

CANADIAN FOOD BULLETIN

(Issued by The Canada Food Board.)

No. 21.

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MORE TO BE FED THAN EVER.

“Is food control required now that peace is assured?”

Food control for the next year may become a more complex puzzle than during the past twelve months. The number of people who, having shared in Canada's war, have a just claim to Canada's food, has been added to enormously. The European issue has been somewhat clouded by the wail of the German Foreign Secretary, Herr Solf. He made the astounding demand that the Allies should immediately feed the Germans to prevent the spread of Bolshevism. He pictured that evil—a German-made Frankenstein—as some sort of a peril to the conquering Allies. It was poor and paltry camouflage, or very abject fright. That, however, need not obscure the case.

Solf's audacity has prevented many good Canadians seeing the other facts in a clear light. Our first and deepest concern must be for the 75,000,000 Belgians, Serbians, Rumanians, Greeks, Czechs and Jugo-Slavs, with the odds and ends of those new, crude republics fringing the western border of what was a better Ally as a coherent empire of the “Czar of all the Russias.” These are all not merely friendly, but were one time or another, until starvation knocked their organization to pieces, active Allies of our own, and fought as much in Canada's cause as Canadian soldiers are now fighting some of their perverted brethren in Russia. In addition, there are 40,000,000 people in neutral states who are, through no fault of their own, on short rations.

Difficulties of transportation have not ended. Troops must soon be sent back to their homes from Mesopotamia to Bombay, from Egypt and the Balkans back to Australia and Singapore, from East Africa back to Capetown, from Italy back to New Zealand, from Palestine back to Wales and Scotland, from France back to Canada and the United States, not to speak of the cross-channel return of the 4,000,000 British troops when they have finished their new “Watch on the Rhine.” Shipping for foods must continue short.

Nothing has been said here for the 120,000,000 civilians on limited rations, British, French and Italian; their case remains as urgent as ever. The only factor which has changed is the elimination of the submarine. The re-establishment of peace-time conditions for all these millions will mean the continuation of all our food-saving programme on this side of the Atlantic. More mouths have to be fed. The feeding may not be primarily of the fighting men, but of the civilian peoples who have shared, to an incomparably greater extent than the civil populations in Canada and the United States, the strain and the vile work which war entailed.

The pages of this month's Bulletin make it almost a food reconstruction number. The opportunities for Canadian farmers, shown herein, have never been equalled. Yet while our pocket may benefit, it must not be forgotten that the same impelling force of patriotism and of honour remains as it has been for two years.

EUROPEAN LIVE STOCK AT LOW LEVEL. VAST FIELD FOR CANADIAN RE-STOCKING EFFORT.

Sir William Goode of the British Ministry of Food, has cabled the Food Board an after-the-armistice statement of the live stock in the chief European countries, which is of the utmost significance to Canadian farmers. He says:

"There is throughout Europe a serious deterioration in the numbers of live stock. The Allied and neutral home-produced meat supplies cannot improve for several months, hence an insistent demand for overseas supplies will be inevitable. The meat situation in Germany, and especially in Austria-Hungary, is considerably more difficult than we had anticipated, thus further increasing the call upon exportable surpluses to the limit of our transport capacity.

"Owing to the universal reduction of pigs, the world production of bacon, hams, pork and lard at present is unequal to the demands, including those of the United Kingdom, which have always been by far the largest consumer of pig products.

"The milk yield in general is greatly diminished, in fact, almost to a vanishing point in Central Europe. Holland, Switzerland and Scandinavia, which are normally large exporters of dairy products, will probably not have any considerable surplus for the United Kingdom, which will thus be practically dependent on imported fats entirely from the Dominion of Canada and the United States."

Decreases shown by the returns of the Inter-Allied Food Commission are:—

Country.	CATTLE.	DECREASE.
France...	14,787,600	2,366,000
Italy...	6,646,000	996,000
Denmark...	2,462,800	344,700
Sweden...	2,722,500	598,900
Holland...	2,096,500	.....
Germany...	21,828,000	2,182,800
Austria...	9,160,000	.....
Hungary...	6,028,000	.....
	SHEEP.	
United Kingdom...	27,886,000	2,788,600
France...	16,131,000	2,258,300
Italy...	13,824,000	138,000
Denmark...	514,000	46,200
Sweden...	973,400	.....
Holland...	842,000	199,900
Germany...	5,471,000	.....
Austria...	2,428,000	.....
Hungary...	7,696,000	.....
	PIGS.	
United Kingdom...	3,939,000	984,200
France...	7,035,000	2,814,000
Italy...	2,722,000	352,800
Denmark...	2,496,700	1,872,300
Sweden...	977,600	351,900
Holland...	1,350,000	162,000
Germany...	25,341,000	19,305,750
Austria...	6,432,000	.....
Hungary...	6,415,000	.....

Date.	CANADA.		
	Cattle.	Sheep.	Pigs.
June, 1914....	6,036,800	2,058,000	3,434,000
" 1917.....	7,920,800	2,369,000	3,619,000

In a memorandum recently published by the British Director General of Food Production, a number of points were made for the guidance of British farmers for the harvests of 1919 and 1920 which will be of much interest and equal value to Canadian farmers who desire to know what policy is being followed in Great Britain for the crops for the next two years, and more especially for replacing the large slaughter of livestock. The points were as follows:—

"During the continuance of war the most important agricultural products are—

(1) Bread grain; (2) potatoes; (3) milk.

Next in order come—

(4) Bacon; (5) beef; (6) mutton.

Production of pig meat in the United States will supply all the bacon and ham required for some months to come. On the other hand it is likely that supplies of beef and mutton will be deficient in the spring months. But policy must not be guided by the outlook of the moment; they are preparing for the harvests of 1919 and 1920, and before these harvests have been gathered, the food position may have undergone important changes.

The policy of the Food Production Department is essentially an insurance policy. The task is to guard against calamity, not to provide for minor shortages.

The whole success of our present system of food supply would be endangered if there were such a shortage of breadstuffs as would make bread rationing necessary.

Potatoes.—Up to the limit of the present acreage, potatoes will be required to ensure an adequate supply for ordinary use.

Milk.—Efforts are necessary to maintain the present production of milk.

Pork and Bacon.—As a deficiency in pork and bacon would be worse than a deficiency in beef and mutton, since fat meat is more needed than lean meat, executive committees should endeavour to secure an increase in pig-keeping to the utmost limit permitted by the food available, especially on farms where potatoes are grown.

Beef and Mutton.—As meat is a food always in keen demand when money is plentiful, the supply will not meet the demand; but it must be remembered that the production of beef and mutton requires much more land than the production of breadstuffs.

WORLD REQUIRES WHEAT RESERVE.

Why Canada Must Still Save and Produce.

There are no wheat reserves in the Allied countries to-day. For the first time in the history of the United States and Canada the 1917-18 crop year was ended without any reserves of wheat being on hand. The United States and Canada had bared their bins in order to protect Great Britain and the Allies against possible and probable increase in the severity of the submarine menace. This enabled Great Britain to create a reserve of breadstuffs that covered possibly three or four months, but this reserve is abnormally low. With no reserves in North America, France, Italy and other neutral countries, the reserves in Great Britain are negligible. The need for reserves of breadstuffs is apparent.

The United States Food Administration says "the world will not be safe from hunger" until a reserve of three hundred million bushels of wheat has been established. It will require another crop in North America, equal to the total crop in the United States and Canada, out of which another 150,000,000 bushels of wheat shall be set aside.

In 1918 the United States harvested her second largest wheat crop, about 900,000,000 bushels; Canada had only an average crop of 190,000,000; making a grand total for the United States and Canada of 1,090,000,000

bushels. In 1917 the United States harvested about 625,000,000 bushels and Canada 250,000,000 bushels. The excess in the wheat crop in the United States and Canada for 1918 over 1917 is not large. The United States normally consumes about 500,000,000 bushels, and requires about 100,000,000 bushels for seed. Canada normally consumes about 40,000,000 bushels, and requires about 40,000,000 bushels for seed.

For the past two years Canada has had two crops that were only average. A fairly good crop may be expected next year, but if the United States has in 1919 as bad a crop as they had in 1917, or if both the United States and Canada have worse crops than they had in 1916-17, America will be faced with conditions in 1919 which will wipe out all the possible reserves that may be piled up in 1919 by conservation and substitution. From these facts the conclusion is evident that any conservation programme that does not cover at least two crop years is of little value, for the best efforts in conservation may be offset by a single bad crop next year.

This conclusion is further emphasized by a scrutiny of the figures relative to the wheat crop of North America for the last five years:—

	1914.	1915.	1916.	1917.	1918.
Canada	161,280,000	393,543,000	262,781,000	233,743,000	190,000,000
United States	891,017,000	1,025,801,000	636,318,000	620,828,000	918,920,000
	1,052,297,000	1,419,344,000	899,099,000	884,571,000	1,108,920,000

WAR GROWTH OF CANADIAN FARM STOCK.

