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COUNTRY LIFE



Toronto, Ont., August 23, 1917



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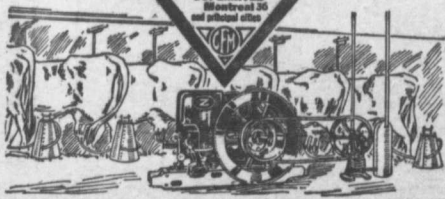
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What to Feed

THE selection of poultry feeds is a varied problem nowadays. Wheat and corn are both about \$2 a bushel for good grades. Even wheat 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 ranges (as they are on most farms), the following ration which is to be fed in hoppers, kept before the birds constantly:

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, so those who want eggs had better put some down now while they are comparatively cheap. Do not use oats, bran, salt or such mediums; moreover, the patent 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 "saturated" limewater, is drawn off and poured over the eggs, previously placed in a crock or watertight barrel.

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 limewater should be drawn or 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.
- Although not necessary to the preservation of the eggs in a sound condition a temperature of 40 degrees F. to 45 degrees F. will do much materially assist towards retaining good flavor 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 15 seasons—do not show any benefit to be derived

therefrom; indeed, salt frequently imparts a lime flavor to the eggs, 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 'heives

By A. P. Marshall.

AUGUST, perhaps, sees more losses from the prowling 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 dusk and dawn, 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 made 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 chickens in two consecutive days. He stated 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 sneaking across the front lawn a big black cat with a fair sized chicken in her mouth. Getting hurriedly into clothes we ran down in the hope of locating the cat. To our 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 had not seriously injured the chicken although it required a little nursing and rest to bring it around again. With one leg double 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 on 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 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 bathing powder can with a few small 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 uninhaled 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 as in the past.

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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 therefor, 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.

THE 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. Eckles, 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 when cows calve at 12 month intervals as is usual in herds not tested for Advanced Register. It gives the additional

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-day, loses a

(Continued on page 7.)



Purchasing Winter Concentrates

THE 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 in order of cheapness are: Cottonseed meal, dried distillers' grains, 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' grains, 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.

Why Do Business Men Fail at Farming?

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

WHY do so many men who have succeeded in business come to grief when they attempt farming? This question is often raised when 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 so far hidden behind the losses that the business man recognizes defeat and fails sensibly. The man who has made a start bare handed 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-

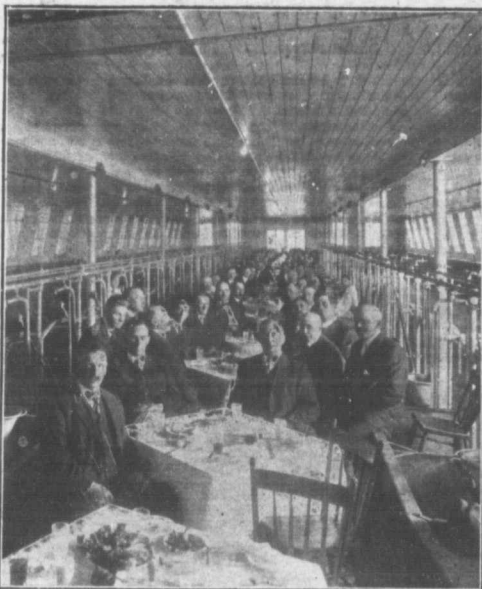
ness men, and in turn make a try at farming and fail. If he wants to give all his boys hundred-acre farms such as he got, he will sell out his farm and go to some new country where land is cheap. There his boys may make a success of farming, not through the sale of crops, but through increase in their 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 falls and moves back to earn an easier living in the city, and at last finds peace by keeping chickens in his back yard.



At Lunch With Ontario Veterinary Association at Manor Farm, Clarkson, Ont. Dr. Williams, of Cornell University, one of the world's foremost investigators of breeding diseases, came to Ontario a couple of weeks ago at the invitation of the Ontario Veterinary Association and gave a demonstration in diagnosing breeding trouble in dairy cows. This demonstration was held at the farm of Mr. Gordon H. Gooderham, and at noon the visiting veterinarians and veterinary students were the guests of Mr. Gooderham at a luncheon served in the model dairy stable at the Manor Farm, as seen in the illustration herewith.

est 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 willed appearance. And by the time he has paid his

The Threshing of Seed Grain

Precautions To Keep the Grain Clean

By C. E. Saunders, Dom. Cerealist.

AS 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

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Threshing the Bean Crop Care is Necessary to Prevent Splitting

Howard Leavens, Bloomfield, Ont.

