

A Fact a Day about Canadafrom theDominion Bureau of StatisticsNo. 93. Sat. Jan. 1, 1938 -- A New Year's Resolution.

This is the first day of the New Year. Let us make a good resolution for 1938. It is a resolution to do everything possible to avoid accidents. It is appalling to learn that there are between six and seven thousand deaths in a year as the result of accidents in Canada and it is the more distressing to realize that a great many of these -- the large majority in fact -- could have been avoided if a little foresight and care had been exercised.

It is not too late yet, now that the Christmas and New Year celebrations are over, to make a good resolution in connection with what statistics demonstrate clearly to be the most outstanding danger of the present age -- from a domestic point of view, of course. We are not talking of war -- the tragedy of Ethiopia, Spain and China -- but rather of the worst danger that confronts us in the daily routine of our lives.

Accidents -- the ever present danger of accidental death, of being hurt, or maimed for life; the threat of becoming a burden to ourselves, our families and the community in general, accidents are possible at every twist and turn of day and night. There is danger in our homes, at our places of business, everywhere, but the greatest menace of all is on the city street and the country highway. Death and injury face us, and we know it, from the moment we enter an automobile until our journey ends.

In the railway train and on the good ship at sea the danger is so comparatively slight that it hardly enters into our calculations when we purchase a transportation ticket, but on the road, even on the little driveway before we reach the road, in the car we so fondly prize and in which we start out so joyously, the prospect is hazardous. We talk glibly about the danger from "the other fellow", and make excuses for ourselves with that platitude, yet to him we are also "the other fellow". This is no idle talk. We shall present in a few minutes the fatal casualty figures and you will agree that they are alarming.

There is an automobile for every nine persons in Canada, which makes a huge total in proportion to population. We have about one and a quarter million registrations in a country of eleven million people.

A distinguished Ottawa clergyman who recently came to the Capital from a western city, speaking from his pulpit two Sundays ago, warned his hearers of this growing danger and urged upon them the resolution, phrased pithily, that they would go round the corners of life on four wheels and never on two.

Care is needed everywhere, even in a church. A year ago there was a remarkable accident in a Montreal place of worship. There had been a special party at which a lady had acted as Father Christmas. Dressed in her Santa Claus costume she went to the church basement to assist in the preparation of refreshments for the guests. While lighting the gas stove her costume caught fire, and she was badly burnt before the flames were subdued. She had to be rushed to a hospital to save her life.

No. 94. Sun. Jan. 2, 1938 -- Fatal Accidents.

It is astonishing to find that close to half of all the fatal accidents occur in and around the home. The premature passing of young children and of old people is striking. Young children have to be watched closely to avoid trouble, but at the same time a great many of the fatalities that occurred were due, not so much to the waywardness of the youngsters as to the carelessness of their parents or guardians. Here is the record. Six hundred children under five years of age were fatally injured or killed outright in 1936, whereas between the ages of five and fifteen, or twice the period of years, there were just over five hundred accidental deaths. The children of the older ages were better able to take care of themselves. The 1936 figures are given because the 1937 record is not yet complete.

The variety of causes of accidental death among infant children, that is, children under one year, is extraordinary. Twenty infants were suffocated while sleeping with their parents; 28 were smothered by bedclothes or by rolling over on their faces. Eight more were suffocated but no details were given the Bureau. A cat slept on a child's face and smothered it. Another baby got its head through the bars of a crib and died. Two fell into a tub of hot water and one touched an electric toaster. Twenty-two died of the summer heat. Some were poisoned and several burnt to death.

Mention of heat brings to memory the furor that was created when Rudyard Kipling wrote of Canada as "Our Lady of the Snows". A great many people worked themselves up into a rage because they thought it was bad advertising for Canada. Had they taken the trouble to examine statistics they would have cooled off right away. The crisp winter weather of Canada is all right. In a previous talk we have shown that Canadians are longer-lived than people who live in more southerly climes.

There is another important fact which serves to bring out clearly what may have been in Kipling's mind when he spoke lovingly and appreciatively of "Our Lady of the Snows". While there were 60 deaths from excessive cold in Canada in 1936 no fewer than 814 persons died from the excessive heat of summer.

The people of Ontario and Manitoba will remember the heat wave in July 1936, for it struck these two provinces more than the rest of Canada. It lasted for ten days and caused 780 of these 814 deaths. It was unusual. In July, 1935, there were only 42 deaths from excessive heat.

Perhaps Kipling's ode would not have aroused so much indignation had it not been for a supposedly reputable English geography which taught school children of that country that farm labourers were frequently frozen to death when harvesting wheat on the Prairies and milk was delivered in Canadian cities in frozen cakes.

We have got over all that now and we rejoice in our winters. Famous actresses and leading lights from all over the world come to Canada for a winter holiday to build up their physique in the bracing atmosphere. We don't like so well, or say we don't, which may be the same thing, these mild winters we have been having lately. We are told they are not so healthy and we are quite ready to believe it.

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No. 95. Mon. Jan. 3, 1938 -- Dangers Crowd upon us.

Dangers still crowd upon children between the ages of one and five but they are learning to look out for themselves better and the rate drops from about 160 accidental deaths under one year to an average of about 110 a year. More little boys are killed than little girls; they are supposed to be more daring, more ready for mischief.



Three were playing with matches but they were all girls. The most common accident was drowning. There were 84 such deaths. They fell not only into lakes and streams but into wells, water barrels, troughs and ditches. Seventy lost their lives through motor cars. Some were playing on the street when they were hit. One child had its head caught in the window of a motor car. A little boy was strangled by buggy harness. Another child died in a grass fire, and one poor little thing was found lying frozen beside its murdered mother.

As children grow older they still have the habit of playing with matches and more girls met death from that cause than did boys. Very probably that was because of the more inflammable clothing the girls wore. One hundred and thirty between the ages of five and fifteen were struck or crushed by motor cars. Twenty-six lost their lives by being shot, (these 22 rifles being largely responsible) and six came in contact with live wires.

It is impossible in the time at our disposal to indicate all the causes of death in people of mature years. Our newspapers make us familiar with most of them, but some are very unusual. One young farmer was driving a horse rake and carelessly had the lines around his neck. The horses bolted and he fell backwards. Another lad somehow got the tail of a horse wound around his neck. A fisherman was bitten by a codfish and a man cranked his car while it was in gear. Five men fell when intoxicated and eight were kicked by their horses. Three met death when trying to board moving trains. A crust of bread stuck in one man's throat and choked him.

Amongst people over 70 years of age, a very common cause of death was falling out of bed, falling off chairs, breaking limbs. Most of these were women. Seven of the old men were kicked by horses, one was attacked by a bull and two by cows. One old lady was attacked by a collie dog. An old man set fire to his clothes when lighting his pipe and another while lighting a match under his chair, which is quite a common habit. A lady upset a pot of boiling potatoes, and another was scorched when her comb caught fire. A gentleman was drowned in trying to cross a river on horseback just as he had done successfully since boyhood. A lot of people, who should have known better, lit their fires with coal oil, and one or two with gasoline.

