

# FARM AND DAIRY & RURAL HOME

DEVOTED TO  
**BETTER FARMING**  
AND CANADIAN  
COUNTRY LIFE

Toronto, Ont., August 23, 1917



FORGE WORK: A PART OF THE TRAINING OF MANITOBA AGRICULTURAL COLLEGE STUDENTS.

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## POULTRY

### What to Feed

THE selection of poultry feeds is a vexed problem nowadays. Wheat bran costs about \$2 a bushel for good grain, while wheats screenings, which some of the big millers are offering, run to almost \$3 a bushel. In view of these high quotations, on what have always been staple poultry feeds, the New Jersey Experimental Station recommends for laying birds and growing stock on range (as they are on most farms) the following ration which is to be fed in hoppers, kept before the birds

Wheat bran ..... 100 lbs.  
Corn meal ..... 100 lbs.  
Ground Oats ..... 100 lbs.  
Meat Scrap ..... 100 lbs.  
This dry mash is not sufficient. Morning and night, cracked corn can be fed, or better still, a mixture of cracked corn and screenings. If skimmed milk is available in such quantities as the birds desire, the meat scrap may be eliminated altogether.

### Preserve Eggs Now

THE indications are that eggs will be dear next winter, dearer than they were last winter, as those who want eggs had better put some down now while they are comparatively cheap. Do not use salt, saltpeter or lime; moreover, the pasteurizing preservatives usually advertised as being so simple and effective had better be adopted with caution. Better use something that has been tried and found satisfactory.

According to Dr. Frank T. Shutt, Dominion Chemist, Lime water is one of the best preservatives and we quote the following from his Exhibition Circular No. 42:

The method of preparation is simply to slake one pound good quick lime with a small quantity of water and then stir the milk of lime so formed into five gallons of water. After the mixture has been kept well stirred for a few hours it is allowed to settle. The supernatant liquid, which is now "satrated" limewater, is drawn off and poured over the eggs, previously placed in a shallow dish.

As exposure to the air tends to precipitate the lime (as carbonate), and thus to weaken the solution, the vessel containing the eggs should be kept covered. The air may be excluded by a covering of sweet oil, or by sucking upon which a paste of lime is spread. If, after a time there is any noticeable precipitation of the lime, the lime-water should be drawn off siphoned off and replaced with a further quantity newly prepared.

### General Precautions Necessary to Take.

It is essential that attention be paid to the following points:

1. That perfectly fresh eggs only be used.
2. That the eggs should throughout the whole period of preservation be completely immersed.
3. That the lime water necessary to the preservation of the eggs in a sound condition a temperature of 40 degrees F. to 45 degrees F. will no doubt materially assist towards retaining good flavor or rather in arresting that "stale" flavor so often characteristic of packed eggs.

Respecting the addition of salt, it must be stated that our experiments—conducted now throughout 16 seasons—do not show any benefit to be derived

therefrom; indeed, salt frequently imparts a limy flavor to the egg, probably by inducing an interchange of the fluids within and without the egg. Our advice is, do not add any salt to the lime-water.

### Chicken Thieves

By A. P. Marshall.

AUGUST, perhaps, sees more losses from the growing cats, skunks and other animals that like a nice juicy chicken than any other month of the year. A little precaution at this time of the year may make quite a difference in the number on hand in the fall.

While not all are taken during the period of darkness, generally it will be found that this is the time when most losses occur. When everything is still and no one about these animals are free to work without disturbance. The simple expedient of seeing that the coops are closed against the entrance of any such animals at night and that the chicks may not get out until people are stirring about, is effective. For years the writer has used a practice of treating the matter in this way, and the losses have been very light in consequence.

My neighbor reported the loss of nine chicks out of a brood of 11 chicks in two mornings, despite the fact that the hen was running free with them. One morning when the coops had been missed the previous night we were awakened by vigorous squeaking of a chicken. Rushing to the window we saw a black cat with four chicks in her mouth. Getting hurriedly into clothes we ran down in the hope of locating the cat at least not expecting to find the chicken alive. Imagine our surprise to find the cat just watching the chicken about two feet from her ready to pounce on it if a movement was made. Luckily she did not startle the chicken although it required a little time and rest to bring it around again. With one leg doubled up the chick hobbled around gradually improving until now there is not the slightest sign of a limp or injury. One of your own or neighbor's pet cats may be the culprit. Don't trust any chickens with any of them in the early morning hours.

### A Cheap Insect Powder

MANY of the poultry insect remedies on the market are not only ineffective, but are too expensive for use in a large flock. The following home-made insect powder is effective, cheap, easily made and will retain its strength for a long period of time if boxed and put away in a dry place.

Mix one-fourth of a pint of creosol and three-fourths of a pint of gasoline. To this mixture stir in gradually just enough plaster of paris to take up the liquid. For this amount of liquid it will take about two and a half pounds of plaster of paris.

Spread out thin on a paper. When thoroughly dry screen carefully, and it is ready for use. If strong crude carbolic acid is available, it can be used instead of creosol and will make a still more effective powder.

To apply the powder, shake from a baking powder can with a few holes punched in the lid. The first application should be followed by a second in four to six days to kill the lice or mites from the unbroken eggs or "nits" present at the first treatment.

Feed prices are high. Egg prices, however, promise to be proportionately high and, with careful management, poultry may be as profitable now as in the past.



We Welcome  
Trade Increase  
VOL. XX

A FEW years ago the breeders of the Ayrshire cattle in the United States were faced with a serious situation. The Ayrshire cattle were not only the best milk producers in the world, but they were also the most popular. The demand for Ayrshire cattle was so great that the supply was not able to keep up with the demand. This led to a sharp increase in the price of Ayrshire cattle. The breeders of the Ayrshire cattle were faced with a difficult decision. They could either increase the price of their cattle or reduce the quality of their cattle. They chose to increase the price of their cattle.

The Value

THE primary function of a mother is to care for her young. She does this by providing them with food, shelter, and protection. She also teaches them how to survive in the wild. She is a very important part of the ecosystem.

In the breeding industry, the most important work is to select the best bulls and cows to produce offspring that are healthy and productive. This requires a lot of work and attention to detail. The bulls and cows are selected based on their performance in the field, their health, and their ability to reproduce. Once the bulls and cows are selected, they are mated to produce offspring. The offspring are then raised and cared for until they are old enough to be sold or used for breeding purposes. The breeding industry is a complex and demanding field, but it is also very rewarding.



# FARM AND DAIRY

& RURAL HOME



We Welcome Practical Progressive Ideas.

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—*Lord Chatham*

VOL. XXXVI

TORONTO, ONT., AUGUST 23, 1917

No 34

## The Value of the 300-Day Semi-Official Test

Several Well Known United States Ayrshire Breeders Argue the Question Pro and Con

**A** FEW years ago the various dairy cattle breeders' associations of Canada, discussed the advisability of reducing the length of the Record of Performance test period to 300 days with a proviso that the cow be required to freshen in 12 months instead of 16 as at present. All the associations decided against the change, though a powerful minority in all associations were in favor of the shorter test period. The question is now to be discussed by the United States associations, and in preparation thereto, the Ayrshire Quarterly publishes letters from leading Ayrshire breeders south of the border, giving opinions, both for and against the change. Canadian breeders of all the dairy breeds will be interested in these arguments which are reproduced herewith.

### The Value of a 300-Day A. R. Test

By Hugh J. Chisholm.

**T**HE primary functions of a dairy cow are to reproduce herself and to give milk. Under natural conditions she performs the former function once every twelve months, consequently all the past and present 365-day world's records have been made under artificial conditions, and it is rarely that you find an animal who has made a world's record who has not weakened herself and her offspring in so doing. It is too long a time to put a cow under a great strain.

In the breeding of pure bred cattle, the most important work which the breeder is trying to accomplish is to breed better and better cattle, and to always have the calf superior to the dam. To accomplish the greatest results along these lines, it is necessary that the calves be as numerous as possible, without injuring the health of the dam. From a money standpoint I estimate the value of a pure bred cow, after she has proven herself at the milk pail, more by the quality and quantity of her calves, than by the quantity of milk which she gives. It is a well known fact repeatedly proven by our A. R. work that a cow will give almost as much milk in a ten-months' milking period as in a twelve-months' milking period. If we adopt a 300-day test it will allow the cow to produce a calf every twelve months as nature intended, and the owner will be better off at the end of five years. The net return is easily shown to be in favor of the 300-day test. If you will take a cow which is capable of giving 12,000 pounds of milk in 365 days, and run her for a period of five years in 365-day tests, at the end of this time she will have given 48,000 pounds of milk and four calves, allowing fifteen months between freshening. Give her the same care and attention for a 300-day test, and she will produce at least 10,000 pounds of milk per year, allow two months for freshening, and at the end of five years she

will have to her credit 50,000 pounds of milk and five calves, or a balance of 2,000 pounds of milk and a calf in favor of the 300-day test.

Another reason of importance and worthy of consideration, is that it is a much easier and less expensive task to run a cow for 300 days than for 365 days in the A. R. work. The 300-day test would have the result of putting the average farmer more nearly on a par or equal with the owner of a large breeding herd. This would result in stimulating interest and would undoubtedly produce a great many more A. R. records, than with our present system.

### The 300-Day Test

C. H. Eckies, University of Missouri.

I ASSUME the main purpose of a 300-day Advanced Register test would be to have the length of the testing period the same as the ordinary milking period when cows calve at 12 month intervals as is usual in herds not tested for Advanced Register. It gives the additional



### Purchasing Winter Concentrates

**T**HE farmer who has grass/hay (such as timothy) and corn ensilage, must buy meals on the basis of cheapness of protein. At present prices these meal of cheapness are: Cotton-seed meal, dried distillers' grain, linseed oil meal, gluten feed, wheat bran, shorts, middlings, and oats. If, on the other hand, he has alfalfa or clover hay, corn or other good silage and roots he need purchase less meal and should select on the basis of cheapness of total digestible nutrients. At present prices these in order are: Dried distillers' grain, beet pulp, wheat middlings and bran, gluten feed, cottonseed meal, linseed oil meal, and oats. Then follow these four rules:

1. Buy the highest quality feeds, not those containing dirt, filler and indigestible fibre.
2. Buy feeds containing the desirable elements in the cheapest form.
3. Buy cooperatively, in car-load lots if possible, and thus save extra freight charges and commissions.
4. Buy when markets are lowest, usually in the summer and fall, and save the storage, handling charges, and, usually, extra profits made by the millers and dealers.—Experimental Farms Note.

advantage of making it possible for the owner of a cow the offspring of which are especially valuable for breeding purposes to make an official record and still get a calf within the year. While these points deserve consideration I do not feel that they are sufficient to justify changing from the present system. Unless some provision is added concerning the production of a calf within certain limits I do not believe the present system of handling cows on test will be changed in many cases by making a 300-day test period. The 300-day test will mean reporting the production for this period and the breeding of the cow will still be deferred in order to make a good record for a full 12 months. Merely reporting the first 300 days of a lactation period extending over 12 or 14 months does not add any value to the record from a practical standpoint and the man that does not breed the cow on test still has the advantage.

I do feel, however, that the yearly record increased as it often is by deferring breeding is misleading and the public should know the facts, in my judgment the plan followed by the Jersey Club meets the situation better than does the 300-day test. Provision is made for two classes. Entry is made in one class by the record alone, and if a calf is dropped within 120 days after the end of the test the animal is put in another class with greater distinction. If a 300-day test period is adopted I am in favor of a provision requiring that the entry will be made only when the cow gives birth to a calf within 60 or at the outside, 120 days after the test is completed.