Official returns of the number of live stock in Canada in 1918 permit the following comparisons to be made:—

	1912	1914	1917	1918
Horses	2,692,357	2,947,738	3,412,749	3,608,315
Milch cows	2,604,488	2,673,286	3,202,283	3,324,429
Other cattle	3,827,373	3,363,531	4,718,657	6,507,267
Sheep	2,082,381	2,058,045	2,369,358	3,037,480
Swine	3,477,310	3,434,261	3,619,382	4,289,682

CANADA'S VAST FARM WEALTH.

Latest Figures on Farm Crops and Livestock.

The "Monthly Bulletin of Agricultural Statistics" (an advance proof of which was furnished by the courtesy of the Editor, Mr. Ernest H. Godfrey, F.S.S.) contains data on Canadian crops and farm livestock, compiled up to the last minute, which is of even more importance at present than usual. The following summarizes the chief statistics dealing with food crops and animals:—

AREAS UNDER FIELD CROPS.		
Acres.	1918.	1917.
Wheat.....	17,353,902	14,755,850
Oats.....	14,790,336	13,313,400
Barley.....	3,153,711	2,392,200
Rye.....	555,294	211,880
Peas.....	235,976	198,881
Beans.....	228,577	92,457
Buckwheat.....	548,097	395,977
Flax.....	1,068,120	919,500
Mixed grains.....	921,826	497,236
Corn for husking.....	250,325	234,339
Potatoes.....	735,192	656,958
Turnips, etc.....	343,037	213,233
Hay and clover.....	10,544,625	8,225,034
Alfalfa.....	195,250	109,825
Fodder corn.....	515,379	366,518

TOTAL YIELDS.		
Bushels.	1918.	1917.
Wheat.....	210,315,600	233,742,850
Oats.....	456,733,900	403,009,800
Barley.....	83,262,500	55,057,750
Rye.....	10,375,500	3,857,200
Peas.....	4,384,700	3,026,340
Beans.....	3,937,400	1,274,000
Buckwheat.....	11,469,600	7,149,400
Flax.....	7,695,000	5,934,900
Mixed grains.....	32,303,000	16,157,080
Corn for husking.....	6,946,200	7,762,700

IN PRAIRIE PROVINCES.		
	Bushels.	Acres.
Wheat.....	186,176,500	16,125,451
Oats.....	261,114,800	9,354,941
Barley.....	54,607,900	2,272,334
Rye.....	7,651,100	411,846
Flax.....	7,430,700	1,044,838

RETURNS BY PROVINCES.

The following are this year's acreage and yield in bushels of the chief food crops by provinces:—

PRINCE EDWARD ISLAND.		
	Acres.	Bushels.
Spring wheat.....	30,352	698,000
Oats.....	169,729	7,171,000
Barley.....	5,672	187,200

NOVA SCOTIA.		
	Acres.	Bushels.
Spring wheat.....	32,737	777,500
Oats.....	145,036	5,438,800
Barley.....	11,571	335,600
Rye.....	531	10,200

NEW BRUNSWICK.		
	Acres.	Bushels.
Spring wheat.....	49,453	1,050,900
Oats.....	224,442	7,855,500
Barley.....	6,601	178,200
Rye.....	308	7,200

QUEBEC.		
	Acres.	Bushels.
Spring wheat.....	365,670	6,764,800
Oats.....	1,932,720	56,732,100
Barley.....	189,202	4,635,400
Rye.....	29,063	544,900

ONTARIO.		
	Acres.	Bushels.
All wheat.....	714,039	14,065,900
Oats.....	2,924,468	116,978,700
Barley.....	660,404	23,114,100
Rye.....	112,726	2,141,800

MANITоба.		
	Acres.	Bushels.
Wheat.....	2,983,702	55,947,900
Oats.....	1,714,894	63,451,000
Barley.....	1,102,965	31,986,000
Rye.....	240,469	5,110,000

SASKATCHEWAN.		
	Acres.	Bushels.
Spring wheat.....	9,249,260	106,366,500
Oats.....	4,988,499	134,689,500
Barley.....	699,296	14,160,700
Rye.....	123,500	1,667,300

ALBERTA.		
	Acres.	Bushels.
Wheat.....	3,892,489	23,862,100
Oats.....	2,651,548	62,974,300
Barley.....	470,073	8,461,200
Rye.....	47,877	873,800

BRITISH COLUMBIA.		
	Acres.	Bushels.
Wheat.....	36,200	782,000
Oats.....	39,000	1,443,000
Barley.....	7,927	204,100
Rye.....	820	20,300

NUMBERS OF FARM LIVE STOCK.		
	1918.	1917.
Milch cows.....	3,243,600	3,243,600
Other cattle.....	6,507,267	6,507,267
Sheep.....	3,052,748	3,052,748
Swine.....	4,289,632	4,289,632
Fowls.....	31,324,498	31,324,498
Turkeys.....	1,061,932	1,061,932
Geese.....	879,177	879,177
Ducks.....	884,034	884,034

AMPLE FOOD IN CANADA.

According to a report issued by the Cost of Living Branch of the Department of Labour, covering the supplies of foodstuffs in the several cold-storage plants in Canada, there are 7,806,437 dozen of eggs in storage, which is a decrease of 15.3 per cent, since last year, and of beef, there are 29,051,970 pounds, also a decrease of 9.7 per cent since November, 1917. Fish total 17,553,996 pounds, giving an increase of 62.3 per cent over last year, and butter, 18,387,402 pounds, also an increase of 7.4 per cent.

There is an increase of 16.2 per cent in fowl, the figures for 1918 being 1,229,208 and for 1917, 1,057,500 pounds. The greatest amount of a single commodity is pork, of which there are 29,745,459 pounds, an increase of 5.3 per cent.

Of the 400,000,000 people of Europe, only three areas, South Russia, Hungary and Denmark, have sufficient food supplies to last until next harvest without imports.

FAR FROM NORMAL SUPPLIES.

Cereals and Sugar Show World Shortage.

There is not a scrap more food in the world because peace—"white-winged peace"—has come back. Those lands with plenty, as Canada, will, in reality, be obligated by a dictate of humanitarian honour, to send still more of their sufficiency overseas. Leaving out the enemy countries—and apparently they have been so battered and starved, and their spirits so depressed by an unvarying ration for four years, that they are bordering desperation and starvation—there are anything up to 150,000,000 people who will have to be helped over the interval until the next harvest. Even then, possibly, the normalizing of food plants and of food animals may not be complete. Out of our existing stores we were able to keep our Allies so marvellously well fed that none of them were reduced to the state of depressed, dejected national spirit which plainly contributed to the utter debacle of the once great German Empire.

None the less, the Allied home supplies have during the war been greatly eaten into, and their grain fields have been much reduced.

Dr. Vernon Kellogg, who was for two years the right-hand man in feeding Belgium, and who is now touring Europe, says that the losses in cattle in France and Italy are very serious. Not only are meat and milk directly affected, but in these lands oxen are largely used for draught purposes, and the areas which can be ploughed next year are likely to be greatly reduced by the absence of beasts to draw the plough and harrow.

Then as to cereals, the International Agricultural Institute has declared that the production of wheat in Italy, while greater than it was last year, is below the average for the years before the war. Spain, Great Britain, Italy, Luxemburg, Switzerland, Canada, United States, India, Japan, Egypt, and Tunis (a list which, with the exception of Russia, Argentina and Southern Australia, comprises all the chief wheat-producing countries) show an increase of only 8 per cent above the average for five years, 1912-16, these including two years of war. That 8 per cent will make but a poor showing even to feed the Russian people, much less help in raising the general level of wheat supply for the better nourishment of millions and millions of Allies.

Rye, however, in the six chief countries, shows an increase of 50 per cent over the average for the same period, and barley an

increase of nearly 7 per cent. Oats show a drop of, roughly, 15 per cent for the same five-year period, and (maize) corn in Spain, Switzerland, Canada and the United States altogether is estimated to show a diminution of about 3 per cent. Linseed, now more largely used than ever for animal feed, and highly important for its essential oils for human consumption, has decreased at least 16 per cent.

Sugar beet production in all the European countries, including Germany and Austria has dropped from 8,500,000 tons in 1914-15 to 4,498,000 tons for last harvest. Sugar was selling in Spain a month ago at from 21 cents to 26 cents a pound. And Spain was neutral. In Austria it was from 30 cents to 54 cents a pound, when procurable, while in Turkey, just before her capitulation under smashing blows in Palestine and Mesopotamia, sugar was selling, or at least was quoted, at from \$1.70 to \$5 a pound. These figures show a globe-wide shortage.