It will be apparent from the foregoing that most of these fatal accidents would have been avoided if a little more care had been taken. The toll of death will be less this year if the good resolution is remembered and lived up to.

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No. 96. Tues. Jan. 4, 1938 -- Industrialists are careful.

One fact stands out very prominently when the record of fatal accidents is examined. It is the surprisingly small number of fatalities, comparatively speaking, that occurred in industrial operations. Conjure up for yourselves the picture of the whirling machinery, the buzzing saws, the electric currents, the deep mines, the high buildings, the hundred and one chances a man takes when he performs a day's labour. Contrast the result when you find that there were about 2,800 accidental deaths in and around the homes of the people and fewer than one thousand in industry.

The reason is clear. Great care is observed by men in charge of their fellow men -- the employers, the managers and their foremen. Responsible men heed their responsibilities. Laws are rigidly enforced, and a great many of these thousand fatalities would not have occurred if the employees had been particular in carrying out their instructions. It is abundantly evident that the cause of most fatal accidents can be traced to some carelessness on the part of somebody.

And now we come back to the automobile. That wonderful piece of mechanism which modern science has given us for useful and pleasurable transportation, is being abused by careless people and the price of that carelessness is being paid. It is a high price.

More fatal accidents are caused by motor car drivers than can be attributed to any other cause, and the authorities are disturbed over the situation. Considerably more than one thousand persons lose their lives annually in this Dominion in some mishap connected with a car or truck. In the first six months of 1937 there were 576 deaths from such accidents. That was 158 more than in the same period of 1936. It is at the rate of 1,150 a year.

Speed, recklessness, carelessness, alcohol, poor judgment, lack of skill in driving and faulty equipment were the direct causes of most accidents in connection with motor vehicles but HURRY was the factor behind almost all of these and most of those driving in a frantic hurry had little or no reason to do so.

Although we are being constantly advised to consider safety first most of us become more or less callous to such warnings.

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No. 97. Wed. Jan. 5, 1938 -- Industrial Minerals.

During the past few days the Canadian people have been made acquainted with the fact that the mineral production of the Dominion in 1937 constituted a new high record. It is now coming close to the half-billion dollar mark. Records have been broken in almost every direction. Gold, copper, nickel, lead, zinc, platinum metals, asbestos and salt all reached new peaks. A number of less known metals and minerals also set new standards of output.

The advance was extraordinary; it was 25 per cent greater than in 1936. There seems to be almost no limit to the heights to which Canadian production may aspire in the next few years.

It is worth while for a moment to cast our eyes backward and examine the why and the wherefore of the gains that are being made in mining.

The significance of mining was enormously increased by the industrial revolution which was in a very real sense the mineral revolution. Probably more than 97 per cent of the output of minerals in recent years has come into existence in the last 150 years. From major dependence upon materials of vegetable and animal origin, the western world passed within a century to major dependence upon the minerals.

Great changes have taken place in these 150 years. Steam power and iron ships created a revolution in ocean carrying and in the last quarter of a century we have seen the displacement of animal by automotive transport.

Minerals are the essence of industrialism. They are the chief bases of the chemical industry. They are largely employed in construction. Minerals are the foundation of transport which is the greatest of all consumers of metal and power. Modern war has been described as a chemical reaction built up around the metals, the nitrates and the coal tar derivatives.

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No. 98, Thurs. Jan. 6, 1938 -- Effect of Machine Age.

The arrival of the machine age has compelled an extraordinary and astonishing draft upon the underground resources of the world. Statistics show that in the hundred years between the Battle of Waterloo and the Battle of the Marne the white population of the world increased three-fold but the consumption of metals and mineral fuels increased about one hundred-fold.

Two characteristics of mining stand out prominently. First there is the marked concentration of the production of certain minerals in certain regions and localities. Half a dozen regions produce three-fourths of the world's requirements of iron ore, although iron resources are available in almost every country. We have iron ore in Canada but we get our supply from abroad. In other cases there is the localized occurrence of mineral deposits. Most of the world's radium comes from a single mine in the Belgian Congo. Canada is the second largest producer, but the total world production to date is less than thirty ounces.

The nickel supply of the world is got in Canada and New Caledonia -- 90 per cent from this Dominion. Most of the tungsten comes from south-eastern Asia.

The second characteristic is chance -- the chance of discovery. All business and industry are subject to change and upset, one cause being the change in habits of the consumer. The Paisley shawl has given way to the tweed coat. Mining, however, is subject to the chance of discoveries. Until the closing years of the last century, Sicily supplied the world with sulphur. The industry appeared to have an established future. Suddenly, however, the Sicilian sulphur future was shattered when a process was discovered by which sulphur was taken from alkali waste. Sulphur from North America competed in Europe with the Sicilian product. An agreement was reached to parcel out the world market in order not to destroy the industry in Sicily, but it has been much impaired.

Russia and Colombia had at one time a virtual monopoly of platinum but the discovery of that precious metal in South Africa and in the nickel-copper ores of the Sudbury District in Ontario completely altered the situation. Canada is now the leading producer.

The outstanding characteristic peculiar to mining is the exhaustibility of a mineral. The richer deposits are always attacked first and, when these are exhausted, the leaner ores and greater depths mean rising costs.

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No. 99, Fri. Jan. 7, 1938 -- Spirit of Cooperation in Mining.

The thought persists as one views the tremendous growth of the mining industry, that it is a wonderful exemplification of the spirit of cooperation. We need not dwell upon the very obvious assistance man has had from the better known metals found in Canada, such as iron, copper, lead and zinc, but confine our thoughts to some others that have also contributed largely to the wealth and comfort of the race.

In the classifications of the mining industry there are certain products that are described as "industrial minerals". These include asbestos, feldspar, gypsum, salt, sulphur, talc, etc.

Salt is the industrial mineral which has the most varied uses. Few things in this world are indispensable. Water and air are the most obvious. Less obvious but equally essential is salt. A package may be purchased for a few cents but it is

more valuable than gold, it is worth more than all the diamonds of Africa. Life itself depends upon salt; without it all living things would disappear from the face of the earth. Salt, or products derived from salt, enter into our soap, drinking water, textiles, paper, food, even the bottles in which our milk is delivered. It helps us to build roads. Gasoline is refined by chemicals derived from salt. Cattle on the farm are fed salt. There are fifteen hundred recognized uses of that industrial mineral. Canada's production last year was close to half a million tons. We imported considerable quantities also, notably for the fisheries.

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No. 100. Sat. Jan. 8, 1938 -- Sulphur.

Just like salt, there is a scientific romance connected with sulphur. Until the last two or three years sulphur in the waste gases from the smelter plants was being lost in the atmosphere; now it is being harnessed and recovered, and there will be plenty of it to mix with the molasses the mothers give their children when the spring freshets flood the brooks and rivers.