### Its Advantages are Manifold

By A. Henry Higginson.

IT seems to me that the principal argument against the adoption of the three hundred-day A. R. test, is that the other breed associations have not adopted it, and that when one compares the A. R. records of Ayrshires with those of other breeds many people will not realize the difference in the length of the test, which would be to the detriment of the breed. Although it is a perfectly simple matter to say that our test is a 300-day test, some people will immediately raise the question as to why the Ayrshire Association adopts a shorter period than the one recognized by the other breed associations. Of course, it is always easy to explain, but the very fact that we would have to explain, to make excuses, is a detriment in some measure. Between Ayrshire men, who understand, of course, all this would be unnecessary, and it would only be to outsiders that this explanation would have to be made. This seems to me the only disadvantage.

Now let us consider its advantages. The man who puts his cow in an A. R. test to "f," loses a

(Concluded on page 7.)

## Why Do Business Men Fail at Farming?

Is It Because They Can Recognize Defeat?—*"A Business Farmer"* York Co., Ont.

**W**HY do so many men who have succeeded in business come to grief when they attempt farming? This question is often raised here business men and farmers get together. The answer, I believe, is "because they are business men." I do not mean by this that it takes a different type of man to farm, from the type that succeeds in business. Rather that the business man's training gives him an insight into the profits and losses in farming, and the profits are far hidden behind the losses that the business man recognizes, defeat and falls sensibly. The man who has made a start here handied in farming and is apparently successful in the sense that he continues to farm, is the man who does not know when he is licked. As a general rule he is a successful failure.

What constitutes a successful farmer? Does the mere fact that he is able to feed and clothe his family after a fashion mark him as a success in his profession? There are few business men who cannot do these things, and yet it is not the ability to do these which are usually looked upon as indicating a successful business man. It is his ability to expand; to add dollar to dollar, and house to house; to build a bigger factory and to be able to afford a better car or more holidays. It is this factor of growth that is usually taken as a mark of success. The majority of farmers, however, show an absence of expansion in their business. They are but marking time.

True, there are some wealthy farmers, but their wealth or source of wealth will usually be found to have been inherited. Their lands were given them by their fathers, and interest on investment has not troubled these men. They take their gross profit as incomes and are satisfied. As for interest on investment, the investment was made before they were born, so why should that trouble them? But are they expanding? Are they truly successful or merely successful failures?

### His Farm Given to Him.

And let us consider the average farmer. It is of course difficult to speak of averages, but the average farmer with whom I have come in contact, enjoys one advantage that the new man will not have—he got his farm from his father. His apparent prosperity over a period of years has represented some increased land values in his farm and a lot of scrupulous saving. It may not have seemed to him to have been saving—in fact, it was through spending that he saved. He put his money into a cow or a binder before he received that money, and through always being slightly in debt he was always saving something, though at a personal sacrifice. He learned to do without things.

But here's the rub—the farmer hasn't expanded his business. By living frugally he has the privilege of looking over his fall wheat and cabbage and of knowing that any diseases or hail storms which may touch these, will affect his pocket book only. As for giving all his sons the same start in life that he got, it is out of the question unless he has but one. Land doesn't grow. So all but one of the boys move cityward, where in time they will probably become successful busi-

ness men, and in turn make a try at farming and fail. If he wants to give all his boys hundred-acre farms such as he got, he will sell out his farm and go to some new country where land is cheap. There his boys may make a success of farming, not through the sale of crops, but through increase in their land values.

### The Business Man's Problem.

When a business man goes farming, he usually goes in with his eyes open. He has learned to distinguish gross and net profits. His farming to be successful must yield enough to pay four things before profits are even considered: Inter-

hired help, he will probably have to draw on the \$500 that he has already placed to his credit in the bank, if he wishes to wear as good overalls as those worn by his hired man—and he hasn't counted profits.

This is the prospect which faces the business man after he has once gotten an insight into farming, and it doesn't look alluring. He finds that he has to work as hard as his hired man and do the chores extra. His wages are the same as those of the man who has not had to invest in the scheme. If he is fortunate after he has worked hard until he is past working hard, he may feel himself in a position to ease the farm on to his son's shoulders and retire to the village. There, by living frugally and by earning that frugal living at light jobs in the village, he may live until he dies. The prospect frightens him. He fails and moves back to earn an easier living in the city, and at last finds peace by keeping chickens in his back yard.

## The Threshing of Seed Grain

### Precautions To Keep the Grain Clean

By C. E. Saunders, Dom. Cerealist.

**A**S a rule, every farmer should produce his own seed grain, and, very often, it pays to produce an excess of such grain for sale to neighbors. In order to obtain as pure a crop as possible for seed purposes, the fields should be carefully studied and the best portions noted, so that they may be kept separate at threshing time. The best areas should be examined while the crop is growing and any plant of other grains, which might be difficult to clean out in the fanning-mill, should be removed by hand.

The commonest impurity in oats is barley and it is a comparatively simple matter to pull out barley plants from an oat field if the work is undertaken when the barley has just headed out. It would be well for any farmer who desires to produce pure seed oats, thus to rogue an acre or two of his standing crop, as the barley can be eliminated much more easily at this time than after the grain has been threshed.

Threshing is a difficult problem under ordinary conditions, when the production of pure seed grain is in view. Small machines which can be fairly well cleaned out are, of course, the best for this purpose.

It is necessary to use good judgment in deciding upon the order in which the various kinds of grain are to be threshed. Each kind should be preceded by something which can be easily separated out in a fanning-mill, because a certain amount of seed invariably remains in any ordinary machine and is delivered into the succeeding lot of grain.

The first few bags of grain which come from the machine should, as a rule, be rejected for seed purposes. Another wise precaution is to thresh the crop from the special seed plot just after threshing the main crop of the same variety. In this way, one can be reasonably sure that any seeds, which were left in the machine from the grain previously threshed, will have been shaken out into the principal lot and that the special lot, threshed last, will be free from them. Of course, it will contain a few kernels from the main crop, but this being the same variety will make no particular difference.

**Threshing Care is No**

Howard

**A**s yet there is no acreage of threshing machine on these machines low speed. On spikes are taken machine that I entirely, and a This was done however, the sometimes or a certain amount.

With the reg should be threshed for they get the split easily. They only 50 to 75 can put them on the horses and the same. In this way they can be threshed as they are drawn or winter threshing machine factory, except were slightly to.

This year I chins tried out the high duty prohibitive in sections of beans are grown.

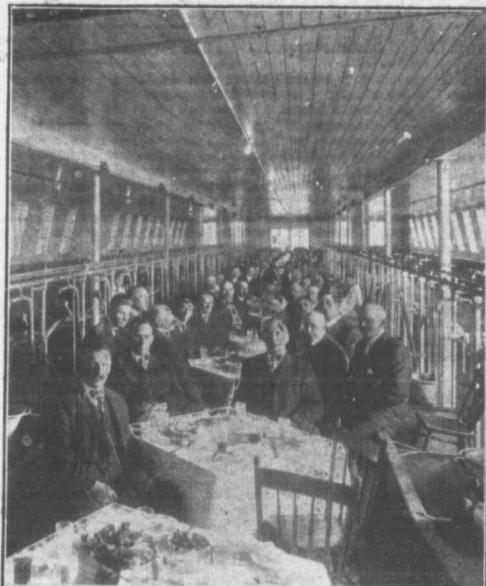
Nearly every threshing bean knives taken off ever, nothing threshing them have, of course, the bean machine.

## After

### Some Ex-

I N the Dom results have summer cul plowing the same indicate very clear benefit derived summer cultiva additi n to the yield obtained, he remembered land is thereby much cleaner and for subsequent

Two fields acres each were the first field was after harvest, vated occasionally during the summer and plowed in autumn; the other of four acres was sod and also plowed in the autumn. From the summer vated field gave yield of 15 bushels more acre than the field in the autumn, a difference of 60 cents a bushel, a total gain. Counting the summer cultivation per acre, a total 16 for the fo



At Lunch With Ontario Veterinary Association at Manor Farm, Clarkson, Ont.

Dr. Williams, of Cornell University, one of the world's foremost investigators of diseases of dairy cattle, was invited to speak to the Ontario Veterinary Association and gave a demonstration in diagnosis, breeding trouble in dairy cows. This demonstration was held at the farm of Mr. Gordon H. Goodeham, and at noon the visiting veterinarians and veterinary students were the guests of Mr. Goodeham at a luncheon very sizable at the Manor Farm, as seen in the illustration herewith.

eat on capital invested; depreciation on buildings, fences and machinery; expenses of blacksmith, machinery shop and millfeed store, and wages for the workers. Then if your imagination can picture the produce buyer having mistakenly given the farmer enough money to pay all this and a little over, the little over would be termed net profit.

Let us say that the business man has to pay \$10,000 for a well-stocked farm. Allowing five per cent. on the investment, he will have to pay each year \$500 into his bank balance before he allows himself any wages. That is what his money would have brought him otherwise over and above his wages. Now, after he has kept up his improvements, paid the bills for machinery and animal feeds required in running his farm and has paid himself this \$500, he will usually find that his gross profits have taken on a wretched appearance. And by the time he has paid his

## Threshing the Bean Crop

Care is Necessary to Prevent Splitting  
Howard Leavens, Bloomfield, Ont.

**A**S yet there has been no regular bean machine in this section. Farmers growing a large acreage of beans here have used the regular threshing machines. The pea pulleys are put on these machines, and the machines run at very low speed. On some of the machines, part of the spikes are taken out of the concaves. In one machine that I used the concaves were taken out entirely, and a hardboard put in their place. This was done to avoid splitting the beans. If, however, the beans had been in the mow for sometime or are very dry, there is bound to be a certain amount of split beans.

With the regular threshing machine the beans should be threshed directly from the field or before they get thoroughly dry, and so hard that they split easily. The most satisfactory way where only 50 to 75 bushels would be threshed, is to put them on the floor and thresh them with the horses the same as dry peas used to be threshed. In this way there are no beans split and they can be threshed at any convenient time, either as they are drawn from the field or later in the fall or winter when work is not so pressing. The threshing machine has not been altogether satisfactory, except in some cases where the beans were slightly tough.

This year I believe there is to be a bean machine tried out in this section. On account of the high duty the bean machines are almost prohibitive in sections where only small quantities of beans are grown.

Nearly every known device has been tried for threshing beans from ensilage cutters with the knives taken off, to corn husking machines. However, nothing yet has proved as satisfactory as threshing them with the horses or falls. We have, of course, had no experience as yet with the bean machine.

## After Harvest Cultivation

### Some Examples of Its Advantages

In the Dominion Illustration Stations, some results have been obtained in comparing the summer cultivation of sod land with fall plowing the same, which indicate very clearly the benefit derived from summer cultivation. In addition to the greater yield obtained, it should be remembered that the land is thereby put into much cleaner condition for subsequent crops.

