertaken. 30 may be, and often are, false alarms, but the other 10 may result in one, two or three lives being saved. The RCAF, typically, doesn't keep count.

Aircraft earmarked for mercy flights or search operations are stationed at Torbay, Newfoundland; Greenwood, Nova Scotia; Goose Bay, Labrador; Trenton, Ont.; Winnipeg and Churchill, Man.; Edmonton and Vancouver; and Whitehorse, Yukon Territory. Control is carried out from six major co-ordination centres: Torbay, Halifax, Trenton, Winnipeg, Edmonton and Vancouver. Personnel are never allowed to undertake assignments that would prevent them being instantly ready for their primary responsibilities—search and rescue.

Pilots assigned to these units are among the most versatile in the service. They must be qualified to fly not merely one or...
two types of aircraft—as are their comrades in fighter, transport and maritime squadrons—but several. They must be able, with equal propulsiveness, to switch from single-engine Harvard trainers to four-engine Lancaster from Canadian flying-boat squadrons from Dakota transports or Otter bushplanes. Many are qualified on all three types of helicopters used by the RCAF, the Sikorsky S-51 and S-55 and the Twin-beeck H-21.

Doctors, nurses and medical assistants, when they are not flying, are kept busy at less exciting but equally important tasks. The doctors and nurses usually serve at station hospitals, the former performing such routine duties as prescribing for indigestion or removing tonsils, the latter changing bandages or taking a turn in the wards.

They’re a strange and wonderful breed, these missionairies of mercy. Take Clifford Wallace Weir, a 42-year-old, six-foot, 230-pound bundle of energy whose friends call him Bounce. He’s been a barnacle miner, policeman and bush pilot. Today, with the rank of squadron leader and 15 years’ RCAF service behind him, he commands the Search and Rescue detachment at Churchill.

In a movie, Bounce Weir could never play the role of hero. He doesn’t look the part: his hair is thinning and his waistline is inclined to wane at discipline. His buoyant good humor is out of character. Yet here’s a man who has become a living legend in the rescue business.

For several seasons he conducted the RCAF’s Para-Rescue School at Jasper, where he trained doctors, medical assistants and tradesmen through the not-so-genial arts of bush survival, mountain climbing and parachuting. He was the equal of his students in everything but parachuting; the air force denied his repeated requests for permission to make just one jump.

When he was transferred to Churchill his energies found an outlet in a long series of rescue missions that entered the Weir logbook in the category: routine. Typical was the misfortune that befell the three-man crew of an RCAF Norseman dispatched from Churchill to pick up a sick Eskimo at Baker Lake, 400 miles away. More than 100 miles from its destination the plane ran out of fuel. The pilot radioed for help and glided to a safe landing on a frozen lake. For the next three days he and his companions awaited rescue. Finally, a search plane lighted fuses.

Who should come bounding over the horizon but the Bounce named Weir. He landed close to the stranded Norseman, exchanged a few pleasantries, packed his frigid friends into the warm cabin of an Otter and flew them out. Early the next day he was back with fuel for the Norseman’s empty tanks.

This was routine, hardly worth passing mention in the newspapers. Ten years ago, the forced landing might have been a tragedy to produce. The pilot and passengers might have perished, their bodies disappearing in the spring thaw to the bottom of an unnamed lake. Ten years ago, Canada had no properly trained, adequately equipped, formally recognized Search and Rescue organization. Its rescue operations were neither fast, nor safe.

Since then Canada has created the para-nurses, the winged angels of mercy who are writing their own pages of aviation history; the incredible Otter aircraft and a host of light-weight lifesavers that can be taken off a shelf, packed in an aircraft and hurled into space on the end of a parachute.

The Otter, designed to an exacting RCAF specification, is gaining wide acceptance as the world’s standard Search and Rescue vehicle. Its heavy load-carrying capacity, its ability to operate from tiny makeshift airstrips and its adaptability on wheels, skis and pontoons have won for its manufacturers substantial orders from the armed services of Canada, the United States and Norway.

Another RCAF “first” is a compact capsule, developed by the Institute of Aviation Medicine in Toronto, that carries a variety of medical equipment sufficient to cope with nearly any emergency. Its outer casing, reinforced for parachute drops, can be converted into a trolley or a hand-carried litter.