When we give sulphur its other name "brimstone" we associate it with the fumes that are said to come from that undiscovered region over which Mephistopholes holds sway and to which bad people on this earth are believed to be sent.

But sulphur, or brimstone, is one of our most useful non-metallic elements. Its common ore is of a golden yellow colour which has brought tragic realization to many a prospector when he discovered what he thought was gold but found to be only pyrites. We employ it in fumigation, for the manufacture of sulphuric acid and as a component of gunpowder and other mixtures. Every schoolboy who has studied science at all gets to know the smell of sulphuretted hydrogen; it is like very rotten eggs.

Sulphur is used in medicine, in the pulp and paper industry, in making fertilizers. It is invaluable as an insecticide. The manufacturers of paint and varnish make use of it, so do the makers of dyes and rubber. The Canadian output was 144 thousand tons, but we import a good deal more than that, chiefly from the United States. Texas is the great producer.

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No. 101. Sun. Jan. 9, 1938 -- Asbestos.

The story of asbestos is one of the most attractive in the whole range of mining. The use of it goes back to the Romans. They wove the brittle fibres with linen threads to make burial cloths in which to wrap their dead, in order to retain the ashes when the body burnt on the funeral pyre, for asbestos is fire proof. Plutarch records the use of asbestos in the wicks of the lamps of the Vestal Virgins. Marco Polo noted the use of it in Siberia in the 13th century.

All knowledge of the mineral, however, was buried with the past, for it was not until 1838, when it was rediscovered in the Italian Alps, that it became known to the modern world. Even then it was not until 1878 when it was discovered in large quantities in the Thetford and Coleraine hills in the Eastern Townships of Quebec, that any real progress was made in the industry. Since then its exploitation and development has been rapid and today asbestos, in one form or another, is indispensable in the electrical and engineering worlds, and plays an important part in our domestic life.

From the point of view of value asbestos is Canada's most important non-metallic mineral, other than coal, and Canada is the world's greatest producer. In 1937 the



output topped all previous records with close to 400 thousand tons. The value at the mines was over 14 million dollars. The production is entirely from the Eastern Townships of Quebec. Explorations have disclosed reserves of the mineral sufficient for many years to come. Other large producers are British South Africa and Russia.

The volume of asbestos consumption depends largely on two great industries, automobile manufacture and the building trades. Large quantities are used in heat insulation or as a constituent of asbestos-cement products, such as roofing and wallboard.

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No. 102. Mon. Jan. 10, 1938 -- Talcum, Gypsum and Graphite.

When a young lady gazes into a miniature mirror and dusts her nose in public, which appears to be quite the thing nowadays, she may be using talcum.

Although talc is employed in making talcum, face and compact powders, its most frequent use is in making paint, paper, roofing and rubber. More than a score of countries have talc but the largest producers are the United States, France, China and Italy. The Canadian talc production comes chiefly from Madoc in Ontario. Soapstone products come from the Eastern Townships of Quebec. Soapstone is essentially an impure talc which, when pulverized, is used for the same purpose.

The usefulness of feldspar to the general public is very great. It helps to make glass containers and illuminating glassware. The potters use feldspar and the manufacturers of that beautiful enamel and sanitary ware that we have now in our bathrooms demand large quantities of that industrial mineral. There is feldspar in our porcelain-enamelled flatware and in our refrigerators. The production of feldspar last year was about 18 thousand tons. Most of our output goes to the United States.

Then there is gypsum, which we get from Nova Scotia, New Brunswick, Ontario, Manitoba and British Columbia. A large proportion of the Nova Scotia output is exported in the crude form while that from the other provinces is calcined, or heated, and manufactured into various gypsum products, such as wallboard, blocks, insulating material and acoustic plaster. We don't see the plaster bound with horsehair any more except in some old buildings that have withstood the ravages of time. Canada's production of gypsum last year was over one million tons which was a considerable advance over 1936.

Exceptionally high-grade graphite is got from the Black Donald mine in Renfrew County, Ontario. It is now being used in the manufacture of pencils, a market which at one time was enjoyed almost entirely by Mexican producers.

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No. 103. Tues. Jan. 11, 1938 -- Garnet for January Birthdays.

Most people think of the garnet as a deep transparent red kind of gem, but there are also green and yellow varieties. The name "garnet" comes from the Latin word "granatus" meaning seed-like; the appearance of the smaller crystals embedded in the mass of rock, resembling seeds.

Asiatic people used garnets as bullets in the belief that their glowing colour might cause them to inflict a more deadly wound. Their use as bullets has also been mentioned in accounts of Southwest Indian Wars in America. It has been used as an amulet or charm against accidents in travel and is sometimes regarded as a royal stone due to the preference the Persians have given it as the bearer of their sovereign's image.

The ruby-coloured garnets belong to the pyrope variety. Pyrope comes from the Greek word meaning fire-eyed. This variety and the almandine type which is deep crimson, violet or columbine red, are fashioned in the rounded form and are known as "carbuncles" from the Latin for a glowing coal. Garnets are all extremely tough and durable.

Garnets are not as expensive as many other gems. People today have but little interest in the garnet because they think of it as a rather muddy-red stone set in low carat gold jewelry. Others value it for its beauty in colour.

The External Trade Branch of the Dominion Bureau of Statistics shows in the year 1936 that imports of precious stones and imitations of the same, increased from Switzerland, Germany and the United Kingdom but decreased from the United States, Czechoslovakia, France and Japan.

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No. 104. Wed. Jan. 12, 1938 --- Beef-Eaters.

Beef-eaters suggests those burly Yeomen of the Guard that add a touch of ancient splendour to official life in Old London. With their broad velvet bonnets, red costumes and white stockings, they make a picturesque sight in the peregrinations of Canadians when they cross to Europe.

The original duties of the Beef-eaters, a popular and quite unofficial name, was service at the king's table. The word is a corruption of the French beaufetier or buffetier, which means one who waits at the buffet or side-table, although it should be said that Skeat, the English etymological authority, maintains that its natural English meaning is the right one. We can let it go at that, for it can't be very far out anyway to us who regard the English as having no superiors in their discriminating knowledge of a good beefsteak. Every schoolboy has heard about the "Roast Beef of Old England". Londoners actually had a Beefsteak Club, founded when good Queen Anne was on the throne. The Prince of Wales was a member of it and so were such distinguished men as Garrick, Wilkes and Hogarth. Sheridan founded one in Dublin -- Ireland is by no means backward in supplying good beef.

Contrary to what seems to be a general belief in Canada we are not heavy consumers of meat -- comparatively speaking, at any rate. The largest consumers are the people of the Argentine, New Zealand and Australia. The per capita consumption is well over 200 pounds in each of these three countries. The Argentinians eat beef mainly but the people of New Zealand and Australia eat beef and mutton.

Canadians, Britishers and Americans are the heaviest meat eaters in the Northern Hemisphere. The Canadians and the people of the United Kingdom consume about the same quantities per capita and the Americans a little less. The Belgians, according to the latest statistics received here, eat only about half what the Canadians consume.

