USE OF INFLAMMABLE GAS IN CANADA

Inflammable gas was first experimentally produced from coal in 1739, but it was not until 1797 that its practical value as an illuminant was demonstrated; in 1812 it was first used to light Westminster Bridge in London. Its practical utility in solving one of the problems of the world's greatest centre of population led to its rapid adoption and, by 1815, the company operating in London had three plants and 15 miles of mains. Paris was similarly lighted in 1820, and in 1821 gas was first used for street lighting on this continent in the city of Baltimore. In 1822 it was used in Boston, and in 1823 in New York.

There is little need to dwell on the displacement of gas as the most popular illuminant by the flexible and convenient electricity. But for heat and for the purpose of domestic cooking, except in limited areas where "white coal" is particularly cheap, gas continues to be the most popular fuel wherever it is available. And in those areas of Canada where natural gas is obtainable, its low cost as compared with either coal or with artificial gas, and its great convenience, has led to its general use not only for domestic cooking, but for house and block heating and for industrial purposes.

CANADA SECOND HEAVIEST CONSUMER.

To-day Canada ranks second in the list of countries enjoying the luxuries of gas, being exceeded only by the United States, and this despite the fact that Canadians are probably the heaviest per capita consumers of electrical energy among all the nations of the world.

In Canada, the Provinces of New Brunswick, Ontario and Alberta have supplies of natural gas in commercial quantities, and in six provinces, Nova Scotia, New Brunswick, Quebec, Ontario, Manitoba and British Columbia, manufactured gas is sold.

Alberta, in 1925, had 86 producing gas wells, and in that year for the first time superseded Ontario as the leading producer of natural gas. The Alberta production amounted to 9,119,500 thousand cubic feet; Ontario's production was 7,143,962 thousand cubic feet; New Brunswick's output was recorded at 639,235 thousand cubic feet. Total production of natural gas in Canada during 1925 was 16,902,897 thousand cubic feet, valued at $6,833,005. The production of artificial gas totalled 26,651,684 thousand cubic feet, but of this amount only 13,507,487 thousand cubic feet were made at the various gas plants for sale to the public. The total selling value of gas-house products was $16,859,130, including nearly five millions in by-products.

HIGH HEAT CONTENT IN NATURAL GAS.

It is significent to note that the production of this cheap natural fuel exceeded by over one-quarter the sales of manufactured gas; and, as pointed out by the Natural Resources Intelligence Service, were the greater number of heat units in natural gas to be taken into account, the disparity in figures would be even more striking. Natural gas contains, roughly, 1,000 heat units (British Thermal Units) per cubic foot, as compared with from 400 to 600 for artificial gas. Manufactured gas, on the other hand, was made available to a greater number of people, as the population of cities supplied totalled slightly over two million.

Comparison of statistics for 1925 brings to light the interesting fact that the capital invested in the natural gas industry in Canada is greater than the entire capital invested in the "manufactured" illuminating and fuel gas industry, in which class is included not only manufactured coal and water gas, but acetylene gas and Pintsch oil gas. The 161 operating firms in the natural gas industry had an invested capital of $48,894,802 and 1,059 employes. The 44 artificial gas plants represented a capital investment of $46,129,651 and gave employment to 3,804 persons.

VALUE OF GAS IN TERMS OF COAL.

In Ontario, where coal has to be brought long distances and mostly imported from the United States, it is of interest to note that the Ontario Department of Mines, in its annual report on the natural gas industry for 1923, has worked out the value to the province of this resource in terms of coal. It finds that, neglecting the cost to municipalities of hauling away ashes, it would have cost $14,432,432 to replace natural gas which sold for $4,066,224. It would have been necessary to import 400,361 tons of coal worth $3,003,410 wholesale, for use direct and in manufacturing gas. It continues the comparison further, taking into account the production of petroleum in the gas fields of Ontario, the loss to municipalities in taxes, etc., and finds that substitute fuels would have cost 3½ times as much as natural gas in 1923.

A Plant That Kills Flies.

The British Medical Journal contains a description of the accidental discovery of a natural fly-killer, which is worthy the attention of shopkeepers whose wares are so much exposed in hot weather to one of the plagues of Egypt, and, indeed, of house dwellers generally.

A castor oil plant was placed accidentally in a room swarming wih flies, which, of course, came in in hundreds through the open window, but as soon as it was deposited in its place the flies disappeared as if by enchantment.

