DEPARTMENT OF
TRADE AND COMMERCE

CANADA

A FACT A DAY ABOUT CANADA

FROM THE

DOMINION BUREAU OF STATISTICS

JANUARY 1941

SEVENTH SERIES

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Contents

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Dominion Bureau of Statistics

No. 93 — Wed. Jan. 1, 1941 — The New Year

To-day we have begun a new year and Canada is still in the midst of war. Our young men are still training to take their part in the front lines against the enemy which is determined to destroy our nation, our liberty, our civilization and our religion. Many of them have already gone overseas to the British Isles where the front line of our democratic struggle is, and many more will follow them before the forces of totalitarian aggression have been destroyed.

There has been a vast change during the past year in the scheme of things in Canada as in all the countries that are engaged in war. When we were wishing one another a Happy New Year just twelve months ago few imagined that such peace-loving countries as Norway, Denmark, Holland, Belgium and France would be overwhelmed by the war machine which Chancellor Hitler of Germany had for years been building up. Most of the rest of the world had placed some reliance upon the pledges given by the Chancellor that his march of aggression had ended, and none of these countries was at all prepared to resist the march of a regimented people who were to become the outstanding European brigands of all time.

The world, however, was soon disillusioned and these countries fell before the drawn sword of the Germans in quick succession, until to-day in this new year of 1941 we are facing the solemn fact that Great Britain and the British Commonwealth alone has unbroken entities left to bear the brunt of the battle. On the shoulders of the comparatively small Island kingdom of the North Sea the full forces of the mighty strength of Germany, Italy and the slave labours of the conquered countries of the continental Europe is falling. Never was such a tremendous task given any people in the whole history of the world and the British people are being tested as never before.

On this New Year's Day there are some breaks in the clouds. One attempted invasion of England has been broken, principally because of the courage, enterprise and skill of the Royal Air Force, in which many young Canadian men are playing an important part along with others from beyond the seas, wherever the British flag flies. It is not too much to say that these Commonwealth airmen have proved themselves as brilliant in mind and valour as the most brilliant of their ancestors of a thousand years. At the same time men in the other forces that are fighting their way to ultimate victory have shown themselves to be of the same metal.

Then there are other breaks in the clouds that seemed almost impossible only a few months ago. The Greek army has resisted successfully the Italian invaders and has driven them from Greek soil. The forces of Mussolini in Albania have met disaster after disaster and seem to be on the verge of overwhelming defeat in Albania, that little corner of southern Europe that had been crushed by Italy. On the continent of Asia the splendid cooperation of the Royal Navy, the land forces and the Royal Air Force have combined to destroy the Italian arms and appear to be on the way to tearing "to shreds and tatters" the Italian empire on what used to be known as the Dark Continent. In the operations which have swept along the northern coast the Australian troops, the fighting men from British India and the Free French forces of General de Gaulle along with English, Scottish

and Irish, have displayed remarkable power and strength. The forces of British South Africa and Kenya are moving up towards Ethiopia and the prospects are that in a very short time the Italians will have been driven out of the war, so far as Africa is concerned, and will have lost an immense number of fighting men.

And then there is the help which the United States has promised to give to the democracies. That it will provide the balance of power which will bring Britain to a victorious conclusion, is beyond all doubt.

Little more need be said, because whatever is recorded today is old by to-morrow in the swiftly passing show. It may very well be that before 1942 rolls around the changes that have occurred during the past year will be completely overshadowed by the changes that will have occurred during 1941.

No. 94 -- Thurs. Jan. 2, 1941 - League of British Nations

Before 1914, the British Empire was still considered as an expansion of Great Britain - a Greater Britain, spreading British culture and British principles over many lands.

It was acknowledged that the British Dominions were self-governing, and that, in theory, they were individual nations. But they had not acquired any real weight as separate factors in world affairs.

The Great War of 1914-18 changed the whole picture of the Empire, both for British eyes and for those of other nations. It was seen that the British Empire was a great organism living of itself, not drawing all its strength from the Mother Country.

Dominions and Colonies alike were able to give to the British cause not only the aid of men and materials, but the vital reinforcements of intelligent, free-thinking collaboration.

What of this war? The outbreak found the British world far advanced in historical development, not only from the Empire of the early years of the century, but also from the Empire of 1918.

In the first place the Statute of Westminster had affirmed, and events had clearly shown, that the Dominions and Great Britain now stood in the relation of autonomous and equal nations bound only by fealty to a common sovereign.

In the second place, the Dominions had developed so rapidly and so greatly in industrial and political organisations that they brought to the war effort not only the counsel of a number of minds but the weight of a number of great nations.

In the third place, history had radically changed the relations between the British nations and foreign countries.

Canada had reached a new and historic understanding with the United States, as between equal and independent nations.

Australia and New Zealand faced new problems in the Pacific, with Japan no longer an ally - but they faced these problems with new freedom of decisions, and new power to back their decision.

South Africa, despite her internal difficulties, had a new responsibility, and a new resolve, as a power whose influence was destined to guard the cause of freedom over a great part of the African continent.

In short, each Dominion found itself living the life of a nation, with its own obligations and opportunities, both in the field of peace and in that of war.

The war against the aggressors has been launched, and will be carried on, not by one British nation, but by a league of British nations, one in creed and one in purpose, but bringing to the battle the strength of many great forces united.

No. 85 -- Fri. Jan. 3, 1941 -- Commercial Progress under War Conditions - 1

Many people have been wondering - and reasonably so - what is happening to our Canadian Commerce, especially its overseas trade, as the result of war. The Hon. James A. MacKinnon, Minister of Trade and Commerce, and incidentally the Minister in Charge of the Dominion Bureau of Statistics, has the following to say of the situation. Read it carefully.

The progress of Canada's commerce during the past year must be viewed in the light of its relationship to the war struggle in which the British Commonwealth of Nations is engaged. Our main policy has been to assist, to the full extent of our resources, in the victory against aggression. Statistics do not reveal the whole story.

In bald figures we are to-day doing approximately a total annual external trade of two and one-half billion dollars, or almost one-third more than we were doing a year ago. Our exports are much greater than our imports and the Canadian products we send to Empire countries comprise considerably more than half of our total domestic exports. The increase has been about fifty-five per cent.

The problem of Canadian commerce when this young British Dominion rose to arms, was first of all to align all our sea-borne and domestic commerce in the direction of the greatest aid possible to the United Kingdom in her heroic defence, and in the accomplishment of that purpose, we had also to see to it that the trade we had lost with the conquered and conquering countries of continental Europe should be diverted into other channels or increased in those directions which remained to us.

It is fundamental in our Canadian economy that we must carry on an international trade far beyond the necessities of most other nations, pro rata to population. In peace years our per capita commerce is one of the very highest in the world. To conserve our position in war time was of the utmost importance. In that enterprise we have been highly successful.

Let me briefly explain the underlying reason for the unquenchable optimism of the Canadian in this conflict. That optimism is frequently observed by commentators.

At the present moment - and please note that I am speaking only in terms of war days - the North American continent is more than half the whole economic world. The British Commonwealth and the United States together represent somewhere between one-half and three-quarters of the economy of the universe.

Canada has not been unmindful of the commercial difficulties which Great Britain is facing and we have been able to assist in a direct and substantial way. British producers have faced special obstacles in export markets in war time because of the higher costs of production and the greatly increased shipping freights and insurance cost. To overcome these disadvantages the Canadian Government, therefore, decided to remove or reduce the tariffs impeding the entry of British goods into Canada wherever this was practical and at the Session of Parliament in December we arranged that duties should be removed completely on all cotton items, on all artificial silk items, on gloves and mitts of all kinds, jellies, jams and marmalades, and a number of miscellaneous items. In addition duties will be reduced on a considerable list of British imports including medicinal and pharmaceutical preparations, soap, earthenware tiles, stoneware and earthenware, table cutlery, bicycles, electrical generators, transformers and motors, rugs and carpets, oil cloth, and linoleum. In this manner we have shown our desire to help indirectly as well as directly in the war effort.