However, Canadians are not eating so much meat as they used to. The per capita consumption of beef, veal, pork, mutton and lamb in 1936 was 134 pounds, which was six pounds less than in 1934 and 15 pounds less than in 1932. Slightly more than half of the meat consumption was pork. It is the same in the United States, while in Europe the Germans also eat more pork than beef, and, indeed, eat more pork than Canadians or Americans. So do the Danes.

The great beef-eaters of Europe seem to be the British and French, but in the United Kingdom much mutton is consumed, whereas, neither in Germany nor France is



there any material amount of mutton disposed of. Canadians do not appear to relish mutton, which is strange. The average consumption is about six pounds in the course of a year. The same thing may be said of the Canadians regarding cheese. We are not as a people very fond of cheese and do not consume nearly so much of it as do the people of the European countries which gave our ancestors birth. Maybe it is because we are too well off and affect to despise what is sometimes spoken of as "the poor man's meat". When talking that way it is well to remember that many of the greatest athletes and many of the hardiest races of the world have been great consumers of cheese. It is a strengthening food, and comes from the cattle that make beef.

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No. 105. Thurs. Jan. 13, 1938 - Meat for Early Settlers.

As can be readily understood, the cost and difficulty of bringing cattle to this country during the 17th century was very great. Many animals died during the long voyage, or were seriously injured in stormy weather. Accordingly it became extremely important to retain imported stock for breeding. An edict was issued prohibiting slaughter. The penalties were severe -- death by hanging to the principal, burning of the hand and loss of the ears to the accessory and 24 hours' whipping to the concealer.

Until an ox was unfit for hard work, or when an accident befell, the early settlers had no beef. It was not a hardship, for bear, moose and deer were plentiful. The thought obtrudes that when a pugilistic young fellow got a black eye from an aggressive opponent, he would be unable to cover his discoloured optic with a plaster of beefsteak, which is a favourite remedy for injuries of that sort. Professional pugilists nowadays usually puncture the lid and draw off the bruised blood, but the beefsteak is the traditional cure.

A little introspection at this moment won't hurt. In our self-complacency we sometimes derive amusement at the idea of the sacred cows of India. There are holy bulls buried in tombs in Egypt. One of the coffins has been robbed. The lid weighed 14 tons and the granite box 65 tons. Why the dead bull was stolen is probably because the inside of the carcass had been filled with precious stones.

We smile at that, don't we, in our smugness? Well along the highway between Toronto and Windsor, a life-size metal statue of a cow has been erected. The cow commemorated, was Springbank Snow Countess, but unlike the Golden Calf set up by the Children of Israel, she was honoured because of her contribution to humanity, a record in the life-time production of butter-fat. That cow trod the milky way 13 fruitful years and then departed for the Elysian fields.

All cows are not benefactors. You will remember that Mrs. O'Leary's cow was supposed to have upset a coal oil lantern in 1871 and started one of the great fires of history. A large part of Chicago was laid in ruins. A high wind and a prolonged drought assisted the conflagration. It drove one hundred thousand people into the shelterless prairies, took between 200 and 300 lives and destroyed 150 million dollars worth of property.

It should not be forgotten in thinking about beef, that, with the single exception of the bison in North America all oxen are native of the Eastern Hemisphere, where they did not appear until comparatively late in geological series. All the members of the genus Ox, which includes the buffalo, bison and yak, as well as the various domesticated breeds of cattle, have hollow horns, as distinguished from the deer, which have solid antlers of bone, shed and renewed yearly.

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No. 106. Fri. Jan. 14, 1938 -- Beef Cattle.

A fine example of early enterprise that did much to build up successfully the live stock and beef industry in Canada is to be found in the story of Rowland Wingfield. He was a young English immigrant who arrived at Guelph more than one hundred years ago. He purchased a farm in the Township of Puslinch, cleared a few acres, built a log shanty and returned to England to buy stock. He came back with some of the best Shorthorns that could be bought, splendid representatives of the white, red and roan. He brought them to Montreal, drove them on foot to Lachine, took them by boat up the Ottawa River to Bytown, passed through the Rideau Canal to Kingston, shipped them up Lake Ontario to Hamilton and then walked them thirty miles to Puslinch. What a journey that was! What an expense!

There were two bulls and six heifers in the lot and their descendants are scattered far and wide over the continent of America. That herd established Guelph as a stock centre in Canada. The enterprising young Englishman made the beginning.

Amongst the beef breeds, as apart from dairy cattle, and talking only of the pure-bred, the Shorthorns are the most numerous. In fact they come second only amongst all cattle to the Holsteins which latter are dairy cattle. Next to the Shorthorns amongst all cattle, but coming close behind them, are the Ayrshires. The others are in the following order: Jerseys, Herefords, Aberdeen Angus, French-Canadian, Guernseys, Red-Polled, Brown Swiss, Galloways, Devonshires and half-wild Highland cattle.

There are thus 14 or more varieties of pure-bred cattle in Canada, which goes to show the wide range that has entered into the building up of the great grade herds of Canadian farms. You will observe that the Devonshire comes far down the list in number. In fact there are only 50 or 60 pure bred Devonshires in Canada. These graceful animals have largely modified the Argentine and Australian herds, but have had little or no influence in this Dominion.

Development of land in the western part of the Prairies began with cattle and sheep ranches. Cattle have held the more prominent place for Canada has never been prominent as a sheep country. Late in the 70's the Dominion Government introduced a herd of one thousand breeding cattle for the purpose of establishing a beef supply for the Indian population. The buffalo had almost entirely disappeared. The venture was sufficiently successful to encourage private enterprise. With the arrival of the railroad in the early 80's the progress was swift.

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No. 107. Sat. Jan. 15, 1938 -- The Ox on the Farm.

We used to be fond of rolling round our tongues the saying that the horse was man's best friend and to the descriptive writer the phrase was a godsend until the unromantic, however useful, motor car came along. But even that old luscious morsel in expression could be disputed with a great show of argument. Here is something to think about:

The cow and the ox were the first animals used on the Canadian backwoods farm. The cow supplied milk, butter and cheese for the household, and the yoke of oxen, or steers, did the heavy labour, the logging of the land and the work of the ever widening acres and arpents as the hard working farmers made their yearly inroads into the primeval forest.



These cattle were comparatively easy to keep. They fed on the forest plants in summer and on meadow hay and browse in the winter. Browse was composed of the small twigs of the forest trees felled by the settler in clearing the land. That causes one to wonder just what was the flavour of the milk, for we are well aware that the reason why the Canadian is not fond of rabbit as a meat food is because of the woody flavour of the flesh.

For years the Canadian farmer had no other stock save cattle, for horses were not adapted for work among the stumps and required better winter food than was available. The wolves took the wandering sheep and the bears had a particular liking for pigs that ambitious farmers brought in from "The Front" as the older settlements were called. That is quite a home-brew Canadian expression. Most of the country towns still have a Front Street, although officially it may have another name. Across the Atlantic, the High Street is a name in vogue.