On examination they were found under the castor oil plant or clinging to the under surface of its leaves, perfectly dead. The leaves, we understand, give out an essential oil or toxic principle which possesses the strongest insecticide qualities.

A Chinese View.

Singapore Free Press: If our Western civilization and ideals are true they must stand the test of general, if not detailed, application to all peoples, for whilst there are many particulars in which Western theories do not appear best suited to Eastern temperaments, we must hold that the principles are sound for the world at large or else we can claim no right but that of pure force for the spread of our influence over the world. If, therefor, China's rising generation is taught those principles, how can we expect that it will not apply them when it returns to its own country.

An Indian View.

Calcutta Forward (Nationalist): Indian troops and resources are being exploited in order that Britain can retain ill-gotten gains and in order to prevent China from fighting white Imperialism on behalf of the Asiatic countries.

Any Old Room Would Do.

He—"Do you think people should make use of mushrooms?"

She—"Oh, I don't think special rooms are needed for that."

A Cure for Glanders.

The Greeks and Turks used the seed of the horse chestnuts for curing glanders and other ailments of horses; hence the name.

Uncle Sam's Asphalt.

Kentucky is the chief source of native asphalt in the United States.

A Secret of the Road.

A broad highroad runs down into the valley and on again, straight and clean and useful, rushing a wave of traffic from country and suburbs to town, by bus and car and wagon. The whir of wheels and panting of motors seldom ceases from earliest dawn almost to daylight again, a cycle of important urgent sounds. A fine, well-flagged sidewalk borders the big road before very modern houses, each with its garage, a reminding proof of the same keenly felt necessity for spinning along somewhere at the highest speed permissible. So little walking is undertaken on this way, that the broad pavements are practically empty and a beautiful secret of the road is usually missed. The houses cease for a space just as it dips into the valley and, for quite a distance, soft green uplands sweep up on the one side, while on the other a charming little, narrow valley between two hills carries one away, with no preliminary signs or inducements, straight from the unleisured, vociferous prose of the road to the sweet poetry of quiet, unplanned remoteness, by means of a tiny path, that runs off with shy abruptness from the very flagstones and disappears in a hurry round a bend of the hill. This path is possibly not more than three handbreadths wide and hides itself so soon, that from the conventional sidewalk it has an alluring runaway charm, quite irresistible.

One side of it the hill curves up steeply to meet the sky, fringed all the way with soft, purple-brown winter hedgerows and dotted by rounded bosses of blackberry bramble. The grass just now is of that peculiarly dazzling fresh green which it wears directly it is freed from snow and carries the strong forehint of spring with its odors and moistness, while here and there a rich, red loam glows opulently through the short, sparse pile.

A few tall, ragged elms mark the windings of the tiny path through the valley. On the hedges, morning and evening, the "wise thrush" fills the air with his "fine, careless rapture," leading soloist to a chorus of minor songsters and rising triumphantly and easily above every opposing sound.

But beyond the first bend of the path, so far, it remains by choice an unexplored sweet mystery, to be enjoyed from the correct sidewalk and as holding in itself a reserve of easily attainable freedom and quietness that gives, to put it very prosily, the same sense of richness, that a large uncashed cheque might do, that can be realized at any time.

Much of pleasure comes from the feeling that "a man's reach is beyond his grasp"—so that short stretch of path worn only by the straying, unconventional tread, holds a satisfaction. "The best is yet to be."

A spider's poison supply is secreted in glands in its head.

Mrs. Jean Muldrew

Director, Home Branch, Soldier Settlement Board, friend, adviser and helper to newly arrived British families settling in Canada.

As Quebec Sees It.

La Presse (Ind.): To produce the good effects for which we hope and which men in authority like Lord Willingdon, the Governor-General, Sir Arthur Currie, Mr. Beatty and others, declare to be necessary, bilingualism should extend all over Canada and to all its activities, without which there can be no lasting results. Our English-speaking fellow-citizens are themselves aware of this, for they are every day taking greater pains to learn and speak French.

Cleaning Leather Furniture.

Leather furniture should be cleaned with milk applied with a soft cloth. Rub lightly so that the surface of the leather will not be cracked in the process.

When the leather is old and shabby use this method: Boil a pint of linseed oil and let it stand until nearly cold. Stir into this half a pint of vinegar. When mixed, place in a bottle until required. Shake the contents before using. Then with a soft cloth thoroughly rub a small quantity into the leather. As the cloth gets dirty turn to a clean place. Then rub with a soft cloth until the polish is restored. A light application of vaseline, rubbed in thoroughly and firmly, is also good.