No. 96 -- Sat. Jan. 4, 1941 - Commercial Progress under War Conditions - 2

As regards Canada more particularly, our Dominion is now the third largest exporting country. In peace time I would have stressed this more, but, while naturally we take some pride in the achievement, remembering that not very long ago we were only an assortment of colonies and now occupy so important a place in international commerce, I know that my countrymen are with me when I say that the greater satisfaction is that we are able to provide a help in this crisis which will be felt wherever the enemy chooses to strike. The power and endurance of our Commonwealth and American commerce is beyond question.

Commerce is a mirror of strength, and therefore to us in Canada it appears inconceivable that Democracy at its peak can be doomed to perish from the earth. Hence the optimism of the men and women who have gone across the Atlantic as volunteers to take their places in the forefront of our defence.

When war broke upon us, we had the experience of the last war and a quarter of a century since to assist us in our plans. It was our object to harness our industries to war needs and so dispose our internal economy that after victory, the least possible dislocation would take place. Luxuries such as the annual new automobile were frowned upon. We appealed to industry. Industry responded with fervent zeal and buckled to the task.

We have kept in mind that one of our chief concerns was to take care that as many as possible of our factories, while engaged upon the main purpose of producing supplies that are vital when the country is at war, should not be found idle when the victory has been won. A totalitarian war is different entirely from the old wars between standing armies. All of our people in one way or another are engaged in this war, and we have seen our peacetime operations directed towards the task of conquering our enemies. The advancement of science and the blessings it has brought to people everywhere have been turned into agencies of destruction. In some respects, therefore, we are almost at a standstill. For example, there are fewer prospectors in our hinterland, yet our mineral production last year broke all records. There has been curtailment in certain other directions. So when war has ceased, those industries will return to their peace time projects to an extent never before experienced when nations were divided against nations. There will still be a high demand for the products of the mines.

The outstanding feature of our commercial relations, internal and external, has been the hearty cooperation we have received everywhere. Need I mention the United States? Close neighbours along a four thousand mile frontier, we understand the people of the Republic and they understand us. We are blood kin, and the trade between us is the largest between any two other countries of the world. Their sympathy and assistance, their hearty cooperation in the output of needs for ourselves and the Empire since war began has been an inspiration. It has drawn the English-speaking peoples very close together.

Cooperation has increased our production in the required industries so rapidly that the measure of to-day's fulfillment is always lower than that of to-morrow. I shall not say much about the specific contributions Canada is making. That they will become growingly effective as the days go by, you may be sure. One instance of our effort is true of the general picture. Our production of trucks is more than ten times what it was a year ago. Practically all the trucks operating in Northern Africa, were made in Canada.

As I have indicated, our exports to Empire countries have increased spectacularly and we have had it in mind from the beginning that the necessities of life, as well as implements of war, must reach the United Kingdom in ever increasing quantities. Our deliveries of grains have greatly increased. Meats have doubled, while eggs, which did not previously rank high amongst the commodities that we sold in the United Kingdom market, are now assuming large proportions. Our lumber export to Great Britain has made a great advance. Newsprint has moved up impressively and wood pulp has been transported across the Atlantic, in about ten times greater quantity. Indeed it may be said that along the whole range of the British peoples' necessities Canada's contribution has vastly increased. At the same time, we have not been unmindful of the needs of other parts of the Empire.

In conclusion, as you well know, fifth column activities in the Americas had secured a foothold before Hitler ran riot in Europe, but these subversive elements have now been labelled and bridled and the vast majority of the inhabitants of the Americas, from Hudson Bay to the Magellan Straits are with us in the battle. The commercial relations which we have established in all the American countries teach us so.

No. 97 — Sun. Jan. 5, 1941 - Water Power in the North

Hydro-electric power has been turned on at Yellowknife. The Con, Negus, and Rycon gold mines are receiving electrical energy from the first hydro-electric plant in the Northwest Territories, located at Prosperous Lake about 18 miles north of Yellowknife. Provision is also being made to supply the domestic requirements of the settlement. In addition Ptarmigan Mines Limited, Giant Yellowknife Gold Mines Limited and the Thompson-Lundmark Gold Mines Limited will be supplied with power in the near future.

Previously power for mining operations in this northern gold field was supplied by diesel units, the oil being shipped to Yellowknife from wells below Fort Norman, N.W.T., or from Alberta. The change to hydro will provide cheaper power, and thus enable the profitable working of lower-grade ore bodies.

Work on the project got under way in April, 1940, after one hundred tons of equipment and supplies had been shipped to Yellowknife by tractor over the

Grimshaw-Great Slave Lake winter road and then by truck to the power site. The plant is estimated to have cost about $600,000, and the work included the construction of a rock-filled timber dam 760 feet long and 16 feet high, a rock tunnel 800 feet long, a wooden penstock with a 90-foot surge tower, a frame powerhouse and sub-station, and a 33,000 volt steel tower transmission line for the delivery of the 4,200 horse-power of the initial development.

No. 98 — Mon. Jan. 6, 1941 - Mass Housing Project

Surmounting colossal difficulties that involved plans, layouts, locations, estimates, materials and labour, completion of permanent encampments for some 125,500 officers and men in the months just past constitutes an amazing record in Canada's war effort.

Thirteen encampments for the Active Army and thirty-nine for recruits called for training in accordance with the provisions of the National Resources Act are covered in this program of erecting and equipping to the last detail 2,500 new buildings suitable for year-round use.

Like modern towns and small cities, these camps have their own water, sewage, light and power systems, and living quarters have all the conveniences of city homes.

Blocks of buildings include hutments for sleeping purposes, dining halls, recreation centres, messes, headquarters' offices, canteens, stores and supply depots, hospitals and dental clinics, rifle ranges, etc., all neatly laid out.

As an example of the speed at which this Dominion-wide project has been carried out, 6,000 acres of second-growth forest land was turned into a camp capable of accommodating 13,000 men between the middle of August and the end of the year at Debert, Nova Scotia.

Some of the other camps had few buildings and were summer camps only. To-day these are all provided with permanent hutments. Over a hundred million board feet of lumber, 71,700 windows and 27,300 doors are figures illustrating the quantities of materials used.

To the Quartermaster-General, responsible for accommodation of the Army, the Director of Engineer Services, responsible for the construction of Works and Buildings, and their staffs together with the Corps of the Royal Engineers, and the cooperation of Canadian industry, already busy with many other phases of war production, goes credit for this master feat.

No. 99 — Tues. Jan. 7, 1941 — Empire Fighters

Canadian soldiers who recently landed in Britain had one thing to say: "We crave action!"

That goes for the fighting men of every country of the Commonwealth. They joined to fight; they have trained to fight; they are burning to fight. And every day now more and more of these warriors from all over the world are getting the action they crave.

With the British Army in the Western Desert campaign, Australians, New Zealanders and Indians face the kind of war for which above all their rugged, individualist character fits them. In the Sudan, Indian soldiers have already shown their fire, their steadfastness, and their initiative.

In East Africa, troops from the Union, from Rhodesia, from West Africa, and from East Africa itself, harry the Italians with the skill and dash of born skirmishers.

In the air, except for the fine work done by the individuals and squadrons attached to the R.A.F. in Britain, South Africans were the first Dominion air force to get into action, and they have been in it consistently and with effect. By now, the Royal Australian Air Force has joined the air blitz over the Western Desert. R.A.A.F. fliers shot down six Italian planes in one day, as soon as the British attack began in early December.

In the Middle East Command of the Royal Air Force are men from many parts of the Empire, including Palestinians, both Jews and Arabs.

At sea, the intensified raiding of commerce by German submarines, surface craft and airplanes has brought increased opportunities for action to the great number of men of the Dominion navies on service in co-operation with the Royal Navy, and to the men from Newfoundland, Malta, Cyprus, the West Indies and other Commonwealth countries who are on the strength of the R.N. itself.