Two fields of four acres each were taken; the first field was plowed after harvest, was cultivated occasionally during the summer and autumn and plowed in the autumn; the other field of four acres was left in sod and also plowed in the autumn. The oats from the summer-cultivated field gave a yield of 15 bushels more per acre than the field plowed in the autumn. This difference of 60 bushels on the four-acre field at 50 cents a bushel shows a total gain of \$30. Counting the cost of summer cultivating at \$4 per acre, a total cost of \$16 for the four acres,

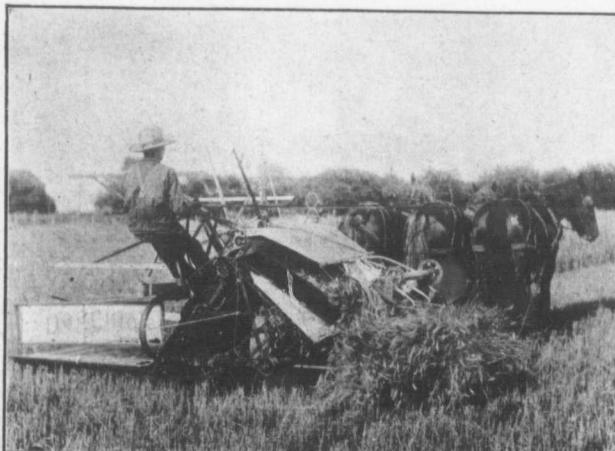


Even the Veterans who retired years ago from Agriculture's Firing Line are back in the fields this year.

an increase in net profit of \$14 or \$3.50 per acre was obtained. The soil on the cultivated field being in a much finer condition and almost free from weeds, the difference in the profits from the two fields, if worked alike, should be almost as great the following season.

Twenty-eight rows of sugar beets grown on summer-cultivated land produced ten and a half tons, while 36 rows of the same length grown on land simply spring ploughed produced only nine tons, a difference of 3,733 pounds. The price paid at the factory being \$5.62 per ton, a gain of \$16.03 per acre was shown in favor of the after-harvest cultivation.

In the rush of work nowadays, after harvest cultivation is apt to be passed over on farms not sufficiently equipped with wide working machinery and efficient horse power.



Garnering the Harvest in Huron County, Ontario.

This week eastern farmers are busy with the heaviest harvest. In many years and with a minimum of help to handle it. Under the circumstances how helpless we would be without the aid of modern farm machinery of which the wide-cut self-binder is the most worthy representative!

## Points in Wheat Culture

### Suggestions on Soil, Seed and Smut

**W**HAT does best on a well prepared, medium loam soil. The big thing that the crop needs first is moisture. No plant food can enter the wheat crop unless it is dissolved in the soil water and root juices.

Winter wheat will probably follow early oats. Where this plan is followed be sure to plow the oat stubble as early as possible after the oats are harvested. The growing oats shaded the surface of the soil from direct sunlight and to that extent prevented the escape of soil moisture by evaporation. As soon as the oats crop is harvested this shade is removed and enormous quantities of water escape. For this reason get plows and disks into the oat field as soon as possible after the oats are cut. If the ground is fairly mellow do not plow too deeply. Three to five inches should be sufficient. As soon as the soil is plowed have it disked and if it has not worked into a smooth seed bed follow the disking with rolling and then with a light harrowing.

Use none but plump, sound seed of a suitable variety. Let the fanning mill work overtime, sifting out the broken, shriveled kernels. Dawson's Golden Chaff is a favorite everywhere in the east, while a new variety, O. A. C. No. 4, promises to be even more productive and satisfactory. It is always a safe rule to choose the variety that does best in your own neighborhood.

### Spray for Wheat Smut.

In order to combat wheat smut, spread the seed on the barn floor and thoroughly sprinkle it with a solution of one pound of formalin to forty gallons of water. Shovel the grain while it is being sprinkled and when it is completely dampened cover it with a pile of sacks, so as to keep the gas in among the seed as long as possible.

If wheat maintains anything near present prices, it is surely going to pay the American farmer to give more attention to this crop. A bushel and a half of good seed is sufficient for an acre. The preparation of the seed bed requires the major amount of labor given to this crop. Once the wheat is started it needs no further care until harvest time. Harvesting labor may be short, but remember that the crop which yields the heaviest makes most efficient use of farm labor.

A method of seeding to fall wheat that is popular with a few farmers, but that is not common in any section of Canada, is to sow wheat in the corn land. A few years ago we saw a fine field of wheat in Northumberland Co., Ont., that had been seeded, after the corn crop was removed. This corn had been kept clean and well cultivated. The crop was put in the silo the middle of September, the land disked and harrowed immediately, and the wheat drilled in both ways. The cultivation of corn had put the land in excellent condition, and the wheat made a good growth that fall. This plan is not capable of wide adoption this year, however, as the corn is late, and but few fields have been carefully scuffed.



It is impossible for anyone to state with any degree of certainty just how many pounds of milk the cows would have given without this pasture, consequently it is difficult to place a value upon it.

We have been comparing a few figures from our herd records that are at least interesting. They are given herewith: The last week our cows were on the ordinary pasture we received 1,852 lbs. of milk; the next week, or the first week on the spring-sown pasture, the milk yield was 2,148 lbs., a gain of 296 lbs. This, at \$1.80 an eight-gallon can, the price received by us for our milk, means a gain of \$5.66 for the week. I find, however, that on the old pasture they were falling nearly 100 lbs. a week, and to be due to the spring-sown pasture this should be added to the gain. The second and third week on the new pasture still show an increase of milk over the week previous to being turned on it. Yet the increase per-turns have not as yet paid me for the seed work and rent of land, etc., but we feel well enough satisfied to plan for still more of another year without waiting to see what it will yield the balance of the summer.

### The Value of the 300 day Semi-Official Test

(Continued from page 3.)

certain amount of the usefulness, because she can produce four calves in five years (allowing a period of fifteen months between freshening), whereas, if the 300-day test were adopted a cow could, and would, in all probability produce a calf every year. Moreover, under the 300-day test a cow would produce more milk in five years than under the present way. A good many men who to-day cannot afford to buy a cow, because of the fact that so much time is taken up would, I believe, do so in a 300-day test were adopted; and this in itself would be a distinct advantage. The principal use of a dairy cow to-day, certainly the primary use, is to produce milk. The average dairymen wants a cow that will produce the greatest amount of milk at the least cost during her lifetime, and for such a man a 300-day test is the most convenient because it is the lactation period which is most economical.

For the above reasons, which seem to me to far outweigh the disadvantages already stated, I should certainly advocate the adoption of a 300-day A.R. test.

### Strongly Favors the Change

By Milton W. Davison.

I T is indeed very gratifying to the ordinary breeder of the Ayrshire cattle, who depends upon the income of his breeding operations for the support of himself and family, that the idea of an official test for a period of 300 days is so rapidly coming to the front, and I freely and fervently prophecy that the moment our official test rules are so amended to recognize records for that period, that the Ayrshire will this popularity, another impetus and the income of our members will be greatly increased.

The one fact alone, that in yearly tests so long a period is required, for satisfactory records, between freshenings, (in many instances 18 months elapse), the offsprings of our best animals are so few, that the profits from this source is curtailed to a remarkable degree.

In addition to this it is an assured fact, after testing all by breeders who conduct yearly tests, that the milk produced during the last 65 days of a yearly period is made at a distinct loss, the ration being increased to stimulate production to so remarkable a degree as to cost more than the

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rate of the milk. In my own experience I have given a cow 100 lbs. of grain as one pound of grain for each pound of milk. If, during the 300-day test, the cow becomes fat, and again begins to lose weight, the rate of income rather than an ex-

and 30 day tests will, I believe, in time discontinue same as misleading, but for us to institute a 300 day test would be better if the average investor would not distinguish between a 300 and 365 day test. Therefore the Ayrshire breed would be placed at a disadvantage. We would always be on the defense explaining our 300 day test.

This reason in my opinion, is sufficient to outweigh the reasons which any breeder may advance in favor of the 300 day test as the natural period of a cow's efficient production.

Please register me as opposed to the establishment of the 300 day test.

Provision should be made so that early farrowed pigs can take exercise after they are six or seven days old, according to Mr. Peters, Animal Husbandman at the North Dakota Experiment Station. He also states that the young pigs should begin to receive feed when about five weeks old. A thin mixture of shoddy and skim milk is good; care must be taken that it does not set around long enough to become sour. If skim milk can not be had, water will have to suffice. In this case, it will pay to feed the pigs some tankage till at least three months old. A little whole wheat or rye is also good for starting.

### A Change Unwise

By J. W. Cline.

FOR one paramount reason this test appears to me unwise. A 365 day test is recognized as a standard by all the breeds and the associations which are making seven

## FARM AND DAIRY

August 22, 1917.

August 23,

# Farm and Dairy AND Rural Home

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## The Rural Publishing Company, Ltd. PETER ORO AND TORONTO

"Read not to contradict and to compute, nor to believe and take for granted, but to weigh and consider."—Bacon.

### Price Control

PRICE control has become the established order. The Dominion Government, through its Board of Grain Supervisors, has decreed that the remainder of the 1916 wheat crop shall be marketed on a basis of \$2.40 for No. 1 Northern in store at Fort William. A similar disposal of prices on the present harvest is contemplated. Meatless and baconless days have been introduced as a means of conserving the supply and, incidentally, lowering the price on these products of the farm. In the United States the food controller is clothed with even more arbitrary powers than our own dictators, and that country, we may safely assume, will not be far behind Canada in regulating the farmers' markets.

But why should price regulation be limited to the products of the farm? Other commodities also are soaring in price. If food "control" is justifiable so also would it be right to regulate the selling price of leather goods, machinery, clothing and wages. Almost any line of manufactured products are being produced at greater profit than either wheat or meat. If they are not, then why is capital and labor flowing into these industries to the detriment of agriculture? What seems difficult for our legislators to understand is that, from a business standpoint, the farming industry has never been profitable, and that, even with present high prices, the farmer's return on his investment is not great enough to be attractive to moneyed men. Why then such a strenuous endeavor to keep down the market price of commodities that are produced with a minimum of profit?

### The Farmers' Service

FARMERS feel, and rightly, that the service that they have rendered the state in the last three years, entitles them to the utmost consideration from the Government and all other classes when legislative control of prices is suggested. No other class in Canada have made sacrifices in behalf of production that are comparable with the sacrifices made by the farmers of the land. While the people of the towns have worked the usual number of hours and enjoyed their usual amount of leisure the men and women of the country have been working more strenuously than ever before. With help at a vanishing point through enlistment and migration to munition plants the women have added their services and have kept agricultural production up to normal. Many hundreds of farm women have this year, for the first time, built loads and mowed back hay and they are now handling sheaves; this, in addition to caring for their homes and little ones. Had country people insisted on the stated hours and time for recreation that are the rule in our cities famine would have been a reality and national bankruptcy a certainty.

After the sacrifices that he has made, is the farmer not justified in hoping that the markets will be strong enough to recompense him, in part at least, for his extra labor? And until the farmer receives a just return for his expense, time and investment no other class in the community have a right to complain of the price of farm products. We venture to state that, averaging the returns of our farms for the last three years, recompensing the farmer and his family for the number of hours worked at the same rate that city help has scoffed at, paying all expenses and allowing a fair business rate for depreciation, the farmers who have noted five per cent. on their investment are the exception rather than the rule. Surely this is not exorbitant? Certainly it is not enough to justify arbitrary action with the object of keeping down prices. We know that it is argued that Government action is intended merely to eliminate speculation and ensure fair prices all round, but interference with the law of supply and demand is always a dangerous expedient. If prices are set too low production will be discouraged. If set too high consumers have a just grievance. Where is the body of men that can adjust the balance with the nice-ty of the unfettered law of supply and demand. And could not injurious speculation in foodstuffs be held in check just as efficiently by limiting the produce exchanges to cash transactions and, perhaps, forbidding trading in futures as by price fixing?

