## A Fact a Day about Canada

#### from the

# Powrth Series

## No. 1 -- Our New Coinage

This year the Royal Canadian Mint issued a new series of coins which were designed with the co-operation of the Royal Mint in England and the Mint in Paris. These issues are typically Canadian and remind us that it is only since 1931 that the Mint at Ottawa was operated as the Royal Canadian Mint.

At first the British North American provinces, and later the Dominion of Canada, obtained their coins from the Royal Mint in London or from The Mint, Birmingham, Limited. In its earlier years the operations of the Mint in Canada were confined to the production of gold, silver, and bronze coins for domestic circulation, of British sovereigns, and small coins struck under contract for Newfoundland and Jamaica.

Gold coins have not been struck since 1919. Most of the gold refined at the Mint is delivered to the Bank of Canada in the form of bars weighing 400 fine ounces each, the rest being sold in convenient form to manufacturers. The fine silver extracted from the rough gold, when not required for coinage, is sold in New York or disposed of to local manufacturing firms.

All the new coins have on one side the effigy of the King with the inscription "Georgius VI D.G. Rex et Ind. Imp".

For the reverse sides the designs are as follows: One dollar, a canoe manned by an Indian and a voyageur, an islet in the background; above, the word "Canada" with the Northern Lights; below, the word "dollar" and the date of the year, with a graining upon the edge. Fifty cents, between supporters the ensigns armorial of Canada in a shield surmounted by the Royal Crown, "50 cents" above and "Canada" below. Twenty-five cents, a caribou head, "25 cents" between the antlers, and surrounded by the word "Canada". Ten cents, a fishing schooner under sail, "Canada" above and "10 cents" below. These latter three bear the year and a graining upon the edge.

The five cent piece has a beaver, above "5 cents" between two maple leaves and below "Canada". One cent, a two-leaved twig of maple, "1 cent" above, and "Canada" below. Both bear the year and a plain edge.

The silver coins issued at the Ottawa Mint last year were valued at \$809,200, nickel coins \$202,600 and bronze \$87,200. Gold coin and bullion, or bars, amounted to \$3,625,549.

## No. 2 -- Bilingual Money for Canada

Not only have the coins in our financial transactions undergone a change but the paper money or bills have also taken on a new appearance. The Bank of Canada has recently issued bilingual notes replacing those in French for French-Quebec and in English for the other Provinces. They range from one dollar to a thousand dollars. Two of them, which few of us ever see, \$1,000 and the \$100 bills, bear the portraits of Sir Wilfrid Laurier and Sir John Macdonald, respectively. The rest bear the portrait of King George VI.

On each of the eight new notes there appears a scene depicting some industry. Here are the symbols:

- \$1 -- A female figure holding on her knees a rake, hoe and fork, personifying agriculture.
- \$2 A female figure, sickle in hand, seated in front of an overflowing cornucopia, emblematic of harvest.
- \$5 A male figure seated on a dynamo, with background of mountains, water fall and a power dam, representing hydro-electricity.
- \$10 A male figure, Mercury, with background representing travel by water, rail and air.
- \$20 A female figure sickle in hand, amidst products of field and orchard, expressing fertility.
- \$50 A female figure depicting modern invention as expressed in radio.
- \$100 A male figure showing a child with a miniature ship, with harbour scene and blast furnaces in the background, typifying commerce and industry.
- \$1,000 The figure of a mother sword in hand, shielding her child, symbol of security.

In the denominations under \$5, which have been used for many years for general circulation, there has been little change in the number recently. Denominations from \$5 to \$1,000 have shown an increase. On the other hand Dominion notes, in denominations from \$1,000 to \$50,000 which were used almost exclusively for inter-bank transactions or bank reserves, are no longer in use.

The denominations of Dominion or Bank of Canada Notes in circulation during 1936 totalled \$105,275,223.

## No. 3 -- Fish Stories

This month the delegates of the North American Council gathered together to discuss important research problems in North Atlantic waters. Although the Council is made up of members appointed by Canada, Newfoundland, the United States and France, these meetings discuss results which affect fishing practices throughout the world.

Canada, as we know, has an immense amount of wealth in the fishing industry and also in its attraction as a sport. For this reason it is important that problems relating to the depletion of various species be studied. This years meeting dealt particularly with haddock, cod and mackerel.

Last year one hundred million fish were added to the rivers, streams and lakes by the Dominion's Department of Fisheries. The majority were made up of the eggs of the sockeye salmon of which there were nearly 65 million. Next came Atlantic salmon, followed by trout fry and fingerlings.

So much for the restocking of the Canadian inland waters but along the Eastern coast the oyster fishermen are suffering through civil strife in the fish realm.

They have named the starfish Public Enemy No. 1 and a bounty is being paid for every gallon of starfish procured. This queer fish has a failing for oysters and has opening the shells down to a science. It merely clasps the oyster in its arms—there are usually five of them—and applies pressure to the valves of the shell by means of sucker discs. As the pressure goes on the starfish dulls the oyster's power of resistance by injecting a narcotic substance between the edges of the shell. So further study of this extraordinary fish may bring joy to the hearts of the people of Prince Edward Island and more profit from their oyster beds.

Canada's harvest from the fishing industry runs between 34 and 35 million dollars annually, according to the Fisheries Branch of the Dominion Bureau of Statistics.

## No. 4 --- Hops

The word "hops" may bring to mind one or two things, either the concocting of a beverage or the stirring story found in some of the school books wherein a young British soldier, rather than turn traitor to his country, suffered death. Before he died his thoughts turned to his home in faraway England and the picture of Kentish hop-fields again appeared before him.

This plant which the young soldier associated with everything that meant home, grows in Canada. The Fraser Valley of British Columbia is one of the few parts of the Dominion where it is grown commercially and this fall some three thousand pickers spent five or six weeks in this district picking hops from the plantation areas. Many people grow this plant simply for its attractive appearance.

The hop-vine is a perennial climbing herb. The hops are the soft greenish cones which are one or two inches in length, composed of thin leaf-like scales having a bitter taste and a heavy narcotic odour. The duration of the plant varies from fifteen or twenty years to an indefinite length of time. Some of the finest hop gardens have been in existence for over one hundred years. In such cases a percentage of the stocks die and are replaced every season. No crop is more affected by the weather, nor more subject to destruction from blight or attacks of aphis and other insects.

