DEPARTMENT OF
TRADE AND COMMERCE

CANADA

A FACT A DAY ABOUT CANADA

FROM THE

DOMINION BUREAU OF STATISTICS

APRIL 1941

SEVENTH SERIES

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Contents

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Editor.

A Fact a Day about Canada — Seventh Series.

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Dominion Bureau of Statistics

No. 183. — Tues. April 1, 1941 — Saying It With Flowers

The time-honoured custom of saying it with flowers still prevails in Canada, according to a recent report which reveals that Canadians spent more than two million dollars for cut flowers during the past twelve months.

Famous in song and poetry because of its beauty and fragrance, the rose was by far the most popular, with sales totalling 14,679,104 valued at $758,496. Other highly favoured flowers included carnations, chrysanthemums, daffodils, tulips, and sweet peas. Orchids were the most costly with an average value of 58 cents each, sales of this flower totalling 70,393 valued at $41,049.

Although the amount of money spent on cut flowers is impressive, it is relatively small compared with the intrinsic value of the profusion of flowers that grow throughout the Dominion. The amateur gardener derives a joy which cannot be measured by money, and to those who visit the woods and meadows the wild flowers are an inestimable source of pleasure and interest. From the dainty hepatica, which bursts into bloom as soon as the snow departs, to the purple aster which presages the fading autumn, nature supplies an ever-changing and widely varied assortment of flowers, each growing at its own season and in its own habitat and geographic range.

Nowhere is the beauty of the flowers more impressive than in Canada's system of national parks. From Cape Breton Highlands National Park on the Atlantic to Mount Revelstoke National Park in the Selkirks, the wild flowers lend to the landscape touches of colour which stand out in delightful contrast to the green foliage of the forest or the gray rocks of the alpine uplands. To those who visit parks, the finding of a familiar flower is like meeting an old friend.

No. 184. — Wed. April 2, 1941 — Mosquito Protection

Those who spend time outdoors, either for recreation or otherwise, are likely to be subjected from time to time to attacks by mosquitoes and blackflies, especially during spring and early summer. Other biting flies such as the stable fly, the horse fly, the deer fly, and the tiny midges known as punkies or "no-see-ums", whose bites are "tiny needle-points of pain", are troublesome pests in certain areas, but are not so widespread, numerous and annoying as mosquitoes and blackflies. Any measures that can be taken to secure protection from these blood-thirsty insects will result in more comfort and efficiency in work and increased enjoyment of outdoor recreation.

A pamphlet on this subject has been prepared by the Department of Agriculture. This contains numerous practical suggestions on simple protective measures that may be taken, and gives several formulae of mixtures or fly dopes that are of value in warding off attacks when applied to exposed parts of the skin. Among these are (1), oil of citronella 3 oz., spirits of camphor 1 oz., oil of tar 1 oz., castor oil 4 to 6 oz.; (2) oil of citronella 1 oz., spirits of camphor 1 oz., oil of cedar ½ oz., castor oil 2 oz.; (3) oil of lavender 1 oz., oil of citronella 1 oz., castor oil 2 oz.; (4) pyrethrum extract (30 lb. extract) 1 oz., oil of thyme ½ oz.,

castor oil 2-3 oz. The purpose of the castor oil (which may be substituted by oilve oil or petrolatum) is to serve as a carrier and to retard the loss of the essential oils. It may be omitted from formulae 2 and 3 if desired. Formula 4 has been found particularly satisfactory and is popular among workers and others in forested areas where biting flies are plentiful.

All the oils mentioned can be bought at a nominal price from any drugstore.

No. 185. -- Thurs. April 3, 1941 -- Junior Farm Clubs

The Canadian Council on Boys' and Girls' Club Work again reports an increase for 1940 in the membership of the clubs of the farm boys and girls of Canada, bringing the membership up to 47,047, as compared with 45,314 in 1939. This is an increase of 1,733 members, or 3.8 per cent, and is all the more remarkable from the fact that the increase in 1939 was 21 per cent greater than in 1938 and is still being continued under the distracting circumstances of war.

A clear picture of the steady advance of junior farm club work since 1931, the year in which the Canadian Council was organized, is given by a study of the membership. In 1931, the members numbered 21,142, followed by 21,430 in 1932; 23,432 in 1933; 26,700 in 1934; 30,282 in 1935; 33,640 in 1936; 35,141 in 1937; 37,254 in 1938; 45,314 in 1939, and 47,047 in 1940.

This steady growth of club membership is closely associated year by year with the improvement in the character of the work through the adoption of methods designed to make club experience more useful and educational to each member. The year 1940 proved no exception, further progress being reported in all branches of the work, particularly in the development of that important factor in successful club work which reaches its peak in efficient local leadership.

While the members have been active in carrying out the requirements of their club projects, at the same time they have fully identified themselves with Canada's war effort, both by actual participation in providing food and active assistance to the various welfare societies, as well as their quota of investment in war savings stamps and certificates, and donations to war funds.

No. 186. -- Fri. April 4, 1941 -- Canned Fruits and Vegetables

It is estimated that during the past months approximately fourteen and a half million 20 oz. cans of apple juice were sold. On the whole, however, the pack of canned fruits for the twelve months under review was considerably less than in the corresponding period of 1939-40, the principal decrease being in apples, peaches, pears and raspberries.

The total pack of fruits for 1940-41 is given as 58,550,172 cans, or approximately 2,439,590 cases, against 3,573,939 cases in the previous twelve months. However, the pack of canned vegetables showed a considerable increase, being estimated at 19,189,295 dozen cans, or 9,594,647 cases, compared with 7,588,055 cases in 1939-40. The pack of peas was almost double that of the preceding year, and tomatoes increased about 11 per cent.

There were 629 fruit and vegetable canning factories operating in Canada during 1940-41. Of these 280 were located in Ontario; 91 in British Columbia; 83 in Quebec; 27 in Nova Scotia; 24 in New Brunswick; 10 in Prince Edward Island; 8 in Manitoba; 4 in Alberta, and 2 in Saskatchewan. In addition there were 49 non-active plants under licence. During the year, inspectors of the Canning Section made 11,680 visits to plants; issued 11,383 export certificates; graded 10,973 samples for domestic trade, and among their many other duties visited military camps throughout Canada to check the grades of jam and canned goods issued to the troops.

No. 187. -- Sat. April 5, 1941 -- Searchlight on France

France to-day has been divided by her conquerors into three zones. There is the forbidden zone, consisting of the departments of the Nord and Pas de Calais, familiar to those who used to cross to France by the short sea routes. This zone is attached to the German G.H.Q. at Brussels, not Paris, and the Germans have more than once remarked that "after the war" this detachment from France will be permanent.

In the occupied zone the Nazis have been careful to include not only the ports and air bases suitable for attacks on England, not only space in which to mobilize a huge army for invasions, not only the capital, but most of the richest land and of the wheat-growing areas. The remainder forms the so-called unoccupied zone, whose capital is the mountain spa of Vichy.

To these three divisions must be added a fourth - a non-geographical division -- the prisoners of war who number nearly 2,000,000 and who have for the most part been trasported to Germany. The historic provinces of Alsace and Lorraine have been torn from France and have become part of the Reich. The majority of the French inhabitants have been expelled and forced to leave all their belongings, except a few personal effects, behind them.

Ninety-five percent of the inhabitants of occupied France live only in the hope of a British victory. They detest their conquerors with a great and growing hatred. They listen eagerly to the French transmissions of the B.B.C.

The showing of German news films fequently provokes disturbances. In a Dieppe cinema recently a film showing the exploits of the German and Italian forces provoked cries of "Down with Hitler -- down with Mussolini." Result, a fine of 1,000,000 francs imposed upon the town.