Search and Rescue in its present form had its beginning late in 1946, when the provisional International Civil Aviation Organization held its North Atlantic regional conference at Dublin, Canada, as an ICAO signatory, agreed to several international commitments, among them the responsibility for providing aid to aircraft in distress on the west and east coasts. As a pattern began developing the full-time agency to honor this commitment responsibilities were expanded. The RCAF, as Canada’s official Search and Rescue instrument, was not only to operate a kind of coast guard for aircraft, it was also to provide assistance in marine distress cases on both coasts and in portions of the Great Lakes; and it to co-ordinate, supervise and provide all primary facilities for aircraft search and rescue activity within Canada.

There was a secondary obligation: provision of aid in any necessary circumstances. This was a stipulation subject to the commercial liberalism of the day; but the time inevitably came when it caused an RCAF helicopter to ride herd on some rampaging elk; on another, it saw an RCAF transport rusksupply of hay to 200 hungry cattle.

The helicopter was provided at the request of the Manitoba Game and Fisheries branch. Elk had broken out of Riding Mountain National Park and were causing concern to farmers in the area between Dauphin and McCreary. The whirring, circling ‘copter struck terror into the beasts, which were soon happy to be back in their park.

A U.S. Air Force jet bomber, high over northern Canada on a flight from Britain to a base in southern California, suddenly ran out of gas. One man was killed; three others parachuted. Some time later, they were spotted by search planes. In the meantime, Capt. Lester Epton, the co-pilot, had frozen his feet.

From an altitude of 1,000 feet, Marion MacDonald parachuted to his aid. It was her 43rd jump. “He had snow up to his armpits,” she recounted later. “I gave him a sedative, set up a camp and built a large fire.”

The nurse and another para-rescue jumper pulled the injured officer on a toboggan to a nearby lake where a skiplane landed to carry him to hospital.

These are the men and women—people like Ian MacKenzie, and Bounce Weir, and Marion MacDonald, and Marion MacDonald—who are helping to maintain Canada’s leadership in the rewarding realm of search and rescue.
UNIVERSITY

fellowship program expanded

Imperial has added a fellowship in the humanities to the four in the physical and social sciences which have been awarded annually since 1946.

J. E. Hogg of Toronto is aiming for a doctorate in geophysics

W. J. King, the youngest winner, is working on nuclear physics

Geology of Alberta is thesis topic of Edmonton’s G. B. Mellon

Kurt Jonasohn, 35, of Montreal, P.Q., is studying for a Ph.D. degree in industrial relations at the University of Chicago. He was born in Germany, moved to England and then to Canada before the war. No stranger to industry, he worked as a cutter in a clothing factory and as an assistant in production scheduling at a rubber factory to support himself while earning his B.A. at Sir George Williams College, Montreal. At McGill he obtained his M.A. under the Samuel Leptonsky fellowship.

John Edward Hogg, a 24-year-old Torontonian and a master's graduate in mathematics and physics, elected to stay on at his Alma Mater, the University of Toronto, to study for his doctorate in geophysics. The Imperial fellowship is the latest in a long series of awards he has won—among them three scholarships and two prizes, including the James Loudon gold medal. He is already well under way with his doctoral thesis on the age of lead-bearing rocks.

The youngest winner, 22-year-old William James King of London, Ont., was the sole member of this year's graduating class in radio physics at the University of Western Ontario. Previously he received an entrance scholarship to the university and a third-year award in radio physics. He is now studying nuclear physics at McMaster University, Hamilton. Last summer he worked in the Chalk River, Ont., atomic energy plant.

A detailed study of the geological formation of the central and southern Alberta foothills is the target of George Barry Mellon, 24, of Edmonton, Alta. A graduate of the University of Alberta where he collaborated on a post-graduate thesis on the McMurray tar sands, he is now attending Pennsylvania State University. He already has spent several summers on mapping and stratigraphic work in British Columbia, the Yukon and Northwest Territories and hopes to conduct foothills research under the auspices of the Research Council of Alberta. His frequent academic awards have included four prizes for first class standing, the Socony Vacuum scholarship in geology, the Dowling Memorial award, and a Shell Oil fellowship.