GIRLS' CLUBS IN NEW BRUNSWICK.

Girls' clubs in New Brunswick did splendid work in canning and pickling. A report is just to hand which shows that during the fall over 200 active organizations of girls and women in the province were busy. These employed over 3,500 girls and reports make it plain that between 75,000 and 100,000 quarts of foodstuffs were preserved through the work. It is pointed out that this is by no means a complete return, for "if the full influence and improvement on homes through the province could be measured, it would show double that amount of work done."

WIDE AWAKE SCHOOL IDEA.

Yellow Grass, Sask., educationalists are shortly to undertake a new co-operative school farm. The plan, which is now under way, is to purchase one or two acres of land immediately adjoining the present school grounds and cultivate it by raising vegetables of all kinds, which will be sold. Shares will be sold to the pupils of the school or their parents at \$1 each, no one person being allowed to purchase more than two shares. In families where there are two or more children, shares may be purchased for each child. Parents may purchase shares ahead for children not yet attending school.

RETAIL MERCHANTS' PATRIOTIC AID.

Retail merchants throughout Canada have been prominent in the way they have assisted the work of the Food Board. Nearly 30,000 of them have been reached through a section which was instituted last February, under the honorary chairmanship of Mr. F. W. Stewart, Canadian Resident Director of Cluett, Peabody & Co., Inc. This is the Conservation Publicity Section. The method of work was simple, but remarkably effective. Its success points to depth of patriotic spirit that could have been found in any class of persons, possibly, in Canada, yet which was outstanding from the fact that the patriotism was at once utilized in a well organized form. The plan, briefly described, was to divide the Dominion into such areas as could be covered by a commercial traveller. Population was taken into account, but still more important was the arrangement of each area so as to be within easy reach of its centre. This involved a good deal of thought, but the plan eventually evolved worked almost perfectly.

In each area a prominent business man was requested to take the chairmanship of a committee, which he himself undertook to nominate. This first committee consisted of representatives from the cities, towns and villages within the area. These in turn became chairman of committees in their own districts, and in many cases from these committees, sub-committees were again appointed, so that the organization opened up like a fan, with Ottawa as the converging point of all.

Through these committees enormous quantities of literature, invaluable in educating the public to the needs of Food Board work, the methods to be employed to attain the best ends, the increase of production and generally to make effective the Orders of the Food Board were distributed. In most cases literature was sent in bulk to the divisional chairman, who in every case, without a cent of payment, and in all cases at a good deal of sacrifice of time and convenience, undertook to forward the literature in split quantities to their local chairman. From these they were again distributed, until there is scarcely a retail merchant in Canada who has not in the last nine months been doing something or other through the publicity of his store window, or through displays within the store to help food work. Its cumulative effect has been enormous, and the Board at Ottawa is fully cognizant of the splendid work retail merchants have thus done.

It is impossible to give the names of upwards of 1,000 local Chairmen who have acted in this capacity since March last. The following, however, are the names of the divisional chairmen in the various divisions, though Messrs. Theo. Morgan, Clifford Martin and R. H. Williams resigned through pressure of other war work during the fall:—

- Amherst, N.S., Clifford Martin.
- St. John, N.B., Wm. S. Allison, Manchester-Robertson-Alison, Ltd.
- Sherbrooke, P.Q., L. A. Bayley, Bayley's, Limited.
- Montreal, P.Q., Theo. Morgan, Henry Morgan & Co., Ltd.
- Ottawa, Ont., L. N. Poulin, L. N. Poulin, Limited.
- Kingston, Ont., R. J. Rogers.
- Toronto, Ont., R. S. Coryell, Adams, Queen street, W.
- Hamilton, Ont., R. L. Smith, Robinson Company, Limited.
- London, Ont., James Gray, Gray's, Limited.
- Fort William, Ont., C. H. Jackson, Rutledge & Jackson, Ltd.
- Winnipeg, Man., F. Sparling, Hudson's Bay Company.
- Calgary, Alta., John Irwin.
- Vancouver, B.C., C. Spencer, David Spencer, Limited.
- Victoria, B. C., J. E. Wilson, W. & J. Wilson.
- Brandon, Man., A. Shewan, Nation & Shewan, Limited.
- Nelson, B.C., A. T. Walley, Emory & Walley.
- Moncton, N.B., E. A. McSweeney, Peter McSweeney, Ltd.
- Portage la Prairie, Man., H. M. Dunham, Brown's, Limited.
- Regina, Sask., R. H. Williams, R. H. Williams & Sons.
- Saskatoon, Sask., J. F. Cairns, J. F. Cairns, Limited.
- Edmonton, Alta., Geo. A. Carnes, Hudson's Bay Co.
- Montreal, P. Q., Armond Dupuis, Dupuis Freres, Limited.
- Windsor, Ont., C. A. Lanspeary.

In the beet sugar producing states and in the cane sugar producing territory of Louisiana, where there is sufficient sugar available, the monthly per capita allowance of sugar for household use has been increased from 3 to 4 pounds, effective December 1.

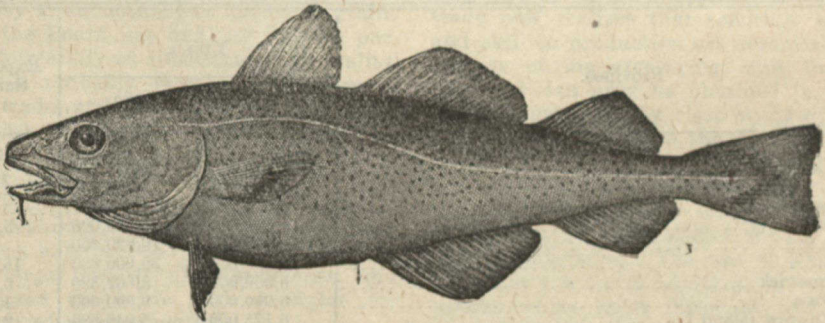
UNTOLD WEALTH OF COD FISHERIES.

NEW FOOD PERMANENTLY ADDED TO THE DOMESTIC LIST.

Codfish has come into its own in Canada during the war. It has always been a favourite fish of the French and other New-Latin countries, both in Europe and in South America. It has, however, been one of the most neglected fish so far as Canada is concerned. The banks of Newfoundland are famed everywhere for their wealth of cod, but it is not so generally known that the Eastern waters of Canada contain an enormous quantity of this fish. In the last few months, under the stimulus given by openings being found by the Food Board,

the cod-fishing industry has made enormous strides in diverting some of its catch to the internal market.

Over 200,000,000 pounds of codfish are caught by Canadian fishermen annually. This is by far the largest quantity of any Canadian fish, or indeed, of any three varieties. Nor is this surprising, for cod-fishing early attracted the fishermen of the Bay of Biscay and of the Portuguese coast to Newfoundland. Indeed, it was the prevalence of cod on the Great Banks which brought about the fact that Newfoundland was the British first colony.



The bulk of codfish taken in Canada is salted and dried for export to the Latin countries. South America, especially, does a large trade. There is no reason why our own consumption should not be as large.

The cod is native to both the Atlantic and Pacific oceans. In the latter, there are, in fact, three varieties, ling, red and bray cod. The last named resembles the Atlantic fish. The flesh of the codfish is not salty. Fresh or frozen codfish is as white and palatable as lake whitefish. Atlantic codfish can be procured in first-class condition as far west as Winnipeg. Pacific codfish is marketed as far east as that point. Dried, salted,

boneless and shredded codfish can be procured anywhere in Canada.

The codfish is cheap and highly nutritious. Its palatability depends on the cooking. Canadians do not eat enough codfish and our present codfishery is largely dependent on foreign markets. A larger home consumption encourages the fishery by quicker returns on money invested. It will also induce more men to go into the fishery—thus forming a nursery for the Navy and the Mercantile Marine.

A leaflet has been prepared, and may be obtained free from the Food Board, giving a number of ways of preparing codfish for the table.

Satisfactory marketing can be done only in person. Food advertisements should be closely followed, and encouraged. Reliable dealers who are up to the minute in food conservation topics, and who take care to display their license numbers on all occasions, should be regularly patronized. The local market is invariably worth encouraging."

The Canada Food Board at its discretion will grant permits in writing for the manufacture of farina or purified middlings.

Maximum prices per ton are \$24.50 for bran, and \$29.50 for shorts, in bulk, Fort William and Port Arthur. Invoices must state maximum price, freight charges, cost of bags, etc.

OUR GOLD MINE IN PLAIN POTATOES.

QUEBEC SETS PACE OF PRODUCTION FOR ALL PROVINCES.