Hitler was never more cunning than when he decided to leave that part of France which was of no use to him economically or militarily in the illusion of freedom and to stay Mussolini's grasping hand in the seizure of the French African Empire. Had the Germans occupied the whole of metropolitan France and the Italians even a part of the Empire, the spirit of resistance would soon have flamed up again.

No. 188. -- Sun. April 6, 1941 -- Breeding Sunflowers

At the present time only a small quantity of sunflower seed is produced annually in Canada. There has been no great demand for large quantities of this seed on the Canadian markets. The relatively small quantity which is annually

produced in this country is sold mainly to seed houses or used in poultry feeds.

A number of varieties of sunflowers have been thoroughly tested at most of the Dominion Experimental Farms in Canada where it has been found that good seed can be produced from some of the earlier maturing varieties. The seed yields have not been very high but it has been disclosed that great variations occur in the percentage of oil that can be extracted from the seed.

The amount of seed and percentage of oil in the seed was found to be influenced to some extent by most of the factors which effect plant growth. However, great variation exists in the quantity and quality of the oil in different strains out of a particular variety.

Considerable progress has been made during the past few years in selecting and breeding for high oil content in the seed. In a number of lines selected out of the Mennonite variety the percentage of oil in 1936 varied from 21.5 to 38.3. In 1939, the variation in the oil content in another crop was from 16.5 to 34.6 per cent, while at the same time the average percentage of oil in the parent variety was 28.0.

A two year average yield of seed of the Mennonite variety was 617 pounds at the three stations in western Canada and 1,210 pounds per acre at four stations in eastern Canada. The yield of seed on the high-oil strains at Ottawa ranged from as low as 605 pounds to as high as 2,760 pounds of seed per acre.

This information is based upon results obtained from small experimental plots, but progress is now being made by plant breeding further to increase the oil content and at the same time maintain the high seed yields mentioned.

It is understood that seed growers are not likely to be interested in sunflowers as an oil-bearing crop unless these two factors are combined and maintained under field conditions and on a larger scale.

No. 189. -- Mon. April 7, 1941 -- Peat Moss Development

Resources of high grade peat moss that "could supply the American Continent with its requirements for a long rime to come" are available in deposits in eastern Canada, states a report by the Bureau of Mines, in which the results of recent investigations in Ontario, Quebec, and the Maritime Provinces are presented. One of the largest deposits, the Eel River bog in Northumberland County, New Brunswick, has been estimated to contain 21,000,000 tons of the material, a tonnage sufficient to supply the current demand of both Canada and the United States for more than 300 years.

Although two modern plants were built in Canada in 1940, it is surprising, the report states, that a greater development has not taken place in the Canadian deposits of peat moss, the two main reasons suggested for this lack of development being the expectation of keen competition from European countries after the war and high freight rates. Owing to the war the importation of peat moss from Europe has ceased and an appreciable market has thus been opened up for Canadian export to the United States as well as for domestic consumption. Prices have been rising and conditions appear favourable for the Canadian industry to capture a market and to become well established before the end of hostilities so as to meet any likely competition from European exporters.

Use of peat moss in the United States has been increasing steadily, the imports into that country in 1938 amounting to 62,000 tons as compared with only 5,000 tons in 1924, and it is felt that this increase is likely to continue with a greater appreciation of the usefulness of the commodity. Most of the deposits in eastern Canada are situated near or on railways and good roads and many of them are within easy access of deep sea harbours. These latter should have an advantage over those in Europe for shipment by all-water route to markets on the Atlantic Coast and the Great Lakes without having to re-load.

Peat moss owes its usefulness to its high absorptive capacity, permanency of composition, and low conductivity of heat. It is an efficient soil conditioner and is used chiefly in horticulture and market gardening. Among its other uses are as a packing for fruit and vegetables; for keeping down the waste of foodstuffs through decay; and as - an insulating material in the building trades. Sphagnum peat moss, especially when mixed with fibrous cotton-grass peat specially treated, makes an efficient surgical dressing.

In the investigations which were carried out last year, a total of 91 deposits were examined, the list including 13 bogs in Prince Edward Island, 22 in Nova Scotia, 13 in New Brunswick, 8 in Quebec, and 31 in Ontario. As the territory covered was large, a selection was made of such localities as might offer fair industrial possibilities. The bogs visited in these localities are classified in the report as regards the quality of the peat; whether they yield peat moss or peat fuel, the industrial uses of the peat, and the situation of the deposits as regards proximity to shipping facilities. The report also contains sections of the peat moss trade, the uses and production of peat moss, drainage of bogs, bog operation, and peat moss baling plant.

No. 190. -- Tues. April 8, 1941 -- Birds are Amazing

The annual spring migration of the birds, which usually begins in the middle of February and continues until about the end of May, is one of the amazing phenomena of nature.

The movement of the birds to their ancestral breeding grounds in the spring of the year is accomplished in the face of many hazards, hardships and adverse weather conditions, and the regularity with which familiar birds re-appear, following months of absence in distant regions, is in many cases very marked.

The great distances that some kinds of birds travel on these annual journeys is also amazing. The bobolinks that nest in Canadian fields winter in southern Brazil and neighbouring countries, while the tiny humming birds return each spring from Mexico and Central America.

Another feature of bird migration that arouses wonder and curiosity is the unerring accuracy with which the birds proceed to their destination. Without map or compass, often without previous experience of their route or guidance from companions, many of them fly thousands of miles over mountains, field and sea.

In making these flights some species travel by daylight, but the majority cleave through the air under cover of darkness. Migrants by night include the numerous fly-catchers, vireos, warblers, thrushes, orioles, tanagers, shore-birds and most of the sparrows. Some species of waterfowl under certain circumstances also migrate by night. Among the day migrants are swallows, night-hawks, chimney

swift, various hawks, and the ducks and geese. The insect eating birds often combine business with pleasure by feeding erratically on the wing. Others lift at once to the habitual altitude of flight and drive forward with unswerving determination to the end of the day's journey. In this case feeding may be done in late afternoon and in the early morning.

No. 191. -- Wed. April 9, 1941 -- Forest Fire Hazard

Forest fires cause Canada an average direct loss of between four and five million dollars a year. In addition are the indirect losses in soil fertility and the damage caused by floods, soil erosion, and the lowering of water levels in streams, all of which are the inevitable results of extreme denudation. Forest fires also destroy the scenic and wild life attractions, which are the principal drawing cards of the tourist industry.

Although forest fires are a constant menace, the late spring is one of the greatest danger periods of the year. The drying winds of late April and early May remove the moisture from the previous year's dead vegetation, leaving it dry and highly inflammable. Not until the June rains and the advent of new green vegetation does this period of fire hazard subside.

Forest protective organizations throughout the Dominion have made good progress in developing efficient methods of detecting and fighting forest fires, but statistics still show that approximately 86 per cent of the fires are caused by human agencies, indicating the necessity of public support to combat this needless destruction of a valuable resource. This year a nation-wide radio contest, designed to interest Canadian boys and girls in forest fire protection, has been arranged in co-operation with the educational and forest authorities of the provinces.

No. 192. -- Thurs. April 10, 1941 -- National Salvage Campaign

Canada has become salvage conscious. The Department of National War Services has launched its National Salvage Campaign.

Hon. J. G. Gardiner has said:

"It might seem that spending public energy on salvage as a war measure, is not a very wise use of such energy. This is not so. Literally millions of dollars worth of raw materials are lying around loose across Canada. Literally millions of dollars of other raw materials are thrown away annually by Canadians. To salvage both these types of raw materials is a very direct contribution to winning the war. We can save scrap to scrap Hitler!"

