

### PREPARING THE FLOCK FOR WINTER

(Experimental Farms Note)

The success to be obtained from the farm flock will depend very largely on the way it has been handled during the autumn months. The plan at the Experimental Farm, Nappan, N. S., is, before the breeding season opens in the fall, to go through the flock, pick out all the non-producers, poor milkers, or any that may have bad mouths or spoiled udders; also any that may be too old for breeding profitably, and discard them. In selecting out the breeding flock looks alone are not the only guide, as many times a ewe may be a profitable breeder yet be very thin, due to the fact that she has been brought down by a heavy milk flow. Good ewes should be retained in the flock as long as they will breed and feed their lambs properly.

All lambs not intended for breeding purposes are sold. If the market happens to be flooded it is found to be more profitable to feed them well until January or February, by putting them on good aftermath until barning time, then finish on roots and meal.

Ram lambs intended for breeding are placed in a separate field with good clover aftermath and given a light grain mixture of 1/2 pound oats; 1/2 pound bran, and 1-5 pound oilcake meal. The ewe lambs are also placed in a field by themselves, but not given much grain unless the afterfeed is poor. All breeding ewes are flushed during the latter part of October or the first of November. This consists in putting them in a good field of clover and giving them a light grain ration of oats, bran, and a little oilcake meal. Hence the ewes make a rapid gain in flesh. There are several advantages from this practice.

1st. The ewes which are bred in a thrifty condition are more apt to throw vigorous lambs; 2nd. They are more reliable breeders; 3rd, more likely to drop twins; 4th, the flock will all breed more evenly together, which makes it much better at lambing time in that the lambs are all dropped within a short period of each other, thus making less work for the shepherd.

In selecting the flock ram it is the endeavor to choose the very best, typical of the breed and vigorous. Then he is fed well in order to keep him virile, but not too fat. He never gets grain until about a month before breeding season. He is never allowed to run with the ewes continually, but put in with them two or three hours each day.

In dividing the pen for winter, all mature ewes are put together; shearlings in another pen and ewe lambs by themselves. The latter are not bred until one year old. Should there be any weak ones, they too are given a separate pen; otherwise they would not get a fair show at the trough with the more vigorous ones. The above method of preparing sheep for winter has been found to be most satisfactory.

### THE DISEASES OF THE TOMATO

Few people have ever stopped to consider the number of diseases to which the tomato plant is subject. A bulletin recently issued by the Division of Botany of the Experimental Farms enumerates forty-four of these diseases, and possibly there may be more. Many complaints to which the potato, tobacco plant, and egg plant are subject, are also common to the tomato, the five plants all being members of the Nightshade family. Mr. McCubbin, Assistant in Charge of the Plant Pathological Laboratory at St. Catharines, Ontario, is the author of the bulletin, which can be had free upon application to the Publications Branch, Department of Agriculture, Ottawa. It consists of sixteen pages with three full page plates showing some of the diseases at the various stages. At a time when vegetable gardening is so general, there should be wide demand for the bulletin, which indeed no grower of the tomato should overlook.

### Freemen Buy Bonds. Slaves Wear Them!

"How did you get away from the traffic cop who was after you for speeding? Did you fool him?" "Well, not exactly, but we did manage to throw dust in his eyes." — *Baltimore America.*

"Yes, my brother was slightly wounded in the Marne advance. We had a letter from regimental surgeon." "Where was he wounded?" "We are not quite sure. The surgeon mentioned the place, but we don't know whether it's an anatomical phrase or a French village." — *Boston Transcript.*

### How to Purify the Blood

"Fifteen to thirty drops of Extract of Roots, commonly called Mother Seigel's Curative Syrup, may be taken in water with meals and at bedtime, for the cure of indigestion, constipation and bad blood. Persistence in this treatment will effect a cure in nearly every case. Get the genuine at druggists."