A revised estimate of the yield of potatoes in the nine provinces of the Dominion has just been compiled under the Fruit and Vegetable Section of the Food Board, from the latest information. It shows an exportable surplus of 28,433,000 bushels. Of this, 24,500,000 bushels are secured through the largeness of the crop in Quebec, New Brunswick and Manitoba. The province which made the most remarkable progress in the past year in its potato yield is Quebec, which jumped from 18,158,000 bushels in 1917 to 35,000,000 bushels in 1918. Of this 16,000,000 bushels is an exportable surplus.

The next largest increase was in Nova Scotia, where the yield rose from 6,000,000 to 9,000,000, though the exportable surplus here is only 1,000,000. Prince Edward Island shows a decrease as compared with 1917, but still the yield was sufficient to enable the Islanders to be able this year to export 2,000,000 bushels. Manitoba doubled its exportable surplus. The provinces which show no surplus and which may, in fact, to some extent have to import, are Saskatchewan, Alberta and Ontario. Weather conditions chiefly, brought this about. The detailed figures for the provinces are as follows:—

Province.	YIELD.		Exportable Surplus.
	1917.	1918.	
British Columbia	3,143,900	3,026,340	933,000
Alberta	7,350,000	3,750,000	.....
Saskatchewan	5,000,000	.....	.....
Manitoba	5,000,000	6,750,000	3,500,000
Ontario	18,185,616	16,620,300	.....
Quebec	18,158,000	35,000,000	16,000,000
New Brunswick	6,000,000	8,662,390	5,000,000
Nova Scotia	6,000,000	9,000,000	1,000,000
Prince Edward Island	6,125,000	5,046,880	2,000,000

CANADIAN ROOT CROPS.

The Dominion returns of acreage and production in turnips and other field roots is given in a statement by the Bureau of Statistics, which adds a comparison of returns from 1917.

The total yield of turnips and other roots is estimated at 120,767,900 bushels from 343,037 acres, an average per acre of 352 bushels, as compared with last year's total of 63,451,000 bushels from 218,233 acres, the average yield per acre being then 290½ bushels. Hay and clover give the record yield of 14,595,500 tons from 10,544,625 acres, an average per acre of 1½ tons. The corresponding figures last year were 13,684,700 tons from 8,225,034 acres, or 1½ tons per acre. The previous record yield of hay and clover was 14,527,000 tons in 1908. The average value per ton of hay and clover is \$9.75, as against \$10.33 per ton last year. Alfalfa shows a yield of 448,600 tons from 196,268 acres, or 2¼ tons per acre, as compared with 262,400 tons from 196,423 acres, or 2¼ tons per acre last year. Of fodder corn the estimated yield is 4,203,150 tons from 502,069 acres, an average per acre of 8¼ tons.

The total area under root and fodder crops, including potatoes, turnips, etc., hay, and clover, alfalfa and fodder corn, amounts to 12,321,351 acres, as compared with 9,576,568 acres in 1917. In total value at local prices, these crops amount in 1918 to \$330,975,825, as compared with \$268,310,300 in 1917.

The area estimated to be sown to fall wheat for 1919 is five per cent less than that sown last year, the area being 840,000 acres, as against 886,000 acres, the revised estimate for 1918, based upon the returns collected in June last.

The Northern Regional Food Committee, in Russia, a few weeks ago was contemplating the use of cedar nuts as food. It has been ascertained that these nuts have nutritive properties quite equal to those of meat, milk, and even bread. By a certain process, a substance closely resembling milk can be produced, also a flour from the oil-cake, not inferior to that made from wheat, or other grain, while the shells can be used as fuel. The yearly crop of cedar is very large, and could yield up to 30,000,000 puds of fat, 20,000,000 puds of oil-cake, and 60,000,000 puds of fuel.

RAISING THE LEVEL OF BAKING INDUSTRY.

SPLENDID RESULTS ATTAINED FROM BOARD'S REGULATIONS.

The baking industry in Canada has been vastly improved through having to carry out the regulations of the Food Board. These regulations were not framed for an educative purpose, but it is true that they have attained it. The Board has received a number of letters pointing out that their businesses were improved in efficiency through having to keep a strict check on the quantities of flour and substitutes used in the bakery. One of these, from a large Eastern Ontario firm, says what was accomplished would have been considered impossible even four months ago.

The whole baking industry in the Dominion had relied so long on all wheat flour that they knew nothing of the other grains which the Board has had, for its own purposes, to classify as substitutes. In reality, they will probably remain to the benefit of the trade, and the consuming public, as first class substantials rather than substitutes. It was only after long experimenting that a satisfactory loaf was produced with the substitutes. Bakers could not get volume, colour or results the same as before, but the Food Board itself carried out a large number of experiments, and circularized the trade with formulae for attaining what was required.

The unbusinesslike methods, due to a lack of technical knowledge among an enormously large number of bakers, were also brought home. In a sense, the bakers were forced to educate themselves in their own trade by learning more about the ingredients they put into the bread. The slipshod way of adding a handful of this and a handful of that could no longer be kept up. The Food Board had insisted upon getting a definite report of exact quantities used, and for the first time in eighty per cent of the bakehouses all ingredients were exactly measured out. The saving and the efficiency have alone been enough to compensate bakers. Neither this nor the actual use of substitute flour will ever be dropped in the Dominion.

Apart from the actual baking, the business end of bread making was also improved. A better system of bookkeeping, a closer tab on waste had to be kept. Stocks on hand, quantities received and amounts used had to be reported regularly on the forms supplied by the Food Board. It was as good as a course in a technical school for many. Leakages were discovered, and the way to avoid them was soon found.

The question of labour also was partly solved for the baker by newer and better ways being shown him of reducing work at the dough pan. There has been a saving in the number of "cuts" in the dough, and labour-saving devices have been put in, raising the standard of the bread made. More care has been taken of the out-put; the maximum amount of bread from the ingredients used has been obtained, and few of the loaves when baked have been allowed to go to waste—and how large the waste in a bakery may be is only known to those with a good technical knowledge of what can be done in the best equipped bakery. It is not too much to say that the baking trade now realizes that scientific methods and skill in production are essential to the success of manufacturing, and that this efficiency can only be obtained in this as in other processes by close study of theory and strict attention to the details in practice.

Bread is an article of diet which cannot be manufactured in a few select centres. Cleanliness of all bakeries should be the first consideration. The use of wholesome ingredients without adulteration—and substitutes as we know them are both wholesome and pure—should be enforced. Handling the product so as to avoid contamination should be made compulsory. Costs, related to bakery delivery and management, should be tabulated, and possibly under control so as to enable the producer to supply the community with bread of the highest grade possible at a reasonable price.

The American National Association of Master Bakers has subscribed \$1,000,000 to establish an institute of research for baking.

BAKERS' APPRECIATION.

At a meeting of the bread and cake manufacturers of eleven towns, held at Palmerston, Ontario, the following resolution was passed on the motion of Mr. Edgar Martin, Port Elgin, seconded by Mr. C. Dannecker, Stratford: "That we extend an expression of our appreciation to Mr. W. H. Linn of the Canada Food Board for his very instructive and educational address; if we could apply the information conveyed by Mr. Linn from the bookkeeping, financial and technical standpoints, we have every reason to believe we should benefit commercially."

"NEW OCCASIONS"

Opinions of the leaders of thought on new food conditions leave little doubt as to the trend in which our efforts must go. In the unsettled conditions which immediately followed the signing of the last armistice with Germany, it was natural that to the mass of the people the thought should have at once occurred that there was nothing to do but to abolish all food control in every country, and things would by magic return to normal conditions of supply and demand. Perhaps nothing could be farther from the truth. "New occasions teach new duties" now as in Lowell's time. The new programme is more than hinted at in the following opinions of those who are qualified to judge:—

BRITISH FOOD CONTROLLER.

"The Allied Food Council, composed of the Food Controllers of the United States, France, Italy and Great Britain," the Rt. Hon. John R. Clynes, the British Food Controller, declared in the Times, "has allotted the world's available food supplies, not to the purse or power of the Allied nations, but according to the actual needs as agreed upon in council.

"The victualling of the neutral nations of Europe has also come within its activities. Just as a united military and naval command decided the terms of the armistice, so will the Allied food council, presenting a united food front, determine the degree of assistance it may be necessary to provide for the defeated peoples, and the method of providing and distributing it.

"The food emergencies of peace are likely to be formidable. A certain amount of the stocks now held as military reserves probably will be released, and, I hope, with the diminution of munitions shipments and the abolition of the convoy system the tonnage position will be improved. "This, however, will not entirely solve one of the most serious problems, the shortage of beef and mutton. Virtually all the refrigerator tonnage of the world which is or can be available, and without which meat cannot be shipped, is already employed to the maximum of its capacity for meat deliveries. The commodities urgently needed in the British Isles are meat, butter, cheese and cattle feeds. Unless there is an improvement in the supplies of these commodities, the present meagre rations are likely to be cut down, and cattle supplies of the country may be reduced to such a minimum as to involve a long-continued strain on the meat supplies available from other parts of the world".