Every day, on perilous patrol and in hot action, these sons of the Seven Seas are proving worthy of the highest traditions of British seapower.

Canadian ships in the grey North Atlantic, Australian ships everywhere from the South Sea Islands to the Indian Ocean, and from the Timor Sea almost to the Antarctic; Indian ships around the coasts of the vast peninsula and in the Red Sea; Malayan and African and West Indian patrol craft on their own "beats" of the world-wide police district of the seas.....all these diverse fleets with their diverse crews are ceaselessly on vigil and on guard.

By sea, land and air the Commonwealth's fighting forces are swinging into action, and behind them the mighty war potential of these united nations stands mobilised for total effort.

No. 100 — Wed. Jan. 8, 1941 — Food for Hitler's Guns

Here is what a woman has to say about the pantry in connection with the total war that is upon us: As a woman, I feel that any woman anywhere who can look at a well-stocked pantry should thank heaven for two things. She should be grateful that the essential articles of the family diet have come her way and, in the second place, she should be glad that they have not gone to Hitler.

For if Hitler had them, they would be used, not for food merely, but in many cases for the manufacture of weapons of destruction. In Nazi Germany parts of aeroplanes are made of milk, the fuel for some of these aeroplanes is provided by alcohol extracted from potatoes, and butter is made into explosives.

This may sound somewhat fantastic, but the whole development of the German "substitute" industry and the Nazis' exploitation of the most unlikely materials for the manufacture of armaments by means of which they hope to gain the mastery of the world is even more fantastic than that.

In countries with a democratic and humane outlook it would be thought shameful to convert foods essential to the health of the population into bombing aeroplanes and explosives. A very different morality, however, obtains in Nazi Germany.

Those people who are concerned just now lest the civil population of Europe should be reduced to starvation as the result of the British blockade should bear in mind that Hitler is using only a part of the food supplies available to him to feed the peoples of the subject countries, and is using the remainder as raw material for his armaments industry. This, moreover, has been his practice over a period of several years.

The shortage of foodstuffs in Germany began to make itself felt as early as 1933, when the National Socialists came into power and began their preparations for a world war. For nearly eight years now the German housewife has been fighting a losing battle against malnutrition on behalf of her family. She has had to put up with meatless days, to go short of fats and to make do with skim-milk.

Ever since 1934 uniformed and armed Nazis have gone round inspecting the kitchens of private households in order to ensure that no more than the prescribed amount of food is being prepared. On "one-dish Sundays" restaurants might only serve one-course meals. The hungry customers were told for their consolation that 30% of what they paid for their scanty meal went to provide food for the poor.

The truth is that the German people have been kept short of food on such pretexts for years now. There were several reasons. The reduction of the meat and fat rations set a limit to expenditure on food and increased the capacity of the population to pay taxes which were used to pay for the manufacture of armaments. By refraining from importing such commodities as tea and coffee the Nazis were able to use their foreign currency for importing raw materials for the manufacture of armaments. Moreover, the actual foodstuffs which the population was made to do without were utilised as raw materials for armaments. So the various reasons for stinting the people all boiled down to one - preparing for war.

Let us look a little more closely at the technique of this modern witches' cauldron. First, let us take that homely article of food, the potato. Power alcohol, which is used for the internal combustion engine in place of petrol can be distilled from it. Ten tons of potatoes make about a ton of alcohol, which can be mixed with petrol in the proportion of at least 20:80. Thus the 300,000 tons of potatoes removed from Norway into Germany will enable 120,000 tons of petrol to be increased to 150,000.

Or, again, let us take milk. Butter is made out of milk, and an essential component of explosives such as glycerine out of the butter. Even skimmed milk is converted into plastics which are of great use in the manufacture of aircraft. Whale oil, which might be used for making margarine, supplies oil for U-boats.

The moment the Nazis occupy a country, strict rationing of foodstuffs is introduced. Even Denmark and Holland, countries in which agriculture flourishes, are suffering at the moment from a shortage of bread, potatoes and fats.

Foodstuffs are all the time exported to Germany from all the occupied countries on a gigantic scale. From Denmark 20 to 30,000 head of cattle are transported to Germany weekly; from Norway 200 tons of fish daily.

In many parts of Denmark and France the entire potato crop has been purchased for Germany and a potato is now for the Danes and the French a rare delicacy costing six times as much as it did in peace-time.

No. 101 — Thurs. Jan. 9, 1941 -- Higher Education

The most significant index of the desire of Canadian people to obtain more and higher education is shown in the enrolment in part-time, extra-mural and extension courses. Not all of these courses result in university degrees but the registration of 42,604 adults in 1939, over 33,282 in 1938, in the extension departments of the institutions of higher education is a revelation of the increased value placed upon study and research by a nation of people endowed with freedom of thought and expression.

The biennial survey of education in Canada recently completed by the Dominion Bureau of Statistics provides some other exceedingly interesting information as to the number of students and universities or other colleges of learning they attend.

The two-year period 1938-39 and 1939-40, are of particular interest in their relationship to the entrance of Canada into the war.

Full-time undergraduate enrolment increased from 34,489 in 1938 to 34,916 in 1939; registration in graduate schools advanced from 1,738 to 1,813 in the same period.

Some significant trends are apparent in the distribution of students by faculties and schools and the influence of such enrolment should not be over-looked in a war-time social economy.

Registration in engineering and applied science, pure science, scientific agriculture, and forestry has increased in each case. Medicine shows but a nominal decrease — from 3,076 to 3,008 — which is more than balanced by the increase in public health nursing, from 461 to 600; and dentistry from 472 to 493. The maintenance of this enrolment to graduation is desirable and urgent.

Schools and faculties of education show a slight decrease in enrolment which is countered to a degree by a corresponding increase of scientific social service trainees.

No. 102 -- Fri. Jan. 10, 1941 — The Sporting Thing

Like a chip off the old block, Canada goes in for sports in a very big way. In addition to possessing an inborn love for the out-of-doors Canadians have been blessed with a country unsurpassed for variety of climate and terrain. Mountains and seashore, prairie and bushland beckon the sportsman the year around.

Catering to the ever-growing needs of a playful public constitutes the work of one of the Dominion's leading industries. In 1939 there were 33 establishments

across Canada engaged in nothing but the manufacture of sporting goods, having a total production value of over two million dollars.

A glance at a detailed report of these firms would lead one to assume that there are more golfers in Canada than is generally believed to be the case. Evidently the fairways are coming to the "fore" in sporting attractions. Supplies and equipment for the tired business man's chief diversion were produced in 1939 to the value of over $482,000.

Next in order of production value that year were tennis and badminton supplies. Tennis has come a long way since the days of its infancy. At one time only ladies indulged in the game, and they flitted about the courts in a supposedly graceful manner, their billowy skirts demanding most of their attention. To-day it is a fast, skillful game, requiring all the speed and dexterity it is possible to acquire through constant and gruelling practice. It has graduated from a petticoat pastime into an international sport of champions. Small wonder it is that sporting goods manufacturers devote so much time and attention to the needs of players and would be players. In 1939 the production value of equipment and supplies amounted to almost $407,000.

In recent years winter sports have come into greater prominence in Canada than ever before. Young and old are leaving their habitual winter nitches at the fireside to take an active part in winter games. Skiing especially is coming into its own. With the inauguration of ski troops in certain sections of the Canadian forces, the value as well as the enjoyment of the sport has been brought more forcibly to the attention of the general public. In 1939 the production of supplies for thousands of enthusiastic ski fans jumped almost 50 per cent over the previous year's output.

These figures, of course, do not reveal the varying degrees of popularity enjoyed by the different sports. The relative costs of supplies must be taken into consideration. For instance, although the production value of golf equipment tops that for any other sport, it is a well known fact that more people indulge in skating, skiing and even tennis than golfing. However, the production value is what counts most as far as the industry of sporting goods is concerned, and in 1939 manufacturers in Canada produced the requisite equipment, supplies and accessories to the extent of over two million dollars, in addition to which over three-quarters of a million dollars were imported.