### THE CAFETERIA SYSTEM FOR HOGS

Much of the drudgery is taken out of hog feeding by the use of the self-feeder. According to investigations carried on at the Experimental Farm at Ottawa, hogs, after they have reached a certain age, do better when fed in this way provided the proper mixtures are used. Strange to say, when properly handled, dangerous and wasteful over-feeding is not so likely to occur with the self-feeder as when meals are given at stated hours. It has been shown that the hogs are the best judges of when they should take food. The feeder is fully described in Special Circular No. 15, obtainable at the office of the Publications Branch of the Department of Agriculture at Ottawa. This bin-like receptacle is easily made at a cost of about \$10 even when new lumber is used in its construction.

### SAVE YOUR WOOD-ASHES

(Experimental Farms Note)

The experience of many generations of farmers and gardeners has proven the high value of unleached wood-ashes as a fertilizer, especially for clover, corn, farm roots, and vegetables and fruit crops generally. Wood-ashes contain no nitrogen and supply no humus, but as far as mineral plant food is concerned there is probably no compounded mineral fertilizer on the market that is more effective and more lasting. They furnish potash, lime, phosphoric acid—the very elements taken from the soil by the forest trees, and, returned to the soil they will supply, in the very best form and combinations, the mineral plant food required by our crops.

According to analyses made by the Division of Chemistry, Experimental Farms, unleached hardwood ashes, free from sand, etc., will contain between 5 and 6 per cent. of potash, about 2 per cent of phosphoric acid and from 20 to 30 per cent of lime. Before the war Germany supplied all the potash used for fertilizing purposes; since that supply has been cut off, potash has tremendously increased in price so that now it is worth almost ten times what it was in the early part of 1914, and as a consequence it has practically disappeared from commercial fertilizers. The potash in 100 pounds of good quality wood-ashes is now worth from \$1.00 to \$1.50.

Owing to the scarcity and high price of coal, farmers will be burning more wood this winter than has been customary for many years. We counsel them to save carefully the ashes from their stoves, storing them in a dry place protected from the rain. Leached ashes contain very little potash; for this element is readily soluble in water.

The soils most benefited by wood-ashes are light sandy and gravelly loams, and mucks and peaty soils. They are also especially valuable for sour soils deficient in lime. The application may be from 600 to 2000 pounds per acre, preferably broadcasted in the spring on the prepared land before seeding and harrowed in.

### THE RAISING OF CALVES

(Experimental Farms Note)

This subject could be very well divided into three parts, viz., 1. Breeding, 2. Feeding, and 3. Housing.

1. Breeding.—In order to get the most profitable results for feed consumed and labor spent in raising calves it is necessary to see that the breeding of the calves is of the best, that their sires and dams are good individuals of the breed which you are working with, and that they have good records of performance behind them. This applies to beef breeds as well as dairy.

2. Feeding.—As soon as the calf is dropped it should be separated from its dam and not given any food for twelve hours, when it will have developed a good appetite and be ready to take its first food, which should consist of 5 pounds of its mother's milk. This should be duplicated in twelve hours, which will make 10 pounds per day, which amount the calf should receive for the first two weeks.

At the end of two weeks the calf should be getting 6 pounds twice a day, which should be continued for three weeks. At the end of five weeks, commence feeding the calf a small quantity of skim-milk mixed with the whole milk, gradually increasing the skim-milk and decreasing the whole milk until at the end of the seventh week the calf would be getting 15 pounds skim-milk per day. This amount should be continued until the calf is six months old. As soon as the calf is getting skim-milk alone, there should be added to the milk a small quantity of equal parts of oil cake and ground oats with hulls taken out. This is a good cream substitute, which partly takes the place of the butter fat which is lacking in the skim-milk. An ounce of this mixture, at first, twice a day is sufficient, but should be gradually increased as the calf develops. When the calf is six or seven weeks old, there should be placed before it some nice, sweet clover hay and equal parts of ground oats and bran, which it will soon learn to eat. It should have as much of this feed as it will eat up readily twice a day. Always be careful that there is no feed left over in mangers, and that all pails and boxes in which calves are fed are kept perfectly clean and sweet. They should be fed an

accurate quantity at regular times, which is very important in keeping the calf's digestive organs in the best condition possible, which is very essential for rapid and robust development.