Cattle, therefore, were the first helpers on the farm and they still lead in the volume and value of their products. The first record of them in Canada was in 1610 when Champlain mentions having cut hay for the cattle. The earliest importations were from Normandy and Brittany whence many of the settlers came, and these formed the basis of the livestock industry of Quebec. The livestock of the Maritime Provinces came partly from France and partly from New England. Nova Scotia had the first French stock; New Brunswick stock was almost wholly from New England, while Prince Edward Island had some directly from Great Britain.

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No. 108. Sun. Jan. 13, 1938 -- Cattle outside in Winter.

This month we have said a good deal about Canadian cattle, especially beef cattle. A word or two more might be added, however, that will surprise many Easterners.

In the beginning the cattle were herded on the open prairie but in the middle of the 80's many of the larger ranchers started to fence their land. Better breeding practices thus became possible and these leading ranchers used pure-bred bulls of the best beef breeds almost exclusively. Excellent "store cattle" for shipping abroad were raised.

It is amazing that, even with the extreme cold of the Canadian prairies in the winter season, the stock on both farms and ranches are frequently kept in the open air during the entire year and, with proper feed, can thrive and put on fat in the dead of winter. In some parts, particularly in Alberta, it is frequently possible for the animals to find forage all through the winter.

The high standard of Canadian cattle is exemplified by the fact that last November a shipment of 200 head went to England to a Chester farm. This is the largest single export shipment ever bought by an individual. Baron von Trutschler, the purchaser, had lost his entire herd of 240 cattle through Foot and Mouth disease.

Last year Canada exported 310,000 beef cattle, most of them going to the United States, but ten thousand crossed the broad Atlantic to the Old Country. Canada is the second contributor of beef cattle to the United Kingdom, coming behind only the Irish Free State.

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No. 109. Mon. Jan. 17, 1938 -- The Canadian Home.

"The six room unit is more common in Canada than homes of any other size, but it is not typical in all parts of the country." That statement is contained in a report on the housing accommodation of the Canadian people issued by the Bureau and based upon data secured at the last census. A reference was made to it in the December issue of "A Fact a Day" but perhaps something more might be said.

There is a world of meaning in the statement, and it should be tucked away in the back of our minds as we endeavour to discover what bearing the Canadian home has upon our habit of thought and conceptions of well-being or, on the other hand, whether it is our mental outlook, our living and climatic conditions, our notions of family life, that sway us when we build our homes.

First of all there is the word itself. We sometimes use the words, abode, dwelling and habitation to denote the place where a person lives. Abode and habitation belong to the poetic or elevated style of speech. Even the word dwelling is not used in our every-day conversation, but when a man talks of "my house" or "my home", particularly "my home", he is portraying a scene of domestic love, and happy and cherished family life. Sometimes, when people get a little bit uppity, they talk of their residence.

Have you ever glanced at the faces of an audience in a concert hall, as the newspaper reporter does, when a great singer is rendering Home Sweet Home? Emotion is everywhere evident.

Madame Patti once sang "Home Sweet Home" as an encore at an Edinburgh concert. The Scottish capital was described by the late Rev. Dr. John MacNeil, of Toronto, as "east-windy, west-endy Edinburgh", yet tears were streaming down the cheeks of stolid men, much given to self-restraint. The great lady herself was almost overcome; no doubt, her heart was full of love for the might-have-been, for much of her earlier life was unhappy. The incomparable Jenny Lind, "the Swedish Nightingale", often sang "Home Sweet Home", the rare music of which was composed by Sir Henry Bishop.

When Jessie MacLachlan sang "The Auld Hoose" in the Canadian capital -- and capital cities are said to be skilled in restraining their feelings -- there was a long, dead quiet as she concluded the last strains. The moments of silence before the applause broke were a tribute to the singer who could so stir fond memories.

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No. 110. Tues. Jan. 18, 1938 -- Two Kinds of Homes.

We are familiar with the saying: "The humble cabin was dear to him as the home of his childhood". The poet has sung:

Home is where affection calls -  
Where its shrine the heart has builded.

Thus the word comes to signify any place of rest and peace, and especially heaven, as the soul's peaceful and eternal dwelling place.

In talking about home we are not thinking so much about our native land but rather of our domicile. An old writer has said that the two most patriotic races on earth are the Swiss of the Tyrol and the Scottish Highlanders.



We have no means statistically of showing whether that statement is correct or not, but there are evidences everywhere that the "eternal hills" have an extraordinary appeal that engenders deep affection.

When Papineau decided to build the mansion that was to be his home, he chose one of the loveliest sites in all North America, where the Laurentian Hills dip down to the lordly Ottawa. Stories are yet told of his evening stroll around that beautiful domain beside Montebello, and how in an ecstasy of love he would doff his hat and outstretch his arms to the wonderful hills.

Nor, however, are we thinking about mansions, but of the average Canadian home. More in our mind is the cottage. There are more log cabins than manor houses in this Dominion.

Let us say broadly that there are two kinds of homes in Canada, the country house and the city dwelling. Cities change so quickly that in a very few years, the place where a man was born may disappear, to be replaced by a business structure or an apartment. But in the country the changes are few and far between. City people take their children to visit the homes in which their parents were born and which their pioneer ancestors built. But a vast number of their children's children will have to point to a city hospital as the place where they first saw the light. The glamour of the birthplace is disappearing fast under our more regimented civilization.

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No. 111. Wed. Jan. 19, 1938 --- The City Home.

We may deal with the city homes first, in order to get rid of one really uncomfortable feature of the Canadian urban districts. There are the slums or near-slums of the poor and the avenues of the affluent. In between are the average homes, which contain six or seven rooms. In Quebec, four and five room homes predominate, in Ontario six, although Ottawa is exceptional with seven. Prairie urban areas contain proportionately more small homes and a lower percentage of large homes than is found in Eastern Canada. The four room home predominates in British Columbia.

The smaller Prairie dwellings doubtless are associated with the relatively short time the western provinces have been settled. This view is supported by the fact that Manitoba, the oldest of the three, has a lower percentage of small homes than Saskatchewan and Alberta. Accessibility and cost of building materials is another factor.

The power and progress of a country are based fundamentally upon the family and family life. Wise statesmen pay considerable attention to wages, for upon adequate remuneration depend proper living conditions. Inadequately housed and undernourished, a population speedily degrades. That is why Canadian statesmen of today are so much exercised over the question of relief for the unemployed. Social welfare looms large in statecraft.

On the whole Canadian cities are fairly well designed to meet the needs of their citizens. Normally the streets are wide and little gardens are an adjunct to the average home. There is plenty of good air. But in many cities there are slum properties which are out of the main routes of travel and are rarely seen by the population in general.

To William Penn we in America owe a great deal. When Charles the Second ruled England, Penn was sent to administer that area which is now called Pennsylvania. He had travelled widely, had seen the effects of the Great Plague of London and the

Great Fire; he was young, active and far-seeing. When he established Philadelphia he gave it a plan of wide streets and squares, which has influenced our continental city planning to this day.