### More Wheat for 1918

WHAT about the wheat crop of 1918? The Ontario hay crop of 1917 is almost a record breaker. Barns are full and stacks abound. Many farmers are preparing to stack every sheaf of their grain, because their barns are already bulging with hay. With coarse grains and straw both plentiful this year, much hay will have to be carried over for another season. Because of this surplus of roughage the commission of Conservation suggests that many of the old meadows, which would otherwise be held over for hay in 1918, could and should in view of the world's need of foodstuffs, be utilized for producing grain, such as fall rye and wheat. If the land is plowed now a good seed bed could be prepared. If it is desired to get the fields back into hay, timothy seed at the rate of ten pounds per acre could be sown along with the grain this fall and the clover sown in the spring.

A difficulty in the way of increasing the winter wheat area is that during the usual plowing season the ground has been too dry. What little plowing has been done has been at the expense

of haying and the cultivation of hood crops. With rains immediately after harvest, however, and with the help of tractors, which have become numerous during the summer, thousands of acres of land could still be gotten ready for fall grains. And, as the Commission of Conservation suggests, many acres of meadow might be included in the fall plowing and fall seeding.

### The Beautiful Farmstead

UNGLINESS is not a virtue. Usefulness and beauty may go hand in hand. Usefulness does not interfere with usefulness. The farmstead, including both dwelling and farm buildings, will be planned first for efficiency, if the farmer be as sound a business man as he should be, the home, to develop the best family life, must be beautiful; unsightly buildings, no matter how useful and comfortable, will always be a thorn in the flesh to the more sensitive members of the family.

Our forefathers, the men who cleared away the forests and laid the foundations of an Empire in the new world, were not overly concerned as to the appearance of their farmsteads. The conditions under which they lived were too hard, their duties were too onerous. But we, of this generation, have passed the pioneering stage. We should be looking forward to other fields of progress. The slogan: "More, and yet more beautiful farm homes," already adopted in some of the older states of the American union, is one for which we, in the older sections of both Eastern and Western Canada, are now ready. The application of the slogan demands more paint, more planting, and perhaps, in some cases, extensive remodeling. A large order, perhaps, but then the beautification of a rural home is important enough to be the work of several years, each improvement being made as finances allow, but all improvements according to a carefully pre-arranged plan.

### One Crop Farming

GRAIN farming is a necessary evil in a new country. The Western farmer has grown grain and buried his straw stacks in an effort to make a start with little capital in a new country. On such a system of farming, however, no permanently successful agriculture can be founded. At first, Nature may be good to the settler, but the end of her bounty is now in sight. Mr. S. G. Porter, of Calgary, put the question tersely to an audience of Western farmers when he spoke as follows:

Every farm is a factory, and the fertility of the soil is the capital stock. How to make the factory most productive is the proposition. You certainly cannot draw on your capital stock to pay dividends. In other words, it will not do to fool yourself into using up your soil fertility and calling it profit. The capital stock, or fertility, of Western Canada's soils is nearly always rich, but it will not continue so under the usual one-crop method of farming."

That Western farmers are coming to realize their position is shown by the steadily increasing live stock population on Western farms, a population that has increased several hundred fold in the last couple of decades. Not the least satisfactory aspect of Western development is the steady growth of the dairy industry. A small dairy herd on the grain farm means steady employment, a steady income, abolition of store credit and a more satisfactory financial situation generally for prairie farmers. Also, in time, the value of dairy cattle as soil builders will come to be appreciated, even on the fertile prairies of the Canadian West.

CITY

The Va-

VANCOUVER were bring Hall, Vancouver worth, who to milk singly gave the res. Dealing with business, Mr. the net profit \$6 per cent. milk, have no the last 12 months in milk, in dairies, but newspaper damages did not the medical

Mr. Canada Farmers' Da prices to farm cent., the ret only 25 per cent. of the P Association local dealers' ter for fat based association was condensate, price should butter fat, inc Sherwood, the their Association the condensate cents a pound in price, market as the market milk w than the expen sery milk.

Mr. E. D. Bo farmers at which prices at which m!!!. The re investment led to a 50% loss. The idea of the more for milk b of the association correct, but if received more for have meant that had to go that possibly consumers might require and water. While looking at the farmers they v fact that they v the one which They were not imme dollar b future as well.

Treating F

ALL-SROWN F to be treated prevent st and rye smut. T and effective in rotation. It does only prevents germs causing various imperfe grubs.

Formaldehyde used for seed a pint of guarc strength) formaldehyde gallons of water. Before treating, balls from when wet the seed w solution. This is one of the follow kets directly move it around

## CITY MILK SUPPLY

### The Vancouver Milk Probe

**V**ANCOUVER city milk producers were in attendance at a meeting held recently in the City Hall, Vancouver, when Mr. Moses Cotsworth, who has been investigating the milk supply of the city for some time, gave the results of his investigations. Dealing with the retailing side of the business, Mr. Cotsworth stated that the net profits of local dairies handling 66 per cent. of the city's supply of milk, have not exceeded 10 per cent. in the last 12 months. He advocated publicity in regard to the quality of milk being supplied by the different dairies, and it was pointed out that newspapers were doing their duty in publishing such reports of the medical health officer.

Mr. Caradice of the Independent Farmers' Dairy, stated that while prices to farmers had advanced 50 per cent., the retail price had advanced only 25 per cent. and he further claimed that the Fraser Valley Producers' Association was overcharging the local dealers seven cents a pound butter fat based on the price which the association was able to obtain from the condensery. He claimed that a fair price should be 67½ cents a pound butter fat, instead of 75 cents. Mr. Sherwood, the manager of the Producers' Association, said that he sells to the condenseries, had netted four cents a pound butter fat more than the price received on the Vancouver market as the expense of handling market milk was considerably greater than the expense of handling condensery milk.

Mr. E. D. Barrow asserted that the farmers had a perfect right to set the prices at which they should sell their milk. The association represented an investment of \$15,000,000 and controlled about 600,000 head of dairy cattle. The idea of the public having to pay more for milk because of the operation of the association was in a measure correct, but if the farmers had not received more for their milk it would have meant that many of them would have had to go out of business, and that possibly next winter Vancouver consumers might have had to eke out their requirements with milk powders and dried milk. While they were primarily looking after the interests of the farmers they were fully alive to the fact that the Vancouver market is the one which they must take care of. They were not in business for the immediate dollar but had to consider the future as well.

### Treating Fall Sown Grains

**F**ALL-sown wheat and rye should be treated with formaldehyde to prevent smutting smut of wheat and rye smut. The treatment is cheap and effective if combined with crop rotation. It does not cost more than a couple of cents an acre, and not only prevents the smuts mentioned, but probably increases yields by killing germs causing seedling blight and various imperfectly known diseases of

Formaldehyde is most commonly used for seed disinfection. Put one pint of guaranteed (40 per cent. strength) formaldehyde into about 40 gallons of water and stir thoroughly. Before treating, remove the smut balls from wheat by fanning. Then wet the seed with the formaldehyde solution. This is most easily done in one of the following ways:

Dip the grain in sacks or wire bags directly into the solution and move it around so as to wet all the

grain. Then dump it into a pile or leave it in the wet mass four or five hours, or over-night. It may then be sown immediately or spread out to dry. If the grain is swollen, set the drill accordingly.

If more convenient, the grain may be spread out on a clean floor, wagon box or canvas, in a layer about two inches thick. Then, while one person rakes or shovels it over, another sprinkles it with an ordinary sprinkler until it is wet. It is then handled the same as if it had been dipped. A small machine may be used if available.

Grain may be treated any time before seeding, but it should not be put into anything which has contained smutty grain, or it will again become contaminated.

A seed germination test should be made so that allowance can be made for any seed injury. This seldom occurs unless the seed has been broken or otherwise bruised.

Loose smuts cannot be prevented by the above method.—E. C. Stakman.

### Feeding Summer Silage

**A**PROBLEM for the farmer who has some ensilage left over for summer feeding is to feed enough off each day to keep his silage from spoiling. Summer feeding is usually confined to the milking cows, even when they do not get one-half of their winter allowance. To take a couple of inches daily off the whole surface of a 12-foot silo with a herd of average size, is impossible. R. H. Harding, of Thorndale, suggests a solution of the problem.

Feed off just one-half of the silo at a time. When one side has been fed down as far as is practicable, say two or three feet, the spoiled ensilage on the other side, instead of being discarded, is turned over onto the good ensilage and trampled down solid. This plan to be followed until the silo is empty. With this method the only ensilage spoiled and wasted will be that on the perpendicular surface.

### Canadian Dairying Statistics

**R**EPORTS has just been issued by the Census and Statistics Branch giving the following data on butter and cheese production in Canada:

	1916.	Make.	Value.
Butter ..	\$3,824,176 lbs.	\$24,368,636	
Cheese ..	183,878,898 "	27,557,775	

Butter .. \$2,564,120 lbs. \$26,966,357

Cheese .. 192,968,897 " 35,512,530

The average price of butter in 1915 was 30 cents and in 1916, 33 cents. The average price of cheese went out to 17 cents in 1915 and 21 cents in 1916.

Ontario and Quebec stand as leaders in Canadian dairying, producing in 1916, 70 per cent. of the total butter production and 98 per cent. of the total cheese production for Canada. In Ontario more cheese is made than butter; in Quebec more butter is made than cheese. In Ontario the total number of establishments operating in 1916 was 1,165 and the patrons numbered 37,235, while in Quebec the establishments numbered 1,961 and the patrons 79,145; so that the average number of patrons per establishment was 75 in Ontario and 40 in Quebec.

The total number of creameries and cheese factories operating in 1916 is reported as 3,446, including 993 creameries, 1,813 cheese factories, 624 combined factories (cheese and butter) and 1,029 condensed milk factories. The total number of patrons contributing to creameries and cheese factories during the year 1916 was 231,192, the deliveries of milk amounting to 2,600,542,987 lbs. and of cream to 157,620,636 lbs.

## Are you going to be caught without a Silo this fall?

If not, you have no time to waste.

In a very few weeks your corn will be ready to harvest.

Freight shipments these days are slow and uncertain. Unless you



## place your order immediately for an Ideal Green Feed Silo

you may not get it up in time to handle your corn. This is a risk you can not afford to run.

Order your Silo now. Allow for freight delays and uncertainties. Give yourself time to erect it properly. If you put off this important matter you may find it impossible to silo your corn this year.

Don't run this risk. Don't put off your decision any longer. Next week may be too late. Act NOW—TO-DAY, and when the snow flies this winter you will have the satisfaction of knowing that you are giving your cows a chance to make money for you.

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50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER



## BE INDEPENDENT

IT IS YOUR SAVINGS, NOT PAY CHECKS THAT COUNT

The average town worker with a family cannot save more than \$120 a year. Rent, food, clothing and expensive amusements take the rest. Once his machinery, seed and live stock are paid for the average Western Farmer has a yearly turnover of \$500 and up, his own.

## OWN A WESTERN FARM

by Homesteading along the lines of the Canadian Northern Railway, where the newest and most fertile sections are still open for settlement. Booklets and information on application to General Passenger Departments: Montreal, Que.; Toronto, Ont.; Winnipeg, Man.

## CANADIAN NORTHERN RAILWAY

When You Write---Mention Farm and Dairy



THE most delicate, the most sensible of all pleasures, consists in promoting the pleasure of others.—Bruvere.

## Winning the Wilderness

(Continued from last week.)

"IT'S very soot," Hans murmured, licking his lips for more. "Wisky not so goot as vassar," and then he went into a delirium. "Don't tell, Don't tell," he pleaded. "I never mean to get Schmitt. I not know he would be der yet. I hide for Yacob, an' I set Schmitt in der back and I only want Yacob. He send me to der pen fer sure yet next time. I hate Yacob."