The National Salvage Campaign has four main objectives: to save raw ate materials, to raise money for war purposes, to give everybody on the home front a chance to help win the war, and to inspire a spirit of national thrift that may endure even after the war is over.

Discussing the first objective, the Supervisor said:

"Of course, there is no serious shortage of raw materials in Canada at the moment, but there is a considerable importation of raw materials for war

industries. For instance, we import over 10 million of dollars of scrap iron and steel annually, four millions of dollars of rags, a million of waste paper. If we can salvage such waste to supply this domestic market, we can conserve that much foreign exchange."

Campaign officials consider the second objective of the drive important. Money can actually be raised for war purposes through the sale of so-called junk by voluntary workers. Five dollars worth of old aluminium kitchenware rescued from a back shed, and invested in War Savings Certificates, will buy one 40-millimetre anti-aircraft shell, which might bring down a German plane. Eight tons of scrap iron, lying around the fields and sheds of most Canadian farms, will sell for enough to buy a 500-pound bomb for Berlin -- or Berchtesgaden.

The plan of campaign to secure this waste material for war industries and to convert it into ready cash on the way to those industries, is simplicity itself. Voluntary effort is the keynote.

Local salvage committees have been, and are being, set up all across the Dominion. Members of Parliament, using the electoral divisions as the salvage areas, co-operated in contacting rural and urban municipal officers and calling conferences of wartime groups, service clubs, and other citizens interested in organizing nationally for salvage purposes.

The top of this pyramid of local committees and salvaging groups is the National Salvage Campaign office, New Supreme Court Building, Ottawa. It is sending out pamphlets and leaflets with suggestions to the local committees. It is advertising to encourage the co-operation of the general public in the drive. It will supply posters and other advertising matter to keep interest high. It will act as a clearing house for specific queries concerning salvage problems.

Campaign officials are anxious to have full coast-to-coast organization complete by the opening date of the campaign, April 14. Citizens are urged to take immediate steps to set up salvage bodies in their community, if such has not yet been done.

Canada is out to "save to win" and Canadians are going to turn waste paper into shell wadding, aluminium pots and pans into airplane propellers, scrap iron into shrapnel, bones into high explosives -- to help smash Hitler!

No. 193. -- Fri. April 11, 1941 -- Nylon

Of the total world production of silk, over 60 per cent is used on this continent, over 80 per cent goes into silk hosiery. Canada's annual bill for this "index of civilization" is $30,000,000. If Nylon can be used to a considerable extent, a large saving in foreign exchange will be made. It is rather well known that the raw materials used in the production of this plastic are coal, air and water.

Nylon was discovered by W. H. Carothers, a chemist with E.I. du Pont de Nemours and Company, Incorporated, in 1928, during the course of fundamental work on polymerization. The name nylon was coined for the group of long chain polyamides produced by condensation polymerization and characterized by molecular orientation along the axis of cold drawing as shown by characteristic X-ray diffraction patterns.

The high degree of parallel arrangement of long molecules confers great strength on yarns made by extruding nylon polymer and then stretching several hundred percent. The yarn also, has high elasticity and elastic recovery. These properties in addition to the ability to take a set when steam treated makes nylon yarn especially suitable for the manufacture of sheer full-fashioned hosiery since it allows the manufacturer to impart good crimp recovery on which the fabric elasticity of knitted garments depends.

The strength and elasticity offer increased protection against destruction of the knitted fabric by snagging.

Among the textile uses other than hosiery visualized for nylon are important war requirements including nylon parachutes. Other uses include bristles, gut, transparent sheeting, artificial leather, wire coatings, etc.

No. 194. -- Sat. April 12, 1941 -- Good Pasture

Good pasture properly utilized is one of the most important crops on the farm at any time. This summer in view of the urgent necessity for increased milk production to enable Canada to fulfil her quota of cheese shipments to Great Britain the provision for and proper management of pasture takes on increased significance.

Around late July the regular pasture usually begins to fail due to heat and dry weather. This is usually the time to provide proper supplements to the pasture. If the cows go down in milk production it is difficult to get them up again. The ideal supplement is the aftermath growth on an area where an early crop of hay has been taken off.

If aftermath pastures are not likely to be available then provision should be made for supplementary pasture in the form of some annual pasture. This may consist of an area of about one acre for every three acres of the regular pasture, seeding oats alone 3 bushels, or a mixture of oats 2 bushels and Sudan grass 20 lb., or oats 2 bushels and rye 1 bushel, or oats 2 bushels and sweet clover 15 lb., to be sown the last week in May or the first in June. This may be pastured when about 6 inches high leaving the cows in it for an hour or two morning and evening after milking. Later if convenient the cows can have access to the regular and annual pasture at the same time but do not let the annual pasture head out or it will be wasted. Plan for complete utilization of both the regular and annual pasture provided.

If neither aftermath or annual pastures are provided then grain feeding may be necessary if production is to be kept up during the dry period. In the early part of the season a mixture of ground oats and barley will be sufficient but later in the season add a little protein-rich concentrate such as oilcake or soybean meal. Grain feeding will be expensive and should be avoided by planning for fresh pasture supplements.

For a later fall supplement sow some corn fairly thickly in an area where it can be cut and thrown over to the cows with the least possible labour. It is good business to plan to supply the cows with a continuous ration of fresh, green pasture and keep up the milk production throughout the whole pasture season.

No. 195. -- Sun. April 13, 1941 -- The Scottish Shepherd

Sirdar Ikbal Ali Shah, (the well-known Moslem author) writes as follows, for reproduction in our Fact a Day:

Against the harsh background of the Scottish mountain side, the herds stand out - slowly moving shapes upon a field of grey. From the Border Hills to the uplands of Inverness stretch many a league of sheep country, for Scotland was a wool-bearing region long before the tapestries of Arras and the Low Countries were woven from Scottish fleeces.

The rule of Mars has so contrived things that in these strenuous months of war only old men and young lads can 'mind" the folds and keep watch over the sheep-paths.

That, indeed, has always been the manner of it since the beginning. The story of Scotland is full of illustrious names of men who began life as herd laddies, commencing with St. Cuthbert and not ending with James Hogg - saints, poets, creative spirits in literature, mystics, scientists.

In these wild days, the job, always a lonely one, is rendered even more so by the dislocation of traffic, by lack of winter fodder, and the recent inclemency of the weather, which can be ferocious at times in the Scottish hills.

In the snow-banks and wreaths the shepherd must search for the newly dropped lambs now appearing in ones, twos and even threes -- for triplets are by no means uncommon - and he must carry them sometimes across a mile or more of heavy, untrodden snow to shelter, where they can be fed from the nozzled milk-bottle.

It is a task for a gentle spirit, and most shepherds are in fact gentle men. But on occasion they can reveal the old warrior sentiment of the Scot. As

As the flocks are being thinned out by those who keep watch and tally over the nation's food-supply, this means a weary moorland tramp for the shepherd in the short hours betwixt dawn and dusk.

The work of selection is difficult and the choice of beasts for slaughter often entails long consultations in a biting wind. In order that the flocks of the future may not be sacrificed to immediate needs, the most fertile ewes of good type must be preserved, nor may the local tweed industry be threatened with extinction by the entire loss of that native wool from which its choicest webs are woven.

I heard the story of a shepherd in Berwickshire who watched a dog-fight between a Heinkel bomber and a British Spitfire.

A hail of dropping tracer-bullets fell about his ears and drove him at last to seek the shelter of a drystone dyke which parcelled two adjoining stretches of sheep-walk.

