DEPARTMENT OF TRADE AND COMMERCE

CANADA

A FACT A DAY ABOUT CANADA

FROM THE

DOMINION BUREAU OF STATISTICS

NINTH SERIES

1942 - 1943

Published by Authority of the Hon. James A. MacKINNON
Minister of Trade and Commerce.

25 cents per annum

January

C O N T E N T S

James Muir,

Editor.

No. 94. — Electric Street Railways

An official statement made public by the Dominion Bureau of Statistics shows that productive operations in Canada were greater in 1942 than in any year in history. This expansion is due in large measure to increased production for war purposes. But what has made this remarkable development possible? The answer is simple. Canadians have tackled their problems with a vigour and enthusiasm, have tightened their belts, and are determined to continue to do so, with a spirit and conviction that is characteristically Canadian.

Thousands upon thousands of men and women have put aside their peace-time pursuits and are now producing the planes, ships, guns, ammunition and food that our boys and those of our Allies need on the fighting fronts all over the world. They are being supplied with the finest equipment obtainable anywhere. Then too, civilian needs have been maintained at a level that has caused no undue hardship. We are maintaining two fronts -- the war front and the home front.

Although production for war purposes is going on in most every town, village and hamlet throughout the length and breadth of our Dominion, the bulk of the activities is naturally concentrated in the more highly industrialized areas. Workers have flocked to these centres, swelling the populations in many cases several-fold. This factor, coupled with the rationing of gasoline and rubber tires, which has caused the lay-up of many civilian automobiles, has resulted in a tremendous increase in the number of persons using street cars and buses to transport them to and from their places of business or employment.

The latest figures issued by the Bureau, those for 1941, show that 800,000,000 passengers were carried by these services during the year, the highest annual total reported during the past twelve or fourteen years.

No. 95. -- Cutting Fuelwood

It is not good business to cut fuelwood only as it is needed. In the first place green wood gives off less heat than seasoned wood. It takes about a cord and a half of green wood to give off as much heat as a cord of seasoned wood. Some farm woodland owners cut most of their fuelwood in January or February. It is all right to cut firewood in the winter months if it is being cut for use next winter so that it will have a chance to season thoroughly before using or selling it.

But green wood — besides giving off less heat when used in stoves and furnaces — causes deposits of soot, creosote and acetic acid in the smoke pipe and flue. Drying wood for a short time is much better than not drying it at all. If air circulates freely about a pile of wood for three months in fairly dry weather, seasoning will be about half complete and the full value will be about 90 per cent of that of thoroughly air-dried wood. Foresters estimate that a cord of well cured fuel wood will save about a ton of coal for war industries -- and that's something these days.

If the supply of fuelwood for this winter is on hand it's not too early to begin thinking about next year's supply. The dead, diseased, crooked or forked trees are those that should be cut for fuel -- leave the thrifty, sound, straight growing trees to grow into sawlogs and other higher value products.

According to the latest available estimates Canada possesses 313,140 million cubic feet of standing merchantable timber, of which 211,660 million are considered to be accessible to commercial operations. The accessible timber consists of 252,100 million feet board measure of saw timber and 1,500 million cords of smaller material suitable for pulpwood, fuel, and other products.

No. 96. -- Writing Ink

History tells us that wars have been won or lost on morale. It follows then, that we, the folk back home, can do much to maintain the morale of our boys and girls serving with the armed forces of the Allied Nations, on its present high plain. As a morale sustainer, mail from home has no equal, so get out the pen and ink and send off a letter by the next post. Do it regularly!

The close relationship between letter writing and ink brings us to our topic for today. It is writing ink. Writing ink is one of the most useful items we have around the house which reached a high degree of perfection long before our time. Its use dates back to the era following the invention of writing.

The earliest inks consisted of a mixture of lampblack with a solution of glue or gum. They are still used in China, Egypt and the East, but have long been replaced amongst western peoples by inks made from iron and galls. The galls of commerce contain tannin, which is used in making inks and dyes.

This transition from carbon inks of the Eastern type into the modern inks took place very gradually and was not complete until the 14th Century. Pliny, Vitruvius and other classical authors mention writing inks, and old deeds and manuscripts show that its manufacture had reached a high degree of perfection in the Middle Ages.

Most of the ink sold in Canada is manufactured in the Dominion and therefore the amount imported is comparatively small, amounting in peace time to about $30,000 annually as against one-quarter of a million dollars worth made in our own factories. The imports came mainly from the United Kingdom and the United States.

No. 97. -- Training the Colt

The degree of success achieved in training colts to be good work horses depends mainly on two fundamental factors, heredity and environment. Through heredity comes temper, which may be docile and easy going or it may be excitable and even vicious. Through environment and training, the effect of applied psychology which gets results with animals as well as human beings is obtained. A good-tempered line of breeding stock eliminates a lot of grief and conserves patience but at the same time a good environment and training as foals and upward to working age will work wonders. Training should begin with the new born foals and the first and most important point is to gain their confidence, then nothing should be done thereafter to lose that confidence. If this practice is followed, the battle is usually won without a struggle.

At the Central Experimental Farm, Ottawa, this procedure is followed and the foals are handled regularly for haltering, tying, foot trimming, and other phases of training. This system is continued until they are rising three years old, when they are harnessed and put to work. At the start they are harnessed and left standing in the stall for half a day at a time, with bridle on and bit in mouth, in order to get used to them. Then another day they are harnessed along with an old solid quick-stepping gelding, driven around for awhile and finally hitched to a sleigh and put to light work. After a few days with the aid of an aged horse, two three-year-olds that have grown up together are hitched and worked as a team on light work. This procedure is invariably carried out by one man working alone and the results speak for themselves. Needless to say he is a good man with a good rein on his own temper.

This may sound simple and it is just as simple as it sounds, if the horses have the right temperament, and provided with the right environment (which includes a love for horses), and the procedure outlined followed. The only horses at the Farm with which any trouble has been encountered are some which had not been under control as foals and others that were hereditarily bad actors. The term "breaking" colts does not enter into the procedure at the Farm, emphasis being placed on "training".

No. 98. — Albacore

Pacific albacore do not seem to pay much attention to nutrition charts in choosing their diet, but apparently they do have some food preferences, and that's a useful thing for British Columbia fishermen to know now that the former source of artificial lures has been closed by war. The preferences were revealed when a federal fisheries scientist examined a number of albacore stomachs in the search for facts which might guide fishermen in their choice of lures. Fishing for albacore or tuna was first undertaken commercially in British Columbia waters only two or three years ago and at present the fishery is much dwarfed by others--in '41, for instance, the catch was only 76,000 pounds--but it has possibilities for the future and it was with a view to making successful fishing more likely that attention has been given to study of the food tastes of the fish. On the Atlantic coast, in Nova Scotia waters, fishing for tuna--the fish in this case is a cousin of the Pacific species, so to speak--has gone on for a number of years, both commercial fishing and angling. The 1941 commercial catch was about 406,000 pounds. A large part of the Nova Scotia catch is marketed in the United States. Most of the catch is sold fresh but part is sometimes canned.