Far From Famous.

"She's not a famous actress, you say?"

"Well, I've never heard of any manufacturer asking her to indorse his powder or soap."

Reciprocated.

Clerk—"Thank you, madam; call again."

Dear Old Lady—"Yes, and you must come and see us."

Ready to Eat.

Sweet Young Thing—"Why are you running that steam-roller thing over that field?"

Farmer—"I'm going to grow mashed potatoes this year."

Charles L. Burton

Recently elected president of the Ontario Motor League.

Red Cross Outposts Do Signal Service to Settlers.

That in the past year in the thirty-seven Red Cross Outpost Hospitals, scattered through Northern Ontario, New Brunswick, Manitoba, Saskatchewan and Alberta, and operating in 1926, 6,820 people were cared for by the Red Cross nurses; that there were 1,010 operations, of which 234 were major operations; that 515 children were born in the outposts; that 178 childen were visited by the outpost nurses, where 4,341 children were examined; and that 3,300 homes were visited to give nursing care or to offer advice—are facts put forward in a statement recently issued from Red Cross Headquarters in Toronto. One of the most interesting features of this report is that it is shown that 743 mothers, who must otherwise have gone without expert care when their babies were born, were cared for in the outposts or by the nurses in homes, and that the death rate among both mothers and their infants was at a minimum. Since these figures were sent in, two more outposts have come into existence in outlying sections of Northern Ontario and the Red Cross is making every effort to expand this useful service in pioneering districts to meet the ever-increasing needs of remote settlers in all parts of the Dominion.

An additional report from the Canadian Red Cross shows that since the year 1924, 808 classes in Home Nursing have been organized in all provinces, at which 10,000 women and girls have taken instruction and that 2,300 are now taking Home Nursing in the 305 new classes organized in the year 1926.

Let's Burn Our Own.

Winnipeg Tribune (Ind. Con.): It is reasonable to believe that with the low temperature carbonization process, oil could be produced from Canadian coal at the pitheads in Alberta, or in Nova Scotia, for sale in the home market or for export, leaving a residue which would be a low-priced smokeless fuel suitable for both domestic and industrial purposes. How much longer must Canada suffer at the hands of the United States coal barons before the Government can be induced to take definite action? How much longer can the Canadian coal industry afford to be behind modern progress?

Reasonable Reduction.

Teacher—"Is it cooler or warmer in the mountains, and why?"

Bright Pupil — "Warmer, please, ma'am, on account of the ranges."

Unanimous.

Teacher—"Who is the King of Italy?"

Johnnie—"I don't know, either, teacher."

Adventure.

There is no promise to the sailor made
That he shall reach the port across the sea;
That never storm shall make his heart afraid.
He ventures out to face whate'er may be.

The warrior takes the field in times of stress
And does not question shall he live or die,
Nor shall he quit with failure or success,
It is enough the chance is his to try.

And so with life! We are not promised here
A joyous journey, free from grief or pain.
If for a time our skies are bright and clear
Soon we must bear the agony of rain.

To this adventure faith must hold us fast:
As goes the sailor bravely out to sea
Not knowing when shall come the tempest's blast,
So we set forth to face whate'er may be..

—Edgar A. Guest.

Baby Language.

Little children often construct what amounts to a new language in their first efforts to articulate. About one such tongue a writer discusses pleasantly:

They call her the little Eskimo—of course she isn't one—because her talk sounds like Eskimo. Anyhow, she has given us a delightful lesson in her own language. She looked up at the moon and exclaimed:

"Moo! Moo! Moo! Da-da, da-da moo! Yo-lo. No-no moo! Da-da, da-da! Baby no! Daw-dawn, daw-dawn."

Literally, "Moon! Moon! Moon! Big, big moon! Yellow. Another moon. Big, big! Little moon no. All gone, all gone." Which, being still further interpreted, is, "Oh, see the big yellow moon. It's another moon. The little moon isn't there any more. It's all gone."

And the explanation: She first saw the moon on Sunday, November 7, her second birthday, as a crescent low in the west. Monday, November 15, she discovered it in its enlarged edition, in the south. Hence, "Another moon, a big moon," pointing to it, while the "little moon" which she had seen in another part of the sky was now "all gone."

Making It Plain.