Again and again, he told me in his own broad "Doric", the Spitfire attacked the Nazi bomber, discharging its lethal bursts of machine-gun fire, until at last the Heinkel whirled wildly like a wounded fulmar and then planed swiftly downwards to where a level race of heath-clad moorland lay between shaw and brae-side.

From the bowels of the stricken bomber emerged a trio of crop-headed Teutons, looking as sheepish as Jeems' own ewes, one holding an arm which dripped scarlet.

As the youngster approached them they gave the Nazi salute, and enquired in passable English as to where they were.

"And, maister," laughed the herd lad, "wud ye believe it, they didna jaloose whit I said. They askit me what tongue I wis speaking, and when I tellt them it was the Lallan Scots they juist gied their croppit heids a shake".

But if the Nazis could not understand Jeems, Jeems could comprehand them after a fashion.

He guided them across a mile and "a bittock" of moorland to a spot on the highway where stood a road-man's cottage where the guidwife regaled them with tea and bannocks - for even the sharpest racial enmity cannot quench the traditional sense of hospitality in the moorland heart.

"They were great muckle Sumphs," Jeems told me. "Stuffy lads, ye ken, but chaps like that'll no' win the war. Awfie sma' herts they seemed to hae, and they kept on askin' me if they wad be shot. When I told them oor way wisna their way and we didna murder folk in cauld blood they seemed awfie relieved."

Then there was the brace of escaped prisoners Jeems helped to track down. They were so weak with cold and hunger that he and his mate of the next sheep-walk "drave" them to the nearest police-station as though they had been a couple of their own half-grown lambs.

So the Scottish herdsman must watch the sky as well as the land, must keep a keen look-out for Nazi wings as well as for fleeces and snowbound ewes and "gimmers".

No. 196. -- Mon. April 14, 1941 -- The Children Can Help

"Mother, what can we do to help win the war?" That is the question the boys and girls across the Dominion are asking their parents. The National Salvage Office has just informed your enquiring reporter that there are several answers to the question.

One answer has come from Winnipeg, where Shriners co-operated with Winnipeg children in collecting eleven and a half tons of rags. Another answer came from Sydney Mines, Nova Scotia, where the manager of a small theatre helped Maritime boys and girls collect 1,500 pieces of aluminium salvage for war industry. Still another answer has come from Vienna, Ont., where a school principal organized his boys into salvage units. During the first five weeks of their operations, the boys accumulated and sold $150 worth of salvage.

The plan of the Winnipeg Shriners and the manager of the Sydney Mines theatre was similar. In each case there was amusement suited to juvenile needs, the price of admission to which was an item of salvage.

The Winnipeg Shriners gave a day of their annual circus to Winnipeg boys and girls, asking a minimum of two pounds of rags for admission. Nine thousand

children brought 23,000 pounds of secondary textiles. The rags, which sold for $495, found their way to war industries in the form of wipers. The money was donated by the Shriners to war charities.

The Sydney Mines theatre, using the same idea, asked a discarded piece of aluminum kitchenware as the price of admission to a rip-snorting juvenile show. Fifteen hundred Sydney Mines boys and girls co-operated. The money from the sale of the salvage went to the Spitfire fund, and the metal went to war industry.

What has so successfully been done in Winnipeg and Sydney Mines could very easily be done in all the cities and towns of Canada. It would have a four-fold effect. It would make the boys and girls feel they are taking an active part in helping Canada win the war. It would help to secure certain types of raw materials which are so urgently needed in our war effort and which had to be imported last year. It would raise money which could be effectively used in the war effort. And it would give the children a treat.

There is need to see that every precaution is taken to ensure that the enthusiasms of the boys and girls are kept in order. The effort necessary for children to gather up salvage around their homes is a challenge to them. By accepting that challenge they can help to win the war. But care must be taken to prevent accidents among large groups of excited children. It can be done, of course, when a sufficient number of ushers are used.

A quite different method of employing the energy of Canadian boys in war salvaging has come from Vienna, Ontario. The Vienna idea divided the 42 boys of the school into three corps, representing the Air Force, the Army, the Navy. Each corps has it own Air Marshall, General, Admiral. Salvage is collected on a competitive basis. The basis of the competition is simple.

Various items of salvage are given points of value. A boy who collects a pound of scrap steel gains 100 points for his corps. An old automobile tire is worth 5,000 points. A scrap storage battery or a copper wash boiler is worth 40,000 points.

In this way there is a means of recording the efforts of the boys. The three corps in the school work on a strictly competitive basis, each one trying to outdo the other.

Vienna, with its population of 200, leads the way. It expects to carry on during the holidays, reclaiming waste and preventing waste.

Collecting salvage by the voluntary effort of school boys has a unique angle. The boys, by their very vigor and youthful enterprise, are able to get salvage not ordinarily available to adult salvage groups. If the Vienna plan is copied across Canada, school boys should be able to bring many tons of material to the war industries, and raise hundreds of dollars for war purposes.

No. 197. -- Tues. April 15, 1941 -- Supplementary Fodder Crops

The increasing demand for dairy products in our war effort provides an opportunity for farmers to increase both acreage and variety of fodder crops. Live stock that have been housed during the long winter months require large amounts of good quality roughage in order to maintain maximum production in both milk and beef.

The Department of Agriculture sends along some valuable notes in this connection.

Fodder crops as grown on most Western Canadian farms may be divided into two groups - hay and sheaf feed, and corn. The chief hay crops are Brome, Crested Wheat Grass, and native grasses. Corn is the main crop grown for ensilage. Some of the annuals are worthy of being grown, both as fodder and ensilage crops. Corn is rapidly gaining in popularity both as a sheaf feed and ensilage, and is possibly the most important fodder crop other than hay.

A few of the more important fodder crops that might be grown to good advantage to supplement the meagre few now being fed are Sorghums, Millet, Sudan Grass, Legumes, Soybean Hay, and Sugar Beet (tops).

Amber Cane Sorghum is particularly well adapted to certain sections of Western Canada. It is grown, harvested, and stored similarly to corn. It can be fed from the sheaf, or ensiled and later fed as ensilage. Feeding experiments conducted at the Dominion Experimental Station, Morden, show this silage as being palatable, nutritious, and highly satisfactory when compared with corn.

Millets are fast growing and may be used to advantage, especially if the crop of grass or clover, seeded the previous spring, has been lost due to drought or grasshoppers. Millet varieties may now be obtained which are especially valuable for fodder production. The feeding value of millet is somewhat inferior to that of the standard grasses.

Sudan Grass provides an important source of fodder for cattle. It can be seeded in June and is ready for hay making in August. It may be cut with the binder and stooked until cured.

Alfalfa is conspicuous by its absence on far too many farms. At the Morden Experimental Station it grows like a weed. On account of its high nutritional value it should comprise the main fodder on all stock farms. It thrives for years, producing generally two crops a year.

Where no legume fodder is grown, oats and peas make a fine combination and produce heavy stands of high quality fodder. Now that rust-resistant oats are available, this mixture can be seeded in June, and provides a heavy yield of roughage that is especially suited to most kinds of live stock.

In areas where sugar beets are grown, care should be exercised to assure that the tops are saved for winter feeding. This type of feed is valuable for carrying stock through the winter, and materially saves on other fodder.

Soybean Hay is classed as a legume and is, therefore, a valuable stock feed. In areas where soybeans may be successfully grown, attention should be given this crop as a source of fodder to supply variety to roughage.

No. 198. -- Wed. April 16, 1941 -- First Ministry of Health

To New Brunswick belongs the distinction of establishing the first Ministry of Health in the British Empire. In commemoration of this nationally important event, which has contributed so much to the happiness and strength of the province, a monument was erected in 1939 on Parliament Square in Fredericton, N.B., on the advice of the Historic Sites and Monuments Board of Canada.