Dr. Leon Lortie, extension department director at the University of Montreal, headed the fellowship selection committee. Other members included Prof. J. C. Cameron, head of industrial relations at Queen's; Dr. R. P. Graham, head of chemistry at McMaster; Dr. A. C. Plewes, head of chemical engineering at Queen's University; and Dr. E. W. R. Steacie, president of the National Research Council.
New Managers Appointed at Six Refineries

As part of an overall company plan to broaden management experience, management changes affecting six of Imperial’s nine refineries were made in October.

At the same time it was announced that, in future, heads of Imperial refineries will be known as managers instead of general superintendents and superintendent.

From Montreal East, where he had been general superintendent, Charles Seryngeo was transferred to the Toronto executive offices as management development counselor. He had been general superintendent at Montreal since 1952 and before that, superintendent of loco refinery near Vancouver.

His place at Montreal East was taken by Dr. J. L. Huggett, general superintendent of Sarnia refinery. He had been head of Sarnia refinery since 1947. During this period the capacity of the refinery increased 79 percent, from 46,000 to 87,000 barrels a day.

George R. McMillin, superintendent of Halifax refinery, moved to Sarnia to replace Dr. Huggett. For Mr. McMillin it was a return to familiar ground for he was superintendent there from 1952 to 1954.

The refinery in Halifax is now under the management of H. H. Moor, who had been superintendent of Edmonton refinery since it went on stream in 1948, before that he was an assistant supervisor at Sarnia refinery. Mr. Moor’s position at Edmonton was taken by E. Keith Lewis, superintendent of loco refinery since 1952. Mr. Lewis had served as superintendant at Montreal East and Winnipeg.

The cornerstone of Imperial’s new executive office building contains some unusual items—including a TV show

To those who’ll find the box, that’s one of the most intriguing things about it.

The “box” is the airship cargo container—about 18 inches wide, 9 inches high, and four inches thick—which was seated inside the three-ton granite cornerstone of Imperial’s new executive office building on September 8. The 19-story building is under construction on St. Clair Avenue west in uptown Toronto.

We can tell something about the finder. He has’s, in all probability, been born yet, and whoever he is, he will be pleased, baffled, and better informed by the two dozen or so objects he’ll find inside the box. He will find a voice from the past calling out a personal greeting: “Hello out there, 2055!” and moving pictures from the year 1955. The voice is on the soundtrack of film taken of a special program, addressed to the next century, of the CBC’s half-hour TV show, “Tobias”.

In the “delayed”—by one century or more—release, Mr. 2055 will find some “quaint pictorial evidence of life in the middle 20th century”: a scrapbook game, football helmet, eyelash curler, nosepier, home permanent set and comic book. He may be amused or amused to hear from Tobias’s farceuses that Hamilton was separate from Toronto, weather was uncertain, Shakespeare was still popular. TV’s most talked of show was a $60,000 go-away program and the common cold was a medical mystery.

By that remote date reading may have become a lost art or
by HAL TENNANT

"Uncle Sam", and more than proved its versatility by doubling as the first submarine ever used for warfare. It has several mentions in the Civil War and it can trace its ancestry back to the 18th Egyptian dynasty.

It can claim a lot of credit for the development of petroleum; for without a cheap, handy container, early drillers would never have got their "rock oil" to market.

The barrel can make the same claim about a lot of other industries, too. Over the centuries it has contained everything from tobacco to butter, parsnips to petroleum and molasses to money. On top of that it has served as a chair, a table, a speaking platform, a house, a hiding place, a wash tub, a catch-basin for rain water, a pontoon for a raft, an obstacle for broad-jumping ice skaters and a crust for Niagara Falls summer.

The Swiss Family Robinson used several in their makeshift raft. Huckleberry Finn lived in a big barrel, and Young Jim Hawkins hid in a middle-sized one long enough to overhear John Silver's mutinous plans in Treasure Island. Even modern youngsters sophisticated by "atomic" playthings and toy Geiger counters are fond of the barrel. The hoops are fun to play with and the staves make pretty good skis.