The albacore stomachs examined by the Pacific investigator were found to contain nearly everything from anchovies and pilchards and squid to feathers, bark, barnacles, gravel and chips, evidence enough that albacore do not give much thought to nutrition charts. Evidence, too, as the investigator says, that albacore will strike at almost anything.

The stomachs frequently held remains of reddish shrimp-like creatures and interesting little fish which carry their own lanterns with them or, as more sober scientific language describes them, "myctophids which have luminous organs along their sides." Perhaps, then, albacore have colour sense and a liking for the bright things of life. However that may be, the frequency of red food and "the presence of the gleaming myctophids" suggests that red or

shining objects might be used to advantage in making lures for albacore fishing. Lures resembling pilchards and anchovies would seem likely to be effective.

No. 99. -- Marriages

Dan Cupid must have joined the army for his arrows have certainly taken on a more deadly accuracy in recent years. Ever since war broke out he has been striking left and right with such abandon that marriages performed in Canada have increased spectacularly. Despite the heavy strain on his bow strings there are no signs of his shafts going wide of the mark. Statistical records prove that this mythical little fellow's job becomes more laborious in periods of relatively high employment and prosperity, whereas in times of economic depression he has less to do.

The war with its resultant high level of employment and consequent increased earning power has doubtless been the greatest single factor in the increase in marriages. Then too, when many of our boys plan to go gunning for Hitler, they first marry the girl of their dreams. But we must not forget the ladies, for it is just possible that they have improved on their methods of approach, or it is possible that the lads also have polished up their technique as well as their buttons. Some or all of these factors enter into the picture in one way or another.

Nowadays bachelors are not coerced into wedded bliss as they were long ago in this country. In the early days when young ladies came out from France to be wooed and won, the authorities put upon the available men such gentle pressure as forbidding those who did not marry to trade, hunt, fish, or in any way enter the bush.

Rewards were offered to men who married at 18 and to women at 16 or under. Fathers who did not marry off their children before they were 18 were fined. A pension of 300 livres, the money of the period, was offered to anyone having ten children and increased to 400 livres in the case of twelve children.

Today no tangible pressure is put upon eligible men --- the furthest we go is with "hints". But human nature is still strong and when the hope chests are ready and the house is built or merely an apartment secured, the young people generally marry. In 1941 there were 122,000 marriages in Canada, which is almost double the number reported in 1933, when Canada was in the depths of an economic depression.

No. 100 -- Wool Production

To meet the needs of the armed forces of the United Nations, and at the same time supply civilian requirements, the production of wool in the various countries is of the utmost importance. In Canada the 1943 production objective for sheep and lambs calls for an over-all increase of 12 per cent in marketings. All the Provinces, with the exception of Saskatchewan, are expected to show increases of 10 per cent or more, states the Current Review of Agricultural Conditions in Canada.

Based on 1,000,000 more sheep in Canada, the goal for the 1943 wool production would be about 7,000,000 more pounds than in 1941. The Canadian production of shorn wool in 1942 is now estimated at 12.9 million pounds, or 10.6 per cent higher than in 1941. The main contributing factor to the larger clip was an increase of 113,000 in the number of sheep shorn.

The world supply of wool is now about to be enormously increased by the seasonal wool clips. The Australian clip now coming into the market will be well in excess of one billion pounds. The New Zealand clip will exceed 300 million pounds. Uruguay and the Argentine will have a combined clip of between 400 and 500 million pounds, including between 250 and 500 million pounds of fine apparel wools. The forthcoming domestic clip in the United States is estimated at approximately 450 million pounds. It is expected therefore that approximately an additional two billion pounds of wool will be available to the United Nations during 1943.

No. 101. — Tanning of Leather

The tanning of leather is an interesting business and one which has been developed into one of Canada's leading industries. Although our modern methods of converting the hides and skins of animals into leather are more scientific than in days gone by, the ancient Egyptians are said to have brought it to a remarkable degree of perfection. So faultless was their outturn that specimens have been preserved to this day, and although some three thousand years have come and gone their colour and strength are almost unimpaired. This is a tribute to the craftsmen of long ago.

Although leather is used in innumerable articles in every-day use a large part of the production goes into the manufacture of footwear, an industry which gained an early start in Canada. In fact footwear appears to have been made in New France from the very first days of the Colony. According to the first Canadian census, conducted in the year 1666, there were 20 shoemakers serving a total population of 3,215 inhabitants. Before the introduction of machinery the shoemaker or cobbler was an artisan supplying his own private customers. All footwear was made by hand in small shops seldom employing more than four skilled hands. In the rural districts however, farmers made their own boots and deerskin moccasins.

Indeed it was not until towards the close of the last century that the factory-made shoe came into popular use. Machinery made this possible. Although we still have our cobblers' shops, they are mainly for repair work. But now there are 210 shoe factories in Canada employing thousands of skilled craftsmen. Production during the year 1941 marks a high record for quantity with a total of 31,500,000 pairs, an increase of 22 per cent over the previous year. Footwear for women accounted for 48 per cent of the total, for men 30 per cent, for misses and children 13 per cent, for babies and infants five per cent and for boys and youths four per cent.

Quebec and Ontario produce the bulk of the Canadian output. The value of Quebec's production in 1941 amounted to $34,800,000, or 61 per cent of the total for Canada, while Ontario's value was $20,000,000 or 35 per cent. Nova Scotia and New Brunswick combined show a production value of about $870,000 or two per

cent of the whole, Manitoba and Alberta combined $500,000 or one per cent and British Columbia $700,000 or about one per cent.

No. 102. -- Plant a Victory Garden

Next Fall wouldn't it be a grand and glorious feeling to have sufficient fresh vegetables stored in the cold storage compartment of the basement of your home to see you through the winter months? It can be done with a little effort. How? Why, plant a Victory Garden in that vacant lot next door. It will provide a pleasurable pastime during those long summer evenings and at the same time will improve your health. It will be helping out the farmer who this year has been called upon for an ever greater output despite the shortage of labour. So, come along, save the meagre gasoline supply and those tires that are getting thin, get out the garden fork and hoe and dig in!