Although a few cones may find their way into a hop-pillow which is supposed to induce sleep, the hops grown commercially find their way into the brewing industry. About one million pounds of Canadian grown hops are used annually and the same quantity imported. The United States supplies more than half of them, Yugoslavia and Czechoslovakia each sent over 200,000 pounds last year, Germany sent over 100,000 pounds and Poland 71,000. Some of the Kentish hops may have arrived in the quantity sent from the United Kingdom. Strangely enough about 200,000 pounds of hops were exported to the United Kingdom and a small quantity to Hawaii, according to the External Trade Branch of the Dominion Bureau of Statistics.

## No. 5 - Pioneer Shipping on the Upper Lakes

Until 1845 Lake Superior was little known except by some missionaries, fur traders and adventurers. As far as trading went, the other four Great Lakes were much farther ahead. The rapids in the Soo River were responsible in a great measure for hindering navigation.

The first seven steamers on Lake Superior were hauled out of the water below the rapids and transported across the portage on ways and rollers in a manner similar to the way buildings are moved today. The boats were launched again above the rapids.

The first steamer was the Independence built at Chicago and the second the Julia Palmer, built in Buffalo.

In 1857, as the result of Canadian foresight, the Government fitted out an expedition to survey a wagon road and to report on the natural resources of the country between Lake Superior and the Red River. The side-wheel steamer Collingwood was chartered and on July 26, set out for Fort William. On August 1, the Collingwood arrived at the harbour bar, the first registered Canadian steamer to pass through the canal and plough the waters of Superior. Aboard were 44 people, including a few Indians. At Fort William some more Indians were engaged but, owing to tribal troubles, they were kept in different canoes.

Shipping on the Upper Lakes became brisk when settlers from Buffalo went to the western United States and grain was brought back. As trade developed in the country beyond Lake Superior other vessels were built to transfer passengers, freight and mail from east to west. The first mail consisted of three letters and two newspapers. In that period Canadian shipping made its profit by carrying United States goods but this was the cornerstone of our present day trade to and from Western Canada.

At the present time the greater part of the Western grain is shipped via the Great Lakes to eastern ports. The iron ore and coal traffic between lake Superior and lake Erie is chiefly United States traffic and sometimes exceeds 80 million tons in a year. Figures from the Transportation Branch of the Dominion Bureau of Statistics tell us that the total traffic on these Upper Lakes alone is greater than that carried by all Canadian railways.

## No. 6 - Canadian Canals

Canals have played a most important part in the development of Canada, particularly in the East. They opened up the country in the early days just as steam railways later on, made Western Canada accessible and created a great settlement.

The earliest mention of canals in Canada is in connection with the Lachine. It was projected in 1700 by early French settlers and its construction was first attempted by the Sulpician priests. Farther up the River, the Royal Engineers completed the locks between Cascades and Coteau Landing in 1783 in time to help transport the United Empire Loyalists to their new homes.

In 1812 the lock at the Canadian Soo, built by the North West Company, which connected Lake Huron with Lake Superior, had been destroyed by the Americans and the Imperial Government decided to build the Rideau to afford a second route between Montreal and Kingston. This was in case another war with the United States made the St. Lawrence route impracticable.

By 1832 the Rideau waterway was finished by the engineers of the regular army. One of their works was a remarkable series of eight locks at Ottawa. The corner stone was laid by Sir John Franklin, the great Arctic explorer. Until the St. Lawrence canals were built, most of the trade and travel between Upper Canada and Montreal passed over the circuitous route of the Rideau and Ottawa.

The first sod of the Cornwall Canal was cut by John Beverley Robinson in 1834. It took eight years to complete it.

Not until 1911 was the plan for the Georgian Bay Canal definitely abandoned. This route was to connect the Great Lakes with the Atlantic via Georgian Bay and the Ottawa River. But the project died, leaving only a partially completed lock a few miles above the City of Ottawa.

You will remember that Champlain had made the Trent famous with his journey from Lake Couchiching to Lake Ontario. In 1820 the Imperial Government proposed the Trent Canal. However, some residents from the Niagara Peninsula influenced the Canadian Government to divert the work from the Trent Valley to commence operations upon the Welland instead.

From small beginnings there has grown up a very complete system of canals which have opened up to Atlantic communication, the greatest expanse of inland lake and river in the world. From the Straits of Belle Isle to Port Arthur the distance is 2,200 miles, but it has required only a little more than 500 miles of canal to make this waterway communicable. The total traffic through Canadian canals in 1936 amounted to over 21 million tons, according to the Transportation Branch of the Dominion Bureau of Statistics.

## No. 7 -- Iron

A little more than two hundred years ago today, the 7th of October, the first iron was smelted in Canada. The need for this common metal has resulted in an iron and steel industry which employs over 71,000 people.

Iron is rarely found in a pure form, in fact, pure iron is a chemical curiosity. The ore is combined with other minerals. Nearly all meteorites contain iron alloyed with nickel. Most of the ore used in industry contains one to seven per cent carbon and by treating it in different ways, products of very different physical properties can be obtained.

For instance, cast iron is exceedingly brittle and hard. Wrought iron and most types of steel are quite flexible and elastic. Steel by the way, is an iron product. Alloys are added to steel to produce special types such as tungsten steel, chrome steel, nickel steel and so on. Cast iron is used chiefly in castings; wrought iron in wire, electro-magnets and malleable iron, and steel has numerous uses, a few of which are structural steel, wire, nails, tools, springs and permanent magnets.

Iron ores have been mined in Canada in Nova Scotia, New Brunswick and Ontario but at present the iron industry of Canada depends upon imported ores. Millions of tons of ore are shipped from the Michipicoten district but there has been no great incentive to the development of the iron-mining industry in Canada. There are easily accessible and abundant supplies in the high-grade ores of Wabana, Newfoundland, and of the Mesabi range in Minnesota.

Sydney, Nova Scotia, depends upon ore imported from Newfoundland while the blast furnaces at Hamilton, Welland and Sault Ste. Marie, obtain their supply from the United States.

The ore is fed into giant furnaces along with coke and limestone and when the molten metal has run off it is known as pig-iron or crude iron. Pig iron is further heated and treated for steel and other classes of iron. Last year nearly  $l_2^1$  million tons of iron ore were imported. Incidentally 7,000 tons of it came from Spain.

The production of pig iron amounted to 679,000 tons, Ontario producing about two-thirds of it, according to the Mining Branch of the Dominion Bureau of Statistics.