No. 103 — Sat. Jan. 11, 1941 — Poland Under the Gestapo

The following harrowing story comes to us from the Polish Ministry of Information:

Life in Poland, in the second winter of occupation, is of increasing severity. There is little to eat. The only foodstuffs in shops are bread, potatoes, linseed oil for cooking. There is neither butter nor margarine. There is neither fruit nor fish. There is almost no meat. Yet in spite of all privations and persecutions, Polish resistance is growing. Mass executions by the Gestapo fail to terrorize.

In Kalisz, a Polish technician was imprisoned for publicly talking of damage by R.A.F. raids on Berlin.

In Lodz, a 17-year old boy was sentenced to ten years imprisonment on the charge of insulting a German official.

In Dortmund, a special tribunal sentenced a Pole to death who had left his work in Germany and resisted arrest.

In a village near Madgeburg, Germany, three German women were sentenced to 18 months imprisonment for giving food and cigarettes to Polish prisoners of war.

Several Polish priests have died in the Oranienburg concentration camp. Their bodies were cremated and the ashes sent to their families.

R.A.F. raids on German industrial centres have forced the Germans to transfer industrial factories to Poland. Germans attempting to build an ammunition factory in Skarzysk found the head engineer dead. The following day 300 Polish workmen were arrested and, according to advices received by the Polish Ministry of Information, were taken to a nearby forest, forced to dig their own graves and massacred by machine gun fire.

An uncensored letter received in London from Poland speaks of unlimited German cruelty to Poles. "Germans announce clearly," the letter continues, "that Poles were born to serve the German nation; to perform the hardest labor. The result of such behaviour is evident. Germans arriving in Poland from the Reich are unbelievably brutal. They ride in automobiles in disregard to pedestrians and cause a large number of accidents. In case of accident, the injured Pole is mistreated and subjected to severe reproach for wasting time. If the automobile is damaged or the driver injured in any way, the Pole is sent to prison. A new regulation in Krakow and Warsaw forbids Poles to enter parks."

No. 104 -- Sun. Jan. 12, 1941 -- Wood has Many Uses

Apart from their importance as a source of raw material for the lumber and pulp and paper industries, Canada's forests yield a widening range of products derived in whole or in part from wood in which this material is not apparent. According to the Forest Products Laboratories of the Department of Mines and Resources, the largest group of such articles is derived from wood pulp. The modern package of cigarettes is a striking example. In getting cigarettes from the factory to the consumer no less than seven different grades of wood pulp are used in the making of cartons, adhesive paper, packages, transparent wraps, tissues, excise stamps, and cigarette papers.

Rayon is a well-known derivative of wood pulp, but at one stage in their creation rayon stockings, ties or drapes might equally well have become movie film, artificial leather, cordite, or the glossy finish on an automobile.

Wood is an important, though rarely noticed, element in automobile batteries, and is also an ingredient of many floor coverings, explosives, and plastic products such as electric switch buttons, radio cabinets, and all sorts of novelties. It also provides a number of medicinal products and is likely to become an increasingly important contributor to man's diet through the production of sugar and possibly other substances. Already wood is a valuable source of vanilla flavouring.

No. 105 -- Mon. Jan. 13, 1941 - Trapping

In an earlier number it was suggested that Seneca picking might be made a part-time summer job, now we are recommending trapping and shooting as a means of earning some extra spending money. Almost every animal has some price on its head, and with industry, determination and patience even the lowly jack rabbit can be turned into ready cash.

As there are lessons to be learned in every trade, the most important part of trapping is to be thoroughly acquainted with the haunts and habits of each particular animal. Weasels, which are the easiest to trap and which form the bulk of most amateur catches, seldom travel very far, especially if there is plenty of food in the vicinity. It is not necessary to conceal the trap, or to erase the traces of your visit. Patience is all that is required. If he is not caught the first night he probably will be the next. Average weasel skins bring between 50 and 75 cents. Alberta leads the Dominion in the number of pelts marketed annually.

However, the simple technique that catches the ermine coated weasel is useless when it comes to bagging the coyote. It requires great care and skill to inveigle this crafty prairie dog into a trap, but when you do you've accomplished something worthwhile. The trap itself must be carefully concealed and all human odor entirely destroyed if you are to be successful. In the end it's worth all your trouble for a good coyote hide well skinned and stretched nets around six dollars. It is interesting to note that coyotes are found mainly on the prairies, being comparative novelties in eastern Canada.

Skunks, while they are easy to catch, not even requiring bait, are difficult to skin. Care is essential not only to insure a good hide, but also to protect yourself. Experience has taught us that if the scent sac is punctured the most miserable fit of nausea will overtake the enthusiastic trapper. Usually skunks can be handled most effectively under water. Hides of these little black and white "pussies" bring around one dollar. In 1939 Ontario marketed more skunk pelts than any other province in Canada.

Across the vast expanse of Canadian prairie, bushland and mountain over 25 different species of animals are to be found in the wild state, making this country a veritable hunters' paradise. However, to insure the perpetuity of Canada's great wild life heritage, conservation rules have been laid down. There are closed seasons when certain animals are not allowed to be taken, and any violation of this law brings a heavy fine. Nevertheless, trapping, can still be a profitable business, provided it is kept within the bounds of the game regulations. The story has recently come to us of an enterprising young Alberta trapper who is paying his own way through university with the proceeds he derives from trapping.

In the 1938-39 season nearly six and one half million pelts were marketed in Canada, bringing a value of over $14,000,000.

No. 106 -- Tues. Jan. 14, 1941 -- Soybean

There has been a slow but continuous increase in soybean production in Canada during the past decade. This increase may be explained, in part, by the

development of new and improved early maturing varieties which have resulted in an extension of the area over which this crop may be grown successfully. However, the chief reason for the increased production of soybeans can be attributed to a realization, on the part of stockmen, that soybean protein can be used satisfactorily to balance the coarse grains -- oats, barley and corn -- which constitute the bases of rations used for growing and fattening live stock and for the production of eggs and milk.

In addition to being a valuable feed for stock the soybean has found an important place in industry. The ripe seed is processed to extract the oil, for which a great many uses have been found. The soybean oil meal, or that part of the bean which remains after the oil has been extracted likewise has many uses.

Soybean oil is utilized in the manufacture of soap. It is also finding an increasing use in the preparation of paints and varnishes. It is a rich source of lecithin, which enters into the making of ice cream, candy, cosmetics and other articles. It finds its way into the household kitchen in the form of salad oil, prepared mayonnaise, shortening and margarine. It may be present as a constituent of the linoleum which covers the floor.

The great bulk of soybean oil meal is used as a source of protein for livestock feeds. A considerable quantity is used in the production of soybean glue which is important in the plywood industry. Many plastic compounds incorporate soybean protein and only recently upholstering has been woven from fibre made exclusively from soybean protein. Flour may be made either from soybean meal or from the beans themselves and may be high or low in fat content according to the production process. An important characteristic of soybean flour is its near freedom from starch which makes it valuable in certain diets. Soybean milk is likewise made from either the oil meal or the whole beans. Its special properties have made it valuable as a diet in certain cases of infant feeding.

No figures of area or production of soybeans are available in Canada at present, but as has been stated, a slow but continuous increase in production is taking place. Our imports in 1939 were very large, running to over 560,000 gallons of oil, 466,000 cwt. of meal and flour and 9,250,000 pounds of beans.