According to official word there is a sufficient supply of vegetable seeds available to meet all requirements, but there is none to waste. Amateur gardeners are advised not to buy more seeds than they are likely to need and not to buy them unless they intend to cultivate and fertilize so as to get the best possible crops. The vegetables recommended for home and community gardens are: tomatoes, carrots, cabbage, onions, beans, sweet corn, cucumbers, lettuce, spinach, swiss chard, radish, beets and hubbard and marrow squash. While green peas are not very practical for a small garden they are recommended where there is plenty of land. It is more economical for the amateur gardener to plant carrots in early June than earlier because by planting in June the destructive carrot rust fly can be avoided and they will mature at the best time for storing for use in the winter months.

The growing of potatoes, preferably from certified seed is recommended. Such seed can be relied upon to give a greater yield than ordinary seed and is practically free from diseases. Certified seed potatoes can be obtained from local seed or feed stores.

It is pointed out that there will be more seed this year than ever before for practising the community spirit among home gardeners. Some who have not had a garden before may be short of the necessary tools. The old custom of small community bees can again be brought into practice. Direction and assistance in this can be given by local horticultural societies, garden clubs, women's institutes and church organizations.

No. 103. -- For the Air Force

Here are some important bits of helpful work that the National Research Council has carried out for the Air Force:

Establishment of the new aeronautical laboratories just outside of Ottawa has provided improved facilities for research on the multitude of problems arising from modern trends in aviation. Closest co-operation is maintained between the Royal Canadian Air Force and the Council's laboratories through the Associate Committee on Aeronautical Research, the chairman of which is the

Air Member for Aeronautical Engineering, R.C.A.F. Much of the work in progress relates to problems that have been suggested by Air Force authorities in Canada, the United Kingdom or the United States.

Horizontal and vertical wind tunnels enable tests to be made on model aircraft of all kinds to determine their characteristics, good or bad, which are likely to affect their behaviour in flight. These studies are very important in the development of superior fighting machines and in working out all possible safeguards for the flying personnel who use them. In the engine laboratory dynamometer rooms are provided for the testing of aircraft engines, while in the gasoline and oil laboratory complete equipment is provided for physical and chemical testing of aviation fuels and lubricants. A structures laboratory provides for the fabrication of prototypes of aircraft and for the test of component parts.

Experimental work required in connection with scientific problems under investigation in the National Research Laboratories is often carried out co-operatively with the Royal Canadian Air Force Test and Development Establishment which is really a full-scale experimental flying station. In this way it has been possible to correlate in a most effective way the results of laboratory and model experiments with full-scale tests and to bring together on a common project civilian scientists and Service operating personnel.

During the year the Radio Section continued to work on the development of secret Radio Locator equipment with considerable success. There are already in the hands of the Services numerous different equipments which have been developed in the National Research Laboratories. Some of these have already been used successfully against the enemy.

No. 104. — Feed Situation in Canada

Scarcity of high-protein feeds is the only flaw in an otherwise favourable feed picture in Canada this year. The extent of the deficiency has not yet been fully measured, but it is abundantly clear that demand for these feeds greatly exceeds the present supply and this is a matter of concern in the light of objectives set for Canadian farmers in the production of live-stock and dairy products in 1943.

Feed grains, including a large supply of surplus wheat, are available in quantities sufficient to meet all demands in the current crop year, but these must be supplemented by oilcakes and meals as well as animal-protein feeds to bring about the increase sought this year in the production of bacon, eggs, butter and meat products. The raw material from which some of these protein feeds are derived, such as flaxseed and soybean, are more abundant this year than last, but the facilities for processing these oilseeds are limited, and the output of oilcake and meal is thereby restricted. Steps are being taken, however, to increase the crushing capacity this year.

The United States reports a similar situation, having more soybean and flaxseed than existing machinery can process to meet a demand so keen that output from crushers is taken up the moment it becomes available. The over-all picture in the United States shows a very close balance between supplies of high-protein

feeds and animal requirements for 1942-43 and points to a worsening of the protein feed situation in 1943-44. This would seem to preclude help coming from the south to Canadian farmers at the present time.

Since 1941 when the prices of animal products began to rise, there has been a growing demand for concentrate feeds, and in recent months with the index of feed prices in relation to animal product prices greatly favouring the feeding of animals, this demand has reached proportions not hitherto experienced. The market is being swept bare of all available supplies and the current needs of many live stock and poultry products are not being fully met.

In the matter of feed grain supplies and millfeed production by Canadian flour mills, the situation is very healthy and the output of bran, shorts and middlings much greater in volume than seemed likely a few months ago. The signs at that time pointed to curtailment of flour exports and a consequent reduction in mill operations, but new and unforeseen developments have kept the flour mills very active and resulted in substantial production of millfeeds most welcome to cattlemen and others who feed them extensively.

No. 105. — More Milk Needed

It is estimated that 18½ billion pounds of milk will be required to meet all needs for dairy products during 1943. This represents an increase of approximately one billion pounds or 5.7 per cent over the estimated production of 1942. The domestic demand for all dairy products, whether in the form of fluid milk or manufactured products, is on the increase. In addition to civilian needs there are the requirements of the Navy, Army and Air Force, Ships' Stores, Red Cross, commitments to the British Ministry of Food and exports to other Empire countries, which look to Canada as their only outside source of dairy products.

A continuation of the expansion of industrial activity, combined with a reduction in the price of fluid milk to the consumer will undoubtedly increase the demand for this product during 1943. The greatest proportion of the increase in total milk will be required in the form of butter. In addition to any increase in consumption which may take place, extra butter will be required to bring up storage holdings to normal, plus what extra may be required to take care of greater consumption. To meet this extra demand for butter, production during 1943 will need to be increased approximately 40 million pounds and all provinces of the Dominion are planning for greater production.

Although some increase is expected in domestic consumption of cheese during the year and the amount needed for export and other military requirements may be slightly higher, no increase in production of this product is considered necessary in 1943. The amount of cheese on hand on the 1st of January was greater than normal and a substantial reduction of this product can occur during the year without resulting in any likely shortage.

Of the concentrated whole milk products an increase of approximately 8½ million pounds is required in this year's production of evaporated milk. Whole milk powder, which forms an important item in Red Cross Prisoners of War parcels, will need to be increased about 6 million pounds in 1943.

The overall picture of the 1943 goals for dairy products calls for an increase of approximately one billion pounds of milk over that of last year. This may appear to be a substantial increase but, with more cows in 1943 than a year ago together with careful herd management, the goal should be possible of attainment.