#### No. 8 - Pemmican

In early Canadian history we read of permican, a dish used by the Indians and fur trappers. This mysterious food, as made by the Indian squaws, for the Canadian Government at times, to serve as a winter emergency ratio for the hardy men who travel and work in the Far Northwest, is merely a highly concentrated meat sausage, containing dried berries and the most refined of animal fats. When it is made commercially for Arctic explorers and police posts in the Far North, currants take the place of Saskatoon berries.

When asked how to make pemmican, an Indian squaw once said in a few words: "How make pemmican? Pemmican, dry meat, wa-chu-saga (jerked beef). Make like flour with stone. Melt fat. Mix dry meat, fat, saskatoons. Put in skin bag. Keep long time. Good!"

When manufactured commercially, the prime beef is out into strips, dehydrated in a kiln until readily ground into a flour then mixed with beef suet, sugar and currants. Everything contained in this form of sausage is designed to provide body fuel and energy and properly prepared permican will keep indefinitely. The recipe for that prepared for Captain Scott's Antarctic expedition of 1904 called for 50 per cent pure lard.

Its chief use, of course, is an emergency rations in isolated areas. The extent to which the meat in permisan is concentrated can be realized that in making it the full nutritive strength of a 700 pound beef carcass is reduced to a little over 100 pounds by evaporation before being compounded into permisan. A single pound of this concentrated food has a food value equivalent to more than six pounds of fresh beef. It can be eaten raw, cooked with flour or oatmeal into a porridge or sliced and fried.

As little of this food is made now commercially, and only for special occasions, there are no figures available for its production. But while talking of concentrated beef, it might be interesting to note that in the slaughtering and meat packing industry, over 800,000 beeves are slaughtered annually. According to the Agricultural Branch of the Dominion Bureau of Statistics the annual consumption per capita of beef is about 67 pounds.

#### No. 9 - The Quest for Beauty

Now that October days are here and the holiday season is finished for most of the workers, Canada's ledger will be opened and carefully checked to see how much money has been spent in the quest of beauty and health by Canadians and people of other countries.

The National Parks contribute the bulk of the money received from holiday—makers and last year their accounts showed a nice balance of \$125,000,000. Nearly 800,000 people visited the Parks to find out for themselves that the Dominion has an asset in her natural beauty which is unexcelled by any other country in the world. The number of motorcars entering the Parks rose by 20,000.

All told, the Canadian Parks cover an area of nearly 30,000 square miles — very nearly the size of Scotland. The reason these Parks attract so many, is that their natural beauty has been unimpaired. Much money has been spent on the supervision of wild-life, the restocking of rivers with fish, their wardenship and hotels. Every type of scenery and facilities for every kind of out door sport, from ski-ing to rambling, from mountaineering to boating are to be found in the Parks.

Banff seems to be the favourite. It covers 20,500 square miles and was visited by 143,000 people last year. Of course this beauty spot had had a longer start than the others. Buffalo Park was second with 11,000 visitors.

The Parks in Alberta and British Columbia equal the area of Belgium and a third of Switzerland combined. The Waterton Lakes, linked with an adjacent United States Park, form the largest peace memorial in a turbulent world. They mark one hundred years of peace between two great nations.

## No. 10 Streets of Gold

The Yukon Territory at one time was the scene of great activity and from out of its boundaries have come stories of adventure, heartaches and success. At the time of the famous Klondike gold rush, Dawson became a city of about 40,000 population and we are told that prices rose sky high, particularly for food. Restaurants were charging "a buck for a bowl of soup" and \$2,50 for a bacon and egg "special". Now comes a story of the streets of gold.

After the recovery of the main gold content of gravel originally washed down from high levels above the Klondike Valley by a process of hydrauli; operations, hundreds of tons of waste or "tailing" in which a trace of gold still remains were used to grade the roads in and around Dawson. Of course, the actual gold content is exceedingly small but nevertheless, the streets are literally paved with gold.

Now the population of that famous city has become a town of about a thousand people. But still the search for gold goes on. Instead of pick and shovel used by the early miners, huge dredges are in operation and the obtaining of gold has become an art.

A recent experiment has proved of value in the Klondike area. The big dredges in their digging pick up large quantities of what was once considered junk; bird shot, bullets, cartridges, odd pieces of metal, in addition to the occasional watch, ring, knife, and guns of all shapes and sizes. All this is now being treated to recover any valuable metal. As a result of this experiment pure gold worth several hundred dollars was recovered.

From out of the Yukon Territory last year, came a shipment of over 50,000 fine ounces of gold. This was an increase of 14,000 ounces over the 1935 production and was the result of expansion in placer mining operations.

The above is based on figures from the Mining Branch of the Dominion Bureau of Statistics.

## No. 11 - Thanksgiving Day

Today we are mindful of the good things in life which we possess; health, friends, food, clothing and a country of natural wealth and beauty, where at the present time, although we hear the rumbles of strife, we feel fairly secure.

But this atmosphere of peace and prosperity was not always in existence in our land. The early pioneers had to fight their way inch by inch to obtain a living from the virgin bush and battle with the unaccustomed climate which caused them to suffer heavy losses in outbreaks of cholera, smallpox and other diseases. Then, too, there were times when different nations tried to claim the new land and war was the result and even civil strife.

Naturally there were times when the hearts of these early settlers were over-flowing with gratitude; when peace was restored, when their freshly turned sod produced food and everyone was enjoying good health, and we find that thanksgiving days were set apart for each occasion. Sometimes two or three Thanksgiving Days occurred in one year.

The first official Thanksgiving Day in Canada was in 1763 when peace was celebrated between Great Britain and France. Following that there were official thanksgivings for victories at home and abroad, for the cessation of the cholera, for the restoration of the health of the Prince of Wales in 1872 and on the occasion of Queen Victoria's Diamond Jubilee.

Later the American custom of the Pilgrim Fathers of setting a special day aside for thanks for the harvest was adopted by the people of Canada. Usually it occurred in October or November. But at the conclusion of the Great War, November 11 was chosen as Thanksgiving Day in Canada. Then, after those who had fought in the War petitioned the Canadian Government to dissociate Thanksgiving from the signing of the Armistice, Thanksgiving Day was again changed to October and November 11 was kept as a day of remembrance.

That is why Canada now celebrates Thanksgiving in October while our neighbours to the south, where our present custom of rejoicing over the harvest originated, keep the festival in November.