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No. 112. Thurs. Jan. 20, 1938 -- The Rural Homes.

What about our rural homes, the houses in the country, far from the madding crowd? Country homes in the Maritime Provinces are larger on the average than in any other part of Canada. The typical dwelling has eight rooms which seems to suggest that they were built when the average families were large. There are a great many of these comparatively large homes in Quebec also. Incidentally, the small family and the married couple with no children appear to favour the apartment house style of living in the cities, which accounts in some degree for the number of small-roomed houses.

There is a definite figure to demonstrate this. During the ten years before the last census the number of households in Canada increased by about 370,000 but the number of dwellings increased by only 220,000. In many dwellings there were more than one household. For example, a young couple without children might rent two rooms in a house and there would then be two households in the one dwelling.

The characteristic rural home in Ontario is the same as in the urban districts, namely six rooms, but in the great open spaces of the Prairie Provinces, there is quite a difference. Over 60 per cent of Prairie rural homes have four rooms or fewer, while in Ontario the number of such homes is less than 23 per cent. In Alberta and Saskatchewan there are more country households occupying two rooms than in any other group.

Not long ago a gentleman arrived from the West to fill an important position in the Capital. He had gone West in his youth and had homesteaded. His first home was built of turf, that strong fibrous divot that can be cut from the lid of the Prairie. He spoke lovingly of that two-roomed sod shack where he and his wife spent their early wedded years, and of the heartbreak when they left it for the more commodious residence that a few years of prosperity had made possible. It was a long while before they looked upon their new dwelling as home.

Not far from Ottawa an aged couple are spending the evening of their days in a little stone house that was built more than a century ago and in which the husband was born. They were prosperous farmers and when their family grew they decided to build a handsome brick residence. The eldest son now lives in the new red brick while the old folk have gone back to the old house. True, they have some of the modern inventions to keep them up-to-date, such as electric lighting, an electric pump, as well as a little car, but they are home again.

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No. 113. Fri. Jan. 21, 1938 -- Most Houses are of Wood.

British Columbia has a distinction all its own. Rural and urban home distributions are more nearly similar than in any other province. The four-room dwelling predominates in both areas, but households occupying fewer than four rooms are more numerous than those with more than that number. The wealth of lumber probably is the cause of the rural homes averaging as many rooms as do the urban dwellings.



One thing is clear -- that city homes in Canada are more nearly alike in size than is the case in the country. There is greater elasticity in the number of rooms in rural homes generally than in urban centres. They range from the one-room shack to the mansion. One of these fine old homes, out in the country near Toronto, is 150 years old, built of white pine. This Markham home is still occupied by descendants of the builder and is visited by many people who are interested in such a remarkable relic of the early days in Ontario.

The interior lay-out of this interesting old house indicates the living conditions of the Ontario pioneers. On the ground floor there are a large dining or living room and two bedrooms -- one for the parents and one for the minister, who presumably lived with his flock, changing his place of abode from time to time. The kitchen was a lean-to. The first floor was one large room occupied by all the girls in the family and the top flat, also a single room, was for all the boys. This particular house was the home of no fewer than 16 children -- all the sons stood six feet and over.

Very many of the wonderful old homes in Canada were built of wood, especially of white pine, and it is a fact that, even to-day, most Canadian homes are of wood. At the census of 1921 sixty-six per cent of the homes were of frame construction, while at the last census the proportion had increased to seventy per cent. A frame house in the country well designed, say of that always charming gable construction, and nicely painted, is a beautiful sight, particularly when flowers and shrubs and trees surround it. There is the "home sweet home" of the Canadian countryside.

All through the older parts of Canada we find these Old Houses. Many of them have fallen into disrepair and are used as storehouses for discarded equipment. Many of the old stone and log structures have been covered with clapboard or stucco so as not to put to shame the new brick houses that shelter the second and third generations. But the Old Houses stand quietly in the background, monuments to the hardy pioneers who first cleared the land and made themselves homes in the wilderness.

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#### No. 114. Sat. Jan. 22, 1928 -- The Slums.

The high cost of real estate in a wide and thinly populated country such as Canada, the speculation and the over-rapid extension of costly civic services have been main causes of congestion. It became inevitable that people with small incomes and large families had to crowd themselves together to lessen the cost of living. We have built up slum conditions as a result. We have crude, rude shacks in which there is neither privacy, delicacy, health nor cleanliness. Insufficiently fed and clothed, children grow up often physically and mentally handicapped. Boys and girls raised in these families intermarry at an early age and perpetuate the problem. Physical defects, although frequent, are not as prevalent nor evident as the general mental degeneracy.

Movements are afoot to improve these conditions and it is notable that the citizens who are taking the deepest interest in the problem include some of the outstanding figures in the Dominion, men and women of noble minds who have devoted much of their time and thought to this cause.

The problem is of national importance. Every child born has an effect or an influence, however minute, upon the national structure.

How important it is may be judged from many angles, but one will suffice. It is notable, especially since democracy ruled, that a very large proportion of the great

minds that have risen to high estate and control of the destinies of their fellowmen, has been drawn from the ranks of those who can boast no purple in their blood. By improper housing and living conditions, therefore, it may reasonably be said that the nation may be losing potential leaders, and the underworld having its ranks recruited.

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No. 115. Sun. Jan. 23, 1938 -- Occupational Trends -- 1.

Many years ago there was a coachman in Ottawa who was known to a great many people from Coast to Coast. A liveryman he was called in local parlance. He was a good deal of a character, in his way, and his special flair was politics. He knew every political figure, and he had a more or less intimate acquaintance with everybody who was anybody.

He had what we call appeal. There was that something in him which gave him distinction. It was mainly his love of horses, transmitted to him by centuries of ancestors who had galloped across the green turf of Kildare. It was a sight to see him drive his span of spirited hackneys up to Parliament Hill and deposit on the kerb a Minister of the Crown who had been enjoined to attend a momentous gathering in the Privy Council Chamber.

He knew instinctively whether a sick horse had colic or a devilish toothache, and he babied it till the pain was gone.

One fine morning he drove to Parliament Hill but he was seated at the wheel of a motor car instead of handling the reins of his beloved horses and it made a good newspaper story. That same evening he taxied a cabinet minister to the old Russell House, now demolished, and the minister expressed his deep regret at the change. The man from Kildare was visibly affected.

This simple little illustration is given just to show what is meant by Occupational Trends. There has been a vast change since the twentieth century opened wide its portals. We describe it very well when we say that we have entered the Machine Age.

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No. 116. Mon. Jan. 24, 1938 -- Occupational Trends -- 2.

Read carefully this more or less technical preface to a talk on Occupational Trends:

At any given time the occupations of a people reflect the stage of economic development through which a country is passing. Basically, of course, this development itself depends upon the nature of the country's physical resources, the progress of invention and industrial technique. The changes that are constantly taking place in these basic conditions will eventually be marked in one way or another by modifications in the occupational structure.