"A little silence, then Hans murmured: "I didn't go to Kansas City. I coom back to Gretchen's home by Little Wolf. I hide where I watch for Yacob. I shoot twice to be sur of Yacob, an' Schmitt, hidin' in der crack by der roat, get one shot." So I coom to Germany and enlist. Gretchen, she coom too an' she stay der. Vell! I help fight Boxer some. Mine Gott, forgive me. I do once some goot for der world dis day."

And that was the last of Wyker.

The twilight hour was near. The wounded had been borne away by busy Red Cross angels of mercy. Wide away across the Chinese plain the big red sun slipped down the amber summer sky into a bath of molten flame. Then out of sight behind the edge of the world it turned all the west into one magnificent surge of scarlet glory, touching to beauty the tiny gray cloud flecks far away to the eastward; while long rivers of golden light by rivers of roseate glow mingled at last along the zenith in one vast sweep of mother-of-pearl. A cool breeze came from the sea—fanning the fevered faces of the weary soldiers. The desolate places were hidden by the deepening shadows, and the serenity of the twilight hour fell on the battlefield.

Then the men of each nationality went out to bury their dead. Swiftly the little brown Japanese digging and filled up the graves into which their comrades were deftly heaved. The Russian and Siberian Cossacks lunged their fallen ones in heavily and unfeelingly. The Bengalees and Sikhs thrust their own out of sight as they were plucking at an uncertain harvest. Each soldier from France must lost his life on that battlefield fell on his own grave and there his countrymen covered him over, an unmarked spot in a foreign land.

Thaine straightened a minute above his spade. The cool breezes were grateful to his heated brow. The after-sunset glow seemed like the benediction of the Infinite on the closing act of the day. He saw the hurried and unfeeling dugouts of bodies into the silent earth. Then his heart ached with something unspeakable as he noted how in all that irreverent and unsympathetic action the American and English soldiers alone were serving as brother for

brother. In the lone trenches prepared for them their dead were laid with reverent dignity and gentleness. Each one's place was carefully marked with a numbered slab that in a future day the sacred dust might be carried back to the soil of the homeland. As the sunset deepened to richer coloring and the battlefield grew still, and still, far along the lines the bands of the English Royal Artillery and the Welsh Fusiliers, with the bagpipes of the Scottish Highlanders, mingled their music with the music of the splendid band of the Fourteenth



An Easy Task When Living on the Lake Shore.

Washing the buggy on the farm is sometimes rather irksome as it usually requires carrying considerable water. On the farm of Mr. A. E. Phillips, Prince Edward Co., Ont., however, the task is simplified by the fact that the family can sit at the water's edge and enjoy the scenery while the task is being performed.

Nearer, my God, to Thee,  
Nearer to Thee.

E'en though it be a cross  
That raiseth me.

Still all my song shall be  
Nearer, my God, to Thee,

Nearer to Thee.

And Thaine Aydelot knew that his last and biggest lesson was learned.

### CHAPTER XXIII.— The End of the Wilderness.

Have I named one single river? Have I claimed one single acre? Have I kept one single nugget (bartering samples)? No, not I. Because my price was paid me ten times over by my Maker. But you wouldn't understand it. You go up and occupy.

The Explorer.

The victory at Yang-Tsun had come with a tremendous loss of life. To go on now promised the cutting to pieces of the entire army. To stay here and

await reinforcements would mean the slaughter of all the foreigners in Peking. In a council of war the next day English and Indian, Russian, German, Japanese, Italian, and French general after general declared for the wisdom of waiting at Yang-Tsun for reinforcements.

Up spoke then General Chaffee of the American command:

"I will not wait while the Boxers massacre the helpless Christians. Stay here or go back to your own countries, as you please. My army will go on to Peking, if it must go alone."

And his will prevailed.

Followed then a memorable march, with the soldiers and their wives even leading the line. The strength of the force was thirteen thousand now and one thousand of these fell by the way before the end of the journey.

After Yang-Tsun, for the only time in ten days' campaign, the soldiers undressed and bathed themselves like Christians in the unchristian Peituo, and on the next day, which was the Sabbath, they listened to the military preacher. Sixty miles they forced onward with the same cruel heat, and scalding air, and alkali dust, and poison water, over dreary plains, through deserted villages, twenty, twenty-five, and even thirty miles a day, they pushed on toward the Chinese capital.

And ever before them the Boxers slowly receded, stinging grievously as they moved. Sure were they that at last only dire calamity could await

knew," declared McLearn wearily, as he lay prone on the ground looking up at the hot sky with unblinking eyes.

"I reckon you never hit the National Pike on August day, out between Green Castle and Terre Haute down in Indiana," Binford suggested.

"Nor St. Marys-by-the-Kaw," Bosh-ringer, a Kansas man, added. "There's where you get real summer weather."

"Oh, kill him, Aydelot, he's worse than Boxer. Don't you know I'm from Boston originally which is only a State of Mine," Gendrich urged.

"No matter what state you're from originally you are in China now, which is in a state of insurrection that we must get ready for a state of resurrection to-morrow. What are you thinking about, T. Aydelot? You look like Moses and the prophets." McLearn half turned over with the question.

Thaine, who was lying on his side, supporting his head on his hand, quoted softly:

"Oh, the prairies' air so quiet, an' there's allers lots of room in the golden fields of Kansas, when the wild flowers blow."

A low boom of thunder rolled across the western sky; a twilight darkness fell on the earth; and a long night of storm and stress began for the army of deliverance encamped before Peking.

Outside the city the Boxers massed in numbers. Inside more than a hundred thousand waited the coming of hardly more than one-tenth of their number. No wonder they felt secure behind their centuries-old walls.

Thaine Aydelot had been accustomed to sleeping tentless on the ground and to being beaten by rains. He was a sound sleeper and he was very weary. But to-night he could not sleep. The morrow would see world movements that should change all future history; in which movements he was a tiny unit, as every furrow that his father, Asher Aydelot, had run across the face of the prairie had by so much won it from wilderness to fruitfulness.

All night long the rain fell in torrents upon the camp. A terrific cannonade of thunder shook the earth. The lightning tore through the clouds in jagged tongues of flame. Where Thaine lay he could see with every flash the great frowning black walls of Peking looming up only a few miles away. In the full of the thunder a more dreadful cannonading could be heard hour after hour.

Thaine knew that inside the walls the Boxers were holding the Compound. And inside that Compound, if he were yet alive, was his old teacher, Pryor Gaines. He wondered if the God of Battles that had led the armies all this long hard way would fall them now when one more blow might bring deliverance to His children. He remembered again the blessing with which his father had sent him forth:

"As thy day so shall thy strength be. The Eternal God is thy refuge, and underneath are the everlasting arms."

The memory brought peace, and at length, wrapped round in the blessing of an absolute trust, he fell asleep.

Inside the City of Peking on that dreadful night the madness of the Boxer forces was comparable to nothing human. Nor jungle beasts starving for food and drink, frenzied with the smell of blood and the sight of water, could have raged in more maniac fury than the fury possessing the demon minds of these fanatics in their supreme struggle to flood the streets of Peking with rivers of Christian blood. For such as these the Christ died on the Cross of Calvary. For such as these the missionary is offered up. A human jungle, untamed

and waiting soldier became he brought to aid him.

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two or three ounces of carbon bisulphide can be injected into it. If the nest of the black ant is found, it can be treated with a solution of 10 per cent carbon bisulphide which may be applied through one or two holes in the top of the nest. These holes after treatment should be covered over with earth. Kerosene and water poured into ant holes will also destroy them.

One of the best means of destroying the insects is to cause them to attract them to porous sponges moistened with sweetened water and placed where they are most numerous. These sponges may be collected several times daily and the ants swarming in them destroyed by immersion in hot water. Washing the places where the ants frequent with boiling water, into which two or three drops of oil of camphor have been dissolved, is also effective, but care must be taken that the steam from this mixture does not get near the eyes. Hot alum water in the proportions of two pounds of alum to three quarts of water and applied liberally to the crevices where red ants have made their home, will do good work.

#### Can Your Hens for Winter Use

**C**ANNED chicken" may be made at home in your own kitchen, out of the old hens that ought to be killed anyway.

The method of operation for what is known as "straight pack" by the

trade is very simple, and is given in detail by Dr. Robt. Barnes, Chief of the Meat and Canned Foods Division, Bureau of Animal Branch, Department of Agriculture, Ottawa, as follows:

Clean and cut up the chicken. Sort out the fleshy portions, such as the legs, thighs and breast. Break off the protruding portions of the bones in each piece. Pack these fleshy portions in a large jar or other suitable vessel, as closely as possible. Add salt and pepper (about a teaspoonful of salt and one-eighth teaspoonful of pepper). Fill to within three-quarters of an inch of overflowing with the liquid that comes from the balance of the chicken, process for preparing which is given below.

Place in boiler or other vessel containing water, cover and gradually bring to a boil. Pour out jars boil two and one-quarter hours. Pour out jars boil three and one-half hours. Place the balance of the chicken in kettle and boil till the meat will strip free from the bones. Strip off all meat and pack in jar. Pour thereon the balance of the liquid in the kettle. If there is not enough liquid to fill the second jar, add water. Place in boiler as above, and boil jars one and one-quarter hours, quarts, two and one-quarter hours.

If desired, the whole of the chicken may be prepared the same as the last part.

In all cases take care not to expose

the gem jars to a sudden change of temperature. Also, after the jars have cooled off, examine the tops to see that the covers are air-tight. During the cooking of the products, place the glass tops on the covers but do not fasten them. Any steam or gas which may be generated will escape. As soon, however, as the process is finished, fasten the tops securely.

What is preferred are good, plump fowls, with a fair proportion of chickens, the bones of the latter giving a firmer jelly and lessening the danger of a possibly mushy product. As a precaution against this condition, where the pack is straight tow, gelatine may be, and often is used.

#### Tried Cucumber Pickle Recipes

Alice A. Ferguson, York Co., Ont.

**O**PART of the cucumber crop need be wasted. Though the small uniform cucumbers are used for green pickles, the large overgrown ones make a pickle which is equal if not superior to the smaller pickles. I am sending along a couple of excellent recipes.

#### Sliced Cucumber Pickles.

One dozen large green cucumbers pared and sliced; one dozen onions, also sliced; arrange in alternate layers, salt and leave standing over night. In the morning drain, and prepare the following dressing: One qt. vinegar; one cup white sugar; one tablespoon mustard, (mayonnaise); one-half cup curry powder; 2 teaspoons turmeric; one-quarter teaspoon cayenne pepper; Scald vinegar, sugar and spices; pour over cucumbers and onions. The cucumbers retain their crispness, and will keep from season to season.

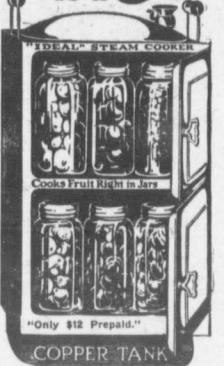
#### Ripe Cucumber Pickle.

Pare the cucumbers and remove seeds. Cut in pieces about two inches long, one-and-a-quarter to one-and-a-half inches thick. Sprinkle with salt and leave over night. In the morning drain, cook in very weak vinegar, containing a small lump of alum, to give firmness, till transparent. Drain; make a dressing of one-quarter pound sugar to one quart vinegar; whole cinnamon and cloves tied in a bag; one teaspoon curry powder; two teaspoons turmeric; one-quarter teaspoon cayenne pepper. Bring to a boil; add cucumbers; cook for a few minutes and bottle. This is good with fish.