No. 107 — Wed. Jan. 15, 1941 — Fruit Growing in Canada

The first records of attempts to establish cultivated fruit in Canada are to be found in the Census of 1698 when 1,584 trees were reported at Port Royal and 32 at Beaubassin in the region then known as Acadia. From this small beginning, the industry has developed until now fruit is being grown in all provinces although production is on a commercial scale only in Nova Scotia, New Brunswick, Quebec, Ontario, and British Columbia. The most extensive fruit-growing areas are the Annapolis Valley in Nova Scotia, southwestern Ontario, and the Okanagan Valley in British Columbia, while less well-known, but increasingly important districts are the Saint John Valley in New Brunswick and the Montreal and southern counties district in Quebec. The development of improved varieties with hardy characteristics has made fruit growing possible in the Prairie Provinces but production is confined chiefly to the backyard gardens. The value of the commercial fruit crops in 1939 was $17,165,000, made up as follows: apples, $10,138,100; pears, $675,300; plums and prunes, $288,000; peaches, $1,143,000; cherries, $581,000; apricots, $150,000; strawberries, $2,120,000; raspberries, $1,078,000; loganberries, $84,000 and grapes, $909,000.

With the outbreak of the war, exports of Canadian apples to continental Europe were completely cut off and shipments to the United Kingdom were restricted to approximately 50 p.c. of the average exports for the previous two years. For the year ended March, 1940, exports to the United Kingdom were 1,189,756 barrels. Exports for 1940 amounted to only 23 p.c. of the 1939 crop.

Various steps were taken to stabilize the domestic market and among them were the canning and drying of 1,333,000 barrels of No. 1 and domestic Nova Scotia apples and the zoning of the Dominion to assure the fair distribution of the fresh fruit. In addition an extensive advertising program to sell apples and apple products was instituted by the Government.

Each of the nine provinces has its Department of Agriculture, through which is carried on educational and extension work to assist farmers. Agricultural colleges maintained by the provinces are: the Nova Scotia Agricultural College at Truro, the Ontario Agricultural and the Ontario Veterinary Colleges at Guelph, and the Manitoba Agricultural College at Winnipeg. Three agricultural colleges in Quebec are assisted by the Provincial Governments, while faculties of agriculture are found in the provincial universities of Saskatchewan, Alberta and British Columbia.

No. 108 -- Thurs. Jan. 16, 1941 -- Water Powers

Like every other activity of a fundamental character, the water powers of Canada assume an added importance when we are at war. Production is all-important.

Canada's water powers constitute one of her greatest natural resources. Their development has not only facilitated the growth of industry but has resulted in giving value to marginal products, which, without the low-cost power provided by water, would have remained unmarketable. This low-cost power has also resulted in the creation of entirely new centres of population for the processing of raw materials imported from abroad. So general and widespread is its availability that all but the most isolated hamlets enjoy the amenities of electric lighting, radio, cooking and domestic appliances which in many countries are associated only with the larger urban centres.

Canada's water powers have an estimated capacity of almost 34,000,000 h.p. which, under average conditions of use, will provide for a turbine installation of about 43,700,000 h.p. of which the installation, as at Jan. 1, 1941, represents approximately 19 2/3 p.c. These water powers, developed and undeveloped, are found from the Maritimes to British Columbia in proximity to all industrial centres, the largest mineral deposits and pulpwood supplies. Widespread transmission networks distribute the power from developed sites to consumers within radii of hundreds of miles.

The water powers of the Maritime Provinces, while small in comparison with the sites in the other provinces, are a valuable economic resource that is augmented by abundant local coal supplies. Quebec has the largest known resources of water power and the greatest development, her present installation is a little more than 50 p.c. of Canada's total. More than 90 p.c. of total installation is operated by central electric station organizations. Ontario, which, like Quebec, is without local coal supplies, is second in both power

resources and development. Here the Hydro-Electric Commission operates plants aggregating more than 67 p.c. of the total installation of the Province, while an additional 18 p.c. is operated by other central station organizations. Of the Prairie Provinces, Manitoba has the greatest power resources and the greatest development, more than 72 p.c. of the total hydraulic development of the provinces being installed on the Winnipeg River to serve the Winnipeg area and over the transmission network of the Manitoba Power Commission, approximately 135 cities, towns, and villages in southern Manitoba. In the section of the Prairie Provinces containing least water power, there are large fuel resources. British Columbia ranks fourth in available power resources and her hydraulic development is exceeded in Quebec and Ontario only. The water powers of Yukon and the Northwest Territories are considerable, but present development is limited to mining uses.

New water-power installations during 1940 aggregated approximately 295,000 h.p. bringing Canada's total installation as of January 1, 1941, to 8,584,438 h.p.

In British Columbia the West Kootenay Power and Light Company completed the installation of two units of 25,000 h.p. each in its Upper Bonnington Falls Station, giving the plant a total capacity of 84,000 h.p. and the Nanaimo-Duncan Utilities Ltd. added a second unit, 750 h.p., to its Millstone River station.

Over 88.4 p.c. of all water power developed in Canada is developed by central electric stations and, although there are a large number of stations (300) that derive their power entirely from fuels and 40 hydraulic stations that also have thermal auxiliary equipment, 98 p.c. of all electricity generated for sale is produced by water power.

No. 109 -- Fri. Jan. 17, 1941 -- Statistics of the Wheat Crop

The 1940 wheat crop in the Prairie Provinces is another exceptionally high grading crop, following the record set by the crop of the previous year. This year's grades are just a shade under those of 1939. Over 57 per cent of the wheat graded in the August-December period of 1940 has been designated No. 1 Northern or No. 1 Hard. During the same period of 1939, 60 per cent of the inspections made the two top grades. The 1940 inspections have included 27 per cent grading No. 2 Northern and over seven per cent grading No. 3 Northern, so that the total volume of the 1940 crop grading No. 3 Northern or higher amounted to 91.6 per cent, as compared with 91.9 per cent in 1939. The mean protein content of the 1940 crop, as reported by the Grain Research Laboratory of the Board of Grain Commissioners for Canada on November 12, was 14.1 per cent, which was identical with that of the 1939 crop, and comparable to the average protein content of the past twelve crops. The similarity between the 1939 and the 1940 crops is striking, with respect to both grade and protein content.

The dearth of wheat below milling quality delivered from both the 1939 and 1940 crops has made very little wheat of the feed grades available to the livestock industry. As in 1939, an appreciable quantity of tough wheat due to wet harvesting conditions has been delivered in Alberta, with 5.3 per cent of the total western inspections grading tough in 1940, compared with 4.8 per cent in 1939. Much of the wheat in the tough category would grade No. 2 Northern except for moisture content, and is priced above the feed range.

The 1940 Amber Durum wheat crop is grading similar to that of 1939. The 1940 inspections during August-December show 70.6 per cent in the two top grades,

compared with 70.5 per cent in these grades in the same period of 1939. Twenty-four per cent of the inspections in 1940 graded No. 3 Amber Durum, as compared with 20.4 per cent in the No. 3 grade in 1939. The small percentage of Durums entering the tough and rejected grades in 1939 was reduced to negligible proportions in 1940.

No. 110 - Sat. Jan. 18, 1941 -- Textile Industries at War

The need for clothing and equipment for Canada's suddenly and greatly enlarged armed forces has thrown a heavy burden upon the textile industries. In general, production facilities have shown themselves capable of co-operating efficiently in the War effort, and many concerns are devoting their entire production to requirements of this kind.

The textile industries are, to a high degree, centralized in the Provinces of Quebec and Ontario. In 1938 the gross value of production was $346,215,000, employment was given to 115,745 persons, and $99,275,000 was paid out in salaries and wages. It is also worthy of note that of all females employed in the manufacturing industries, 42 p.c. were to be found in the industries making up the textile group.

The variety of individual industries contained within the textile group is representative of practically all of the stages of manufacturing necessary to convert the various raw materials into products ready for purchase by the public. Yarn is spun, and fabrics and goods are woven and knitted.

Factory production of clothing is on such a considerable scale that in 1938 the men's factory clothing industry led the group with a gross value of production amounting to $64,303,000, and was followed closely by the women's factory clothing industry. Some other leading industries, in the order named, were: cotton yarn and cloth; hosiery and knitted goods; silk and artificial silk; and woollen cloth.

The remarkable expansion of the silk and artificial silk industry during a comparatively short period of time, and which was continuous throughout the depression years, makes this an important member of the group, with a production valued at $23,872,000.