PRESIDENT WILSON.

President Wilson's statement on the complex food question in his address to Congress on the peace terms, was as follows:

The humane temper and intention of the victorious Governments have already been manifested in a very practical way. Their representatives in the Supreme War Council at Versailles have by unanimous resolution assured the peoples of the Central Empires that everything that is possible in the circumstances will be done to supply them with food and relieve the distressing want that is in so many places threatening their very lives; and steps are to be taken immediately to organize these efforts at relief in the same systematic manner that they were organized in the case of Belgium. By the use of the idle tonnage of the Central Empires it ought presently to be possible to lift the fear of utter misery from their oppressed populations and set their minds and energies free for the great and hazardous tasks of political reconstruction which now face them on every hand. Hunger does not breed reform; it breeds madness and all the ugly distempers that make an ordered life impossible.

THE FRENCH MINISTER.

Monsieur Victor Boret, French Minister of Provisions, in an interview said it would be impossible at present to increase the rations to civilians put into effect during the war because of the necessity of supplying food to the central powers and neutral countries. All taxes, the minister said, would be maintained. He added that normal conditions in France would be entirely restored in time for the next agricultural season.

CHANCELLOR OF THE EXCHEQUER.

The Right Hon. Bonar Law Chancellor of the Exchequer, asking the House of Commons for a vote of credit of \$3,500,000,000, immediately after the armistice said: "It might be necessary for the Allies to make an effort to bring food supplies to Europe in which case the expenditure will be great, and it will be vital that the close international unity which the war has produced shall prevail while the ravages of war are being repaired."

TEACH NEW DUTIES."

MR. HERBERT HOOVER.

"Our first and deepest concern now must be for the little allies who were under the German yoke, they are the Belgians, Serbians, Roumanians, Greeks, Czechs, Jugoslavs and others, remarked Mr. Herbert Hoover before sailing for the Allied conference of Food Controllers. There are some seventy-five million people in these groups and they must be systematically helped and at once. We have already doubled the stream of food flowing toward Belgium.

"Our next concern must be to relax blockade measures as far as possible in order that the neutral states in Europe who are now all on short rations, should be able to take care of their people and prevent the growth of anarchy. This is another group of about 40,000,000. Another problem lies in the 50,000,000 people in North Russia, a large part of whom are inaccessible owing to the break-down of transportation and through sheer anarchy. Millions of these are beyond help this winter.

"There is a great problem in the situation of the enemy people—about 90,000,000. This problem is not one of going to their relief. It is a problem of relaxing the watertight blockade, which continues through the armistice; sufficiently so that they may secure for themselves the bare necessities that will give stable government. Unless anarchy can be put down and stability of government can be obtained in these enemy states, there will be nobody to make peace with and nobody to pay the bill to France and Belgium for the fearful destruction that has been done.

MAJOR ASTOR, M.P.

Major Astor, M.P., Parliamentary Secretary to the British Ministry of Food, addressing his constituents at Plymouth, said:—

"The Allies are combining to buy jointly in the producing and exporting markets of the world. They no longer compete and drive up prices to each other's disadvantage. This Inter-Allied Council of Food Controllers for this purpose represents consumers. At the end of the war we, almost a sub-committee if you like of a League of Nations, shall be in a position to control the operations of any food trust. Such control must continue for a time; at all events during the period when the world returns to normal conditions. Other purchasing countries must be included in our organization

SOUTH AFRICAN PATRIOT.

As we organized the world for victory, let us now organize the world against hunger. That will be the best preparation for the new order of international good feeling and co-operation, said General John Christian Smuts, the South African patriot.

"The position is tragic in the extreme. The evils bred by hunger threaten not merely the old institutions, but civilization. We saved the soul of civilization, now let us care for its sick body. Not only the liberated territories of our allies, not only our small neutral neighbours, but the enemy countries themselves, require our helping hand. Let us extend it in all generosity and magnanimity. The idea of organizing food supplies for those lands will help to purify an atmosphere cursed with war, hate and untruth.

AN AMERICAN VIEW.

"Even if the question of food for Germany and Austria-Hungary did not exist, the situation in the liberated territories in France and Belgium and in the Balkans is such that we are bound by every consideration of honour and humanity to stint ourselves in behalf of populations that suffered the worst ravages of war," says the Philadelphia Public Ledger.

"FRANCE DEEMS IT FAIR."

Monsieur André Tardieu, General Commissioner for Franco-American war affairs, has recently made a statement of the enormous requirements for reconstruction work in France—a work which is almost past our imagination to grasp. Speaking of the ruin wrought in the occupied departments, which paid 25 per cent of the whole of the French taxes, he says: "I need hardly say that in those wealthy lands no agricultural resources are left. The losses in horses and in cattle, bovine and ovine species, hogs and goats, amount to 1,510,000 head; in agricultural equipment to 454,000 machine or carts—the two items worth together 6,000,000,000 francs." From other sources it is calculated that Germans robbed Belgium alone of over 8,000,000 livestock of all sorts. M. Tardeau puts the case of an ally in the following words: "But resolute as France is to do everything by herself she herself can do, France also deems it fair that after having been for so many months the main battlefield of liberty and right, she should now be helped in her effort."

LIVESTOCKMEN'S OPPORTUNITY.

Canadian Share in Restocking Europe's Farms.

In view of the enormous decrease of live stock in almost all the countries of Europe, and the combined duty and opportunity this deficiency entails for the live stock industry of Canada, Hon. T. A. Crerar, Minister of Agriculture, and the officers of his Department held a conference with representatives of the leading live stock producers of the Dominion and representative meat packers at Ottawa to discuss plans for meeting the situation.

It is recognized that the export trade in live stock may bear an important share towards paying off Canada's war debt, the net amount of which now stands at \$1,247,000,000.

Mr. H. B. Thomson, on the authority of a cable from the British Ministry of Food, gave out figures showing the latest official estimates of the decrease in the flocks and herds of the various countries from which estimates have been possible to procure. These estimates are as follow:

	Cattle.	Sheep.	Pigs.
France	2,366,000	2,258,000	2,815,000
Italy	996,000	138,000	354,000
Denmark	345,000	46,000	1,873,000
Sweden	599,000	.....	252,000
United Kingdom . . . . .	.....	2,788,600	948,200
Germany	2,200,000	.....	19,306,000
Holland Holland . . . . .	.....	200,000	162,000

Figures for Austria-Hungary, Russia, the Balkans, Turkey and Mesopotamia are impossible to obtain, but there is no doubt the shortages in those countries are quite as serious.

The meeting of the different interests of live stock industry was unanimous in agreeing that Canada had now an opportunity of placing that industry on a broader and more permanent basis; that the situation engendered by suspension of hostilities, far from lessening the demand upon exports of meats, animal products and live breeding stock, called for production to the limit of the country's abilities.

Five definite resolutions embodying plans for the encouragement of production at the war-time scale during the period of reconstruction and of increasing rather than of diminishing the operations of the industry, were carried and submitted to the Cabinet, and were received by the entire conference at the conclusion of its two-day session in the office of Sir Thomas White, Acting Prime Minister. These resolutions embodied the following points:—

1. That a policy of rural credits be sanctioned and supported by the Federal Government.

2. That steps be taken to establish credits in this country with France, Belgium and Italy.

3. That a Government agent, preferably, Mr. H. B. Thomson of the Canada

Food Board, in the continuation of his present capacity, be sent to Europe to secure fullest possible recognition of Canadian interests in supplying agricultural products.

4. That the Government provide necessary marketing facilities to develop a permanent and extensive export trade in chilled beef and other meat and animal products, including adequate control of temperature space in railway cars, storage warehouses, and ocean going vessels.

5. That the Government give encouragement to a campaign throughout Canada for increased live stock production, in view of the enormous opportunities now presented to the Canadian Live Stock industry.

Sir Thomas White, in his reply, emphasized approval of all efforts to increase Canadian production. "Production, Production, and still Production" was his slogan for the Dominion. He declared that the matter of credits in Canada for European countries need not be a subject of concern, as with the cessation of hostilities, the credit and exchange situation would continue to improve, and arrangements would doubtless be made to finance orders placed in Canada. As for shipping facilities, large merchant fleets had been built in England and the United States.

TASTY MEALS MADE FROM WASTE.

Tasty nourishing meals can be made from what is usually regarded as waste. Below will be found a number of suggestions which have been printed at the suggestion of hotel chefs. They are followed by a number of recipes in which no wheat flour is used, and very little sugar. The use of wheat flour substitutes is not new compulsory, but the value of these recipes as a change in the diet, and affording housewives a chance still further to extend the use of little-known flours for which the family has taken a taste in the last twelve months, must not be overlooked. Then the question of expense, too, must be taken into account, and in the uncertain future in food matters, every cent is worth watching.