No. 106. -- Electric Washing Machines

Although the average Canadian housewife still finds plenty to keep her hands busy from morning till night, the engineer and the scientist, to say nothing of the soap manufacturer, have blended their skills to make her labours lighter. For instance, before the advent of the electric washing machine and wringer, Monday was the hardest day of the week in the average household.

Today in many homes all the lady of the house has to do is to fill up her washer with hot water, add soap or whatever cleaning preparation she may favour, drop in the soiled clothing and let electricity take care of the rest, while she busies herself with other urgent matters. Yes, that weary weekly back-breaking job of bending over the washtub has become a thing of the past for many thousands of Canadian women. Electricity has made this possible.

Here are some facts taken from an official report issued by the Dominion Bureau of statistics that may interest our readers: Sales of domestic washing machines by Canadian producers during 1941 amounted to 127,899 units valued at $6,608,188. This total included 102,870 electrically operated machines worth $5,378,114, 14,907 gasoline operated models at $1,091,192, and 10,122 hand operated types at $138,882.

Some homes are even equipped with electric ironers, factory sales of these conveniences in 1941 totalling 2,344 valued at $136,324. But despite these modern improvements many Canadian women still prefer the wash tub and the scrubbing board.

Some women apparently favour the imported type of washer, for in 1941, there were 985 electric models brought into the country and 2,417 of other types. Then too, Canadian washers go to other lands, 843 units having been exported during 1941.

No. 107. -- Medical Research

In the field of Medical Research on active committee of the National Research Council has made great progress. The original purpose of this Committee was to co-ordinate medical research in Canadian institutions and to assist in its development. The activities of this committee are now wholly directed to war problems. The work has grown to such an extent that several new sub-committees have had to be established to deal with questions of shock and blood substitutes, wound infection and surgical problems. Regional committees have been appointed to facilitate the work. Liaison with Great Britain and the United States has enabled Canada to co-operate effectively with them in the promotion of medical investigations arising from war problems. More recently Australia and New Zealand have been included in the interchange of reports.

In the field of medical research as applied specifically to the Services, three associate committees are in operation dealing respectively with Aviation, Naval and Army Medical Research problems.

The first of these associate committees, on Aviation Medical Research was formed early in 1940 and has carried out a most impressive programme of work especially in the fields of high altitude flying and protective clothing. The work of the Naval Committee has been directed to the improvement of innumerable factors effecting the efficiency of personnel on boats, and the Army deals with similar problems of Service men who have to operate in tanks and work under the innumerable special Service conditions attendant on modern warfare.

Research activities under these committees have been carried on at most of the universities of Canada and at the National Research Council, the Ontario Research Foundation and the Clinical Investigation Units and other establishments of the Services. The close collaboration existing between the civilian and Service groups of workers and the help and advice so freely offered by industrial concerns have greatly accelerated the solution of a number of important problems. To co-ordinate work on major problems and make possible early and effective application of findings, subcommittees composed of civilians and Service workers under the chairmanship of a senior medical officer are the active research units.

No. 108. — Bread Grain

As the season progresses, the short supplies of bread grain in many European countries become more apparent. The shortage of bread in the Nazi-occupied territories and the Balkans seems most acute, with Norway, the Low Countries and France also indicating considerable scarcity of bread. Some neutral countries, including Turkey, report an unfavourable supply situation but the British and United States Governments have apparently made arrangements whereby Turkey will procure about 3.7 million bushels of wheat from Egypt until such time as she harvests another crop. It is understood that the United States will replace anything shipped from Egypt if this is later required.

Spain and Eire both report crops below domestic requirements despite increases in acreage and both will be required to import from abroad. Spain is obtaining most of her requirements from the Argentine while Eire is buying from Canada. The South African crop of wheat which has just been harvested is said to be 2 million bushels below the needs of the country and trade reports indicate that Canada will make up this deficiency either in the form of wheat or flour. The bread shortage in Greece is well known but the Greek people are getting some relief through the shipment of one-half million bushels of Canadian wheat a month which is in the form of a gift from the Dominion.

In the United Kingdom emphasis has been placed on the consumption of potatoes instead of bread as a means of conserving shipping space that would be required for the movement of wheat from North America. This would also utilize the very large potato crop produced in the United Kingdom in 1942. Recent remarks credited to the Minister of Food, Lord Woolton, suggest that if the switch from bread to potatoes is not made on a voluntary basis, it may become necessary to ration bread.

A serious food situation appears to have developed in India, as a result of the cessation of rice imports from Burma. It is understood, however, that the British Government is arranging with the Government of India to supply quantities of wheat to relieve the present shortage and trade reports indicate that Australia will be called upon to furnish this grain. The new wheat crop in India is approaching the harvest period but suffered from drought in the early stages of growth. The harvest is expected to begin in March and the outcome will depend a good deal on the amount of rain that falls during February.

Turning now to the major wheat producing countries, new estimates of 1942 production have recently been made. The crop in Canada is now put at 593 million bushels, a reduction of 15 millions from the previous estimate, while a minor reduction in the United States crop estimate places the harvest at 981 millions. The second official estimate of the Argentine crop is 235 million bushels, or a drop of 7½ million from the first estimate, while the Australian crop stands at 150 million bushels. Thus, the combined wheat crop of the "Big Four" in 1942 was 1,959 million bushels, or 310 millions more than they produced a year earlier. In all four countries the carry-over of old wheat is very substantial.

No. 109. — Cost of Living

In these days of war, when every dollar saved and invested in war savings stamps and certificates is bringing ever closer the day when the Axis Powers will be called before the tribunal of Free Nations for a final accounting, it is imperative that each and every one of us keep our living costs at the very minimum. It is in this phase of our war effort that the housewife plays the leading role. Upon her falls the responsibility of watching the family budget, which includes the buying of food, clothing and a host of other necessities of life.

To the average individual the term "living costs" means the total cost of things purchased. Used in this sense, living costs may include different things from month to month and year to year, and likewise different amounts and qualities of the same things. Therefore a measure of the cost of living based upon this idea would simply reflect the value of total purchases made by each one of us. It would reflect substantial changes in standards of living as well as changes in prices.

The Dominion Bureau of Statistics cost of living index which has been specified by government order as the basis for cost-of-living bonus adjustments, is based upon a different idea. It measures changes in the cost of a family budget which includes the same amounts of the same commodities and services for considerable periods of time. It is therefore essentially an index which measures the influence of changes in retail prices of commodities and services upon the cost of a representative urban wage-earner family budget.