## No. 12 - Radios for Schools

A very short time ago some boys and girls did a thing their fathers and mothers had never done. They couldn't go to school because the schoolhouse was closed to prevent the spread of infantile paralysis, so they had their lessons at home by radio.

But they were not the first people to receive instruction this way. As early as 1929 the Manitoba Department of Education was giving late afternoon broadcasts on high school subjects and Saskatchewan began to do the same two years later. The subjects selected were: English, History, Mathematics, Science, Music and French and were of particular help in small schools where the teacher cannot find time to cover the course thoroughly with the pupils who are preparing for high school.

Although many educational programmes are delivered after school hours, there are fourteen city school systems which receive regular programmes during school hours and 51 who receive them occasionally. Outside the city 92 schools receive radio programmes regularly and 835 occasionally. About two thirds of them are one-room schools and there are relatively more in Alberta than in any other province. Ontario and Alberta together account for more than 80 per cent.

Many of the radios are owned by the teachers. Sometimes commercial firms or public service organizations loan them to the schools. One large firm in the West, for instance, instals radios in the city schools for about three weeks at Christmas

time to enable the pupils to take part in carol singing conducted daily from the store.

In England and Wales there are now over five thousand listening schools and 456,000 pamphlets to accompany the broadcasts were sold to listening schools in the autumn term. In Scotland over 700 schools registered. A survey of the city schools in the United States showed  $11\frac{1}{2}$  million radio receiving sets. The experiment is being tried out in Australia also.

The majority of school inspectors and superintendents indicate to the Bureau, through the Educational Branch, their belief that more use could be made of radios in Canadian schools with advantage to the pupils.

## No. 13 - Use of Films in Canadian Schools

The Report of the Scottish Education Department for 1936 says: "Great Britain has been less ready than some other countries to accept the film as an aid to education, but interest in the subject is steadily growing." The same might be written of Canada. Fewer than 200 motion picture projectors in the schools of Canadian cities are to be compared with more than 10,000 in the city schools of the United States. Allowing for population differences they are about four times as numerous in the United States as here, and in France seven or eight times as numerous. Among the other countries, the German, Italian and Russian governments appear to have found school motion pictures of particular value. The German Government is reported to have placed 7,700 projectors and 32,000 films in schools last year.

Canadian schools obtain more films from industrial concerns, especially the transcontinental railways, than from commercial distributors. Government Departments, Dominion more than provincial, are also frequently the source. Films are most often used in the teaching of Geography, Science and History; and school officials say they would like to have more historical films than any other kind. Two Departments of Education, Nova Scotia and Quebec, are establishing film libraries, while in Alberta this service is being conducted by the Extension Department of the University.

The most common reasons given by Canadian school authorities for not using motion pictures more are as follows, in order of frequency: first, the lack of money to spend; school revenues generally have not recovered from the losses since 1930 when salaries were cut and other economies effected.

Second, lack of information as to where desirable films can be obtained. Third, teachers are insufficiently trained in the use of films. Some teacher training institutions report that training is now being given. Fourth, available films are not suited to the course of study; in this connection some say that they know where suitable films can be rented in the United States, but that customs regulations do not allow them to do so. Fifth, the lack of electric power is an obstacle to the use of sound pictures in small schools; but for silent pictures storage batteries are sufficient.

This information was obtained from the Educational Branch of the Dominion Bureau of Statistics.

#### No. 14 -- Granite

Granite is a very hard rock which has been formed deep below the surface of the earth under high temperature and pressure. Its name most likely came from the Latin word "granum" which means "grain" or it may have some relation to the Italian "granito" meaning "gritty". However, the rock is of a crystalline granular nature, composed principally of quartz, feldspar and mica. Granites are usually red, pink or grey, depending on the colour of the feldspars. Dark green colours are made by large quantities of black mica or hornblende.

All the constitutents of this rock, except mica, are as hard or harder than steel, making it difficult to cut and polish. How the early Egyptians worked with it is a mystery. They polished it in a way that cannot be excelled with all the appliances of modern science; and they covered some of the blocks with delicately cut hieroglyphics. At the present time the rough blocks from the quarry are cut by special steel saws which progress at the rate of about four inches per hour. The difficulty of preparing the stone makes it expensive but this is counterbalanced by its durability.

A large proportion of the granite produced in Canada is used for foundations for highways, for permanent ballasting of railway road beds, for large concrete structures, for filling breakwaters and for bridge piers. Black and grey granite are in demand for monumental purposes. Granite for this purpose is produced in the Maritimes, Quebec, Ontario, Manitoba and British Columbia. Some is imported from the United States and Europe. Many of the buildings in the Scottish city of Aberdeen are of granite and the streets used to be paved with it. It is called the Granite City.

The upward turn in the building industry is reflected by an improvement in the granite industry. The Canadian production in 1936 was 856,000 tons as compared with 326,000 tons the year before, according to the Mining Branch of the Dominion Bureau of Statistics.

#### No. 15 -- Gelatin

Gelatin is a familiar protein used as a food in jellies and soups, being readily digested and absorbed. It is extensively used in the manufacture of ice-cream to prevent the formation of large ice crystals and in the confectionery trade in the preparation of such sweets as "marsh mallows". Gelatin is also used in the preparation of photographic plates, films and papers, for coating pills and making capsules and for making culture media for bacteriological work. A new use that is rapidly assuming importance is to prevent cultural buttermilk from wheying off.

Gelatin is derived from substances in the supporing structures of vertebrate animals, — such as the long fibres in the tendons, cartilages, bones, skin and white connective tissue — by boiling with water or dilute acid. It occurs in commerce in varying degrees of purity; the purer form obtained from skins and bones is named gelatin. A preparation of greater purity is "patent isinglass", while isinglass itself is a fish gelatin, a white semi-transparent substance prepared from the air bladders of sturgeon, cod, etc. Less pure forms constitute glue and an aqueous solution appears in commerce as size.

The manufacture of gelatin has to be very carefully done, mineral matter must be removed and any trace of bacteria which might cause decomposition must be

eliminated. The boiling process has to be conducted with great care otherwise the gelatin itself would be decomposed. The finished product is a nearly colourless, transparent substance, flexible and horny when in the normal dry condition. Immersed in cold water, it swells to many times its normal size. When the swollen gelatin is heated to 35 degrees centigrade it goes into a solution. If the solution is allowed to stand at 10 degrees centigrade, it sets to a firm jelly. This is the most characteristic and important property of gelatin.