No. 111 — Sun. Jan. 19, 1941 -- A Programme for Each Farmer

Nowadays, to prevent producing at a loss and, if possible, make a reasonable profit, a farmer must be on the alert and keep well posted in all that pertains to agriculture, and especially to his particular district. Keen competition between agricultural regions and even between countries, the present war, and surpluses of certain crops all tend to reduce the margin of profit in the production of farm products. Thus the necessity for a program for each farmer is made apparent, and at the present time during the winter months when he is not rushed with farm work, the farmer is afforded the best opportunity in the year for making a comprehensive and detailed review or check-up of his operations during the past year.

There are many questions a farmer can ask himself; is my present crop system well adapted to the type of soil on my farm; is the rotation I follow the right one; do I fertilize my crops in a complete and economical way; are the yields

satisfactory and are they obtained economically; do I still produce crops which used to pay in the past and now entail annual losses on account of uncontrollable circumstances; why cannot I sell my products - is it because of faulty grading or the unattractive manner in which they are offered to the buyer; do I follow the market requirements in this regard; does my herd still contain boarders which do not pay their way on account of their low production; are there certain new crops which I could grow with good results to the soil, with labour and agricultural machines available? These and other questions may be pondered over.

When these questions have been thought out, the point arises as to where the necessary information or advice towards improvement is to be obtained. There are many such sources of information. There are the Dominion Experimental Farms and Stations, the Dominion Illustration Stations, the Colleges of Agriculture, the Middle Schools of Agriculture, and the District Representatives. They are spread all over Canada and are in direct touch with the farmer, and the statistics are all carefully compiled in the Dominion Bureau of Statistics.

Further, the farmer has at his disposal numerous Dominion and Provincial publications expressly written by agricultural experts. These publications are given free of charge upon request and may be obtained from the Provincial Departments of Agriculture or the Dominion Department of Agriculture. In case of doubt as to the exact publication desired, the farmer can write for the list of publications and at his leisure mark the publications he needs from time to time.

There are also the Co-operatives and various other Associations which are intimately concerned in farm problems and may be consulted by the farmer in his preparation of a programme which will give better and safer results, if not perfection.

No. 112 -- Mon. Jan. 20, 1941 -- Farm Implements

The name of agricultural implements manufactured in Canada is legion. There are many kinds of ploughs, including horse and tractor mould board, single furrow and two or more furrow walking, single furrow sulky, two furrow or larger gang, horse and tractor-drawn discs of all types, breakers and others. Other tillage implements made in Canada are corn and other cultivators, spike-tooth, spring-tooth, and disc harrows, harrow parts and attachments, horse-drawn hoes, land rollers, packers, and soil pulverisers, one-way discs, harrow ploughs, tiller combines, scufflers, and weeders.

Of planting and harvesting machines, there are fertilizer sowers, press and wheel seed drills, corn planters, grain binders horse and tractor drawn, corn and cotton binders, threshers and reaper-thresher combines, thresher parts, pickups, harvester stackers, swathers, and push harvesters, while for haying the implements are abundant. These include hay loaders, dump, side, combination side rakes and tedders, horse and tractor-drawn mowers, hay carriers, hay forks, hay tedders and pressers.

However, that is only part of the story, for there are fanning mills and grain cleaners, grain grinders, hammer mills,barn and stable equipment, corn shellers cream separators, ensilage and straw and stalk cutters, eveners, manure spreaders, potato diggers, pulpers and slicers, sleighs, hand and power sprays, wagons, wagon boxes, gears, wheelbarrows and many other implements used on the farm.

Plants in Canada engaged in the manufacture of farm implements and machinery made these products to the value of $16,035,000 in 1939. In addition over $20,917,000 worth were imported, while our exports to other countries were valued at $7,028,000.

No. 113 - Tues. Jan. 21, 1941 -- Farm Manure

Farmyard manure is the oldest and best known method of fertilizing land, the chief trouble being that rarely can the farmer get enough of it.

Experiments conducted over a period of sixteen years at the Quebec Experimental Station of the Dominion Government, give interesting comparisons of the value of manure and commercial fertilizers. In a four-year rotation of potatoes, oats, clover, and timothy, sixteen tons of manure, ten tons of manure supplemented by 450 pounds of fertilizer and 1,800 pounds of fertilizer gave practically the same yields on the average of sixteen years. The manure plots produced a few more oversize potatoes than those with the manure plus the fertilizer or the ones with fertilizer alone. Thus 16 tons of manure would be about equal in value to 1,800 pounds of fertilizer.

In order to maintain the fertility of farm land, it is generally considered advisable to make an application of manure equal to four tons per acre per year. This is not applied every year, but usually once or twice during a rotation, depending on the crop grown. In a four-year rotation, starting with a hoed crop, the 16 tons of manure is spread before the crop. In a grain and hay rotation, this amount of manure before the grain crop would cause it to lodge. The best practice is to use eight tons before the grain and use the other eight tons as a top dressing on the hay land. Where there is not sufficient manure, it may be supplemented to good advantage by chemical fertilizer.

In the wartime series of bulletins issued by the Agricultural Supplies Board, No. 27 deals exclusively with farmyard manure, and No. 25 with fertilizers for various crops. Other bulletins deal with the fertilizing of specific crops. These bulletins may be obtained free.

No. 114 - Wed. Jan. 22, 1941 -- Commercial Intelligence Service

The Commercial Intelligence Service, maintained by the Department of Trade and Commerce, is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in markets, and the current demand or opportunities for Canadian products. They also secure and forward to the Department at Ottawa inquiries for Canadian goods and, in general, promote the development of overseas markets.

The headquarters staff at Ottawa is presided over by a Director, who administers the work assigned to the various Trade Commissioners and is assisted by the following divisions: Directories--Exporters Directory, listing Canadian exporters, with their agents abroad, commodities handled, etc., and Foreign Importers Directory; Editorial; Commodity Records--where information regarding markets for Canadian export commodities is indexed; Economics; Animal and Fish

Products; Vegetable Products; Metals and Chemical Products; Forest Products; and Miscellaneous Manufactures.

There are twenty-nine Canadian Trade Commissioners or commercial diplomatic officers conveniently located abroad. In some countries or territories, such as the United Kingdom, Australia, British West Indies, South Africa, and the United States, there is more than one commercial officer; in other cases an officer covers adjacent countries. Besides the five mentioned above, countries in which officers are located are as follows: Argentina, Brazil, British Malaya, China, Cuba, Egypt, Hong Kong, India and Ceylon, Ireland (Eire) and Northern Ireland, Mexico, New Zealand, Panama, and Peru.

Under an arrangement made by the Minister of Trade and Commerce with the British Foreign Office, Canadians interested in trade matters may secure information and advice from British commercial diplomatic officers and British consuls in all countries in which Canada is not represented by her own Commercial Intelligence Service.

The Commercial Intelligence Journal, containing the reports of the Trade Commissioners and other pertinent material relating to export trade, is published weekly by the Department of Trade and Commerce in both English and French editions. Special reports dealing with various phases of Canada's export trade are also issued from time to time, as supplements to the Commercial Intelligence Journal.

No. 115 -- Thurs. Jan. 23, 1941 -- Air Travel

The aeroplane has provided a vastly improved means of transportation in the undeveloped northern areas of Canada where the only alternatives were canoe in summer and dog team in winter. Air travel soon proved not only much quicker, but much cheaper, and a rapid expension took place without the aid of government subsidy. The mileage flown by aircraft increased from 185,000 in 1922 to 10,969,271 in 1939, when 161,503 passengers, 21,253,364 lb. of freight, and 1,900,347 lb. of mail were carried.