The first Minister of Health in the British Empire was Dr. W. F. Roberts, a native of Saint John, who was elected to the provincial legislature in 1917 and became a pioneer in public health service work. The Great War had revealed the pressing need for measures which would bring about a higher standard of physical and mental well-being among the people, and on assuming public office Dr. Roberts immediately advocated the setting up of a central provincial authority under which could be co-ordinated medical services in all communities. He sponsored in the provincial legislature of 1918 a Health Act embodying his reforms and upon the establishment of a Ministry of Health he was chosen Minister.

In this capacity Dr. Roberts worked untiringly to improve public health in his province. A provincial laboratory of wide range was set up under a highly trained scientist, and depots were established where serums, vaccines, and necessaries for emergencies could be obtained free of charge by physicians. Regulations regarding pasteurization of milk, handling of bread and other foodstuffs were put into effect, and pre-natal, pre-school, tuberculosis, and other clinics were established.

No. 199.--- Thurs. April 17, 1941 -- Unemployment Insurance - 1.

Interest in unemployment insurance is general. The following statement by Hon. Norman McLarty on the subject will be informative:

In June of last year, the Federal Government obtained the approval of every Province in Canada to an amendment to the British North America Act, permitting an Unemployment Insurance Act to be written into the social and economic structure of this country.

That was done and, by August, Canada had followed the example of other countries where great industries have developed, and had passed such an Unemployment Insurance Act.

Now, and because the operation of an Unemployment Insurance Plan at this time would be a direct contribution to our "Trial by Battle", it is intended to start collecting contributions and putting the Act into full operation on July 1st.

This plan of insurance, which was examined in detail by Parliament last ye year and very widely approved, is designed to fit the unique features of the industrial and social structure of Canada. The experience of other countries in this field of social insurance legislation has been carefully studied and it is believed many mistakes have thereby been avoided.

In Canada, Unemployment Insurance is to be administered by a Commission representing the three parties who contribute to the Fund: workers, their employers and the State. Each of these three will pay into a Fund for the Benefit of the worker who becomes unemployed.

When the Unemployment Insurance Commission was created last September, the late Dr. Sirois was chosen as Chief Commissioner but, owing to his ill health, it was necessary to arrange for a man to carry on in his place. Some months earlier Mr. Arthur MacNamara had been brought from Manitoba, where he had been Deputy Minister of Public Works, to reorganize the Dependents' Allowance Branch of the National Defence Department, and he was induced to undertake the new work

as Acting Chief Commissioner. With him, representing the workers of this country, is Mr. R. J. Tallon, well known for his work in protecting the interest of the worker. Mr. Allan M. Mitchell of Montreal, the third Commissioner, represents those enlightened employers of Canada who see in Unemployment Insurance a true contribution to industrial peace and good will.

In the last few months, this Commission has been working at great pressure and with great ability under difficulties, to make it possible to start operating the plan on July 1st. This will be an outstanding achievement, as in other countries it has always taken a matter of years to set up the machinery to administer such a scheme. In fact this early start is only made possible through the co-operation of the Post Office and other Government departments.

This Commission will spread a cloak of protection over some two and one-half million workers in Canada who, with their dependents, will total nearly half the population of the country.

In the course of the next few weeks, it will start the distribution of insurance books to every employer in an insured industry: one for each of his employees who comes within the terms of the Act. For instance, there will be about one million books distributed in each of the Cities of Montreal and Toronto; and some idea may be had of the magnitude of the task by the statement that across the whole country the issue of books will weigh about seventy tons. No less than three million books are being printed for the first year's supply and in a few weeks these will be distributed through about fifty depots set up in Post Offices across the country. The front page of the insurance book, which employers will fill in, will show details such as age, occupation and industry of each of the persons working for them. This will be the means by which every insured worker in the country will be registered and given a number, which he will retain throughout his years of employment.

Contributions to the Unemployment Insurance fund will be made by means of special stamps purchased through the Post Offices and placed in the worker's insurance book. The worker's contribution ranging from twelve to thirty-six cents a week, depending on his earnings, will be deducted from his wages by his employer and with the employer's contribution will make up the value of the stamp which is put into the book. The total number of stamps required for the first year will be some eighty-nine million.

The amount of benefit an unemployed worker receives and the length of time he receives it is strictly related to the amounts and length of time he himself contributed while he was employed. For example, if a married man was fully employed at twenty-five dollars a week for five years and then became unemployed for a long period he would receive twelve dollars a week for a limit of one year.

During this period of unemployment the nation-wide Employment Service -- a development of the existing Provincial Employment Services -- would be endeavouring to find him employment either in his usual occupation or in some other suitable occupation at his normal standard of living.

This Employment Service will operate in every large community in Canada and will charge no fees to any employer or worker who desires to use it.

For the employer it will offer the best and widest field in which to find just the type of man or woman he requires to fill some special post.

For the worker it will offer free contact with employers who have vacancies to fill.

For war industries operating at high pressure, it will be the quickest and most logical place to look for the men they need. At this time of crisis, such a service is vital to our efficiency.

Because of administrative difficulties, the experience of other countries has shown that it is unwise to insure some types of employment in the early years of operation. For example, agriculture and fishing by their very nature do not operate in places where collections can be easily made or benefits administered through a City Employment Exchange. These occupations, and others like forestry and trapping, are, therefore, among those not insured.

Professional people like doctors, lawyers, and dentists, and people earning over two thousand dollars in a year, are also excluded although all these excluded classes will benefit indirectly from the payment of insurance benefits to the unemployed workers in their community. Even with these exclusions, something like eighty per cent of the wage-earners of the country will be required to contribute to the insurance fund and will be able to draw from it on fulfilment of certain minimum requirements.

While nobody doubts that many of our serious economic problems in the last ten years have been caused by unemployment, or the fear of unemployment, it might be said that the relief of distress caused by unemployment is not the most pressing problem facing Canada at this time - that we are in the middle of the greatest war that this country has ever experienced and that we can think of these problems later - after Hitler has wished he had suddenly become sane and flown to Scotland with his friend, Hess.

Perhaps if we had all been willing to think of war in time of peace, it might have been possible to have kept the regimented barbarity of the Nazi hordes from laying waste the civilized lands of the continent of Europe. Let it not be said that in time of war we did not plan for peace and that we so far forgot the debt we owe to the skill of the worker and the tireless efforts of those who plan for this victory, that they were left to drift alone on the turbulent waters of readjustment after the victory had been won. An "all-out" War Effort demands changes in the industrial structure that will have permanent effects on the economic life of the country. As Mr. Menzies, the Prime Minister of Australia, said recently, "If we win this war - and we certainly mean to - we shall take years to recover from the strain ... and there will be burdens which will bow our shoulders for a generation to come."

In the meantime, we have created industries that are designed solely for war purposes. Agricultural workers have become builders of aeroplane engines; stenographers are making munitions; industry has developed new materials and techniques and trained its workers in new skills, and the armed forces themselves have drawn to their ranks much of the brain and muscle that has built Canada's peace-time prosperity. The days of readjustment will bring new and intricate problems beyond the experience of any man.

Unemployment Insurance will give those who contribute a chance to catch their breath after their strenuous labours, and enable them to pause for a while during the period of readjustment without the fear of want and distress hanging over their heads. Their spending of their insurance benefits will help to sustain the purchasing power of the great consuming public, while merchants adapt themselves to new conditions. As far back as 1919, a Royal Commission of Canada recommended the study of Unemployment Insurance as a means of protection for workers during the period of the country's rapidly changing economic structure.