The United Kingdom sold to us 868,000 pounds of gelatin for food purposes last year, Australia 560,000 pounds and Belgium 484,000. Altogether Canada imported over two million pounds of edible gelatin. Most of the empty gelatin capsules for medicinal and pharmaceutical preparations came from the United States.

This information is based on figures from the External Trade Branch of the Dominion Bureau of Statistics.

#### No. 16 -- October Birthstones

October is one of the few months which have an alternate birthstone. Opals are most commonly recognized as belonging to October but another gem which is little known or appreciated is the tourmaline. The opal, however, is the more popular.

Many people today believe the opal an unlucky stone. This idea seems to have originated in the last century when Sir Walter Scott wrote a novel in which the heroine owned an opal that brought bad luck and calamity. Previous to that time, it was considered one of the luckiest stones and the symbol of hope.

This colourful stone has in reality no colour of its own but nature has given it the trick of catching the light and breaking it up into many colours. The "Burning of Troy" so called because of its many red flashes, was a magnificent fire opal which belonged to the Empress Josephine and is one of several handsome opals among the French Crown jewels. Another interesting thing about these stones is that they contain water which has a tendency to make the opal dry out and crack through evaporation. An occasional bath in olive oil is said to assist in preserving them.

The tourmaline is a hard gem and has a great range of colours due to its complicated chemical composition. It has more hues, shades and tints than any other gem stone and is therefore extremely valuable in costuming. Sometimes two colours are contained in one crystal and gem stones can be cut so that half of them are pink and their other half green.

Previous to 1703 this stone was not recognized as a distinct species. For centuries its varieties must have been confused with rubies, sapphires, emeralds, topaz and amethysts. In India the natives still call the red variety of tournaline a ruby. For many years tournalines were sent from California, now the chief source, to China where they were cut or carved into jewels and ornaments and then reimported into America as "Chinese" tournaline.

## No. 17 - Canada s Golden Future

Canada is now third amongst the world's gold producers. Her position may be regarded as enviable at the present time and full of unusual promise for the future. Insofar as competition with other countries is concerned, Canada is well placed

because she has a wealth of favourable areas accompanied by all the natural and essential conditions, such as power, transport, accessibility, labour, materials and so forth, that must ensure for her a high place in the gold industry.

The hunt for this glittering metal is a great incentive for opening up remote territories. It gives employment to railroads and other methods of transport. Indirectly capital is brought into circulation because of the outlay involved in exploration and development. Taxation both at the source and from the income to the individual adds to the country's revenue. With a view to stimulating exploration and development of mineral resources in Canada, certain exemptions from income tax were granted in May, 1936, to new or re-opened mines coming into production. There can be no denying the fact that in Canada new territories have been opened up more unexpectedly by the search for gold than from any other cause.

While exploring for gold, the discovery of other metals is frequently incidental, but at times may be of equal or greater importance than the gold for which the prospectors were looking.

Last year the production of this metal made an all-time high record in Canadian gold mining. The new or primary gold produced was close to four million ounces worth over \$131,000,000. South Africa produced about three times as much, Russia nearly twice the amount and the United States about the same quantity as Canada.

The Mining Branch of the Dominion Bureau of Statistics supplied the figures for this information.

#### No. 18 -- Rubber Fenders

Rubber fenders are becoming standard equipment on an increasing number of London buses we are told. The durable and flexible fenders developed in England are made of moulded or pressed rubber. So far, they have been made primarily for buses but it is likely they will be made for passenger cars in the near future. Similar fenders have been used on buses made in the United States and several automobile manufacturers are expected to show cars equipped with rubber fenders at the forthcoming International Motorcar Exhibition. It is reported that, based on weight and price, rubber fenders are comparable to 18 gauge steel.

At the present time there is no record of the number of fenders made in Canadian industries. Each automobile plant has its own special die for stamping fenders for each particular need of the certain style of car it produces. These dies, by the way, are very expensive and only the automobile factories can afford to use them. Until a short time ago, most of the fenders were produced in the United States but now automobile firms in Canada can make their own.

However, some idea of the number of fenders made may be gained by knowing that last year the total number of automobiles, both passenger and commercial, made in Canada amounted to 281,000. That would mean over one million fenders. At this rate, if all the fenders made in the world during 1935 were put into a pile there would be over 20 million of them.

Whether bumpers and bumperettes would still be necessary should rubber fenders take the place of steel is a question. Their production amounts to over \$500,000 in a year, according to M. M. & C. Branch of the Bureau of Statistics.

## No. 19 - Man-made Sponges

The name sponge makes us think of tropical countries where dark-skinned divers walk among the luxuriant growth of the sea-floor, searching for the animal which gives its skeleton to make white skins whiter. Fixed to rocks on the sea-bed, these live sponges look very different from the ones we know. In their natural state the framework of cells is covered with a jelly-like substance. They are, so to speak, all mouth living on the water which passes into their body through the small holes of their surface and out again through the larger holes.

The first artificial sponges were made successfully from rubber. Unlike the natural article the rubber sponge was able to fit into corners because of its rectangular shape, an important factor in cleaning windows, for example.

Now along come experimental laboratories with another new sponge, one which scientists have made from spruce trees. Not only can it fit into corners but its texture is so soft and free from grit that it is claimed it cannot hurt even a baby's delicate skin nor the wet emulsion of a photographic negative.

This sturdy and versatile newcomer of chemical ingenuity is said to bid fair to supersede a host of diverse odds and ends used for cleaning purposes. Being unaffected by chemical reagents, such as mild alkalies and acids, it finds use readily in many industrial operations for which previously there has never been a wholly satisfactory absorbent material. When it is dirty, the cellulose sponge can be immersed in hot, soapy water or sterilized in boiling water if necessary and will come out as good as new. The artificial sponge is said to be exceedingly absorbent, taking twenty times its own weight in water.

According to the External Trade Branch of the Dominion Bureau of Statistics, sponges of marine production come chiefly from the British West Indies, such as the Bahamas, the Windward and Virgin Islands, to the Canadian market. Over \$52,000 worth of sponges were imported last year, those from the West Indies were valued at clase to \$40,000. The rest came from the United Kingdom and the United States.

#### No. 20 -- Chops in China

A meaty pork or veal chop is an appealing dish, but it might be interesting to know that there are such things as chops but no meat. Word comes from China that "chop" means the attractive label or trade mark upon a tin of fruit or vegetable.