FISH SOUP.

Take the head and spinal bone of one cod fish. Put in saucepan with about two quarts of cold water, well seasoned with carrots, parsley and onions; let boil for about two hours. Brown one onion cut fine, with small piece of salt pork cut in small dice, add the fish broth and two potatoes, cut in small squares. Let cook thirty minutes. Add two fresh tomatoes, peeled and cut in small pieces, let boil five minutes. Season to taste. Add half pint of cream and serve hot with chowder cracker. *For four persons.*

COD FISH HEAD—ROASTED.

Split a very fresh cod fish head, and remove the eyes; season with salt, pepper, little shallots, fresh parsley, piece of butter, small wine glass of broth or water, and bake in hot oven for half hour. This makes a very good dish—not expensive. *For two persons.*

SOFT ROE ON TOAST.

The soft roe from mackerel, shad, etc., is excellent. Season with salt and pepper and place in oven for fifteen minutes with a small piece of butter, and serve on toast with brown butter with a dash of lemon juice and fresh parsley concatte.

COD FISH LIVER SAUTE.

Take a very fresh cod liver; soak it in half water and half milk over night. Next day cut it in slices; dip each slice in milk and roll it in flour (season well), and fry in hot butter. Serve with brown butter on top, with dash of lemon juice and fresh parsley.

GIBLET STEW.

Take the neck of turkey, cut in three pieces. Remove gill from liver and cut liver in two pieces. Take the meat only of the gizzard—well cleaned, and cut the wings in two or three pieces each.

Put four ounces of butter in a saucepan with the wings, neck, gizzard, and when these are nicely fried, add the liver and three table-spoonsful of flour. Stir well, let the flour cook for one minute, then moisten with stock or water, season well with salt and pepper, add one dozen small onions, half dozen small new carrots, cut in two, let cook slowly for an hour and a half, remove the fat and add a half pint of fresh, green peas, and let cook for another half hour; then remove, and serve. *For four persons.*

BEEF PALATE.

Take six beef palates, rub them over with salt, blanch them till you can take off the upper skin. Then cook them the same way you cook sheep's trotters or calf head, then serve them broiled or with sauce. *For six persons.*

OX FEET.

Ox feet are gelatinous, and will make an expensive dish. One ox foot will be enough for three or four people. Take one foot—very clean, bone it and cut it in small squares; put in in a deep saucepan with six sliced onions, two or three sliced carrots, one small bunch of parsley, one bay leaf, season well with salt and fresh ground pepper, add two glasses of water, one glass of cider and a small glass of white wine. Let it cook for four hours—slowly, and serve it hot.

CALF CRAW.

The crawl is the curly part of the intestine. Take one very fresh, soak it in water with a little salt for one hour. Cut it in small pieces and cook it in water with one onion, one carrot, small bunch parsley, one bay leaf, salt, cloves, for two hours; when well cooked serve with vinaigrette sauce and boiled potatoes. *For six persons.*

LITTLE USED MEAT-CUTS.

"The list of meats we commonly buy is being rapidly extended to include all kinds of fancy miscellaneous meats or by-products and sundries, as they are sometimes called," it is stated in the introduction to a valuable pamphlet which has been prepared under the direction of the Food Board on fancy and miscellaneous meats.

"These portions have long been popular in Europe, where soup and stew making is a fine art, and in the United States they have enjoyed a good market, although in Canada they have been neglected to such an extent that fully 75 per cent went to the grease tank to be rendered down or else was exported to other countries.

In the days when cattle, sheep and hogs were killed and dressed at home, the housewife was in the habit of getting the last half ounce of food value from the carcasses. But gradually the abattoirs took over this work, and as high-priced roasts, steaks and chops began to get firm grip on the market, people were apt to forget that pigs and cows still had feet, legs, livers, backbones, tails and tongues. Although these portions were all available, the demand for them fell off.

Ox tails are counted a delicacy in Europe. Yet in a Canadian city with a population of over 100,000, no less than 500 pounds of ox tails are either rendered down each week or exported to the United States where they find a ready market. They could be bought for 15 cents a pound, if women were to ask their butchers for them.

RETURNED SOLDIERS FAVOUR FARMING.

Over 105,000 members of the Canadian Expeditionary Force wish to take up farming in Canada after the war. This figure was obtained by interviewing 230,000 members of the forces overseas; 43.9 per cent of those men wish to go on the land. The provinces in which they wish to settle are as follows:—

Ontario	25,400
Alberta	23,072
British Columbia	15,135
Saskatchewan	15,108
Manitoba	11,708
Nova Scotia	3,533
Quebec	3,330
New Brunswick	2,831
Prince Edward Island	816
Province not stated	4,518

"Of these 105,000 the cards disclose that 78,000, or 74 per cent, have had previous agricultural experience," a statement says. "The number of men who have had three years' experience or more is 61,000, or 58 per cent, and the surprising number who

have had twenty years' experience or over is 11,000, or almost 11 per cent.

"That this declaration represents a substantial prospective increase in the agricultural population is revealed by the fact that of the 105,000 men who wish to go on the land, fewer than 41,000 were actively engaged in agricultural pursuits at the time of enlistment.

"The men were asked to state whether they desired to take advantage of any scheme of assisted agricultural settlement, and almost 96,000, or 89 per cent, stated that they wished to avail themselves of such assistance. The number who declined to accept government assistance was over 6,000, or about 7 per cent. The remainder gave indefinite answers.

"A further surprising fact was revealed that practically 50,000 of the 105,000 announced their willingness to work for wages to get experience. The number who declined to work for wages was over 42,000, but this is easily accounted for by the fact already mentioned that 61,000 have had three years' experience or more.

POTATO FLOUR PROFITABLE.

Professor V. W. Jackson of the Manitoba Agricultural College, writing in "The Farmer's Advocate" on potato flour and its uses, says:—

"The Japanese, who did not know what potatoes were at the beginning of this war, is now growing 35,000,000 bushels, or four times the Manitoba crop, and, last year, shipped 400,000 pounds of potato flour to United States where the average selling price was 12 cents per pound. In 1913, Germany produced 1,750,000,000 bushels of potatoes, one-half of which was converted into potato flour or starch to make it imperishable and, therefore, marketable. In this way, the plenty of one year can be stored up for another of future years, and, no doubt, these vast reserves enabled Germany to withstand the blockade. Three hundred thousand dollars worth of this potato flour was sent in 1913 to United States where it was used to make bread, for thickening soups and for making fancy pastries.

One factory in little Holland dried 33,000 bushels of potatoes every twenty-four hours. A special variety is grown which yields 500 bushels per acre. One hundred and thirty-seven pounds of potatoes make 25 pounds of potato flour, and at a cost of 3½ cents

per pound. From this special variety of potatoes, Holland made 346,000,000 pounds of first-grade flour last year at a cost of \$70 per ton, so it is apparent that we are not handling potatoes as we might, or they would not be sacrificed at 25 cents per bushel when potato flour is selling at 12 cents per pound, and can be manufactured at a cost of 3½ cents per pound; although it is claimed that it would cost 8 cents per pound to dry potatoes in this country. But surely what Holland and Japan can do, we can do. There are now six plants in United States making natural potato flour. In 1917, 6,000,000 bushels of potatoes were dehydrated into natural potato flour, which is better than the German or Japanese product which is simply starch.

The Ontario Organization of Resources Committee, for encouraging the production of food as a war-time service, has had prepared a service badge that is offered to war production clubs, agricultural, horticultural societies, school boards, teachers, women's institutes, Sunday school clubs or any other group of responsible persons, for distributing locally at public meetings.

BRIEF TALKS TO JOURNALISTS.

Those who have stood at the "stone" and seen a pet "make-up" go to pieces at the last minute through the coming of an all-important piece of news, can picture what happened to the publicity plans at the Food Board when the armistice was signed. The bottom seemed to fall out of the bucket. But it was a case of seeming only. In reality, the basic causes for food control had not changed, only the incidence of appeal by our voluntary methods had altered.

Naturally enough most people—including some journalists who had not the excuse of Dr. Johnson's celebrated "Ignorance, sir, sheer ignorance"—jumped to the conclusion that food restrictions would at once go with the first whistling shriek by which gentle Peace came to us at three o'clock on a frosty November morning. One good scribe in lower Ontario argued in half a column, learned and leaded, that the Food Board should be immediately "demobilized." He might have suggested, had he humour, that we be also demilitarized, and perhaps de-Prussianized!

It is too often forgotten that food control is not directly war. It is a necessity caused by war, caused by the removal of millions of men from food production, caused by the destruction of millions of acres of productive land, and caused by the employment of the world's shipping for other things than the transport of food. Its continuance will be necessary so long as these factors are not normalized, and it will be necessary afterwards until the depleted foodstocks of the world are replaced.