During the last war, and again during this war, Great Britain has seen the value of extending the scope of protection afforded by Unemployment Insurance and in the battered homes of Britain, workers are finding their insurance benefits of tremendous value, both to their pockets and their peace of mind.

As my colleague, Mr. Ilsley, has pointed out on more than one occasion, Unemployment Insurance will make a direct contribution to the War Effort, even now. Contributions from workers and their employers will total about one million dollars a week. This will be held in trust by the Government for the Unemployment Insurance Commission, to be invested in Victory Loans and other similar Government bonds, until it will be needed. To the tax-payer, this means that just one million dollars a week less has to be raised by the Minister of Finance by other means while the demands on the fund are few.

Collections will begin on July 1st, when this important contribution to social welfare will be launched.

While collections will begin on July 1st, it should be borne in mind that benefits do not become payable in any case until contributions have been made for not less than 180 days within the two years immediately preceding the date on which need for benefit develops. It will be understood, therefore, that no benefits will become payable until approximately seven months have elapsed during which contributions have been made.

Of course, at this time it is impossible to predict the number of benefit cheques which will be issued once benefit rights have been established. Based on the experience of the United States during recent months, an approximation of the number of benefits which might become payable has been set up by one of our accountants. His guess is that the number of benefit cheques which will be issued each working day will not be less than fifteen thousand, or in the neighbourhood of three and a half million cheques a year.

I simply mention the volume of cheques which will probably be required to give an appreciation of the magnitude of the task which is being undertaken.

Today, in Britain, the bombed-out worker and the Government have found in their social legislation, a source of their high courage and morale.

Canadians have already expressed their approval of the Unemployment Insurance Act here, both as a war measure and as a plan for peace.

I ask for the utmost co-operation of workers and their employers in launching this scheme and know that I can count upon it.

No. 202. -- Sun April 20, 1941 -- A Danger in P.E.I.

While it is true that nature is forever washing away and moving parts of the thin earth covering that we call soil, she has also, through the centuries and ages, gradually built up over vast areas, a productive surface soil that has been responsible for the subsistance of the human race ever since it appeared on the earth.

One of the most wasteful farm practices that is common throughout every district of Prince Edward Island,says an official report, is that of making the rows of cultivated crops run directly up and down the slope of the fields. This method does not have anything to commend it. It is actually the hard way for man and beast and has caused an ever increasing amount of waste of the most valuable soil particles which contain most of the fertility in our soils, by helping the rains and melting snow to carry them away. In recent years, the increased area devoted to such cash crops as potatoes and turnips, has rapidly speeded up soil erosion in Prince Edward Island.

Dr. H. H. Bennett, Chief, Soil Conservation Service, Department of Agriculture, Washington, D.C., in a recent article "Thirty Years of Vertical Farming", tells something of what has happened in the Aroostook potato district of Maine. He refers particularly to the 220,000 acres of ideal potato soil known as Caribou loam. Thirty years ago, he surveyed the area. The top soil was then mellow and dark in colour. Last year, after examining it again, he states: "I hadn't counted on any such prodigious change in the soil as I actually found -- change caused by erosion." He states later in the article: "One thing that hadn't changed was the direction of the potato rows. Most of them, except on farms that had co-operated in the Soil Conservation Service demonstration project, still ran straight down the hill." He refers to a field that 32 years ago had a combined soil and subsoil depth of at least two feet: "In which the average depth of the subsoil -- the original soil is all gone -- is less than 12 inches today". -- "In other words, more than a foot of soil and subsoil, amounting to 32,000,000 pounds per acre, had been unnecessarily wasted in this field."

After visiting some of these fields in company with soil conservation agents of the U. S. Department of Agriculture, convincing evidence was seen to indicate that Prince Edward Island soils with rows down the slopes, are wasting soil fertility more rapidly that has occurred in Maine. Their soils have great quantities of small, hard stones and gravel that soon line the sides and bottom of rivulets and gullies as the soil washes away, producing a natural protection. Very few of the P.E.I. fields have any hard stones or gravel so that gullies cut deep and wide.

No. 203. -- Mon. April 21, 1941 -- The Bishop's Fable

Proposing the toast of "Chemistry" at a dinner held in Birmingham, England, the Lord Bishop of the Diocese related an ingenious fable, reported as follows by the Birmingham Post:

About the middle of the third millenium of what was still called the Christian era — that is to say about 2500 A.D. -- intelligent beings from Jupiter landed on this planet. You will say that surely beings from the nearer planets, Venus and Mars, reached us first. It was not so. On Venus pre-occupation with sex had caused depopulation resulting from a disastrous fall

in the birthrate, while the Martians by reason of improvements in their weapons of war had practically exterminated one another. Our first interplanetary visitors came from Jupiter.

They appeared, by chance, in the vicinity of Birmingham at a time when another great European war had just been fought, by the aid of the latest discoveries of chemical science. The object of the war I need hardly say was to establish freedom, justice and truth and to make the world safe for democracy. Equally there is no need to say our visitors from Jupiter found a hideous desolation. Chemistry had produced superb explosives. Its poison gases had achieved a magnificent thoroughness which made the primitive efforts of the early twentieth century seem pitiful; and though the substitute foods of the chemists did not quite equal those which Nature gave to generations when democracy was less highly valued, none the less the corpses were those of citizens emaciated rather than starved.

The visitors sought long for an untouched dwelling where they might discover unharmed representatives of European civilization. To their joy, in a remote district of that prosperous suburb of Solihull, an undamaged house was found. The man in it was busy. He had in his hand an indelible pencil, latest product of chemical research, as different from the thing which for us makes bluish smudges as a machine gun is from an arquebus. With this pencil in his hand he was poring over a sheet of paper, paper fashioned by chemists of the time from all-too-prolific nettles, all trees having been used up for wood-pulp some two generations earlier.

Eager to understand the civilization of which a perfect fragment seemed by a happy chance to have been preserved, the visitors asked the man what he was doing. He explained that as a psychological relief from the war, he was filling up a football coupon. They then asked where his wife was. He pointed to the ceiling and said that she, by the help of cosmetic chemistry, was, and here I quote his exact words, 'dolling herself up as a synthetic blonde.'

Gentlemen, is my satire too savage? You representatives of the chemists of the world have discovered Pandora's box. It is full of treasures. In amazing profusion you are constantly creating new substances for the use and enjoyment of mankind. New products of immense value and of constantly extending range come from your laboratories and factories. Your new dress materials and the never-ending series of dyes which colour them are a fascinating delight to at least one-half of humanity. No dictator's influence has ever spread as rapidly as rayon; and rayon is soon to be made obsolete by a new product of chemical science. Your fertilizers make nature astonishingly productive. When your new plastics are applied to the various utensils of humanity, even one of the most obstinate of human anxieties -- breakages in the kitchen -- will disappear.

You chemists, in fact, belong to that group of scientific men who ought to be pioneers of the golden age, and should, in fact, bring in that age but for human wickedness and folly. In very truth leaders in the applied sciences of chemistry, engineering, and electricity deserve our unstinted gratitude. But great discoveries are bent to evil uses. Genius demanding our homage is frustrated, and one asks, 'When will men turn to sanity and peace?' I do not know. But hopefully -- and in the old fable hope alone remained in Pandora's box -- hopefully we must look through the mists to a brighter, though possibly remote, future."

No. 204. -- Tues. April 22, 1941 -- Vikings Train in Canada

Thousands of miles from their shackled homeland, a band of blonde and adventurous youngsters are setting up an ominous thunder in Canadian skies. Except for saying that they are Norwegians of whom the Vikings of old would have been proud, this article must leave them nameless, because to reveal their identities would be to open the way for the Naxis' favourite weapon of revenge. Some day, when the bonds have been severed and the Gestapo has released forever its grip on their friends and families, they will receive their share of the glory.