Furthermore, the aeroplane has proved a great boon to Canada in the administrative field for the development and conservation of her vast natural resources. Aerial forest-fire patrols are now carried on over large parts of almost every province; fishery patrols by aeroplane protect territorial waters and enforce fishing regulations; and by the use of aeroplanes equipped with special cameras, preliminary surveys, which would have taken years by the older methods, are now made quickly over large tracts of difficult country. This development in Canada has differed from that in other countries where air traffic between the chief centres of population has received most attention. The Trans-Canada Airway is designed to facilitate progress along this line.

The Trans-Canada Airway is now in operation all the way across the continent from Vancouver to Toronto, Montreal, and Moncton, and from Toronto to London and Windsor. Intermediate aerodromes lighted for night flying are established at approximately 100-mile intervals. Meteorological services provide weather maps four times daily, and district forecasts for the ensuing six hours. As part of the facilities of the Trans-Canada route and its feeders, there are now in operation 40 radio range stations at approximately 100-mile intervals, except in the mountain regions where closer spacing is necessary.

Work on the eastern section has been completed, and mail and passenger air services are now operating twice daily, except Sunday, by Canadian Airways Limited, from Moncton to Charlottetown, Halifax, and Saint John, connecting with T.C.A. at Moncton. This company also operates a daily service as an extension of the Trans-Canada Airway System from Vancouver to Victoria, British Columbia. A daily service is also operated by Prairie Airways from Regina to Moose Jaw, Saskatoon, Prince Albert, North Battleford and return, connecting with the through service of T.C.A. at Regina.

No. 116 -- Fri. Jan. 24, 1941 -- National Radio

In this day and age, we are all radio conscious, and we await eagerly the news broadcasting hours to learn what progress we are making with war and how the boys overseas are getting along.

During the past four years the coverage of the CBC has been greatly increased. At its inception the Corporation served less than 50 p.c. of the population; it now serves over 84 p.c. This has been made possible mainly by the inauguration of four 50,000-watt transmitting stations: CBL at Hornby, Ontario, serving the Province of Ontario; CBF at Verchères, Quebec, for the Province of Quebec; CBA at Sackville, New Brunswick, for the Maritime Provinces; and CBK at Watrous, Saskatchewan, for the Prairie Provinces. A 5,000-watt transmitter, CBR, at Vancouver, serves the Pacific Coast, and there are five other CBC transmitters at various points. The progress of the Corporation has been directed towards completion of the plan envisaged in the report of the Royal Commission on Radio Broadcasting appointed in 1928 to investigate the whole problem of broadcasting in Canada. Reception and programme service have also been greatly improved.

The technical facilities of the CBC were further extended by the addition to its equipment of a completed armoured Mobile Unit capable of operating under war conditions on any front. This unit has been sent to England, while two other Mobile Units, which include short-wave sending and receiving apparatus, recording machines, and pack sets, are used in Canada. The pack sets can be carried by commentators to ordinarily inaccessible territory. A staff of three commentators and two engineers was established in England by the CBC during 1940.

Transmission facilities enabling CBC programmes to be broadcast over a national network in all five Canadian time zones for sixteen hours a day are maintained. This nation-wide network carries both sustaining programmes of the Corporation and a limited number of commercial features. In addition to the ten stations owned and operated by the CBC, the national network includes a large number of privately owned transmitters throughout Canada.

During the first year of the War the CBC National Network carried more than 1,600 special war broadcasts, exclusive of news bulletins and summaries, the number of which was also increased.

No. 117 -- Sat. Jan. 25, 1941 -- The Parachutists

In these swiftly moving days it is almost impossible to pick up your newspaper without running across some comments praising the latest achievements of those gallant fighters -- the men with wings. The untold dangers they face daily

as a matter of course are beyond the limited bounds of our comprehension.

At one time or another during the course of their dangerous careers, most of these heroes have had some rather harrowing experiences, in which their very lives were hanging in the balance. One such experience, breath-taking to onlookers, but which the pilots themselves take quite matter-of-factly is "bailing out". In those frightful moments of sailing through space they trust their all to a few silken threads and we wonder at their nonchalance. However, their faith is well placed for the parachutes of to-day have been developed to the point where there is practically no danger of failure. Had this been the case in the last war, scores of men could have been spared when their planes were shot down out of control.

New and greater importance is being attached to the manufacture of parachutes to-day. In Canada the new Empire air training scheme has brought this industry to the fore in rapid strides. At the present time the demand is met by companies located in eastern Canada.

To the ordinary layman a parachute is just yards and yards of cloth sewn together to look like a huge umbrella. However, a dozen or more operations are necessary before a parachute is finally completed. First of all each 'chute consists of six principal parts: capopy, shroud lines, container, harness, rip cord and pilot chute. The process briefly is as follows:

The canopy is made of silk having a tensile strength of forty pounds per inch of width. It is formed by joining gores cut in four different sizes into a panel, and it takes twenty-four such panels to make a complete canopy. These are thoroughly inspected for the slightest imperfection.

The shroud lines are formed by an unbroken 680 foot skein of silk cord doubled to make the twenty-four lines in a twenty-four foot parachute. These lines are also tested for flaws and subjected to a tension of 450 pounds. The shroud lines are sewn securely to the canopy and a final inspection is made before the assembly of the parachute.

The containers are made from heavy brown canvas, reinforced with wire frames. Flaps, pockets, hooks and fasteners are attached by special machines.

The harness consists of a number of linen webbing straps, sewn together with linen thread. To the harness are attached the shroud lines, and here the webbing is tested to 4,500 pounds.

The pilot chute is attached to the apex of the canopy, and helps to pull the chute away from the wearer when the rip cord is pulled. The rip cord comprises a steel ring about five inches in width, and a jerk which a child can exert is all that is necessary to open the chute.

The final operation is packing the parachute, and this requires special training and infinite care. It takes about half an hour to fold one chute.

Formerly the silk used in parachute fabrication was imported. Now, however, orders are being placed with Canadian firms. Experiments are being conducted with nylon fabrics, which may perhaps eventually replace the silk in the canopy. A new type of cotton yarn with bonded fibres has been developed and is being used successfully in parachute harness. It is understood this development will free the National Defence programme from its dependence on flax.

Parachutes are now being produced by Canadian plants and with the exception of housings and a few small fittings, all materials for the manufacture are made right here in Canada.

No. 118 -- Sun. Jan. 26, 1941 - Tourists and Sportsmen

Almost 9,000 sportsmen from the United States brought firearms into Canada during the 1940 hunting season, under permits issued by the Commissioner of the Royal Canadian Mounted Police. Although Canada is at war, bona fide tourists and visitors from Allied or neutral countries may still obtain permits enabling them to import firearms for hunting or for gun club use and for trap shooting.

Canada's game resources are one of the primary attractions which bring thousands of tourists and sportsmen into the country annually. Although the advance of civilization has almost always had the effect of driving the game back and restricting its range, Canada still possesses a vast hinterland which affords unspoiled natural habitat for many forms of native wild life. Land and water highways, railways, and airplane services have brought the former backwoods regions within easy reach of the great centres of population, but the appeal of the forests, lakes and open spaces is as powerful as ever, and they are now accessible without hardship or delay.

To guard against depletion of Canada's supply of wild life, the Dominion and provincial governments have adopted reasonable measures of conservation. Game laws regulate the hunting of animals by limiting the catch and providing closed seasons. Game preserves and national and provincial parks, in which no hunting is permitted, serve as reservoirs, the overflow from which restock surrounding areas. Canada welcomes hunting guests from other lands who comply with the regulations and observe the ethics of sportsmanship.

No. 119 -- Mon. Jan. 27, 1941 -- Germany's Strength in the Air

The following estimate of Germany's strength in the air is based on material from the British Ministry of Information.

Germany's strength in the air is estimated at an absolute total of 40,000 machines of which fewer than 18,000 are combat types. The number available for full operation at any given time is about 9,000. According to authoritative estimates, it is unlikely that Germany would be able to assemble 6,000 aeroplanes for her opening assault on Britain.

Estimates which place German airstrength as high as 70,000 or 80,000 "fighting types" are dismissed as nonsensical.