In making sales of canned goods to the Chinese population the "chop" is of the greatest importance because a considerable proportion of the buying public cannot read English. The purchase of a canned product is made chiefly on the basis of price. If the product proves satisfactory, the buyer, who associates a particular requirement with a certain size, shape or colour of container, will always insist on a tin with the same label. For this reason large labels brightly coloured are usually employed by Canadian packers.

The Chinese buyer is conservative and favours long established brands. A tin of peas, for instance, which has been selling in the market for years and is well known by its "chop", will continue to sell even if slightly higher in price than a similar and cheaper but still unknown line. Eventually, the cheaper line may sell more widely, but this will be the result of the new "chop" becoming known and appreciated as a similar article at a better price.

The variety of fruits and vegetables canned in Hongkong and South China is not extensive, being confined to peas, beans, water chestnuts, bamboo shoots, lichees and a number of typical Chinese fruits and vegetables. However, the production is large and, in addition to supplying the domestic markets, meets the demand from Chinese domiciled in other countries.

Imported canned peaches and pears are the largest sellers in the canned fruit lines, while in canned vegetables the greatest demand is for peas, pork and beans and sweet corn. Imports of Canadian canned fruits into Hongkong last year were valued at nearly \$5,000 while canned vegetables were valued at \$14,000.

The foregoing figures were supplied by the External Trade Branch of the Dominion Bureau of Statistics.

## No. 21 - The Eighth Wonder of the World

Pitch is a solid, black resinous substance obtained from boiled tar and we are told that asphalt is mineral pitch. Its use is chiefly for pavements and covering roofs. Sir Walter Raleigh tells of the Pitch Lake of Trinidad, the most notable source of mineral pitch, in the following words: "There is that abundance of stone pitch that all the shippes of the world may be therewith laden from thence, and wee made triall of it in trimming our shippes to be most excellent good, and melteth not with the Sunne as pitch of Norway".

This Pitch Lake, we are told, is the eighth wonder of the world. According to legend, a tribe of Chayma Indians killed the hummingbirds in large numbers, ate them and bedecked themselves with the plumage. These feathered jewels were believed to be the souls of the departed and the "Great Spirit" caused the earth to open and the entire village disappeared. The cavity was filled with asphalt. Scientists tell us that the lake had its origin many thousands of years ago during certain general earth movements when fractures or faults were made in the vicinity of Trinidad. One of these breaks is deep enough to reach a large oil and gas reservoir. The surface is constantly in motion which is, of course, very slow but any object placed on its surface will shift its position from day to day.

During the month of February, in 1928, a tree believed to have been buried from four to five thousand years ago, came through the asphalt, rose to a height of about ten feet and then disappeared.

However, it is possible to walk on the Lake. Gangs of barefooted workmen dig out huge chunks and send them off in trucks on a very light railway which is moved frequently. It is remarkable how the asphalt supports the ties and rails, especially when the loaded cars often passing in a continuous line weigh no less than 1000 pounds each.

The holes which are left at the end of the day reach the depth of about three feet but by the next morning are filled up again. The Lake is solid asphalt perhaps two hundred feet deep at its lowest point. Borings show that in consistency the asphalt is practically the same throughout.

From this eighth wonder of the world according to the External Trade Branch of the Dominion Bureau of Statistics, Canada imported over 300,000 pounds of solid asphalt last year. The home production amounted to 35 million gallons.

## No. 22 -- Canada's Imports of Peanuts

Ground nuts, the fruit of a tropical to sub-tropical annual plant are so called because the nuts mature in the ground; they are also known as earth nuts, peanuts — because the kernels grow inside pods like peas — and monkey nuts. The nuts are used for human food, as food for live stock — chiefly pigs which are turned into the field to do the harvesting — or crushed for oil and oilcake. All but a small proportion of the ground nuts entering world trade are destined for the production of oil. India, China and West Africa, along with the United States remain the principal sources of supply.

Canada differs from most other industrialized countries in that she has only a small seed-crushing industry and, apart from linseed, imports almost all the vegetable oils she utilizes. However, there were nearly 36 million pounds of peanuts imported last year, China supplying 31 million pounds, British India nearly three million and Dutch East Indies over one million.

Australia is increasing her production of ground nuts and in 1931 a trade agreement was made with Canada which will give the Australian market the preference when the Commonwealth is able to supply all Canada srequirements. At present there is a duty of one to two cents per pound on ground nuts imported from other than British Empire countries but this preference has not yet resulted in any appreciable import from Empire sources.

Canada's cattle, sheep and pig population supplies much of the animal fats which form more than one—half of the oils and fats used in the manufacture of soap in Canada and limits the consumption of vegetable substitutes. Nevertheless, it is clear that the great bulk of the ground nut oil imported is crude oil for refining for edible purposes; the amount imported last year was 653,000 cwt. and came from the United Kingdom, China and some from the Netherlands. Oil for the manufacture of soap or for canning fish was 544,000 gallons. Last year's import of this particular item was only one half that of the year before, that from China dropping from 383,000 gallons to 41,000.

The External Trade Branch of the Dominion Bureau of Statistics furnished the above figures.

# No. 23 - Flax, Hemp and Jute

Plants are used for clothing as well as for food and people have learned how to get the longest and strongest fibres from various parts of them. Flax, hemp and jute come from the plant stem, while cotton comes from the seed fiber and henequen and abaca or Manilla hemp, are from the leaves. The removal of the fibers from the woody core of the stalk is a disagreeable and difficult process and has been instrumental in limiting production to regions of abundant and cheap labour.

The British government in 1532 compelled all persons holding tillage land to sow at least one quarter of an acre with flax for every sixty acres occupied. Later a penality of £5 was imposed if the farmer didn't grow one acre of flax for every 60. Bounties were paid on the importation of flax and hemp from the Colonies. In fact, efforts were made to encourage the Colonies to produce flax into the nineteenth century when flax growing on a large scale was tried in Ireland. This attempt failed due to unfavourable climatic conditions as well as to the large quantities of cheap

Russian fibre which came into the British market. Russia contributes some 60 per cent of the world's supply of flax today. Japan is the only country outside of Europe that is important in the cultivation of flax for fibre.

Hemp has been used for sails and ropes for ships for centuries. The word canvas is derived from the Arabic name for hemp. At one time hemp was grown in the British Isles but its cultivation has disappeared. This fibre was considered by the early settlers in the United States as the most important of all products of the new settlements save bread corn, because it provided one half of the clothing for the winter season and practically all of it for the summer. The important world producers of hemp are Russia and Italy.