Its design, utilizing the principle of the double arch, is so perfect that nobody was able to improve on it for centuries—and only by making barrels of metal.

Call it what you like: hogshead, butt, tun, pipe, Oporto pipe, queen's pipe, punchon, pigglen, finken, keene, kier, cask, tub, tierce, vat or tank—it's still the good, old-fashioned barrel, and it has a unique place in history.

Its stint as a submarine came during the American Revolution. The British kept lay at anchor at New York, blocking the harbor; but the Yankees were too disorganized to stage a conventional attack. So a young cooper named David Bushnell built a special barrel with doomed ends. It was about 10 feet long and broad enough for a man to stand erect inside. It included removable lead weights to permit surfacing, a depth gauge, hand-cranked propellers and some crude time bombs.

A courageous soul named Sgt. Ezra Lee climbed into this contraption on the night of September 7, 1776, and went looking for trouble. He planned to propel the sub under the English ships and screw time bombs to the wooden hulls. But the first ship he reached had its hull covered with metal. The time bombs just wouldn't screw on. Two nights later, while a small sloop, the Nancy, was moving the barrel sub into position for another attempt, the British ships opened fire. Down went the Nancy, and with her the first-time submarine.

Two years later, Bushnell designed some small mines out of small barrels, and the devilish Yankees floated them down the Delaware river toward British ships anchored at Philadelphia. But by the time the mines got down the river, the ships had pulled safely into dock.

However, the barrel can boast of enough successful peaceful missions to make up for its failure in war.

It started out, in fact, not as a container but as a musical instrument. The Egyptians, some time between 1380 and 525 BC, hooped a few pieces of wood together into a cylinder and covered the ends with animal skins to make a drum.

Legends say they got the idea when a cruder drum, made of skins drawn over the ends of a short piece of hollow log, was lost in the sun too long. The log split into several slave-like pieces, and the owner, too lazy to go looking for another hollow log, bound the pieces together with cord.

Historians, who have thought about the barrel occasionally on their days off, don't believe this legend. They say ropes and other bindings were used earlier than that as hoops for strengthening the walls of earthen casks.

Strength, on the other hand, has been one of the barrel's big selling points ever since some obscure Egyptian lashed the first one together. If you look at a barrel from one end while it's lying on its side, you can see that each stave acts as a keystone for all the other staves, in an unending arch. Spin it around and look at it sideways and you'll see that the bulge (or "bulge") is again a keystone between the heads at each end. So the staves hold the heads and the heads hold the staves, and nobody has ever come up with anything better in a wooden container.

The Romans, who didn't miss much else, missed out, somehow, on the barrel. About all they did was give it a name when they found it being made by workmen in the Alps regions of France about the time Nero was tunng up his fields. They called barrels "cupae" and a barrel maker a "cuparius".

The Normans took the barrel across the English Channel and bequeathed it to the English, who corrupted the name into "cowper", then into "cooper". By the time King Richard came home from the Crusades, the barrel was waiting for him, filled with wine.

Medieval barons used to try to keep up with the Juneses in the castle next door by building bigger and better wine casks, which were really nothing more than overgrown wine barrels. They didn't go in for chrome on the bumpers, but they did hire skilled workmen to carve fancy figures on the heads and sides.

One cask, built in Hamburg-on-the-Rhine in 1525, held 22,000 gallons of wine. Then, in 1751, some show-off built a 49,000-gallon job in Heidelberg Castle. Twenty feet high and 31 feet long, it was really too big for everyday use, but it was handy for attracting tourists and humilitating Texans.

By this time the barrel was also keeping the pioneers wired and dined during their voyages to the New World. It also helped put the Americas on their financial feet. Products like sugar, rum, molasses and tobacco would never have been traded so briskly if the barrel hadn't been sitting around waiting to act as a handy, leakproof container.

It staved off some discomforts for settlers, too, by serving as a receptacle for their homemade soap, butter, candles, cider and syrup.

During the War of 1812 it provided the troops with meat and, so the story goes, helped name "Uncle Sam." A large contract from New Jersey named Elbert Anderson, Jr., got a government order to supply American troops with 2,000 barrels of pork and 300 of beef. He bought the supplies from a meat packer named Sam Wilson, who also weighed a jug as Anderson's shipping inspector. All the barrels were marked "U.S.—E.A." for "United States—Elbert Anderson.