Some of them came to Canada direct in fishing craft so small and flimsy that the gods who rule the weather and the seas must have been moved to kindly moods by their very audacity and bravery. Some sailed past the U-boats and through the mine fields and under the German air patrols to England and thence to Canada. Others came by a way so long and hard that books could be written about it were it not a secret route that they do not care to publicize too widely.

Today, in a plot of land on the lake-front in the shade of Toronto's skyscrapers, these men toast King Haakon and each day raise the flag of their nation beside that of the British Empire. The sign across the arched entrance of this plot of ground reads "Lille Norge". Translated, it means "Little Norway", and the camp is well named.

Inside the huts may be seen the neatness and colour associated with this clean and industrious people. Winter scenes of blue and white and red hang upon the walls of their dining rooms. In the officers' mess, over the door that looks out upon the lake, hangs the Coat of Arms of Norway, with its braids of gold and its background of velvet. Many times, as you watch these young warriors lounging in their chairs or moving about the room, you see them lift their eyes toward it and something in their glances assures you that some day it will hang in its rightful place again.

And those who doubt the ability of these Norse hedge-hoppers may check with Wendell Willkie. During his recent trip to Toronto, the famous American accepted an invitation to visit Little Norway. Having been waiting months for a good excuse to break loose, the Norwegians decided to put on a little show in Willkie's honour. The memory of it still moves veteran pilots around Toronto's Island Airport to chew their fingernails and blanch.

From all reports, it seems the Norsemen did everything but fly their planes in and out the windows of the surrounding office buildings. A radio announcer, describing the show, hung on to his hat and started searching for words. Willkie and the official party stood with eyes glued to the sky. It is said that even the sea gulls stayed grounded until the last Norwegian whistled in to a landing.

A number of Little Norway's flying personnel were members of the Norwegian Air Force before the German invasion. Many of these officers fought a hopeless battle in the sky against clouds of Heinkels and Messerschmitts. At least one stole a machine right from under the noses of the Germans and roared off like a hurricane from hell straight to England. The difficulties of landing a German machine in England without getting your breeches full of bullets may well be imagined, but he did it.

The number now under training is, of course, secret. Actually, there

exists in Canada today a Norwegian air force much larger than the one that tried to fight off the German sky-raiders during the country's invasion. It is composed of two branches, the Royal Norwegian Air Force and the Royal Norwegian Naval Air Force. During the winter, the naval branch took its seaplanes off to Vancouver in order to operate them from the waters of the Pacific. With the arrival of summer they will return to Toronto's combined land and water airport.

No. 205. -- Wed. April 23, 1941 -- Eggs for Britain

Indications are that Great Britain will require an increasingly large supply of eggs from Canada during the third year of the war. The Dominion Department of Agriculture believes it is now too late to prepare for this demand through the purchase of baby chicks, but a great deal can be done by a careful selection and carrying over of all available laying stock. There is a noticeable tendency at the present time on the part of poultry producers to reduce laying flocks, the marketing of fowl being quite heavy during the first two weeks in June.

While systematic culling is desirable at all times, the present situation would not appear to warrant heavy reductions. There has been no break in the price of eggs and all indications point to a particularly strong egg market during the summer and fall of this year.

While it is true that a great many yearlings were kept over last fall and in the ordinary course of events now is the time when two year olds, and birds that have completed their lay, should go to market. Poultry producers, however, would be well advised to look over their yearling stock carefully and to retain for laying purposes all birds which are physically fit and in such condition as to insure a maximum egg production during the next twelve months.

Every back-yard that will accommodate a few hens will be a valuable asset, and readers of the Fact a Day who help in this way to raise eggs will be making a valuable contribution to the War Effort.

No. 206. -- Thurs. April 24, 1941 -- Caring for Eggs

Following what was said yesterday about the raising of eggs, here are some important notes about caring for the eggs:

When eggs are being gathered the thought of how far they will have to t travel may not necessarily occur to the person gathering them. It may be just a a few yards for consumption on the farm; it may be a few miles to the nearest market, or it may be thousands of miles to Britain. No matter where they may be used it is a certainty that the consumer prefers the best quality. Most eggs are of good quality when they are laid and it depends upon how they are handled whether or not they retain their prime condition.

Canadian research scientists say that heat is the chief enemy of quality in eggs. Consequently, they recommend cooling the eggs as quickly as possible and keeping them cool all the time, on the farm, in the grading station, and in transit. With the advent of warmer weather it will be more difficult to keep the original fresh-laid quality. It will mean gathering the eggs two or three times a day and

giving them a chance to cool before they are packed and taken to market.

When an egg is laid it is at the body temperature of the hen, about 105 degrees. Tests have shown that the sooner the natural heat leaves the eggs the better they will keep. That is why it is recommended to place the eggs in a cellar or cool room. If the eggs are packed at once it will take almost 24 hours for the eggs in the centre of the crate to cool to below 68 degrees, even if the temperature of the room is at 50 degrees. Eggs in the centre of a tightly packed pail will take almost 10 hours to cool. They need about half that time to cool in a wire basket, and only three hours if placed on wire trays. Thus, even under the best conditions it will take several hours to bring the eggs to the proper temperature, that is, under 68 degrees.

No. 207. -- Fri. April 25, 1941 -- Talc

Dating back to 1886, the mining of talc in Canada first attained prominence in 1906, when active development of the talc deposits in the Madoc district of Ontario was commenced. The deposits of this district constitute the only known Canadian occurrences of fine white talc and from them has been produced probably well over 90 per cent of the entire Canadian production of the mineral. In recent years output in the Madoc area has been about equally divided between the Henderson and Conley mines. Unexcelled for its colour, talc from the area is marketed largely in the United States. Almost all of the cut soapstone produced in Canada has come from deposits in the Thetford area, Quebec, where a small but steady output has been maintained since 1922.

With a range of industrial usefulness surpassed by few other minerals, talc is employed chiefly in the paint, paper, ceramic, rubber, and roofing industries, a feature of recent years being the steady increase in the use of the mineral in the ceramic industry.

Although its percentage of the total world output is relatively small, Canada is seventh on the list of talc producing countries, and is the chief Empire source of supply to the United Kingdom. Most of the Canadian production, however, is marketed in the United States for use chiefly in the textile and cosmetic industries.

Production and trade statistics reveal a close annual uniformity during recent years, both in tonnage and value, in the production, exports and imports totals. This, it is stated, tends to indicate a saturation point in the present avialable domestic markets for Canadian talc, with the consuming industries well supplied. Since the commencement of the war, however, there has been a steady expansion in the export trade.

No. 208. -- Sat. April 26, 1941 -- Magnetic Mines

Magnetic mines are laid on the sea bottom, and are only effective if ships passing over them are inside the danger area of the explosion. They are useless in depths of 300 feet or more, and are thus complementary to the ordinary moored mines floating beneath the surface and designed to fire on a ship striking them. The development and laying of magnetic mines forced Britain to provide

special methods of clearance over and above the ordinary sweeping or moored mines.

As regards the antidote, much has recently been heard of "de-gaussing" belts fitted to ships of all types from trawlers to battleships, for the purpose of neutralizing their magnetism and so rendering them immune from magnetic mines. Dr. Gauss, one believes, was a Scandinavian professor who died in the middle of the 19th century; but gave his name to the unit of magnetic flux, just as the names of Ohm and Ampere are now used in the technical language of electricity.