#### Watering House Plants

**P**LANTS in pots indoors should always be watered with water of the same temperature as the air of the house. A good plan for glasshouse watering is to have a tank large

## Canning Joy!



#### Cooks by Steam Pressure

Made in 5 Sizes.

The Toledo "ID AL" Home Canner and Cooker is acknowledged the world over, after twelve years of success, to be the greatest canning machine ever invented. You can do your bit for Canada in saving the Nation's food by canning at Home. Join the Canning Club. Fruits or vegetables can be canned in the Toledo "Ideal" Home Canner will keep for years and years. No, save as you earn, and you will pay only \$12.00 prepaid if your dealer cannot supply you. Eighty page cook book free with each canner.

THE LOUIS MCLAIN COMPANY,  
451 Portage Ave., Winnipeg, Man.

enough for two or three days' supply. The tank may be filled up after each day's use and will then be ready for the next day. For indoor plants a little hot water can easily be had to take off the chill. Water direct from a tap or well should never be used for indoor plants.

A simple way to ascertain whether a pot plant requires water is to rap the side of the pot with the knuckles. If the sound is clear and ringing, water is needed, but if the sound is dull, no water is needed. When a person has had some little experience with plants they can tell whether a plant needs water by the feel. The usual plan of giving a little water, cut a jug is quite a mistake. The only effect is to moisten the surface of the soil, still leaving that below, where the roots are, almost dry.

It is not possible to make any rule as to how often a plant should be watered. Much depends on its surroundings and the temperature it is exposed to. That means, for growth, such as fuchsias, geraniums and cinerarias, generally require more water than slow growing ones like cacti. Again, plants having soft foliage require more moisture than plants with hard leaves.

Never leave a plant standing in a saucer containing water. This causes sour soil and the roots quickly become diseased.

The best water for all plants is the water nature provides.

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# CANADIAN NATIONAL EXHIBITION

Aug. 25

TORONTO

Sept. 10

## JUBILEE YEAR SPECTACLE

1200—Performers—1200

The last word in spectacular pageantry.

More exhibits, more features and more special attractions than ever before.

### MAMMOTH TRACTOR AND FARM POWER EQUIPMENT DISPLAY.

#### A SOLUTION FOR MANY PROBLEMS OF THE FARM

New and enlarged Government exhibits; new competitions; new classifications; giant agricultural and livestock display.

Inspiration, education and recreation on a colossal scale.

#### REDUCED FARES ON ALL LINES OF TRAVEL TO THE BIGGEST AND BEST SHOW IN EXHIBITION HISTORY.



# Many Thousands

## Farm Laborers Wanted for Harvesting in Western Canada

"Going Trip West"—\$12.00 to WINNIPEG

"Return Trip East"—\$18.00 from WINNIPEG

### GOING DATES

August 21st All stations in Ontario West of Sault Ste. Marie up to and including Toronto on Lake Ontario Shore Line and Hawkesbury-Peterborough Line; also from stations between Kingston and Renfrew Junction, inclusive, and from stations on Toronto-Sudbury direct line. From stations on Sault Ste. Marie branch, from stations on Lake Huron to Frankfort, St. Marys & Port Burwell to Port McNicoll and Burkton-Burkeport.

August 23rd From stations West and South of Toronto up to and including Hamilton and Windsor, Ont., en route to Winkler, Manitoba, Lethbridge, Galt, St. Marys & Port Burwell and St. Thomas branch, and stations Toronto and North to Bolton, inclusive.

### SPECIAL THROUGH TRAINS

Further particulars from Canadian Pacific Ticket Agents. W. B. HOWARD, District Passenger Agent, Toronto.

## The Makers' Corner

**Butter and Cheese Makers are invited to send contributions to this department, to give information on matters relating to cheese making, and to suggest subjects for discussion.**

### Watch Churning Temperatures

**T**HIS is the season of the year when creamers must exercise the greatest care to prevent losses in quality of butter. Perhaps the greatest losses are sustained because of high churning temperatures, which produce butter with a poor body. It will not keep, the moisture and the salt will not be dissolved, and keeping quality will be affected considerably. Besides these defects, the shrinkage will be large, and may mean a loss of one or more cents a pound, which the average creamery knows nothing of. Yet there are perhaps hundreds of creamers which lose heavily and this will make it impossible for them to pay good prices, which may be the reason there is so much difference in the price paid for butterfat by different dealers. In the same locality and operating under about the same conditions, and receiving about the same number of pounds of butterfat.

The buttermaker who watches the temperatures of his cream closely and chills his cream cold enough to assure a good body and does the rest of the work in workman-like manner will have an advantage over the one who gives less attention to the details of his work.

Yes, sir, Mr. Buttermaker, it pays to do the work right, though it takes a little longer to churn the cream and do the other work. Give your work the best that is in you, and success is yours.—Butter, Cheese and Egg Journal.

### Parease Cheese

**I**T is a good business proposition to paraffine cheese at the factory where cheese are properly cured for local or small shipments. Keep the cheese on clean shelves turning every day. When cheese are five or six days old when they should be paraffined. We always have the paraffine very hot and dip the cheese completely as possible completely covering the cheese, draining them until the paraffine is cold when the cheese should have a thin coat of paraffine closing all rough spots and cracks and making them mold-free. It also eliminates excessive shrinkage. If cheese has any mold or dirty spots same should be removed before paraffining, as it will show and make the cheese unattractive. After cheese have become dry and paraffine has hardened they can be boxed and shipped.

When cheese are shipped to a large receiver where same are held in storage at a central curing room, the paraffining can be done at that point possibly to a better advantage than at factory. But when shipped in a local way it should be done at factory as very few small receivers or storages have facilities for paraffining.

Experience has clearly shown the desirability of paraffining cheese of the Cheddar type, both whole milk and cream. The wax coat prevents or materially reduces the normal shrinkage during storage and distribution. It protects the cheese from the cheese from dirt and mold contamination of all kinds and it keeps the surface bright, clean and handsome. But it does all this only if the work is properly done and if the cheese are

in proper condition. If the cheese is well made and would normally be a good keeper and if the wax coat is well applied the cheese come out of cold storage as handsome as they went in. But if the cheese is very soft made, if the rind is not well formed or if wax is not well applied, trouble is likely to ensue, and defects will develop which are exaggerated if the cheese is held in a moist atmosphere or at too high temperature. Cheese of high water content and soaked curds are very apt, if stored for some time to show surface defects when taken from storage, these being observed as blistered paraffine or rind rot under the paraffine coat.

The cost of an outfit is only about \$15 to \$20 at most or one can be devised by most cheese makers at a very inexpensive and the probable cost per pound of cheese is not in excess of two or three cents and at least five per cent shrinkage can be saved and the prevention of mold will pay in a more saleable cheese. Cheese should be thoroughly dried off and allowed to cool before being packed.—C. R. W.

Dear friends—Statistics show a satisfactory increase in the output of cheese and butter factories. Makers are certainly "doing their bit."

### Postal Card Reports

Correspondence Invited.

#### PRINCE COUNTY, P. E. ISLAND.

RICHMOND, Aug. 6.—Farmers are busy haying. Hay is an average crop when looks poor. Oats promise to be the biggest crop. Turnips and turnips look well so far. Bugs are plentiful. Pork green shells for 7c a lb. Cheesemakers are doing well. The patrons anticipate big prices. Milk price and fat cattle command big prices and record prices. Butter is worth 32c; eggs, 32c; oats, 75c; potatoes, 51c—J. D. M. L.

#### PRINCE COUNTY, P. E. I.

KENNINGTON, August 13.—Haymaking is about finished and is above the average. The grain crop is above the average. Wheat is nearly a failure. Pastures have had a lot of dry weather till haymaking, when the grass was very promising. Horses are still fat but are thinning out the turnips considerately. T. G.

#### KINGSTON, P. E. I.

HERMANVILLE, Aug. 7.—Splendid crops all around. The wheat crop has been large and promises an excellent harvest. The barley crop is very good and getting non too much rain and sun and as a consequence the late sown grain is in excellent condition, in the rapidity with which the blades are above the ground. We have not any too much well-drained soil. Pasture crop prospects for all-round good crops (grain and turnips) were never brighter at this date than they are now. The potatoe rotation promises an immense crop. Hay has been made with the hand teams the last ten days on account of the wet weather. Hay however is growing, and the crop now being raised is excellent. The sheep are being paid in Soudis for washed wool. The unscrupulous carmen paid us 12c per lb. for the sheep. For which we thought was ridiculous. Good quality sheep will shear five lbs. washed wool, at 8c per lb. The cost of raising a lamb is more than the cost of keeping a sheep and winter fencing included. There is no money to be had for the purchase of \$5 lambs in the fall the potentiality of a breeding ewe is hard to comprehend.—J. A. M.

#### RICHMOND CO., QUEBEC.

DANVILLE, Aug. 14.—Hay-making is well on the way and a very heavy crop will be secured. occasional heavy rains. Grain will be an average crop and vegetables look well. Pastures are doing well. Cattle are looking well. The weather is rather below the average. Butter is 40c and oats the same 26c. Beef and pork prices are still high.—M. D. B.

### FIVE YEAR CUMULATIVE RECORD

EDETON FARM AND DAIRY—Giffie Goat, a black and white cow owned by completed a five-year cumulative Advanced Registry record.

March 17, 1907  
Giffie was born March 1, 1911. The following records show her five year Cumulative record. Giffie's average of 12056 pounds of milk, 87.7% butterfat, and year's record of 21,120 pounds milk and 1,800 pounds butter. Several other heifers of this breed were freshened in September, and will then be entered in the E.O.P.

At the head of the Jersey herd is the excellent three-year-old bull, Brampton Genetics Heir, 5099. Some very promising young bulls are now being seen at the University farm. Chief among these young things is the heifer Golden, Wilton Second, 5094, calved December 1916. Golden, the cow Golden, Wilton Second, 5094, calved December 1917, also an excellent young bull calf from the new Sultan Third, calved December 1916. Gipsy Eureka, freshened May 30, 1917, is the entries in the E.O.P. Her record so far is satiation.

Our intentions are to improve the dairy herds by using good sires and retaining the heifer calves. Young bulls will be used in the breeding in the Dominion. This spring the University will offer the sheep and swine departments. Our new record consists of excellent representatives of the Hampshire, Shropshire, Suffolk, Oxford and Leicester. In the swine division, we have Doric-Jersey, Lancashire, Cheshire, and Yorkshires. Surplus breeding stock will be sold to the farmers of the Province. The University farm, the University farm, will be used for judging purposes, along with the fat barrows and wethers. Farmers competing with the judging work, fat steers are necessary. It will be given the importance they deserve. The University farm are doing well, all stock on the University farm are doing well. There has been demand for breeding stock of all kinds.—A. Dowell, Professor of Animal Husbandry.

### UNIVERSITY OF ALBERTA HERDS.

EDETON FARM AND DAIRY—In our herd at the University of Alberta, we have the good services of the Holstein and Jersey breeds. The cows used for judging purposes in connection with the annual animal husbandry department, as well as for selection.

Hilda White, Johanna Lass, 7279, is a cow of excellent Holstein type, and a record of 420.3 pounds milk and 22.23% butterfat. Her record is 15,479 pounds milk and 790 pounds butter. The two-year-old Holstein heifer, Rose-

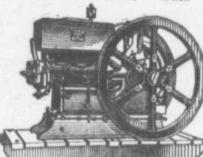
bud Mutual Dr. Kol, 37829, is freshened June 23rd, 1917, and is now producing present indications she is in milk in mature form, come well up to your dam's pounds milk, 87.7% butterfat, and year's record of 21,120 pounds milk and 1,800 pounds butter. Several other heifers of this breed were freshened in September, and will then be entered in the E.O.P.