3. Housing.—All quarters in which calves are kept should be clean, and they should be given all the room possible so as to allow chance for exercise. They should always be well bedded, with plenty of light and good ventilation, so that the calf will develop a good strong constitution in order to be a healthy acquisition, when grown, to the farm herd.

Save money for Victory Bonds!

### BRITISH SHIPBUILDING

Speaking to the shareholder of R. and W. Hawthorn, Leslie and Co., Limited, on Monday last, the chairman, Sir Herbert Rowell, said that "The enthusiasm of the workers in America, resulting in the rapid development of shipbuilding in the coastal States, where it is a new industry, must command our admiration, but it should also inspire and foster a spirit of serious emulation amongst British workers, as the ultimate effect of this new source of production in our in-

dustry demands our consideration. At the same time it should be realized that the publicity given to American achievement and the state of comparative ignorance in which the British public has been kept as to British achievement has given entirely false impression that with us this most important industry is decadent. The truth is, apart altogether from repairs—a branch of the industry which has from the nature of things increased enormously during the war—new construction in this country, taking both naval and mercantile together, has been during these war years half as much again as during the best year of peace. This, expressed in terms of output of merchant shipping, would, I estimate, be equal to about 3 1/2 million gross register tons per annum, a record of which the country may well be proud. If, however, the necessary skilled labor had been returned from the Army, as could well have been done in view of the arrival of the American forces, and adequate unskilled labor supplied, the output of 3 million gross register tons indicated to the shipbuilders as necessary to meet the submarine menace would undoubtedly be produced in addition to the warship work in hand." — *The Engineer.*

### IT PAYS TO FINISH POULTRY

(Experimental Farms Note)

Even with the present high price of feed no one can afford to sell birds, and especially cockerels, in a thin condition. The good prices received for poultry meat more than pay for the extra feed, and if there ever was a time when birds should be finished, it is now.

As a war measure the marketing of thin chickens should be prohibited. The most expensive part of the bird to produce, and that which is of the least value for food, is the frame. The cheapest weight for the feed fed is the flesh, as it is all edible; the necessity of putting this flesh on is evident.

The most profitable weight at which to finish cockerels is when they weigh about 4 pounds, but even earlier birds may be fed with profit, as several experimental Farms this summer go to prove.