Each index is a percentage which shows the relationship between the dollar value of the index budget for a specified period, and the corresponding dollar value of the same budget in a reference period. The Bureau's standard reference period includes the five years 1935 to 1939. The average value of the index budget for this period is represented by 100.0. The value of the same budget in August 1939 was 100.8 per cent of the reference budget, and the corresponding value for December 1942 was 118.8 per cent. These figures become the cost-of-living index numbers for August 1939 and December, 1942.

No. 110. -- Cost of Living in World Countries

In yesterday's Fact a Day an explanation was given of the method used by the Dominion Bureau of Statistics to measure the cost of living. It was felt that a short summary of the movement of cost of living indexes in world countries in recent months would round out the picture. Here are some interesting facts as gathered by the Bureau:

In the second half of 1942 upward trends of world cost of living indexes continued to be generally in accord with patterns of the first half. Advances ranged between less than one and six per cent, Iceland being a notable exception with an increase of 49 per cent between June and December 1942.

The cost of living in the United States as measured by an official index, rose less rapidly in the second half of 1942, with a three and one-half per cent gain over June as compared with nine per cent for the year. The Canadian series, on the other hand, recorded an increase of almost two per cent between June and December as against two and one-half per cent for the year. In both cases foods continued mainly responsible for increases.

An official index published by the United Kingdom revealed small divergence from levels maintained for the past eighteen months. A June to December gain of one-half of one per cent brought the index to a point slightly below the peak reached in December 1941 and again in August, 1942. Decreases in the clothing group during the past six months were offset by increases in all other groups except rentals. The 1942 average for foods, however, was lower than the average of 1941 and 1940.

The Mexican series in December was five and one-half per cent higher than June and eleven per cent higher than December 1941. South African and Australian cost of living indexes recorded June to November increases of two and four per cent respectively, and about nine per cent each during the year.

No. 111. — Tomatoes

One ounce of tomato seed will produce two thousand plants. Three ounces will produce enough good plants for an acre planted four by four or five by five feet apart. The tomato is a tender plant, and the governing factors in its culture are that plants should be eight to ten weeks old before being set out in the open and should not be planted in the field anywhere in Canada until all danger of late frosts is past, according to the climatic conditions of the region.

In the greenhouse, the seed should be thinly broadcast or drilled in flats or boxes, eleven by twenty-four inches, containing four inches of soil. The bottoms should have six one-half-inch holes for drainage. Heavy screen wire, five meshes to the inch, may be used for bottoms, where available. The seed when sown should be covered with one-quarter inch of soil and the flats placed in greenhouse or hot-beds. The seed may also be sown directly in the bed or started in pots in the house. When the seed is sown into the hot-bed, it should be placed in rows one-quarter to one-half inch deep, four inches apart, and moderately thick. Cover with sifted sand or preferably sandy loam and press firmly.

No. 112. — Advertising

Advertising, reputedly the very soul of business, may be defined as the art of educating the buying habits of the people. It is by no means a modern business practice, for it was in use as early as Babylonian times, as witness a clay tablet of Babylon bearing an inscription of cattle and feed for sale. Some authorities credit the Egyptians with having issued the first known advertisement on material which can be classified as paper. Then too, the Greeks and Romans painted signs on walls in public places as a means of conveying information.

The first English printed advertisement of which we have a record was one of Caxton's in 1477 and the first decorated printed advertisement was published in 1558 when Master Gervaes announced his willingness to cure certain diseases, "the poor freely for the love of God and the Ryche for a reasonable reward". The first newspaper advertisement in England appeared in 1626 and when freedom of the press was obtained early in the 1700's, newspaper advertising developed speedily. In America one of the earliest records of advertising was in John Campbell's Boston News Letter which was first published in 1704.

Today, advertising is considered a specialized business. Thousands of skilled craftsmen make a living by preparing advertising copy which appears in our daily and weekly newspapers, magazines and periodicals. In comparatively recent years radio advertising has been exceedingly rapid in its growth, while a variety of posters, handbills and circulars are turned out to keep the buying public informed. On occasion one has the opportunity of watching the sky-writer who thrills the onlooker with his daring skill. These are perhaps the better-known of the modern methods of bringing to public attention goods and services for sale.

Advertising is quite definitely big business in Canada. According to a tabulation made by the Dominion Bureau of Statistics, there were 49 advertising agencies in Canada in 1941 which contracted for space or other advertising media and that placed the advertising for the client on a commission or fee basis. Total billings to clients for all types of advertising placed by these agencies amounted to $29,224,000 in 1941, an increase of more than 33 per cent over the 1939 valuation.

No. 113. — Winter Sports

Canada has always been noted for its winter sports. From the earliest times, skating, tobogganing and snowshoeing have had their devotees, and, with the increase in the urban population and the greater need for outdoor exercise to offset the strain of the close application to indoor pursuits, these forms of sports have been supplemented by skiing, curling, ice-boating and hockey.

Although most of these forms of sport have attained a remarkable degree of popularity, none has been so well received by all classes as hockey. In fact hockey is today considered Canada's great national winter sport. No other game requires so much speed, accuracy, endurance and quick thinking in the player, nor does any form of sport so fascinate and thrill the spectator.

With an abundance of ice and snow covering the landscape in a normal Canadian winter it is natural for Canadian boys to play hockey. Just as soon as they are old enough to don a pair of skates and hold a hockey stick in their hands they are at the game. There are probably one and a quarter million boys in this country between the ages of five and fifteen and most of them have played some hockey in their young lives. They play the game as soon as the ice forms in early winter until the sun disperses it in the spring. Is it any wonder then that Canada lays claim to the distinction of producing the world's finest hockey players.

To keep these youngsters chasing the puck there were more than half a million hockey sticks manufactured in the Dominion last year. This is an enormous supply and no other game in this country approaches it as a creator of the demand for volume of output. Of course the older fellows who play in the major and amateur leagues use up a lot of sticks but not anything like the quantity that is turned out for the youngsters who are having the time of their lives learning to play the great Canadian game on the rink they have built in the back yard.

No. 114. -- Potatoes

With the war demand for more good potatoes in 1943 comes the need for planning and action by potato growers. Time, labour, machinery, fertilizer and spray materials must now be conserved as never before to avoid lost motion and waste of chemicals. Eleven per cent more potatoes is the goal in 1943, and this can be readily attained with approximately the same amount of labour and materials as was required for the 1942 crop, if proven sound practices are more generally followed.

All good potato growers will agree that the average yield in 1942 of 140 bushels per acre is not good enough. Many growers average more than double this yield, which means that many other growers are producing far below average yields. The most frequent cause of low yields is poor seed. Next is low fertility and poor methods of pest control. It is fundamental to start off a crop with good seed. Otherwise the fertilizers and spraying materials used are wasted. The country simply cannot now afford to waste any materials, time and labour on fields planted with cull seed, especially when good certified seed has been made available in quantity to the country for the express purpose of aiding the industry in that respect.