About 90 per cent of the world's jute crop is grown in India. With the exception of cotton, jute is the most used of all the vegetable fibres. Is the cheapest, the weakest but the most easily spun of the stem fibres. It has replaced hemp in many temporary uses such as coverings for cotton bales and bags for grain, coffee and sugar.

Our total imports of flax, hemp and jute products amounted to  $9\frac{1}{2}$  million dollars last year according to the External Trade Branch of the Dominion Bureau of Statistics.

## No. 24 -- Flax Produced in Canada

Two types of flax are produced in Canada. One type is cultivated for the production of fibre as used in the manufacture of linen, the other type is grown for the production of flaxseed from which linseed oil is extracted. Fibre flax has longer straw with fewer branches and is more suited to moist climates. Ontario and Cuebec grow a relatively small area of flax for fibre. The seed type has shorter straw, branches freely, and is more suited to a moderately dry, sunny climate. These short straws may be used as tow in the production of rugs, matting, towelling, insulating board, building paper and upholstering types of furniture.

About 90 to 97 per cent of the flax grown in Canada is used for its seed, Saskatchewan being the greatest producer.

Production dates back to pioneer days, as early records show that in 1720 New France produced 55,000 pounds of flax seed. The ability to yield well on newly broken ground and the absence of weeds in the recently developed areas contributed to the extension of the flax acreage. By 1912, the climax in production was reached when over two million acres were planted in flax. Twenty years later the lowest point was made when only 244,000 acres were planted. This year the acreage in flax for seed amounted to slightly over 400,000 acres.

Compared with the normal consumption of from two to two and one-half million bushels, this decline has tended to change Canada from an exporter to an importer of flaxseed. Last year over one million bushels were imported. The paint manufacturer uses the greatest amount of raw linseed oil, about  $7\frac{1}{2}$  gallons for every 100 pounds of white lead. Thousands of gallons are used for printer's ink on newspapers and smaller quantities for the manufacture of oil silks and oil clothing worn by sailors and fishermen. Over 25,000 gallons are consumed annually by the soap industry.

With the return to better conditions in the building trades, an increased demand for paints will reflect an increase in the use of flaxseed for linseed oil. Although flax is not as easily grown as wheat or other grains and must be marketed with greater care yet the Canadian flax is of excellent quality and should find a greater place in world trade.

The above is based on information received from the Agricultural Branch of the Dominion Bureau of Statistics.

## No. 25 - The Discoverer of Insulin

Fourteen years ago today (October 25) Sir Frederick Banting received the Nobel Prize for the discovery of insulin. A recent session of the American Chemical Society at Rochester, New York, made public the following information regarding this discovery.

Sir Frederick Banting, the great Canadian discoverer of insulin, was offered only about one dollar for the results of his work. As a medical man he could receive no more than the nominal dollar being paid for the patents of his process, but even this he refused. Nor would any of his four associates take a cent, although they themselves were not medical men. All the Royalties have gone back into further research work.

Now, insulin is used in the cure of diabetes. It is a substance extracted from the pancreatic glands of oxen and reduces the amount of sugar in the blood. The name is derived from the collection of cells in the pancreas known as insulae or islets.

The latest figures available show that close to 1,500 people died of diabetes in the year 1935. The majority of them were females. Children under five years of age were the fewest victims, the greatest toll being men between 70 and 74 years of age and women between 65 and 69.

The disease carried off as many people as small-pox, scarlet fever, whooping cough and diphtheria combined. So today, we turn our thoughts to a Canadian who, with his assistants, is doing much for mankind.

This information is based on figures from the Vital Statistics Branch of the Dominion Bureau of Statistics.

#### No. 26 - Turnips for the United States

The United States is the only important market for Canadian turnips. Cuba took some shipments in 1934 and 1935 and Newfoundland, the West Indies and Bermuda are regular importers of smaller quantities, but exports other than to the United States are insignificant.

Two factors affecting this trade are first, as would be expected, the price quoted from Canada, second, an unusual one which is seldom thought about by the general public when talking of trade, the weather. Turnips are essentially a cold-weather vegetable, and during warm periods, the demand slackens considerably and vice versa. Another factor, though of lesser importance, is the potato market. In years of surplus potato production, low prices might have a slight effect towards a reduction in the consumption of turnips.

In the United States the local production of turnips is unimportant as far as restricting the outlet for the Canadian product is concerned but it may be assumed that there is a fairly general distribution of the crop throughout the States. New Jersey is probably the most important producer.

However, the large cities like New York, Boston and Chicago look to Canada for their main supplies. Philadelphia was recorded as receiving 102 carlots last year, largely for the manufacture of canned soup.

Certain markets prefer large turnips, such as New York and Pittsburg where four to six-inch turnips are desired. Boston requires somewhat smaller sizes, while Philadelphia and Cleveland demand them half as large as those for New York. Waxed turnips from Ontario command top prices.

According to the Agricultural Branch of the Dominion Bureau of Statistics, Canada produced 38 million bushels of turnips last year. Of this amount over two million bushels were sent to the United States.

## No. 27 -- Air Pollution

Up and down the country there are to be seen very tall chimneys, especially in or near industrial centres. Many of them are very old and some of them, after the plants with which they were connected had been abandoned or dismantled, were left intact as reminders or memorials of a once thriving industry. These chimneys, usually built of the finest brick obtainable were, in many cases, works of architectural art, beautiful on the landscape. A notable example stands on a little promontory on the Ottawa River near the Canadian capital.

There are several reasons why these chimneys were built so tall. One was because of the danger of sparks setting fire to adjoining timber or property. Shot up so high into the air, the sparks were more likely to be extinguished before they reached the ground.

But a greater reason than all was to carry poisonous gases and other pollutions as far away as possible from the nostrils of the people. Health was considered.

The smokes and fumes from domestic and industrial chimneys, exhausts from combustion engines, dust whirled up by vehicles, as well as other activities of man, all pollute the air we breathe. Exposure for a length of time to polluted air is detrimental to health and efficiency. Certain fumes and dusts are worse than others.

Air pollution is not a subject to which very many people have given special attention, but it is an important question. We are supposed to inhale  $37\frac{1}{2}$  pounds of air every twenty-four hours and, especially those who live in cities, are daily inhaling, along with that air, such things as dust, cinders, tarry matters, acids, carbon monoxide and micro-organisms.