Peace did not bring more food into the world. On the contrary, it revealed a state of destitution among millions more than came within the Allied pale before the four armistices were signed. Newspaper men who read the cablegrams from Europe must by now know the utter deprivation throughout the reconquered territories, and the distress which is only hinted at in the many small nationalities of Asia Minor, in Arabia and in that odd conundrum, Russia. Should they not make these facts comprehensible to their less well-informed readers?

Thoughtful reading of the opinions of Food Controllers and others with a broad oversight of food matters given in this issue, will clarify our own view. Taken in conjunction with the facts brought out at the livestock conference in Ottawa, it will be seen that five years is none too long

in which to expect a restoration on European farms. If there is so much depletion, how great must be the actual food shortage? It is for the intelligent imagination of journalists to make plain.

For those who care for figures—and some editorials are never complete without them—there is the fact that the total foodstuffs sent overseas from Canada from 1914 to October last totalled over \$2,000,000,000. The cost of the war was admittedly great, but last year the incoming value of our Canadian wheat alone exceeded our war expenses for the year by \$23,000,000.

Having learned so much in national economy in war time, shall we not be foolish to abandon this new knowledge in peace time? There is plenty of matter for serious consideration in these things. To use one of the only three Latin phrases really permitted in a well-equipped newspaper office: Verb. sap.

SUGAR REMAINS UNCHANGED.

Restrictions on sugar so far as the private home is concerned cannot yet be withdrawn. This may seem somewhat of a hardship, when it is stated in our newspapers that the allowance in the United States has been increased. It is, however, chiefly a matter of shipping. Thanks to the fact that the United States ports lie nearer to Cuba, they are able to get more tonnage in the sugar trade than is possible for us in Canada, especially for the next couple of months, when Halifax and St. John will certainly be congested with transatlantic liners. The sugar-producing states of the south have already raised their allowance to 4 pounds per month, but this is quite a local ration. Ontario has been fortunate this year in meeting the cane-sugar shortage by the heavy crop, estimated at 25,000 tons, from the sugar-beet fields.

A concession has, however, been made which points in the direction things are going. Circular letters have been issued to all confectioners, permitting them to use their sugar allotment for icing or filling of biscuits, cakes, etc. It does not mean an addition to their allotment, but merely permits confectioners to use their present allotment in any way they choose. It might be mentioned too that, subject to being made with vegetable fats only, confectioners are allowed to make French pastry, doughnuts, biscuits, and Scotch shortcake.

A QUESTION OF PREPAREDNESS.

In a clearly stated argument for the continuance of food control after the war, Mr. Sheldon S. Cline, writing in *Munsey's Magazine*, makes a statement somewhat apart from his main subject, which is full of suggestiveness for thoughtful people in Canada. He says:

"England, from the very beginning of the war, has sought to prevent artificial inflation of wages, going to the extent of subsidizing foodstuffs. She has not been able wholly to prevent paying higher wages, but the increase has been in no wise comparable to that in the United States. If the wage-scales in England and America remain relatively the same after the war as they are to-day, we shall be as unprepared to meet England in the struggle for trade as the Allies were unprepared to meet Germany in the struggle to preserve democracy. If England can produce a given article by paying out three dollars in gold as wages, while it requires the payment of five dollars in gold as wages to produce the same article in the United States, England is going to undersell us on that article in all the markets of the world. It used to be one of our stock boasts that we could afford to pay higher wages in America, because of our greater industrial efficiency. That boast would be silly to-day. England has undergone an industrial rejuvenation, and if there is any margin to-day in industrial efficiency many authorities hold that it is in England's favour. Business cannot be done on a normal basis with wages artificially high. But wages cannot be brought back to normal with foodstuffs artificially high. Some price reductions will come naturally when the war ends; but, left to themselves, they will not be sufficient, nor will they come in time, to meet the necessities of the industrial situation.

"If the present provision of law that food-control shall end with the war should be allowed to stand, the country would face the almost certain prospect of the greatest industrial disorder in its history. The food-gamblers and profiteers would be back on the job at once, hungry and avaricious after their enforced abstinence. Employers, forced to meet changed conditions coming with peace, would be confronted with the alternative of reducing wages or closing their factories. Facing the prospect of dearer instead of cheaper food, labour would fight such wage reductions with a bitterness which can only be imagined."

"The coming of peace," says the monthly letter of the Canadian Bank of Commerce, "will not justify any relaxation in our efforts to increase the thrift and economy of the nation in order to keep the public purse filled. Fighting may soon end, but our men will require to 'stand to' for an indefinite period until many difficult international problems have been settled, and in the meantime the war-racked and devastated countries of Europe must be supplied with many necessities. If the country is to be saved from a period of serious industrial depression, it is of the utmost importance that our people should not relax their efforts to save, so that they may be enabled to give generous financial support to the Government whenever needed. To provide for the cost of demobilizing our expeditionary forces and for our share in restoring the war-devastated areas, additional Government loans will be necessary from time to time, though on a lesser scale than during the war. When peace is finally declared, important changes will take place in the trend of foreign trade, and though fighting may cease and the demand for shells and explosives fall off, there will still remain a demand for food products. Large armies will have to be maintained and fed, and civilians in the districts lately occupied by the enemy will have to be taken care of by the Allies for a considerable time. Large supplies of all the necessities of life will be required, and a considerable proportion of these may be supplied by Canada through the existing machinery for allied war purchases.

A NEW POTATO BOOKLET.

A booklet has been prepared on the use of potatoes. Many new and interesting recipes are given which are likely to attract attention. It is the desire of the Food Board to bring before Canadian housewives anew the remarkably high food value of the potato so that it may be used to the fullest extent in the coming winter as a leader among those things which have to supplant wheat flour as much as possible. Despite the common knowledge of the humble potato, it is not nearly so largely used nor prepared so palatably as it could be. The booklet when ready will be willingly mailed to any applicant to the Food Board, Ottawa.

The nearness to British markets is giving Canadian wheat growers an advantage over all others, in or out of the Empire.

TIT-BITS OF FOOD CONTROL.

Croatia is described as a land of plenty, owing to a successfully developed war export trade.

In the forty-one days after the United States entered the war the average rise in food prices was more than 20 per cent. This was between April 6 and May 17, 1917.

A scheme for a national kitchen at Bath, England, has been rejected by the city council. It was stated that Liverpool had closed five kitchens after losing about £1,000 on each.

The state of the fish supply at Munich, the Bavarian capital, may be gauged by the fact that the authorities hope shortly to distribute the magnificent ration of one herring per household.

A writer in the leading Bulgarian newspaper eulogizes the Food Controller for his activity and the good results he obtained by visiting the provinces. He was able to check certain abuses of the local committee and put everything in order, to the great satisfaction of the inhabitants.

It is probable that the Java supply of sugar will be made available soon for Europe, and this in conjunction with the incoming Cuban crop, will probably ease off the demand, but as Mr. Hoover says: "We must be guided from time to time by the world situation."

The establishment is announced, under the French Assistant Secretary of State for Food, of a technical department for the regulation of food prices and the proper allocation and division of produce. This department is specially deputed to avail itself of the assistance of professional experts, and to study the proposals of syndicates and of the various groups of commerce and production.

A Frankfort-on-the-Main master butcher, has been delivering addresses on the improvement of the meat supply. In one year alone 417,893 bullocks, 923,000 calves, and, in spite of the pig shortage, 150,000 pigs have disappeared illicitly, and he attributes this to misguided State rationing. A stock of 15 million pigs is necessary for the reintroduction of general slaughtering and sausage manufacture, as compared with the present stock of 7.2 million. The gaps in the meat supply after the war will have to be filled at first from the pig stocks.

A shortage of meat continues in Rome. Many butchers' shops are closed, being unable to procure any meat.

The milk ration has been reduced in Berne, Switzerland, by 1 decalitre for all classes of consumers, as it is feared otherwise that the normal supply will not last throughout the winter.

Nearly one hundred vessels at Prince Rupert, B.C., are occupied in halibut fishing, and during September 128 fishing vessels arrived, bringing in a total catch of 1,094,000 lbs. of halibut.

Looting of bread carts and thefts of butter and margarine have been on the increase at Rotterdam. At Haarlem women looted bread carts in several parts of the town. They paid for the plunder, but gave no coupons.

A syndicate has been formed which will immediately take up the production of seaweed fodder at a factory in Sweden. The annual output is estimated at 10,000 tons.

Experiments are now being carried out in Stockholm to feed pigs on cellulose meal, in order to alleviate the bacon scarcity.

Sugar beet raising, combined with the keeping of live stock, is claimed to provide a first-rate means of building up a farming district; the feeding value of the beet pulp and tops providing in large measure for the late fall and early winter feeding of the farm cattle, and restoring fertility to the soil.