A survey has shown that in some provinces less than ten per cent of the seed planted would qualify to certification standards, and that many fields are planted with a quality of seed which could not possibly produce a good crop, no matter how much fertilizer was used. If every grower planted certified seed, either the crop could be doubled, or the present quantity produced annually could be harvested from about half the present acreage.

This gives food for thought especially when it is realized that most of the certified seed produced in Canada has to be exported to find a market, and that another million bushels are sold annually as high grade table potatoes, because of the lack of home demand for high quality seed. Countries,

thousands of miles away are paying high transportation charges to obtain Canadian certified seed by the shipload every year. About two million bushels are exported annually, while only about half a million bushels are sold in Canada each year as seed. Much of the acreage at present is planted with inferior seed, the bulk of which might better be used for starch purposes or fed to stock.

No. 115. -- Douglas Fir

The Douglas Fir is the true monarch of Canada's timberland, for it attains the largest size of any species of tree in the Dominion, and, with the exception of the California Redwood, is the largest tree found on the North American Continent. It ranges from the east slope of the Rocky Mountains in Alberta through to the coast of British Columbia and Vancouver Island, where some of the finest commercial stands are found. In Alberta it grows as far north as the headwaters of the Athabaska.

Although it usually attains the height of from 150 to 300 feet and a diameter of from three to six feet, it has been found reaching heights of over 300 feet and diameters up to 15 feet. As a protection against the elements nature has provided it with a heavy layer of bark, sometimes reaching a depth of from 10 to 12 inches. Another interesting point about this forest giant is that its span of life averages up to 400 years, but specimens have been found over 700 years old.

As a source of the largest structural timbers in commercial quantities, Douglas Fir is unsurpassed. It is obtainable clear from defect in large dimensions and has a very wide range of uses but because of its strength and size is particularly useful as a structural timber. In fact Douglas Fir timbers are much in demand today as a replacement for steel in construction work on aircraft hangars, war plants, bridge work and other enterprises that call for heavy timbering. Consequently logs thirty inches or more in diameter with small knots and few pitch pockets come under direct allocation of the Timber Controller.

The pronounced growth ring figure of Douglas Fir which may be emphasized or reduced by proper finishing, gives striking effects in interior woodwork where the timber finds extensive uses. Flooring both for dwellings and for heavy dock construction and general building purposes, water pipes, silos, cooperage, veneers and plywood, railway ties, telegraph poles and railway car construction are other channels of utilization.

The Canadian production of sawn lumber in 1940 was valued at $108,000,000, of which Douglas Fir accounted for about one-third. Spruce lumber was next, followed by hemlock, white pine, cedar and balsam.

No. 116. -- Boon to our Allies

We have heard a great deal about soybeans in the last few years and how that product has been devoted to many uses. However, here is something new and very interesting.

The extent to which soy products are helping to feed our Allies is indicated by the fact that from July 1941 to August 1942 approximately 31 million pounds

of these products were purchased by the United States Government for Lend-Lease. Of this amount 33 million pounds were in the form of flour, seven million pounds of grits, one million in dehydrated soups, and 20 million pounds in pork and soy links.

The demand by the Allies for soy products continues to increase. During the first two weeks of January purchases were made of 35 million pounds of grits and 31 million of soy flour. Additional invitations have been sent out for 20 million pounds of concentrated foods and eight million of dehydrated soups, each containing soy.

Further uses for soy products are being found in the U.S. Army. They will be used in pork-link sausages, stretching the meat and increasing the protein. They constitute an important part of the U.S. Army's K ration, being used principally in the K biscuits.

The U.S. War Production Board has indicated the importance of soybean oil by curtailing its use in any but edible products. Soybeans, indeed, occupy an important permanent position in the U.S. National Economy and a position of supplementary importance to the wheat flour and meat packing industries.

No. 117. -- Unemployment, Earnings and Employment

According to a 10 p.c. sample tabulation there were 98,030 male wage-earners in Canada unemployed on the Census date, June 2, 1941. This number represented approximately 5 p.c. of all male wage-earners. Unemployed female wage-earners numbered 26,130 on the Census date or just under 4 p.c. of all females in wage and salaried employment. These figures may be compared with data from the 1931 Census when unemployment on the first of June was much greater than on the Census date in 1941. On June 1, 1931, 395,662 male wage-earners, or about 4 times as many as at the 1941 Census, were unemployed. The percentage of male wage-earners unemployed at the date of the 1931 Census was almost 20 p.c. as compared with 5 p.c. on June 2, 1941, while for female wage-earners the percentages unemployed were roughly 8 p.c. in 1931 and 4 p.c. in 1941.

The Census figures show that about 1,135,000 or 55 p.c. of all male wage-earners and 407,000 or 57 p.c. of the total female wage-earners worked 50 weeks or more during the 12 months prior to the Census date, June 2, 1941. Approximately 67 p.c. of both male and female wage-earners were employed 40 weeks or more and 77 p.c. of the males and 76 p.c. of the females reported 30 weeks or more of employment during the Census year.

Although the proportion of male wage-earners with short periods of employment as wage-earners during the 12 month period prior to the Census date was much the same as at the 1931 Census, - about 12 p.c. in both years having worked less than 20 weeks - it is unlikely that there was as much extended unemployment in 1941 as in 1931. The more recent Census year was one of expanding employment with the result that a considerable number of persons were drawn into wage-earning jobs, many of whom for a short period during the course of the Census year, from agriculture and other non-wage-earner occupations and, to some extent, from school. New entrants into the labour market in 1941 were especially common among females. Almost 15 p.c. of all female wage-earners at the 1941 Census had worked less

than 20 weeks during the 12 month period prior to the date of the Census, while in 1931 only 5 p.c. reported less than 20 weeks of employment.

Such short period employment during the Census year ended June 2, 1941, partly accounted for the fact that 27 p.c. of all male wage-earners and just over 50 p.c. of all female wage-earners in Canada earned less than $450 over this period. About 54 p.c. of all male wage-earners and 88 p.c. of all female wage-earners earned less than $950 during the Census year. Almost 90 p.c. of total male wage-earners and 98 p.c. of all female wage-earners earned less than $1,950. Only about 175,000 males in wage and salaried occupations in Canada earned over $1,950 during this 12 month period ended June 2, 1941.