"I asked her what her address was and she didn't seem to understand."

"She's a washwoman, man, ask her where she hangs out."

Truth—

—Can be silenced and suppressed, but never killed.
—Can be delayed, but never permanently side-tracked.
—May be uncomfortable, but it is never as dangerous as a lie.
—May be stubborn, but it does not have to change its story.
—Is never afraid of time.
—Is always our best defence.
—Will never hesitate at an investigation.

ADAMSON'S ADVENTURES—By O. Jacobsson.

POSSIBILITIES OF MAPLE INDUSTRY

Indicated by Improvements in Production Methods and Extension of Area.

MAPLE SAP PRODUCTS HISTORIC BACKGROUND.

Many and varied are the benefits which forests confer on mankind, and nowhere is this more evident than in Canada. In addition to their beneficial effect on stream-flow, climate, and soil conservation, immense industries have grown up around the exploitation and utilization of their products.

Of the many forest industries of Canada, large and small, none has so deep a historical background as the making of maple sap products. Maple syrup was made by the Indians before the advent of the white man and it was from the aborigines that our earliest settlers gained their knowledge of this art. Methods of garnering the annual harvest of sap have changed greatly since those early times. The rough-hewn spouts and troughs of wood have been replaced by implements of metal, while the open kettle has given way to the modern evaporating pan with its corrugated bottom and separate compartments. In the delivery of sap to the sugar-house in the modern plants advantage is taken of the law of gravitation where conditions permit. If the maple grove is located on the side of a hill or slight elevation, as is very often the case, a temporary system of metal pipes is erected and the sap is carried by these down to the collecting tanks at the sugar-house. In this way the labor of collecting the sap is considerably reduced. At the close of the sugaring season the pipes are carefully stored in the sugar-house.

QUEBEC LEADS.

In the St. Lawrence Valley area of Ontario and Quebec and in the Maritime Provinces where the practice of sugar making is in vogue, it holds a place of prominence seldom realized in other parts of the Dominion. For many years the annual production of syrup and sugar in Canada has not varied greatly except as altered by the climatic conditions of each season which affect the "run" of sap. Measured in sugar the amount produced ranges from 15,000,000 to 25,000,000 pounds per year, with an average of about 18,000,000 pounds. The major part of the production comes from the Provinces of Quebec where the census figures give the number of trees tapped in an average year as 4,760,000 as against 1,600,000 in Ontario, and approximately 150,000 in the Maritime Provinces. Census figures show that some 55,000 owners of woodlots in Eastern Canada are engaged in this industry, and last year's crop, according to the Dominion Bureau of Statistics, was 7,137,303 pounds of sugar and 1,746,570 gallons of syrup, with a total value of $4,896,375. Considering the total yield as sugar and using the converting factor of ten pounds of sugar to one gallon of syrup, the output of Canada's maple groves reached 24,608,003 pounds of maple sugar in 1926.

It has been pointed out by authorities on the subject that Canada is as yet making only from one-quarter to one-half of the maple sugar that might be produced in this country. In addition to the maple groves and woodlots in the more settled farming districts, there are available for future use in provincial forests in Eastern Canada vast numbers of untapped maple trees awaiting the sugar-maker; and already, under a system of permits, enterprising sugar-makers are beginning operations in the Crown forests of Quebec.

SIXTY MILLION TREES.

The Dominion Forest Service estimates that the total stand of sugar maple in Eastern Canada is approximately 5,860,448,000 board feet, or in round numbers, according to the usual conversion factor, about 60,000,000 trees. Canadian records show that each tree tapped yields on the average two and a half pounds of sugar annually. Calculating that at least one-third of the maple tree stand is easily available for tapping purposes, it is seen that a possible total yield of 50,000,000 pounds per year is a reasonable assumption. The other two-thirds of our maple trees may thus be regarded as a reserve for further expansion in future years.

The making of maple sugar is one of the minor forest operations, yet the fact that it fits in well with other farm work, by occupying a slack season and by bringing in the first crop-money of the year, commends it to farmers in suitable districts, while the steadily increasing demand for pure maple sugar, the improvements and the reduction of costs in production methods, and the movement under way to extend the area of operations all point to the possibilities of the industry.

My Measuring Hoe.

The "measuring stick" has a way of always being at the wrong end of the row. We paint the measure marks on the hoe handle. Three feet is as long as ordinarily needed and the inches may be marked on the first two feet.—Mrs. H. R. S.