One day at Troy, N.Y., while Sam Wilson was supervising the loading, some ignorant bystander wanted to know what the "U.S." stood for.

A gib Irish workman, tongue in cheek, replied, "Why, Uncle Sam, of course! Those are Uncle Sam Wilson's barrels."
The nickname caught on among the troops, who began identifying all their U.S.-marked equipment as "Uncle Sam's" property. Eventually, newspaper cartoonists, who have a knack of picking up ideas, borrowed this one and created the lean old guy in the long silk hat.

From the time Bushnell was trying to out-fish the British fleet with the aid of a barrel, there had been plenty of journey men cooperers just like him who traveled from town to town, practising their cooperation for cash on the barrelhead.

But even the most highly skilled artisan could not turn out more than two barrels a day. When oil men and other industrialists got down to business around the middle of the 19th century, the foot-loose journeymen couldn't meet the demand for barrels. The barrelers then settled down and opened up cooperages, employing crews of men to make barrels on a crude mass production basis. The forerunner of the assembly line system developed as machines were invented, one by one, to do some of the jobs done by hand.

The oil men were glad to toss out the old whiskey barrels they had been using for want of anything better, and eventually they standardized the size. Coopering barrels especially for oil products was an established trade by the time the first barrel rolled out of the new cooperage at Sarnia in 1899, and though the steam-driven machines were occasionally replaced and improved after that, Imperial made barrels with the same basic methods for more than 30 years.

Oak staves, imported from the United States in box cars, were unloaded by hand and diced into the cooperage, where one man placed them end on end in a "setting up machine." This machine held the staves in position while the operator slammed a hoop over one end of them. Then the partly-completed barrel was put into a steam chamber to make the staves pliable. After that a windlass pulled the staves together, and the other end was hooped. A gas flame was used to eliminate the moisture resulting from the steaming, and there were special machines for tightening the hoops, cutting channels for fitting the heads into place, and for boring bung holes in the sides. Glue was used to seal the inside surface. Heads were made by hand.

What the Imperial cooperage lacked in mechanical efficiency its crews made up in their hard work.

"Some of the guys seem to think they work hard today," says W. C. "Hop" Hipple, the foreman of Imperial's ultra-modern packaging plant, who started in the cooperage in 1912 as a water boy of 14. "But if they could have walked into the shop I worked in, they'd turn green!"

Water boys in those days got eight cents an hour—$4.80 for a 60-hour week. Full-grown laborers got $1.25 a day. But you could buy a loaf of bread for a nickel and a stick of family's larder for a week with a five-dollar bill and still have some change left over; and the men who made up to $1.75 a day at piece work in the cooperage considered themselves well off.

But the wooden barrel's role in the oil industry was doomed. In October, 1931, in line with an industry-wide trend, the Imperial cooperage shut down, and most of the crew started learning to make steel drums in a relatively new plant nearby.

Today, the only non-metal barrels used in the Sarnia refinery—or almost anywhere else in the oil industry—are the theoretical 35-gallon "barrels" that are units of measure and nothing more. The barrel, as a unit of measure, is standard throughout the United States and Canada, although it's easy to get confused on this point because this standard barrel holds 35 Imperial gallons or 42 of the smaller U.S. gallons.

The steel drum now commonly used for oil is just a container—not a unit of measure holds 45 Imperial gallons, or one and two-sevenths barrels.

Other industries, such as brewing, have also taken up the metal drum. But in spite of these inroads, the wooden barrel is still doing a multitude of useful jobs, and there's a lot of understandable sentiment attached to it, too.

Whenever a young English apprentice has qualified as a journeymen cooper, he goes through a custom that was traditional in the days of the Bushnell submarine. He makes a barrel, all by himself, and is placed inside with his head poking out the open end. Then his initiates gleefully douse him with water, pour shovings over his head and roll him gaily down the street. Not many young Englishmen want to become cooper's apprentices these days.