That is full of meaning. Boiled down a bit, it means that the changes in industrial production have an immediate effect upon employment.

To get down to brass tacks, the modern power shovel of  $1\frac{1}{4}$  cubic yards capacity will dig up and dump 93 cubic yards per hour, which is the equivalent of the labour of 62 men working one hour with hand shovels.



The average man in a modern iron and steel plant is producing from  $1\frac{1}{2}$  to 8 times as much as he did 25 years ago.

The introduction of the movie tone picture theatres has displaced musicians entirely in small theatres and has resulted in about 50 per cent loss of employment among theatrical musicians in general. Every small theatre had its pianist or organist and the larger theatres had an orchestra.

There are not so many pianos in Canadian homes, with the result that there is less opportunity for the music teacher.

It takes about one-fifth the number of workers to turn out an automobile than were required years ago. A new special machine for the manufacture of pressed steel frames, operated by one man, can produce 3,600 in 10 hours, an output which by hand methods would require a force of 175.

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No. 117. Tues. Jan. 25, 1938 -- Occupational Trends -- 3.

Up to and including the last census, the minimum age at which a child might be counted as having a gainful occupation was ten years. However, in recent years, children are staying longer at school than they were and at the Prairie Census of 1936 the minimum working age of 14 was set. It was found at the 1931 Census there were few children under 16 employed outside agriculture, 75 per cent of the boys between 14 and 15 at work being in farming occupations.

A gainful occupation is one by which the person pursuing it earns money or money equivalent or in which he assists in the production of marketable goods. A farmer's son not attending school, who is fully employed on the family farm, is recorded in the Canadian Census as gainfully occupied though he may be working in a "no pay" capacity.

The most significant occupational change in Canada generally during the past quarter of a century or so has been a decline in the relative importance of agricultural pursuits and a rapid growth in transport, commercial, service and clerical occupations. In such primary pursuits as fishing, mining, logging and particularly in manufacturing occupations, the growth, though substantial, has hardly kept pace with the general increase in the working population.

This reveals the general direction of trend of occupations in the Dominion, but it is not easy to measure the actual extent of these changes. It is difficult to create comparable statistics. Constantly changing methods of production, the substitution of machinery for hand labour, the creation of new products, all tend to create occupational differences even where the main tendencies remain the same. There are occupations called by the same name as thirty or forty years ago but the nature of processes performed and the special duties associated with them show little resemblance.

At the opening of the century about 45 per cent of all gainfully employed males in Canada were engaged in agriculture but at the last census only one-third of the total males in the Dominion were engaged in that vocation. The population generally has grown, of course, and there are more men engaged in agriculture than there were 35 or 40 years ago, actually 55 per cent more, but the number of men engaged in all occupations has risen 100 per cent in the same period.

Agriculture very clearly reveals the effect of the Machine Age upon employment. Although the number of men employed in agriculture has risen 55 per cent compared

with the beginning of the century, the area of occupied farm land has increased 157 per cent. The total value of farm products is three times greater, which is a large increase even after allowing for changes in price levels.

It is worth noting that the population, as a whole, living in rural parts of Canada has fallen from 62 to 46 per cent. To put it in another way, while the rural population has increased 44 per cent since 1900 the urban population has grown at a much more rapid rate, or by 178 per cent.

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No. 118. Wed. Jan. 26, 1938 -- Occupational Trends -- 4.

There has been a definitely slower growth in the number of people employed in manufacturing or mechanical occupations than in occupations generally. This is true although there have been large increases in the manufacture of rubber and metal working and paper-making occupations. In fact, the proportionate increase in the gainfully occupied population of the whole country has doubled that of the manufacturing group. At the same time there has been a great expansion in the volume of production of manufactured goods. While the number of employees in manufacturing has not quite doubled since the beginning of the century, the net value of production has increased six times. Improvements in the processes of production have contributed largely to this result.

Statistics show that the aggregate number of workers engaged in what we call primary or secondary production today represents a relatively smaller proportion of the total working population than at the beginning of the century.

On the other hand, the numbers employed in the transportation and sale of goods have increased at a rate approximately double that of the employed population as a whole. The gainfully employed increased by 120 per cent but the number of those in transportation services increased by 266 per cent and in commercial occupations 233 per cent.

Railway transport occupations showed marked growth until 1921 but after that there has been some decline. On the other hand, road transport occupations have increased sharply since 1921. That is one of the very noticeable trends in recent years.

Telephone operators have increased from one thousand to fifteen thousand, a large proportion of the increase taking place in the first decade of the century. In that same conspicuous decade, trade had its greatest expansion, the number of employed almost doubling, while the total of gainfully occupied increased 50 per cent.

Occupations common to finance and insurance have shown remarkable increases; there are six times as many insurance agents as there were.

The service group of occupations has shown a somewhat more rapid rate of growth than the average rate for all occupations, but the number engaged in the professions has increased faster relatively than in the personal services. Valets and footmen are not so much in evidence.

Some professions, such as engineers, especially electrical and mechanical engineers and dentists, have increased much more rapidly than the older professions of medicine, law, and particularly, the church. Why that should be so, is just an exemplification of the higher standard of comfort -- apart from religion. That requires an explanation all by itself.



No. 119. Thurs. Jan. 27, 1938 -- Occupational Trends -- 5.

We prepare our bread with an electric toaster instead of browning it in front of a great open fire or over a box stove. We visit the dentist long before the vile toothache begins its beating. We sit proudly in our car and touch a button to start up instead of curry-combing a nag the night before and harnessing him up the next morning with fingers freezing. In fact we have begun to live like lords although we forget about that and grumble just the same. We rarely realize the blessings of our state and seldom think of thanking Providence for the fine food we are about to devour.

While professional engineers are five times as numerous as they were when the 1900's began, there are not quite half as many more clergymen. Apparently the need for attention to our souls is not regarded as so pressing as our requirements in the shape of mechanical devices. We don't attend church so regularly as did our forbears and are thankful that the Minister doesn't call the roll at morning or evening worship.

Then we have the personal service occupations. Domestic servants in the home ~~have~~ not shown the spectacular growth in number as recorded for restaurant keepers, waitresses, janitors, hairdressers and other personal services performed outside the home. This indicates the change in our mode of life consequent upon the growth of large cities and the trend towards apartment dwelling.

Complaints are heard frequently that it is difficult to get good maids, that young girls from good families will not endure domestic service, the long hours, the hard work, the poor pay and the servile state with its badge of servitude. Happy the young lady who enters the home of a kind and understanding lady -- to wit, Robert Louis Stevenson's nurse -- for in such a case domestic service is elevated as it should be.

Clerical occupations have absorbed rapidly growing numbers of young people, especially girls. There are 840 per cent more than at the turn of the century. There are more lady stenographers and typists now than school ma'ams. Indeed, with the exception of domestic servants, there are today more stenographers and typists than in any other occupation suitable for women. Teaching school, however, is still a favourite occupation.