It is impossible to place an estimate upon the amount of material and gas we inhale, along with the air, but an idea can be gained in a city stockyard. We are told that the lungs of a sheep just arrived from a farm far distant from the city, will be of a clean pink shade, but in a sheep which has been in a city for even a few days, the lungs will be darker in colour.

In some large cities the deposits of air pollution have been measured and estimated. London, the largest city in the world, deposited from the air 284 tons of impurities to the square mile and the figure for Toronto is pretty much the same.

Air pollution is closely connected with the problem of fuel economy. There is much more soot from the top of a domestic chimney, generally speaking, than from a factory chimney and a noted expert states that a large percentage of the fuel bill of the country is wasted through preventable inefficiency.

## No. 28 - Canadian Textile Production

Textiles are fabrics produced by the weaving or knitting of materials into cloths. This is probably one of the oldest known industries; older than man, in fact, since it was practiced by spiders, caterpillars and birds before the advent of the human race. It is known to have existed in the Stone Age.

At the dawn of history, wool, cotton, silk and flax were being woven in the East with great skill. The Egyptians, the Chinese and East Indians had reached a high state of development in the making of textiles 3000 years before the Christian Era. In North and South America, the Mexicans, Peruvians, Incas and Mayas of antiquity produced textiles of beauty and fineness.

It is believed that the first textile article produced by prehistoric man was a mat or fishnet woven of rushes. This was followed by the basket. Today this industry is highly developed, Great Britain. the United States and Belgium being among the great wool manufacturing countries; while silk manufactures are especially important in Japan, China, France and Italy. The United States has large manufactures of cotton fabrics, so also has England. Linen is important in Scotland and Ireland.

The production of textiles and textile products constitutes an important branch of Canadian manufacture. In gross value of products it stands third with 13 per cent of the total for all industries. In number of employees it was second with 21 per cent. The value of the products was well over \$161,000,000, employing 12,201//60 persons in 1934, the latest year for which complete statistics are available.

This information comes from the General Manufactures Branch of the Dominion Bureau of Statistics

#### No 29 - Berry Boxes and Baskets

The wood of the poplar tree forms three quarters of that used in the manufacture of berry boxes, baskets and crates. The wood is valued in this industry for some of the same reasons that make it desirable for the manufacture of excelsion. It is soft, tough, clear, light in weight and colour, and tasteless and odourless. It is used mostly in making berry boxes. The wood is purchased in the log and cut into pieces of the required size from which the veneer is sliced. Birch is also used for that purpose.

Basket sides, rims and handles are made chiefly from birch, which is cut into lengths, steamed and placed in a lathe which peels off the veneer. Birch is valued for this purpose on account of its toughness and the fact that it peels smoothly

The birch logs cannot be peeled down below a diameter of four or five inches. This leaves cores which are perfect cylinders of well-seasoned wood and can be used as rollers and plugs for paper rolls, although large numbers are sold or used for fire-wood when they cannot be otherwise disposed of. Light fruit crates are also made of peeled birch veneer. Spruce is used for basket bottoms and spruce ends are used for berry box bottoms.

There were 38,736,000 berry boxes manufactured to the value of \$128,000 in 1935. considerably exceeding the production in the previous year. They were made largely in the provinces of Ontario and British Columbia according to the Forestry Branch of the Dominion Bureau of Statistics.

## No. 30 -- Barrel Staves and Skis

When the snow begins to fly and covers the hills and valleys with a blanket of white, then is the time when many are thinking about a pair of skis. There are those who are fortunate enough to be able to purchase them but there are others who cannot. Ingenuity then has to enter upon the scene. The old apple barrel lends itself to the occasion. The staves are strong and tough, can be smoothed nicely and made very slippery; with a strap fastened on each stave the skip are all ready.

Then too during the warm summer months the barrel stave finds further use, sometimes having its place in the body work of a canoe or skiff; and it is a common thing to see a hammock made from the staves of a barrel.

The making of barrels is divided into two divisions — slack and tight cooperage. Slack cooperage, or barrels made with comparatively loose seams, for the shipping of dry products such as lime, potatoes, apples, dry fish, flour, cereals, nails and other products which do not require a water tight container, is probably the most important. Tight cooperage includes the manufacture of water tight barrels only. These are mostly used for containing liquids, such as whiskey, beer, wine, syrup, cider, vinegar and oil. These are also used for pork and fish packed in salt or brine.

Elm, poplar, maple, spruce, beech, ash, basswood, birch and pine are a few of the woods used in the making of barrel staves, and in 1934, there were 44,947,000 feet manufactured to the value of \$363,175, according to the Forestry Branch of the Dominion Bureau of Statistics.

# No. 31 --- Any Hallowe en Apples?

The apple and the pumpkin are popularly associated with Hallowe'en and so are black cats, bats and witches. It seems that the colour scheme black and orange for this celebration was instituted by the Druids before the Christian era. The yellow, or orange, had its origin in the fruits of the earth, for example the green apple or the green ear of the crop, which later became golden fruit or yellow sheaf. The black represents the sable robes of the Druid sorcerers who wore that colour in tribute to Saman, the lord of death and evil spirits who once a year went on the rampage on the eve of the feast.

The apple is more closely associated with the feast than any other fruit or vegetable. There is a special reason for this. In pagen times, at the festival of Pomona, the goddess of fruit, trees, nuts and fruits, particularly apples (poma)

played an important part. Apples were distributed as gifts and Canadian boys and girls who go from house to house asking for Hallowelen apples are doing exactly what children did in other countries three thousand years ago.

One thing that many a youth in Canada has improved upon is the Jack-o-lantern. In Europe the humble swede turnip was used whereas a big, orange pumpkin is much better and not only makes an excellent lantern but can also be served as golden-brown pies.

In Ireland, even today, Hallowe'en is known as Oidhche Shamhna, the vigil of Saman. In Scotland, bonfires, otherwise known as baalfires, still are part of Hallowe'en celebrations, a relic of the worship of Baal. Some cynics declare that the evil spirits of old Druidical times still exist in the shape of thoughtless youths who overstep the mark of pure fun and cause injury to persons and damage to property.

Maybe this Hallowe'en will see more boys and girls ducking for apples at school or at parties and more people able to give away the Hallowe'en fruit, because this year's apple crop is going to be about one million barrels greater than last year's. The Agricultural Branch of the Dominion Bureau of Statistics estimates that five million barrels of apples is what Canada's orchards have produced in 1937.

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