At the 1941 Census a tabulation of family earnings in families with wage-earner heads showed that in just over one quarter of these families aggregate earnings of all members of the family earning was less than $950. In approximately 75 p.c. of all wage-earner families total family earnings was less than $1,950, and in about 90 p.c. of these families total family earnings fell below $2,950. In the Census the family was understood to include husband, wife and children, but not other relatives or lodgers.

No. 118. -- British Columbia Tulip Bulbs

Like good news that bears repeating, so do the facts concerning the unmatched quality of British Columbia raised tulip bulbs. The proof of this high quality is not lacking, for extensive field comparisons of local and imported bulbs made at various points from coast to coast revealed the superiority of B.C. stock. Convincing evidence is also borne in the fact that some forcers have been raising and forcing their own stock for years with complete success. To-day, there is a brisk demand for tulips as well as other kinds of bulbs from all classes of buyers. Maintaining this favoured relation with the buyer should be the object of all bulb growers.

As an aid to the growers, in this respect, experiments were made at the Saanichton Experimental Station. These experiments were to determine the factors which contribute to the performance of bulbs purchased from different sources when grown under glass. From two years' results the following observations were made. Only bulbs of top grade should be placed on the market. If a consignment must be made up with bulbs of different quality in any variety, lots representing differences should be packed separately. This also applies to graded sizes. Uniform quality and size is a necessity to uniform flowering especially under glass. Bulbs sometimes shrink in ordinary storage so grading should be done as near the date of shipping as possible. The most accurate system of grading is by hand-calipering each individual bulb. Such grading is recommended if time will permit. Bulbs raised at widely separated areas and districts may flower at different periods when forced so should not be bulked for shipment. Bulbs ship best if packed in ventilated, strong paper bags in cartons or in boxes. Slack space can be taken up with light-weight material such as excelsior. Attention to these details assures repeat order sales because bulbs will arrive at their destination free from bruising and peeling, uniformly graded as to size and place of origin and in prime condition for both forcing and outdoor planting.

No. 119. -- Sow Good Seed

Although 'Old Man Winter' still reigns supreme in most parts of our Dominion, it is at this time of year that the farmer formulates his plans for the inevitable arrival of Spring and Summer when his labours in the field reach a peak. This year, due to labour and other shortages as a result of the war, farmers may not be able to give the same amount of attention to the cultivation of their land to control weeds as they did in former years. It follows then, that it is highly important to obtain good seed that is free of weed seeds. By doing this a two-fold purpose is served: more bountiful crops will be harvested, and less labour will be needed to combat the weed nuisance.

The production of all crops is largely a battle with weeds. As weeds compete with crops for water, light and the mineral nutrients found in the soil, the argument that a few more weeds cannot make any difference to the resulting crop shows a lack of knowledge of the competition which the crops have to meet in weed infested fields.

Many farmers are inclined to accept such common weeds as lamb's quarters and pigweed as a matter of course rather than consider them to be serious weeds. If the quantity of water required to produce one pound of lamb's quarters in dried form is compared with the amount necessary to produce an equal quantity of oats it will be found that lamb's quarters make far more demand on the soil moisture than the oat plant. Oats require 597 pounds of water to make one pound of dry matter, while lamb's quarters require 801 pounds.

The importance, then, of obtaining the best seed possible may therefore be realized. It is bad economy to save money on the lower grades of seed. A poor animal can be disposed of and forgotten as a bad debt, but once a field has become infested with such weeds as field bindweed or wild morning glory, bladder campion, wild cockle and many others, the loss may become permanent or at least recurrent for many years.

No. 120. -- Wartime Production

The predominating aspect of the economic situation in Canada in 1942 was the continued shift to wartime production. This was reflected by the trend of the various indexes compiled by the Dominion Bureau of Statistics. A majority of these factors indicated that in 1942 the high levels of economic activity reached in 1941 were not only equalled but exceeded. The index of the physical volume of business standing at 221.2 for December, showed an increase during the year of 22 per cent, while the index of industrial production at 250.8 was 38.5 per cent higher.

Most of the expansion indicated in manufacturing naturally can be traced to activities associated with the war program. Increased industrial output was accompanied by an 11 per cent increase in the use of electric power, and a continuation of the trend toward fuller employment and larger disbursements in wages and salaries. The employment index reached a new peak at 186.5 for December compared with 183.3 in November and 168.3 in December, 1941. The index of payrolls showed an over-all increase for 1942 of 21 per cent.

The immense economic stimulus of war production in Canada is indicated by the estimated output of munitions and supplies to the value of $2,600 millions in 1942. To date contracts placed by the Department of Munitions and Supply aggregate over $6,000 millions. In 1942 the output of mechanical transport is estimated at $400 millions, or nearly double the previous year. Other branches of industry to show greatly increased output included shipbuilding (increase from $91 millions to $260 millions), aircraft construction (158 per cent increase) as well as the production of shells, bombs, guns, armoured vehicles, chemicals and explosives. This great increase in industrial operations as well as primary industries has provided very substantial increases in purchasing power, and income payments to individuals in 1942 are estimated to be about 70 per cent greater in total than in 1938, the last full peacetime year. Aggregate retail sales for 1942 are estimated to show an increase of 14 per cent over 1941, the index standing at 213.4 for December, compared with 164.8 for November, and 201.5 in December, 1941. Country general store sales showed a 14 per cent increase for the year.

A continuation of these various economic trends can be expected in 1943, but as the peak of the war effort approaches, advances will be less pronounced. The supply of man-power has already begun to define the limits of the expansion of employment. The government has firmly reiterated its intention to check further advances of prices and wages, and it is probable that taxes, war savings and loans will be freely employed to finance the war and prevent inflationary tendencies. Shortages of men and materials, power and transportation will check further rapid expansion of industrial plant capacity, although there may be considerable transfer from less essential activities. Despite these facts, consumer purchasing power is likely to remain at comparatively high levels, and to ensure a fair distribution of available supplies of numerous foods and other commodities, rationing has either already been instituted, or is being contemplated.

No. 121. -- Vegetable Dehydration -- 1

Vitamins spell victory any way you want to look at it. From the front-line fighters right down to the men behind the men behind the guns it's what they get when they "come and get it" that really puts the oomph in their work. Recognition of this fact has led to a search for some method of preserving foodstuffs so that an adequate supply might be made available all year round for troops and civilians alike. That's where dehydration comes into the picture.

Contrary to popular belief, dehydration of fruits and vegetables is not a new idea born of the emergencies brought about by the far-flung battle fields of this, the Second World War. In fact it dates back to the Indians with their dried corn and salmon and pemmican. In the Crimean War dried vegetables and fruits were shipped from **England** to the suffering troops at the front in an honest attempt to relieve the men from deadly attacks of scurvy. While the antiscorbutic properties were not to be found in the dried vegetables as in the fresh, the pioneers did have the right idea. About four years ago some of these "canisters of dried foods of the 1855 pack", consisting mainly of powdered carrots and meat, were opened, the contents analyzed and found to have changed very little in the course of 80 years.