Declining though it may be, coopering is still carried on by highly skilled artisans who are convinced that the barrel—bless its buxom little bilge—will be with us for a long time yet.

**Imperial Oil has more than doubled its university undergraduate scholarship appropriations since the plan was inaugurated in 1946.**

Originally, the scholarships were for $500 per year to each student. This fall, when naming 11 high school graduates as 1955 winners, the company increased the scholarships from $625 to $700 a year, and, in addition, began paying annual grants of $100 for each scholarship holder and the universities they are attending. This brought the total annual appropriation per student to $1,200.

The new grants, to be used by the universities in any way they choose, are intended to help offset the rising costs of education. In this way, the company's contributions are being spread around the country, since present holders are attending 16 different universities. The scholars are chosen by a committee of educators from among children and wards of Imperial employees and annuitants. The 1955 winners, like their predecessors, are entitled to a renewal of their awards up to a maximum of four years, providing their standings are satisfactory.

Girls had an academic field day when this year's awards were announced. They captured eight of the 11 scholarships. The proudest single group within the company were the marketers, whose offspring won six awards. The manufacturers had three winners, and one each went to children of employees from the producing department and the marine division.

The marketers' winning students come from homes as far apart as Haligon and Vancouver. The Haligon winner is 16-year-old Carol Earle, daughter of Walter Earle. A native of Haligon, she graduated from Dartmouth High School where she was active in sports and drama. She is now in first year arts at Dalhousie University.

The Vancouver student selected, 17-year-old Elizabeth Henderson, is the daughter of Stanley Henderson of North Vancouver. Her sister Donnetta won in 1951. At North Vancouver High School she had a wide variety of extra-curricular interests, including coaching others in foreign languages. She is taking arts at the University of British Columbia.

McMaster University is the Alma Mater of June Mus, 18, daughter of Ernest A. Munn of Hamilton marketing. Music and foreign languages were among her diversified interests at Delta Secondary School, Hamilton. At McMaster she has begun a general arts course.

Barbara Pinkham, 18, daughter of R. E. Pinkham, Leaside, intends to specialize in foreign languages at the University of Toronto where she is now enrolled. At Leaside High School she was a top-ranking student in Latin, French and German, and was active in many organizations, including the student council.

A degree in commerce is the aim of 20-year-old André Poisson, son of Donat Poisson of Quebec marketing, Plessisville. Now enrolled at Laval University, he graduated from the College St. Edouard, Plessisville, where he was vice-president of the student council.

A winner known in both Ontario and Quebec, is Peter Saegert, 17, stepson of John F. Farlie, assistant manager of Quebec marketing, Montreal. Although his home is in Westmount, P.Q., he last attended Trinity College School, Pott Hope, Ont. and is a keen football player. He has begun studying engineering at Queen's University.

Among the winners whose parents are in manufacturing, Ann Dyer, 17, is the daughter of G. M. Dyer, assistant superintendent of Cherry Valley refinery, and sister of George Blair Dyer, who won an Imperial scholarship last year. A graduate of Kelvin High School, Winnipeg, she is now studying arts at United College, University of Manitoba.

Modern languages and literature are the chief academic interests of Beverly Finch, 18, daughter of Glen H. Finch, a pumphouse operator at Sarnia. Active in athletics and on the student council at Sarnia Collegiate Institute and Technical School, she is now working towards a bachelor of arts degree at the University of Toronto.

Youngest of all winners is 16-year-old Ann Soutter, daughter of Warren D. Soutter of Edmonton refinery. An outstanding student in music and languages at University High School, she is now an arts student at the University of Alberta.

The only winner this year whose parent is connected with Imperial's producing operations is Ruth North, 17, daughter of Charles V. North, an accountant at Calgary. A top-place graduate of Crescent Heights High School, Calgary, she is now seeking a degree in geology at the University of Alberta.

Marine operations are represented by Neil Gebbie, 17, whose father, the late John Gebbie, was a pioneer in Toronto as head of operations for the Imperial fleet. A graduate of University of Toronto Schools and a winner of several previous scholarships, Neil Jr. has begun working towards a civil engineering degree at the University of Toronto.

This fall 11 more young Canadians began university studies with Imperial Oil scholarships