The air correspondent of the London Sunday Times, in an analysis of German air strength, points out that Germany has seven regular air fleets. To these must be added the naval air services operating separately and an operational training division which together constitute total "first line" strength of the Luftwaffe.

These formations have a first line strength (including first line reserves) of 24,000 with an operational strength of 12,000 available at any moment.

Behind, lie reserve pool and unfinished machines amounting to approximately 50 per cent as well as some 5,000 trainers and communication aircraft. This brings the grand total of all German aircraft to about 40,000.

The estimate is incomplete, however, without mention of production losses. Records show R.A.F. have scored nearly 6,000 confirmed victories over German aeroplanes in all engagements since the war began. Experience suggests as a reasonable estimate that for every machine lost in combat two were put out of service by accidents and unrecorded victories. This does not include training losses usually estimated at 15 per cent per month.

Thus total losses of the Luftwaffe since war began counting Polish, Norwegian, Dutch, Belgian, French and British campaigns are not far short of 24,000 machines.

When war opened, German production of first line types was about 1,000 a month. It is now estimated at about 1,600 per month (total about 2,300 all types). An average of 1,400 first line machines per month is probably not far wrong.

Thus, to replace losses of 24,000, Germany has built about the same number of aircraft and Luftwaffe cannot be said to have expanded during the war.

The Royal Air Force, on the other hand, has more machines than when war began.

No. 120 — Tues. Jan. 28, 1941 — Moisture Content in Wood

The exigencies of war have emphasized the wide variety of uses to which wood can be put quickly and at a relatively low cost. Its use in the domestic and United Kingdom markets for the construction of aerodromes, military camps, aeroplanes, boats, munitions' containers and many other purposes has focused attention on the tremendous asset which Canada enjoys in its wide variety of softwoods and hardwoods. This wide variety permits the selection of wood which can be put readily to the most exacting requirements. Intelligent use must be made of wood in order that it may give complete satisfaction. It is most important that it be seasoned to a moisture content suitable for each type of use.

To aid wood-using industries in Canada engaged in war production, the Department of Mines and Resources has prepared a chart showing the equilibrium moisture content of wood over a wide range of temperatures and humidities. The demands made upon these industries during the war period have in many cases called for fine wooden parts within definite moisture content limits. This moisture content is often above that of wood stored or fabricated in a heated building without humidity control during the winter months. The small wooden parts are quick to react to atmospheric changes, and the resultant shrinkage from excessive drying during storage or manufacture may cause difficulty in fabrication.

By means of the moisture content chart and some form of air-conditioning equipment, it is possible to maintain the proper relative humidity at any prevailing indoor temperature and thus keep the wood at the moisture content desired.

No. 121 — Wed. Jan. 29, 1941 - Soft Drinks

The mention of soft drinks brings to mind hot summer days, and warm balmy evenings when an iced drink is the accepted companion for every occasion. However, statistics reveal that both winter and summer, thirsty Canadians manage to keep over 450 beverage manufacturing plants busy supplying them with their favorite brands of "pop" and other cold drinks.

Soft drinks are technically referred to as "aerated" or "carbonated" beverages. They are composed of over 80 per cent water, flavouring and carbon dioxide gas. The peculiarly pungent and acidic taste, the sparkle and effervescence that accompany the opening of a bottle of champagne, soda water or any of the aerated beverages is due to the carbon dioxide that was previously held in solution under pressure. These drinks have practically no body-building properties, but children frequently prefer them to ice cream.

The growth of the modern soft drink industry has been most rapid, although it covers a comparatively short span. While entirely a product of the twentieth century, the present size and general importance of the industry is surprising. The factory output in Canada in 1938 amounted to over $26 million. If you were to translate that figure into individual drinks it would number far into the billions, enough to stagger the imagination. Imports into Canada of mineral and aerated waters were valued at something over $62,000 for 1938, while exports for the same period totalled $6,000.

No. 122 — Thurs. Jan. 30, 1941 - Cost of Living

The increase in salaries which has been granted the lower grades in the Civil Service brings forward the question of the cost of living. Some idea of costs may be gathered from the index prepared by the Dominion Bureau of Statistics. A summary of the report for 1940 will be read with special interest but it should be remembered that the index covers the whole of Canada. Costs of certain items vary in different localities. The Bureau's report reads:

The cost of living index for Canada advanced from 103.8 for December 1939 to 108.0 for December 1940. This increase of 4 per cent was mainly concentrated in the latter half of the year when prices for clothing, home furnishings, foods, and coal showed appreciable advances.

The December 1940 living cost index was 7.1 per cent above the corresponding index for August 1939, and materially above the minor peak of 102.9 recorded in November 1937. However, it remained far below levels of 1929 and 1930 when annual average cost of living indexes were 121.7 and 120.8 respectively. Living costs in these years were representative of the period from 1922 to 1930.

A Dominion index of retail food prices advanced 4.2 per cent during 1940. This movement occurred between June and December, following a slight decline in the first half of the year. The December 1940 food price index of 109.1 compared with earlier indexes of 103.8 in June and 104.7 in December 1939. Butter, eggs, and meats were mainly responsible for the rise in the food group. The autumn seasonal increase in egg prices was slightly greater than in 1939, and December 1940 butter prices were about 8 per cent above corresponding 1939 levels. Late summer advances in the retail price index for meats were partially cancelled by

declines in the final three months, leaving the December 1940 index for meats only 3.9 per cent above the corresponding December 1939 index. One of the few important foods to record a net decline for 1940 was potatoes. A December 1940 index for potatoes was 10.9 per cent lower than the December 1939 figure.

Higher prices for coal and coke carried the Dominion index for fuel and lighting up from 105.4 in December 1939 to 108.5 in December 1940. This group index was one of the few which was not substantially lower in 1940 than in 1929 and 1930.

A Dominion index for rents of wage-earner family dwellings increased moderately from 104.4 at the end of 1939 to 107.7 at the end of 1940. Control of rentals in areas most affected by the war effort minimized variations in regional movements.

Clothing price increases in 1940 were sharper than those in any other principal budget group, and the December 1940 index of 113.5 for clothing was 9.9 per cent above the corresponding index for December 1939. Men's clothing was more affected than other groups due to the greater importance of wool in its manufacture. The advance in footwear prices was less than 5 per cent.

The broad group of home furnishings and services, including furniture, hardware, bedding, floor coverings, etc., advanced 6.3 per cent during 1940 which was a greater than average rise. Bedding and floor coverings recorded the sharpest increases in this group, but advances in other sections were fairly general.

Miscellaneous living needs showed less change on the average, than other groups commented on above. The increase of less than one per cent in the miscellaneous index during 1940 was influenced by higher costs for tobacco.

No. 123 -- Fri. Jan. 31, 1941 -- Bakery Products

While the way to a man's heart may still follow the traditional route, the modern young miss relies a great deal upon the titbits turned out by the neighborhood bakery to produce the desired results.

Baking is probably the oldest industry in which man has engaged. Evidences have been discovered that lead us to believe the custom dates as far back as the Stone Age. Furthermore, the oldest form of baking appears to be bread, much as we know it today, the Egyptians having perfected that art over 1,500 years before the beginning of the Christian era.

With the development of towns and cities the baking of bread has gradually passed from the home to the family baker. Modern bakery shops equipped with intricate and costly machinery have attained the dignity of factories and transformed the simple art of baking into a leading industry, which in 1939 furnished employment for over 23,000 persons.

With the shops baking on such a large scale, it is no longer necessary for the housewife to spend long hours in the kitchen in an effort to satisfy the demanding appetites of a hungry family. It is so much easier, for the

city housewife anyway, to have her breads and pastries, rolls and cakes delivere to her door in attractive and sanitary wrappers.

In 1939 there were over 3,000 establishments in Canada producing bread and other bakery products. The consumption of bread amounted to $51,666,000, pies, cakes, cookies and pastries $19,383,000, and buns $4,277,000. It is interesting to note that almost four million barrels of flour were used in the making.