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### Brantford Kerosene Engines

1½ to 60 H. P.  
Stationary, Mounted, Traction



These engines are the perfected product of years of study and experience with Internal Combustion Engines. They have demonstrated success on thousands of farms throughout Canada. Get one this season and let it work for your hired man. It's a power for work and the running cost is little, as it runs on coal oil.

We also manufacture a full line of Grain Grinders, Saw Frames, Pumping Engines, Traction Engines, Concrete Mixers, Windmills, etc.

Catalogue of any line mailed on request.

**GOULD, SHAPLEY & MUIR CO., LTD.**

Brantford, Winnipeg, Regina, Calgary

### BALED SHAVINGS

We have a few cars of baled shavings at the rate of \$2.00 per ton. Ready for immediate shipment. Advise farmers to take them in now, as they will not be available next winter.

**THE NICHOLSON LUMBER CO., LTD.**  
Burlington, Ontario.

### WE WANT TO DEMONSTRATE ON YOUR FARM

We will send a Gilson Engine, any size, without charge, to any responsible farmer in Canada to try out on his own farm at his own work. Write for further particulars of our free "hal offer, catalogue and special introductory prices.

**GILSON MFG. CO.**

LTD.  
267 York St., Guelph, Ont.

### The Surest Way

To sell your surplus stock is through the live stock columns of Farm and Dairy. The cost is little and the results certain. Send in your ad.

## Peter Hamilton Carrier Silo Filler and Feed Cutter

If you have a gasoline engine, why not fill your own silo and cut your own feed? We have a machine which your engine will run and it will do all the work. Please answer all your feed-cutting requirements.

**PETER HAMILTON** machines have tremendous strength and great capacity. They are built to last. They are simple in a day, and because of their shearing method of cutting only a small amount of power is required.

**Free Booklet** There are many good points in connection with these machines. Please write you to write for our free booklet describing them.

**Peter Hamilton  
Company, Limited  
Peterborough, Ont.**



### REGISTERED YORKSHIRE PIGS

Orders booked now for delivery, middle of September. Only a few left. Write at once. Price \$10.00, six weeks old.

**A. O. KERR, NORTH GORE, QUEBEC**

### DO YOU WANT REGISTERED HOLSTEIN COWS?

Write to-day to  
**J. Alex. Wallace, Secretary,  
Norfolk Registered Friesian Breeders'  
Club, Simcoe, Ont.**

100 HEAD—Cows, Heifers, Heifer Calves, Bulls, Bull Calves.  
Tell us the class you want—we have them all—100% values.

**TAMWORTH**  
Young Sows and Boars from several litters just weaned.  
Heralds Farms, Beamsville, Ont., Niagara District.

**WANTED**  
Live hens, poultry of all kinds.  
Write for price list.

**WALLER'S**  
713 Spadina Ave. - Toronto

**BONE SPAVIN**  
caused by Fleming's Spavin and Ringbone Powders. Cure old the blemish. Full price refunded if it fails to cure either Bone Spavin, Ringbone or Soreness. Farnham's Pocket Veterinary Adviser sent free on request.

**FLEMING BROS., CHEMISTS**  
83 CHURCH ST., TORONTO, ONT.



### the Price of Metal

Guaranteed 15 Years.

Four-ply Rock-Faced Pure Asphalt Roofing, green or red. One-third the price of Galvanized Iron. Guaranteed 15 years. Standard August and September price, \$45 per square.

Send for Free Samples.

**THE HALIFAX CO'Y, LIMITED**  
Factory Distributors,  
HAMILTON - CANADA

## FARM AND DAIRY

August 23, 1917.

### OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM JULY 1 TO JULY 31.

#### Mature Class.

1. Lady Waldorf Pietje, 2278, 5y. 4m.; 772 lbs. milk, 28.31 lbs. fat, 35.39 lbs. butter.

2. Johanna Ruth Lorraine 2nd, 11691, 6y. 6m.; 772 lbs. milk, 24.16 lbs. fat, 30.20 lbs. butter.

3. Daisy Gerben Kornykova, 18715, 6y. 11m.; 631.0 lbs. milk, 22.36 lbs. fat, 27.88 lbs. butter.

4. Bettina, 14301, 8y. 6m.; 294.7 lbs. milk, 20.60 lbs. fat, 26.25 lbs. butter.

5. Octavia Mercena Pieterje, 23923, 5y. 3m.; 558.8 lbs. milk, 18.19 lbs. fat, 24.42 lbs. butter.

6. Hillcrest Pontiac Duchess, 27714, 5y. 11m.; 631.0 lbs. milk, 17.52 lbs. fat, 21.30 lbs. butter.

7. Fjelje Young, 21818, 6y. 11m.; 114.0 lbs. 484.3 lbs. milk, 16.72 lbs. fat, 20.77 lbs. butter.

8. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

9. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

10. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

11. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

12. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

13. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

14. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

15. 14-day record: 6y. 11m.; 94.0 lbs. milk, 21.57 lbs. butter, 39.47 lbs. butter. Geo. Smith, Peterborough.

16. Madam Poehl Pauline, 16291, 5y. 11m.; 558.1 lbs. milk, 17.40 lbs. fat, 21.76 lbs. butter.

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## Market Review and Forecast

TORONTO, Aug. 20.—A preliminary estimate of the yield of fall wheat, hay and clover has been issued by the Canadian Wheat Board. The total yield of fall wheat for 1917 is estimated at 17,816,000 bushels from 899,200 acres, or 19.5 bushels per acre. The average yield per acre was slightly higher than last year, but with a decreased acreage. Out of the total \$16,000 bushels, Ontario will supply the market. The total yield of hay and clover is placed at 1,000,000 compared with 14,637,000 tons in 1916. Only twice has this total yield of hay and clover been exceeded; that is in 1911 and 1916.

Throughout Eastern Canada, the spring grain crops have been harvested. Spring wheat may be above the average in yield and probably in acreage. Oats are still the largest crop, and some of the yields running as high as 70 bu. to the acre, while 50 and 60 bushels are common. Conditions for Western wheat are somewhat favorable at the first of the month. Rains and clouds have been pretty general throughout the prairie provinces, but will be a very short crop, and feed of all kinds, including hay, will be scarce in the Western provinces, both Eastern and Western Canada, harvesting in full swing. The prices for live stock are continuing to rise. Good draft horses in Ontario are bringing from \$125 to \$150 per head, increasing, owing to the falling off in pasture conditions, and keeping fairly well up for this time of year.

### WHEAT.

The Board of Grain Supervisors has prohibited trading in futures after Aug. 20. This year's price is the most interesting feature of the market. Winter wheat is at \$2.06. Old wheat is holding at the \$2.40 maximum and would go higher if there were no Ontario wheat, new crop, is yet nominal. \$2.50. Old Ontario wheat is quoted \$3.55 to \$4.00 for No. 2 and \$3.50 to \$3.85 for No. 3.

### CORNFLOUR GRAINS.

The coarse grain market is at a standstill as buyers are holding the new crop and are unwilling to pay present prices. Western oats are now down to 70¢. At present quotations are as follows: Oats, C.W., No. 2, 77¾¢; No. 3, 76¢; feed barley, \$1.35.

### MILL FEEDS.

All feeds are climbing steadily upward, with the exception of middlings: Shorthorn, \$45; bran, \$35; middlings, \$27 to \$40; good feed flour, per bag, \$2.50. Milled corn, \$35 to \$37; shorts, \$40 to \$43; middlings, \$40 to \$50; moultrie, \$60 to \$65.

### HAY AND STRAW.

No. 2 old hay is quoted on the track, Toronto, at \$1.00 per ton, and \$1.10; Montreal, \$2.00, cut and \$0.90 to \$1.10; straw, in car lots, is quoted at \$7 to \$10.

### EGGS AND POULTRY.

No developments of note have occurred during the week, the tendency being however, for prices to advance. Eggs are very scarce, and what little have come forward have been of poor quality. Supplies have been the

highest on record, but more signs are now coming forward; 3½ to 4¢ per dozen at country points are the prevailing rates. The Montreal market has been somewhat steady, and the prices have been paid 4¢, egg circle stock bringing a cent or two more.

A little more fresh dressed poultry is being marketed, and what is arriving is in poor condition. With the return of the flocks, however, the poultry will no doubt have a better chance to flesh up for the fall market. The most recent report is that the market is the optimistic report on the outlook of the United States corn crop. This should help the poultrymen, who are now paying such high prices for poultry. Quotations:

	Lbs. weight.	Dressed
Chickens, spring	30 to 35	to 40 to 45
Hen under 5 lbs.	16¢ to 20	to 25
Hen over 5 lbs.	18¢ to 20	to 25
Ducks .....	16¢ to 20	to 25
Ducks .....	16¢ to 20	to 25
Ducklings .....	14¢ to 20	to 25
Turkeys .....	16¢ to 20	to 25

### DAIRY PRODUCE.

The strong feeling which developed in the cattle market about three weeks ago was not entirely removed by the last week. Shipments show a slight falling off, due, no doubt, to the failing of markets in all but a few states. The prices for live stock are continuing to rise. Good draft horses in Ontario are bringing from \$125 to \$150. Milk production is increasing, owing to the falling off in pasture conditions, and keeping fairly well up for this time of year.

### WHEAT.

The exports of cheese during the past week have been large, and on the whole market has been active. The total receipts since May 1st show a decrease of 265,000 boxes. Buyers are anxious to buy cheese as closely as possible to the market price, although not by the fixed prices. Cheese new largely is quoted at 32¢; twins, 25½¢; old, large, 30¢; choice dairy prints, 36¢ to 37¢; ordinary dairy prints, 33¢ to 35¢; bakers', 30¢ to 32¢.

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### CHEESE BOARD SALES.

Madoc, Aug. 15.—420 boxes sold at 21½¢.  
Markstock, Aug. 15.—Two factories made offering; 2½c was accepted.  
St. Paschal, Que., Aug. 14—700 boxes sold at 21½¢. 36 packages of butter at 40¢.  
Mont Joli, Que., Aug. 17.—300 boxes cheese sold at 25½¢. 260 boxes butter at 40¢.  
Listowel, Ont., Aug. 17.—2,875 cheese sold at 21¢.  
Wainfleet, Ont., Aug. 17.—1,355 white and 160 colored sold at 21½¢.  
Picton, Ont., Aug. 17.—1,820 boxes sold at 21½¢.  
Galt, Ont., Aug. 17.—1,500 boxes sold at 21½¢.

### LIVE STOCK.

Toronto market has had little furnished in the meat department, but on Aug. 20 was paid last week fed and watered. The market continues strong. Cattle advanced to 25¢ during the week; choice killifers were offered. Micks and heifers with ready sale. Sheep and lambs are available.