In Canada vegetable dehydration, or drying, goes back almost as far in history as fruit drying. War, however, encouraged and speeded up research activities being carried on along this line ever since the last Great War. At

that time the efforts were not very satisfactory and the dried vegetables, when refreshed, were tough, tasteless and lacking in food value. Today, six plants scattered across the fertile stretches of the Dominion are turning out all kinds of dehydrated vegetables, from onions to spinach and beets to potatoes.

No. 122. -- Vegetable Dehydration -- 2

Sponsored by the Dominion Department of Agriculture, research and experimentation in new and improved methods of dehydration is right in line with the war effort of the United Nations. With armed forces scattered all round the world, and overseas civilian populations in want, the problem of keeping them both properly fed was something to cope with. Shipping space was at a premium. There wasn't enough room for all the food so badly needed. Transportation was disrupted by prowling U boats, making long, dangerous detours necessary and occasionally food would arrive at its destination in very poor condition. Dehydration was the only logical answer to the space and spoilage question.

Most vegetables are about 90 per cent water and dehydration or drying processes reduce this moisture content to about 5 per cent without detracting from the flavor or food value of the original raw material. Besides being less bulk, dried foods are light in weight and will not spoil even when stored for a period of twelve months or more at extremes of temperature. Dehydration actually represents a saving of 90 per cent in shipping weight and from 25 to 50 per cent in shipping bulk.

The vegetables being dried in Canada in the greatest quantity are carrots, beets, cabbage, beans, spinach, onions, turnips and potatoes. Radishes and lettuce have not yet been successfully processed. Potatoes require the highest temperature and are the most difficult to dehydrate, but when properly done it is practically impossible to tell the difference between the fresh and dried tubers. Cabbage and onions require the lowest temperature but the difficulty with the latter is retaining the escaping flavor. If you have ever peeled an onion you will have some idea of what the workers are up against.

A pound of dehydrated potatoes doesn't look very appetizing and it takes a real imagination to picture them white and steaming, heaped up on your plate. When they are scraped crisp and flaky from the trays of the drying chamber they are packed by hand in large cans and hermetically sealed. One five gallon can of the variety most commonly used will hold 7 pounds of dried potatoes which is equivalent to 105 pounds of the fresh vegetable, or 10 pounds of dried cabbage which is equal to 140 pounds fresh, or 15 pounds of dried turnip as compared with 165 pounds of the fresh. Where over 280 pounds of fresh carrots would be the amount required to feed a thousand hungry soldiers, only a little more than 70 pounds of the dried vegetable is sufficient.

The 6 plants in Canada now producing dehydrated vegetables are located in British Columbia, Manitoba, Ontario, New Brunswick, Prince Edward Island and Nova Scotia. The processed products they turn out are, when refreshed, satisfactory in color, texture and flavor, and complete with all essential nutritive values, in fact they are the greatest stand-ins for the real thing yet to emerge from the laboratory.

No. 123. -- Halibut

Halibut may not know it but they carry about with them such interesting things as riboflavin and nicotinic acid. Which is one of the reasons why halibut are healthful food for humans, even if that particular reason, one among a number, may come as news to people who are not familiar with scientific terms and facts.

For health's sake the human body needs both nicotinic acid and riboflavin, or vitamin G as riboflavin was sometimes known, though the daily requirements are not great. Riboflavin, to quote from material prepared by Pacific Coast scientists of the federal Fisheries Research Board, "assists in preventing certain eye disorders, prevents or cures cheilosis (fissures or cracks at the corners of the mouth), promotes growth." Nicotinic acid prevents or cures pellagra, an affection of the skin.

Protein percentage in fresh or frozen halibut, as indicated by representative averages, is about 23.5 and percentage of oil or fat 4 5. Energy value of the fish is put at 625 calories to the pound. Protein fat calories are all familiar friends but here are some of the other human necessities which halibut supply, in addition to riboflavin and nicotinic acid: Vitamin A, vitamin B1, vitamin D, calcium, phosphorus, iron and copper. Iron and copper are essential for the prevention of anaemia and the other minerals and the vitamins promote or protect human health in various important ways -- calcium, for instance, being "essential constituent of all living cells", vitamin A serving, among its other functions, to assist in maintaining resistance to infections, and vitamin D building and maintaining strong bones and teeth and helping the human body otherwise as well. Data as to halibut content of iodine, "required for normal functioning of the thyroid gland," were not available when the Research Board people made up their statement but sea fish, of course, are the great food source of iodine, and halibut, no doubt, have their full share of it.

No. 124 -- Consumption of Cigarettes

When sending parcels of comforts to the boys serving overseas, along with a variety of good things to eat, we invariably include a few packages of cigarettes. Our boys appreciate these smokes, according to letters received by friends and relatives, as well as occasional suggestions from the boys themselves by way of overseas radio broadcasts to "keep them coming." Although the Bureau has no record of the number of smokes actually sent abroad to the boys in uniform, the quantity must be tremendous.

The smoking of cigarettes has had a spectacular growth in Canada during the past twenty-odd years. In 1919 for instance, the year following the end of the last war, there were approximately 1,555,000,000 factory-made cigarettes released for consumption in Canada. By 1934 this total had grown to 4,822,000,000 and by 1942 to 10,240,000,000. The figure for 1942, is of course, an all-time high record. This huge advance is due to some considerable extent to the increased use of cigarettes by the ladies, but the general upswing in the earning power of the average Canadian has also had much to do with it.

Although these figures are really very impressive, they by no means represent the total amount of tobacco consumed by Canadians in a year. There are thousands

who prefer to "roll their own", many who prefer the pipe to the cigarette, and still more who prefer the cigar or "stogie" as they are sometimes called.

A large part of the tobacco used by Canadians is grown in this country, although some is still being imported for blending and other purposes. In 1942 the commercial production of leaf tobacco in Canada amounted to 85,132,000 pounds as compared with the 1941 production of 91,160,600 pounds. Most of the decrease occurred in the Ontario flue-cured crop where heavy frost destroyed six million pounds. In Quebec approximately one million pounds of flue-cured, cigar and pipe varieties were lost through frost.

The acreage planted to tobacco in 1942 was 75,200, an increase of 4,600 over that of 1941. The average yield per acre was lower for all types and particularly for flue-cured which occupied the greatest acreage.