Some fifty thousand head of good-class cattle in Holland are to be preserved in cold storage as a meat reserve for spring requirements, so that there will be very few first-grade beasts available for immediate consumption. Twenty refrigerating installations as against the three that were in existence before the war, are engaged in the work.

Mr. Herbert Hoover recently said it was difficult to foresee the position in sugar. All Europe and North America, he mentioned, were living on a very restricted allowance, and he assumed that Europe would continue on present rations, in which case there would be enough sugar to go round. If, however, European food controllers found it necessary to raise the ration, there would be an immediate shortage. This fact shows how closely to the limit the per capita allowance is cut.

ENFORCING BOARD ORDERS: TYPICAL CASES.

During November a large number of prosecutions for breaches of the Food Board Orders were carried out. It is somewhat interesting to note that there were far fewer cases which necessitated the board suspending licenses of the offenders than in the previous month, a state of affairs that points to a more rigid co-operation of the municipal authorities in the work of food control. The following were typical cases:—

Twenty-five cases were investigated in the province of Alberta.

The Jansen Trading Company, Jansen, Sask., sold flour without substitutes, and were fined \$100.

A similar fine for a like offence was imposed on Steve Hyt of the Commercial Café, Lethbridge.

P. Russell and W. N. Birkett, of Girvin, Sask., both of whom sold fruit without a license were fined \$100.

A. A. Nicas and G. Gavros, café proprietors at Lethbridge, Alta., were fined \$100 and costs for selling dough-nuts.

Julius Hiebert, Chaplin, Sask., who had hoarded twelve sacks of flour was fined \$100. The sacks of flour were confiscated.

Bert Easley of Chaplin, who had one hundred pounds of sugar in his possession in excess of the amount allowed was fined \$100.

Peter Heibert, who had 200 pounds of flour and 100 pounds of sugar hoarded away, was ordered to pay two fines of one hundred dollars each.

Henry J. Sawatzky, also of Chaplin, Sask., who had hoarded 19 sacks of flour in excess of the amount permitted was fined \$100 and the flour confiscated.

A similar charge was proved by Mr. F. W. Mossop, hotel inspector for the Food Board against A. Nicas in connection with the White Lunch, Lethbridge, and a fine of \$100 was also imposed.

John Alexen, of Wakaw, Sask., was found to have no less than 3,400 pounds of flour in his home. It was a bad case of hoarding. The flour was confiscated and Alexen fined \$200 and costs.

P. Workenteen of Aberdeen, Sask., hoarded nine sacks of flour and was fined \$100; Steven Schoeder, Aberdeen, hoarded five sacks of flour, \$100; Baron Avries, Ceylon, Sask., who hoarded flour, \$100.

Chief of Police, Nesbitt, seized five bags of cane sugar and three bags of flour at the home of Mrs. Etta McIlroy of Kingston, Ontario, and she was fined \$100. The sugar and flour were sold by order of the Police.

There were thirty prosecutions in Calgary alone, the chief offenders there being Henry N. Simpson for serving beef at other than evening meals, \$100; J. A. Longden and Jim Fong for selling flour without substitutes, \$100 each.

George Lachensky of Regina, the proprietor of a dining room, had no license and moreover broke the regulations by having sugar bowls on the table, from which customers helped themselves. On both charges he was fined one hundred dollars.

A. Onischenko, who had no fruit dealer's license, \$100. James Marles for selling flour without substitutes, \$100. Quon Gart who served bread without substitutes in his restaurant at Strathmore, Alta., was fined \$100. An appeal was lodged.

A YEAR OF LICENSING.

The first year of licensing under the Food Board plan is just closed. It was in December, 1917, that the first class of food dealers, the millers, were put under license. Nearly 600 firms are enrolled, and the licenses of these are now being renewed.

To assist its licensees, and to see that they obtain the proper classification, questionnaires were mailed, previous to the expiry of a license, requesting information as to the method of distribution and the class of food or food products manufactured or handled. To facilitate this the Board requests that those requiring a license under its orders, read carefully the letter of instructions, complete the questionnaire, have same declared before the proper authorities and return without money or remittance to the Canada Food Board.

Provided that the questionnaire is properly filled out, the License Division will then forward information as to the correct license required, also the amount of the fee necessary before a renewal or a new license can be issued, upon receipt of which fee the Board can then forward the renewal or new license.

The above method of handling the license problem is different from last year, but should work to the advantage of all concerned, provided that those receiving the questionnaires do their part in filling out the form, etc.

Various licenses are required to be renewed before the dates, as follows:—

December	1—Millers.
January	1—Cereals, Package Makers.
"	1—Wholesale Fish Merchants.
"	1—Packers.
"	1—Bakers.
February	1—Wholesale Fruit and Vegetable Merchants.
March	1—Wholesale Produce Merchants.
April	1—Wholesale Grocer.
May	1—Retail Grocer.
"	15—General Retailer—Butcher.
"	15—General Retailer—Flour and feed.
"	15—General Retailer—Baker (not mfg.).
"	15—General Retailer—Fruit and vegetable.
"	15—General Retailer—Fish Dealer.
"	15—General Retailer—Produce.
June	1—Public Eating Place.
"	1—Confectioner (Mfg.).
"	1—Wholesale Flour and Feed.
"	15—Canners.
August	1—Manufacturers, using sugar.

OUR PLEDGED MINIMUM.

Average export of foodstuffs from the North American Continent

before the war, annually.	5,553,000 tons.
Export of foodstuffs during 1917-18.	11,820,000 "
Next year United States and Canada are pledged to send overseas.	17,550,000 "

The wartime increase is over 300 per cent.

When that pledge was given we could only foresee 100,000,000 Allies to be fed. There are now at least 250,000,000 people on the list. Belgians, Serbians, Poles, Rumanians, Slavs, Czechs and Russians have been added since the armistice was signed, by the simple fact that we are now able to reach their countries, which before were fenced off by the enemy.

Good business as well as good-heartedness dictates that we should aid in restoring Europe to normal.

Food is for the present, and will be for the year 1919, the most important thing by which Canada can aid in the reconstruction of half a continent.

SUMMARIES OF FOOD ORDERS.

The following summaries are given of the more recent orders issued by the Canada Food Board. They are intended chiefly as a quick reference guide, but for a fuller statement of the exact terms, reference must be made to the orders themselves.

Order No. 71 repeals all orders and rulings of the Board requiring the sale, purchase, and use or consumption of substitutes for wheat flour.

No. 73 revises the regulations for the control of flour mills. All mills employed in the manufacture of any food product from wheat, oats, rye, barley, Indian corn, peas or buckwheat, must be licensed, the expiry of such license to be November 30th of each year. For spring wheat, not more than 264 pounds of quality No. 2, Northern, or better, shall be used to produce 196 pounds flour, which must be straight run. For winter wheat, not more than 264 pounds, quality No. 2, or better, Ontario or Quebec standard, or testing 60 pounds or more per bushel, shall be used for 196 pounds flour. In manufacturing from winter wheat or lower test, the limit of lower grades is as follows:—

59 pounds test,	266 pounds.
58 pounds test,	268 pounds.
57 pounds test,	270 pounds.
56 pounds test,	274 pounds.
55 pounds test,	278 pounds.
54 pounds test,	282 pounds.
53 pounds test,	286 pounds.

Not more than 264 pounds blended winter and spring wheat shall be used. Of the by-products, not more than 5 pounds of feed-inb flour shall be separated, and the rest must be sold as bran or shorts

Orders 32, 68 and 70 are revoked.

WORLD'S WHEAT FACTS.

Significant facts on the wheat supply are given by the Reference Hand Book of Food Statistics, just issued by the United States Food Administration.

In the three years preceding the war, the average excess of exports over imports of wheat and wheat flour from the principal countries was as follows: Russia, 122 million bushels; United States, 113 million; Canada, 110 million; Argentina, 100 million. Other countries coming in with smaller amounts are: British India, 58 million; Rumania, 53 million; Australia, 52 million. Other exporting countries export trifling amounts.

Turkey's entrance into the war and the closing of the Dardanelles stopped exports from Russia. In 1915 Russia's exports fell from 122 million to 3 million. The exports from Rumania fell from the pre-war average of 53 million to 19 million in 1916. The cutting off of the Russian and Rumanian supplies alone would have tended to produce a wheat shortage in Southern and Western Europe to which these exports went mainly.

AUSTRALIAN WHEAT.

In Australia there still remain part of the 1916-17 crop, the whole of the 1917-18 crop and the 1918-19 crop will soon be harvested. The last contract for wheat made with the British authorities was in December, 1916, before the submarine menace forced the putting of ships on short hauls. For the crop of 1918-19 the Commonwealth has given a guarantee of 97 cents a bushel, or about \$100,000,000, in addition to \$70,000,000 already paid out in advances on former crops.