Choice heavy steers, \$11.75 to \$12.25  
Butchers', choice handy 11.25 to 11.50  
do good ..... 10.25 to 10.50  
do common ..... 8.25 to 9.50  
Butchers' bulls, choice ..... 7.50 to 8.25  
do good ..... 7.25 to 7.75  
do medium ..... 6.25 to 7.25  
do common ..... 5.25 to 6.25  
do good ..... 7.00 to 7.50  
do medium ..... 6.25 to 7.00  
Porkers, 10 to 12 months, 7.50 to 9.25  
do medium, 700 to 800 pounds ..... 7.75 to 8.25  
Steers, 10 to 12 months, 8.00 to 8.50  
do medium ..... 8.00 to 8.50  
Canners ..... 5.60 to 6.00  
Matured good to choice 9.00 to 12.00  
do common ..... 8.50 to 9.50  
Springers ..... 4.00 to 12.00  
Cows, real, choice ..... 14.00 to 16.00  
do common ..... 11.00 to 13.00  
do grass ..... 6.00 to 7.00  
do common ..... 6.00 to 7.00  
Spring lambs, ewes ..... 14.00 to 16.00  
Sheep, yearling, choice 10.00 to 11.50  
Sheep, ewes, choice ..... 8.50 to 9.75  
do common ..... 6.00 to 7.00  
do culs ..... 4.00 to 5.50  
Hogs, fed and watered, 15.00 to 20.00  
do old cars ..... 15.00 to 20.00  
do f.o.b. ..... 15.00 to 20.00

We have the only two sons in Canada, of the 45-lb. bull, Ontario James King—only mature son of the world's most famous sire, King James King, and a 30-lb. calf, whose dam and two great-grand-dams average 35 lbs. each. Both bulls have won all honors at both Toronto and London Exhibitions, 1916. They are now in the fall fair, and we have decided to give \$35.00 a head to the man that buys the 1917 winner.

Don't miss this opportunity. Act quick, and plan to spend a day at Major E. F. OSLER, Prop., Bronto, Ont. T. A. DAWSON, Mgr.

### The Value of Pigs Increased

20%

During Last Year

## GET A Pure Bred Pig Free

It's quite easy for you to call on or telephone a few of your neighbors. Tell them about Farm and Dairy. Tell them how useful it has been to you, and how much valuable help you get from it. Show them it's the cheapest and best help they can get. Tell them of its fight for better dairy condition, greater cooperation among farmers, and more money for them. Get their subscriptions.

Send only twelve new yearly subscriptions at \$1.00 each and we will send free of charge to you, a pure bred pig. Your own choice as to variety. Pedigree for registration. If you don't want the pig, or cannot get a subscription, send in all you can get, and we will pay you a cash commission on each subscription sent in. Right now is the time to begin. Say to yourself NOW, "Here is an opportunity for me and I am going to take it."

### Circulation Department

## FARM AND DAIRY - Peterborough, Ont.

Further information and sample copies sent on request

### "SOMETHING CHOICE"

King Hengerveld, of Oak Park, born March 8, 1917, half black and white, a good individual and very healthy. His dam and sire are tuberculin tested. Sir-Jakobus Dutchess Hengerveld, born Oct. 20, 1916. His sire is the Canadian Test, a son of Sir-Jakobus and Queenie, a 34-lb. boar, born in 7 days. His dam has just completed a record of 467 lbs. with 27.41 lbs. butter on grass with an average test of 4.69 per cent. fat.

Queenie Colanitha, a yearling cow with great capacity and a record of 458 lbs. in milk, making 18 lbs. butter and an average test of 4.66 per cent. fat. The average test for the two newest sires of this bull is 4.77 per cent. fat. Write at once as he is a bargain. Correspondence solicited.

W. G. BAILEY OAK PARK STOCK FARM R.R. NO. 4, PARIS, ONT.

### LAKEVIEW HOLSTEINS

Are still in the test. The latest Holstein year book shows that they held a good position for both sires and dams. Both have won all honors possible at both Toronto and London Exhibitions, 1916. Now we are again showing very richly bred young fellows that are looking forward to the fall fair, and we have decided to give \$35.00 a head to the man that buys the 1917 winner.

Don't miss this opportunity. Act quick, and plan to spend a day at Major E. F. OSLER, Prop., Bronto, Ont. T. A. DAWSON, Mgr.

### VILLA VIEW OFFERS FOR SALE

Villa View, the home of King Segis Adonis, Calamity and Dutchess Pontiac Colanitha, the two sires that are backed up by more dams that have held world's record than the herd street of any other herd in Canada. We have a few Alcarita bulls for sale at reasonable price. ARBOGAST BROTHERS, Sebringville, Ont.

### HOLSTEINS

We have the only two sons in Canada, of the 45-lb. bull, Ontario James King—only mature son of the world's most famous sire, King James King, and a 30-lb. calf, whose dam and two great-grand-dams average 35 lbs. each. Both bulls have won all honors at both Toronto and London Exhibitions, 1916. They are now in the fall fair, and we have decided to give \$35.00 a head to the man that buys the 1917 winner.

R. M. HOLTY, R. R. No. 4, PORT PERRY, ONT.

### Registered Holsteins

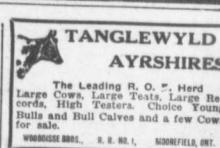
Bulls from one month to 17 months old for sale. All from our grand herd's Echo Segis Payne, whose sire is the world's wonder cow, that has just made a record of 50 lbs. in 7 days. JOHN M. MONTLE, Sunnyside Stock Farm STANSTEAD, QUE.

### Every Farm Should have an "Ayrshire"

## The Cow For Profit

Rich milk—high in butter fat—good feeders.

WRITE W. F. STEPHEN SECRETARY  
CANADIAN AYRSHIRE BREEDERS' ASSOCIATION  
BOX 508—HUNTINGDON, QUE.



### AYRSHIRES

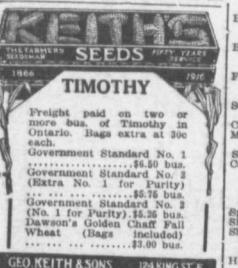
The Leading R. O. P. Herd  
Large Cows, Large Teats, Large Re-  
cords, High Testers. Choice Young  
Bulls and Bull Calves and a few Cows  
for sale.

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FOR SALE—A city dairy and creamery, modernized and remodeled, located in prosperous country. Apply Box 52, Farm and Dairy, Peterboro.

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Young Stock for sale, always on hand (both sexes), from high-testing heavy producers. Good udders and large teat a special feature of these animals. Three fine young sires ready for service. Get particulars of these if you need a sire. R. T. BROWNLIE, Peach Blow Farm, HEMMINGFORD, Que.



Freight paid on two or more bushels of Timothy in Ontario. Bags extra at 30¢ each.

Government Standard No. 1 ..... \$3.50 bushel  
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Government Standard No. 3 (Extra No. 1 for Fury) ..... \$3.75 bushel  
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Dawson's Golden Chaff Fall Wheat (Bags included) ..... \$3.00 bushel.

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FARM & DAIRY

Peterboro

# !! YOUNG MEN ON THE FARM !! WHO CANNOT GO TO WAR !!

**Read This Announcement --- It Will Interest You**

**Canada must have greater Agricultural Production**

**Canada needs men trained in the best Agricultural Practices**

You will be of greater value to your country and to yourself if you will gather all available information regarding your own business as a farmer. The result is bigger crops and bigger profits. You can get this information during the fall and winter months at the

## Ontario Agricultural College, Guelph

The Agricultural College belongs to the farmers of Ontario. It is a special school maintained by the Ontario Government where agricultural investigation is carried on from one end of the year to the other, where young farmers may acquire the best practical and scientific knowledge concerning their chosen occupation.

### EVERY FARM BOY WITH ONLY PUBLIC SCHOOL EDUCATION WHO IS SEVENTEEN YEARS OF AGE, CAN GO TO COLLEGE

#### THE COLLEGE TERM.

The College opens September 21st, 1917, and closes April 13th, 1918, with two weeks holidays at Christmas. Most of the hardest work on the farm is completed before the college opens and continues in the spring before seeding commences. They are free all summer to work at home and can then put into practice the information they have gathered at the college.

#### COURSES.

The Two-Year Course is designed particularly for young men intending to be good practical farmers. It includes instruction in all farm work; care and culture of all farm stock; farm dairy; fruit and vegetable growing; farm surveying; farm mechanics; making; farm keeping; carpentry and blacksmithing; veterinary treatment; soils and fertilizers; keeping; extensive cultivation and plant propagation; introduction of weeds; farm forestry; poultry raising; English Literature and Composition; public speaking; education for life on the farm, but also "stirs up" young men to observe, read, and think for themselves. At the end of the first year the Associate Diploma is awarded.

The Four-Year Course for the degree of B.S.A., which is conferred by Toronto University, is simply the two-year course with the addition of two years of advanced study. Matriculation standing is not necessary if you wish to obtain the degree. Students who have obtained 60 per cent general average and 60 per cent on English subjects, at the second year, enter the Third Year. The Third and Fourth Years make a more scientific study of Agricultural problems and prepare

students for work of a scientific, as well as of a practical nature. Graduates of the college are required to become farm managers, district representatives, agricultural teachers, agricultural journalists, etc.

#### EXPENSES.

In order to encourage farm boys to attend the college and to put this opportunity within the reach of the average young man, the Ontario Government gives a share of the expenses of the institution, and has fixed all college fees at the lowest possible figure. You pay for yourself. Tuition fee for one year, \$20.00; Board and room at \$4.00 per week; room estimate, \$100.00; tuition and railway fare, etc., is \$16.00. Can any other college give a year's education at this figure? It need not cost that much the first year. There is no opportunity to work for extra money, say \$25, by work on the farm.

#### THE COLLEGE AND FARM.

The Agricultural College and Experimental Farm is a more extensive institution than most farms. The land property consists of 709 acres. Over one hundred acres is used for experimental purposes. The farm is divided into plots arranged to test different varieties of all manner of farm crops and for creating new varieties by plant breeding. A large number of plots are set aside for Ontario varieties. This farm property consists of 500 acres. This is used largely to raise grain, which is necessary to have at an agricultural college. The College buildings consist of the Main Building, dormitory, lecture room, and audience and lecture hall buildings, where the work of the different departments is carried on. A staff of over sixty professors, lecturers, and investigators are maintained for teaching and for scientific re-

search. The entire property represents an outlay of about two million dollars.

#### THE STUDENT BODY.

This college is favorably known all over the world, and as a consequence many students are recruited from among the students. In 1914, there were students from eighteen different countries. The Ontario boy is in close association with those from every province of the Dominion. The result is a broadening of ideas. Education is not confined to the student, but all students and residence associations. The average age of the O. A. C. student is 22 years, though it may vary. Many students do not come to the college out of school too long. In the first year a good deal of elementary work is reviewed for the sake of those who have had little opportunity for education. We want young men to take advantage of the instruction given at this school, and we make it as easy as possible at the beginning.

#### STUDENT ACTIVITIES.

The Athletic Association provides recreation in all branches of sport and assists in keeping the student mind and body in a fit condition for study. Football, baseball, tennis, basketball, gymnastics, swimming, etc., are popular pastimes. A large, well-equipped gymnasium, a fine camera room, and a library are at the students' disposal. The Y. M. C. A., Literary Society, and Philharmonic Society assist in the religious and social life of the students. The Students' Cooperative Association operates the canteen, the residence, and a store which supplies books, stationery, and food at reduced prices. It also controls and prints the official college magazine, "The O. A. C. Review."

## COLLEGE OPENS SEPTEMBER 21st, 1917

(Closes April 13th, 1918.)

Arrangements may be made to admit you a little later if it is impossible to come on September 21st.  
**A COLLEGE CALENDAR, GIVING FULL DETAILS OF COURSES, EXPENSES, AND REGULATIONS WILL BE MAILED ON REQUEST.**

Address communications to **G. C. CREELMAN, B.S.A., LL.D., President.**