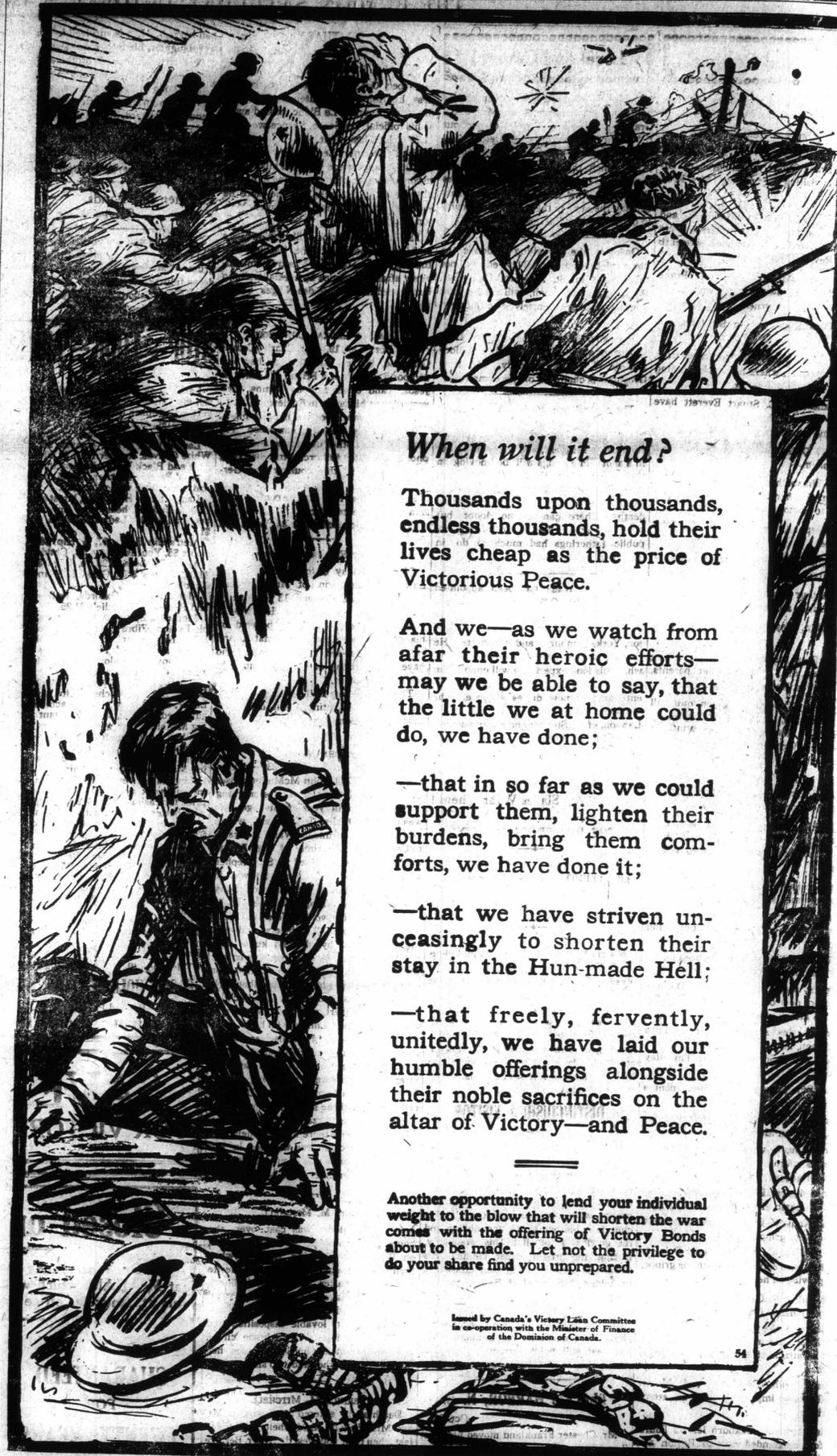
Poultry meat of all kinds has been a good price. Hens have been selling as high as roasters, and broilers have paid well. Leghorn cockerels at the Experimental Farm have been sold at about 2 pounds each, and because of being

specially finished on milk, brought good returns and paid well for extra feed. Four different lots marketed in August, 152 birds, weighed 280 pounds; they were fed for about ten days during which time they gained 60 pounds, weighing at the end of the feeding period 340 pounds. They consumed 180 pounds of mash and 24 gallons of buttermilk. The mash was composed of 2 parts corn-meal, 1 part middlings, and 1 part buckwheat screenings.

The cost of feed was 180 lb. at 4c. per lb.—\$7.20, and 24 gal. milk at 5c. per gal.—\$1.20, making a total of \$8.40 for feed and milk. Add to this the value of the birds at the start, 280 lb. of thin chickens that would bring 35c. lb. \$98.00, and it makes a total cost for thin chickens and feed of \$116.40.

The weight of the finished chicks was 340 lb., having gained 60 lb. in the 10 days feeding. The value per lb. was increased because of the quality of the flesh to 50c. per lb., making the total value of the birds \$170.00.

This meant a revenue of \$54.00 for the care of 152 birds for less than two weeks. It also showed that for every pound increase on the birds it took 3 lb. of milk, or an average cost of 14c. per lb. of gain.



### When will it end?

Thousands upon thousands, endless thousands, hold their lives cheap as the price of Victorious Peace.

And we—as we watch from afar their heroic efforts—may we be able to say, that the little we at home could do, we have done;

—that in so far as we could support them, lighten their burdens, bring them comforts, we have done it;

—that we have striven unceasingly to shorten their stay in the Hun-made Hell;

—that freely, fervently, unitedly, we have laid our humble offerings alongside their noble sacrifices on the altar of Victory—and Peace.

Another opportunity to lend your individual weight to the blow that will shorten the war comes with the offering of Victory Bonds about to be made. Let not the privilege to do your share find you unprepared.

Issued by Canada's Victory Loan Committee in co-operation with the Minister of Finance of the Dominion of Canada.

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