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No. 120. Fri. Jan. 28, 1938 -- Occupational Trends -- 6.

Inevitably the question will be asked whether the unskilled labourer in industry represents a larger element in the Canadian working force today than formerly. It is a difficult question to answer. In the manufacturing industries it is not easy to distinguish between the so-called semi-skilled operator and the unskilled labourer. In the first decade of the century labourers increased at a faster rate than for most occupations; in the second decade they appear to have declined relatively, while in the third decade they resumed the more rapid rate of increase of the first decade.

Changes in occupations have been accompanied by changes in the sex composition of the working population. An increasing portion of those who work are women and girls. At the beginning of the century there were 154 females to every one thousand male workers; today there are over two hundred, or about one female to every five males in employment.

Though females have been entering gainful occupations at a relatively faster rate than males, the rapid expansion in female employment has been confined largely to the clerical, professional and commercial occupations. On the other hand, the number of women in manufacturing occupations has not shown as rapid a growth. For example, the decline in the number of dressmakers, milliners and tailoresses in the last twenty years has not been fully counterbalanced by the increased number of women in clothing factories.

The agriculturist still very largely pursues his occupation independently on the family farm, but the shoemaker, the tailor, the cabinet maker and a host of other skilled workers, who did their tasks at home, have now been largely supplanted by the factory worker.

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No. 121. Sat. Jan. 29, 1938 --- The Pea-viner.

The Canadian people use much canned peas and corn. They are such a favourite dish that it is worth while digging up from our memory the fact that two young Canadians made the first beginnings which made the pea canning industry a success.

During the last century John Chisholm and his brother, two young farmers who lived near Oakville, Ontario, had been working on a machine for shelling peas. It was a clumsy affair and had not been a success. The delicate peas were bruised and broken in the process.

The two young men had decided to give up their efforts and John, before leaving the barn, picked up disgustedly some of the pea pods. With a butter paddle in his hand he hit them much as you hit a ping-pong ball, or a tennis ball.

His brother examined the peas scattered round the floor of the barn. Every pod was empty and not a pea was bruised. That gave them the required inspiration. Their elaborate machinery had been rough with the peas. What they required was a light sharp impact such as Chisholm had given the pod with the butter paddle.

The two Chisholms went to work again on their invention, and they were joined by another inventor, Robert Scott, who had been working on a machine for picking the peas off the vines. Within a few months these three clever young men had built a wonderful machine, the pea-viner, that picked the peas off the vines, shelled and graded them, all in one operation. It is an attractive story of Canadian enterprise. Chisholm also developed a corn husker from a clothes wringer through which he ran the corn. These inventions paved the way for the canning of peas and corn on a large scale.

The development of the canned foods industry has effected great changes in the relation of foods to seasons. Fruits and vegetables of many kinds are to be had at all times of the year, not always with all the flavour of the freshly gathered products, but with much of their original freshness and flavour.

A striking illustration is the canning of tomatoes. About 90 million pounds have been canned in one year. Then we have tomato juice running up to over twenty million pounds and millions more of canned paste, puree and pulp. More tomato goes into cans in Canada than any other vegetable or fruit. Canned peas come next in quantity.

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No. 122. Sun. Jan. 30, 1938 -- The Tin Can.

Look at the kitchen cupboard. The shelves exhibit a pleasing array of coloured and decorated cans, all of them containing something <sup>that</sup> plays a part in the routine of the household. The containers are neat and well labelled. Indeed, these containers are quite often so neatly and conveniently made that, for everyday use, they are quite good enough for the table. We could easily do away with the old fashioned pepper box, for example, because the corner grocer will hand you a very nice-looking container with the pepper in it all ready to shake.

A Parisian named Appert was the first man to can food. He carried out his experiments with glass jars, which he sealed and immersed in boiling water. The French Government had offered a prize of 12,000 francs for the discovery of a process of preserving food for the soldiers and sailors of France. Napoleon was so grateful that he awarded the prize to Appert in person.

After that an Englishman, Peter Durand, invented the tin can and it took the place largely of the glass jar, so easily broken.

Hark back to the kitchen cupboard with its splendid variety of canned goods -- from coffee to spinach. There may be everything you require for breakfast, luncheon or dinner and a snack in between. Compare it with the cupboard typical of the days before the present century came in. Almost the only canned food on the shelf was salmon with its gaudy paper wrapper glued to the tin. Now and again when the picnic season was due there might be condensed milk, in which the Swiss were doing a thriving trade.

These were the days when the ladies of the household were very busy with purely domestic concerns, and cupboards were huge affairs. Much food had to be prepared for hungry mortals. Coffee had to be roasted and ground, salt cellars and pepper boxes had to be filled, mustard to be moistened. Potatoes, turnips, carrots and other accompaniments of the meat portion at dinner had to be peeled or scraped. The household implements were solid and heavy, the forks and knives had to be polished after every meal, and the work went on from early morning until late in the evening.

Nowadays, there is actually no need to do any one of these things. If the housewife is so minded, she need not do much more preparation for a meal during the day than toast a slice of bread, fry a rasher of bacon, boil an egg or brew a pot of tea. Housekeeping has been simplified with a vengeance.

The angle that occurs to one as most noticeable is the arrival of the tin can as a great labour-saving device. It has eliminated a great deal of the drudgery of the kitchen. Countless hours of toil have been saved by the tin can.

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No. 123. Mon. Jan. 31 -- Most Important Branch of Canning.

The most important branch of the canning industry is the canning of fruits and vegetables, which is carried on most extensively in Ontario and Quebec, where the climatic conditions for the growing of these crops are favourable. The canning season begins in June and continues throughout the summer and autumn until October, being at its height in July, August and September. That makes employment vary. Fewer than three thousand persons are employed in March, yet in the busy months there are seventeen or eighteen thousand.

Besides the fruits with which we are all familiar, we have loganberries and apricots in British Columbia.



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Canned fruits and vegetables in Canada have a money value greater than all other canned foods combined. Canned fish rates next. Salmon leads the way amongst the varieties of fish and is more than twice all others combined. Practically all of the canned salmon comes from British Columbia, with a small quantity from Quebec and other provinces.

Chicken can now be bought in a can, fitted to its nicely browned curves, thus saving the blushing bride from the jokes about amateur cooking. Even the prospect of raising young children has been made simpler by prepared foods. This item is gaining rapidly in popularity as the figures for the last two years available show a doubled production of prepared food for infants.

In fact the production of concentrated milk products was double that of canned soups. The total production value of the ~~canned~~ food industry in 1935 amounted to 45 million dollars, an increase of nearly 3 million dollars over the year before.

Tomato juice, which is more frequently found in the bars than in the dining-rooms of hotels in England is another product that is gaining in popularity. The flavour of the Canadian tomato is well liked and the extra juice in the tins of canned tomatoes is very popular in the North of England, especially among the miners.

It is impossible to say exactly how many tin cans are made in Canada in a year, but a good guess might be 60 million of all kinds. In the United States 600 million is said to be the number.

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