The "de-gaussing" belt or girdle, or "D.G." equipment, as it is now called, consists of a number of strands of ordinary insulated cable passing round the ship about the level of the upper deck, and energised in a special way by an electrical current. It neutralises the permanent magnetism of the vessel, so that she is able to pass over a magnetic mine without deflecting the needle and firing the charge.

Total immunity against mines, magnetic or otherwise, can never be guaranteed. However, no ship fitted with the new gear has yet been damaged, while an officer responsible for its development expressed himself as being prepared to take a "de-gaussed" ship over any number of magnetic minefields.

It should be added that the apparatus which was suggested by the officers of one of His Majesty's Naval Establishments, with the able advice and assistance of civilian scientists, was developed in less than three months from the time the need for it became apparent.

No. 209. --,Sun. April 27, 1941 -- A New Pest in Canada

Here is something new in pests. It is the Pacific Mite. The Pacific mite was first found in British Columbia in 1939, when it was identified from Grand Forks and Oliver. In 1940 it became more widely disseminated in the Oliver district and an infestation was also discovered at Kaleden. This mite feeds upon all kinds of fruit trees grown in British Columbia, as well as upon a wide variety of weeds and other herbaceous plants, including the usual cover crops. Among fruit trees, apples are most severely attacked, Delicious being most susceptible.

The adult females winter beneath soil refuse, in cracks in the soil or beneath suitable protection on tree trunks. The overwintering forms, bright orange yellow in colour, are usually first seen in late July when moving down the tree to suitable winter quarters. These mites often congregate in immense numbers in crotches or on rough bark. Frequently, they collect in the calyx cups of the apples and by the profuse webbing that they spin as they move about, produce what is popularly known as "cellophane" beneath which they shelter in conspicuous yellow clumps.

In spring, these female mites begin to emerge from their winter quarters about the time apple buds are bursting and may continue to emerge for a month or more. A day or two subsequent to feeding, the overwintered female mites lose their yellow colour and very shortly begin to lay minute round translucent eggs. It is difficult to detect the summer form of the Pacific mite on foliage because of its inconspicuous colouration and very small size. An infestation in mid-summer is most readily discovered by the devitalized brownish condition of the foliage and by the presence of the fine but profuse webbing spun upon it by the mites.

The Pacific mite is carried by wind for long distances and it is probable that this is the principal means of dispersal. Until last year it was believed that control of the overwintered individuals was necessary if extensive summer increase of the mites was to be avoided. It has now been determined, however, that a special delayed dormant application of lime-sulphur for this purpose does not give results commensurate with cost of material and difficulty of application. Perhaps the chief reason for this conclusion is that the migration of mites from winter quarters to unfolding leaves goes on for several weeks after the delayed dormant period, hence a spray application at that time fails to kill a large proportion of the mites. Additional sprays are then required.

No. 210. -- Mon. April 28, 1941 -- Stern Realities

The Prime Minister of Canada said today:

"What have for long been ominous probabilities, are, now, upon us as stern realities. The area of conflict widens every day; its intensity increases every day; losses on sea, in the air and on land will continue to mount; the scenes of terror and destruction which live in the memories of many lands free, beleaguered and invaded, will be repeated and renewed. In steadiness of heart, of hand and of vision we shall find our present strength and the path to victory. If we are depressed by the picture of to-day or to-morrow, we shall be unworthy of our allies and ourselves. Wars of endurance are not lost by the accidents of a day, or a week or a month. They are lost only by the steady disintegration of the moral fibre of a people. The stuff of which the peoples of the British commonwealth are made is not that kind of fibre. Let us, therefore, calmly and confidently continue to look at the facts steadily and as a whole, not bowed down by the failure of to-day, not unduly elated by the success of to-morrow.

"Let me say that from now on as never before it is of the utmost importance that we should view the whole struggle in perspective, and seek to preserve a true sense of proportion. We must be prepared for the extension of fighting over wide and wider areas, for a rapidity of movement at times, and in other places, not unlike what we have already witnessed in the Balkan campaign; and for and intensity and ferocity of warfare resulting in terrific destruction and in heavy losses of human life. Regardless of where the conflict may spread or how rapid may be the movement of forces, or how intensive and destructive the struggle may become in other parts of the world, we must keep ever in our mind the truth that so long as Britain stands no reverse will be decisive.

"Britain is fighting with every ounce of her strength, every fibre of her being. We, in Canada, will strive more earnestly than ever to do our utmost on sea, in the air and on land; to work to produce, to manufacture, as we have never worked and produced or manufactured before. The news received yesterday of the landing in Britain of further contingents of Canadian troops, and airmen trained in the great commonwealth plan, should increase our confidence in the ability of Canada to help effectively in the decisive struggle. For the world it is renewed evidence of Canada's determination to spare neither her material resources nor her manhood in the battle for the world's freedom." - House of Commons, April 28, 1941.

No. 211. -- Tues. April 29, 1941 -- Weed Control

Weeds are a menace to the nation in peace time, but in war time they are an immediate danger. They deprive the producer of the produce that should come from the land. Think over the question of weed control and see what you can do in these days of battle.

Perennial weeds, a menace on most farms, are reproduced by underground rootstalks as well as from seeds. There is a vast difference in the ability of the various species of perennial weeds to withstand eradication treatments.

It is an easy matter to destroy the root system of a shallow rooted plant like ox-eye daisy or orange hawkweed, but it is extremely difficult to eradicate field bindweed, the roots of which often penetrate into the ground to a depth of seven feet. Between these two extremes is a list of well known perennial weeds such as couch grass, Canada thistle, perennial sow thistle, milk weed and toad flax, which are moderately persistent, yet they can be eradicated by cultural practices which may be followed by any farmer.

Many of these common perennial weeds can be effectively controlled by after-harvest cultivation commenced not later than August 1st in each year, and continued until the end of the growing season. This treatment, if followed by a well worked hoed crop, is a further insurance of eradication. This treatment is not sufficient, however, to eradicate a persistent weed like field bindweed. The best cultural method for controlling this weed is to plant corn in hills so that it can be cultivated in two directions. The corn should be grown continuously on the same area for two or three years in order to control effectively this troublesome weed.

Small patches of any perennial weed may be killed by applying sodium chlorate. Such a treatment is not recommended for large areas, however, because of the high cost. The killing of small areas of perennial weeds with a chemical is good practice. It prevents the development of what may later become a serious problem.

No. 212. -- Wed. April 30, 1941 -- Port Royal Habitation

Because of the active interest displayed in the reconstruction of the Port Royal Habitation by historical societies in the eastern United States, many visitors from the United States are expected to attend the formal opening of Port Royal National Historic Park at Lower Granville, Nova Scotia, on July 4.

The rebuilt Habitation is an exact replica of the one erected on the same site in 1605 by Champlain and De Monts. When work on this project was started, the Associates of Port Royal, an organization whose members reside in Massachusetts and Virginia, donated the services of an outstanding archaeologist, who employed a scientific method of soil reading to survey the site and determine the actual positions of the original structures. More recently this association has offered to place in the Habitation a suitably bound book containing the names of the Associates of Port Royal, as a token of their abiding interest in this reconstruction of the group of buildings which sheltered the first European settlers in North America north of the Gulf of Mexico.

Another group of United States citizens, the Order of 1606 with headquarters in Boston, Massachusetts, have shown their goodwill and interest in the

project by donating the furnishings for the Community Room of the Habitation. These furnishings, designed in the manner of the period, were made by local craftsmen in Nova Scotia.

The Order of 1606 is an organization whose aim is to maintain in our day the spirit of good companionship which characterized the social functions held in the Community Room of the old Habitation by the original Order of Good Time.