As 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 hardwood board 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 flails. 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,

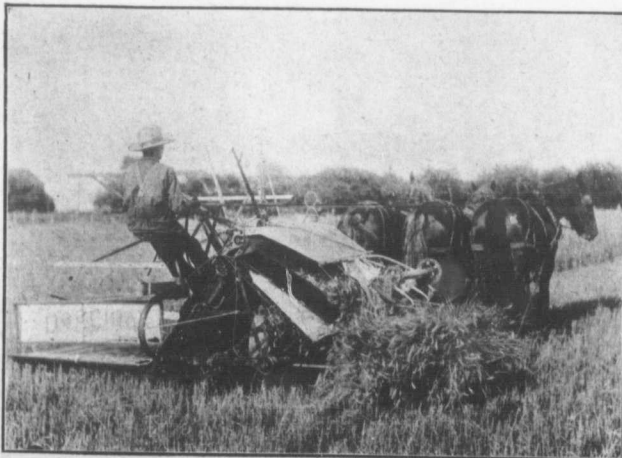


Even the Veterans who retired years ago from Agriculture's Firing Line are back in the fields this Year.

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

WHREAD 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, shrivelled 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.



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HORTICULTURE

August in the Garden.

DO not let the garden land bake dry and hard. Cultivate often enough to keep up a good dust mulch. The results in the growth of your plants will more than repay you for any effort spent in this way.

A sowing of early-variety beets in the first part of August will provide an ample supply of young, tender beets for fall eating, at a time when they are a delicacy.

Harvest the early crop of cabbage this month, and provide for future fertilization by planting seeds of rye, vetch, or other legumes. These can be turned under in the spring, to make a green fertilizer.

Onions must be harvested this month. Give them a chance to cure outside on the ground, then store them away in open crates in some cool place.

The tops should be cut from the apparatus plant in the last part of this month, as the ripening seeds will fall and germinate in places where they do not belong, unless this is done. In removing tops, cut off as close to the ground as possible. If left sticking up, are likely to scratch your hands when harvesting the next year's crop. Destroy the seeds by burning the tops.

Fruit Crop Report

A REPORT issued by the Fruit Branch on August 14th, gives the fruit prospects for Canada as generally poor. The Annapolis valley in Nova Scotia will have a larger crop than last year. The average crop for the past five years has been 737,000 barrels. This year the percentage of this average for the different varieties is as follows: Gravenstein 90, Ribston 70, King 90, Blenheim 110, Fallster 110, Baldwin 100, Stark 105, Nonpareil 100. The New Brunswick apple crop is less than last year, but quality promises to be fair. Small fruits have given a light crop, but prospects are good for vegetables. Apples in Quebec have been badly affected with scab; 40 per cent. of last year's crop will be the most that can be harvested.

Scab has also been very prevalent in the Ottawa and St. Lawrence Valley. Only well sprayed orchards will have any No. 1 fruit. The crop through this district will run about 35 per cent. of normal. The apple crop throughout the Niagara district is very light, much damage having been caused by the apple worm. Peaches will yield about 50 per cent. of normal crop, as will also grapes. Pears and tomatoes will both be short crops. Throughout the Western part of Ontario the apple crop only promises from 10 to 15 per cent. normal. No peaches will be harvested in this district. The Georgian Bay district will have a 25 per cent. normal apple crop, but with the severe attack of scab, not more than 25 per cent. will grade No. 1. Spies, Baldwin, Ben Davis and Russet apples are particularly light.

Conditions in British Columbia are not so favorable as early reports indicated. Apples will likely be of small size on account of lack of water for irrigation. The total crop is not expected to exceed that of last year.

Orchard and Garden Notes

KEEP the tomato vines on the stakes trimmed.

Save seeds of all plants possible. They will be useful next year. Late cabbage and celery need rich land or must have fertilizers worked into the soil.

Iceles and Charter radishes may be sown now for fall use. They will do well during the autumn.

Keep the ginning machine going. We must save all the products possible for the next year.

Celery will require some water this month if the weather is dry. It pays to keep it growing till ready to harvest.

Do not let sweet peas suffer for want of water. Thoroughly soak the ground and then cultivate it as soon as dry enough.

Cut out the old canes of raspberries and burn them as soon as the fruit is picked. This will get rid of many insects.

Liquid manure is of great value for hastening the growth of plants if applied properly. Use on roses, panicles, etc. It is made by putting well rotted manure in a tub or barrel and filling it with water. Pour off and use the water when the color of tea.

Carbon bisulphide put on cotton and pushed well into the holes in which tree borers are at work will destroy the insects present. The cotton is put in, cover the hole with grating wax, clay or putty.

Wayside Cleanings

By "Sunburst"

The Weed Problem

WE have mentioned before in this column the weed problem, but it never before faced us in this an overwhelming sense as it has this last month or so. Unfortunately, we have our corn on the dirtiest piece of ground on the whole farm, the pre-dominating weed being switch grass. All who are acquainted with this weed (which, methinks, will include nearly everyone living on a Canadian farm) can imagine what the field would look like after the seven or eight days' rain we had in July.

Since the fine weather has come this field has been our front line of activity. We early decided that a thorough hoeing would be necessary, consequently went in search of men, offering as high as \$3 a day. We got them. Some stayed one day, others longer, and some only a few hours. We had as many as six hoeing at one time, and the next day not a man. Finally several of the women living in the town nearby asked for a chance to earn a few dollars. We had, however, learned wisdom by our former experience, and bargained with them by the row. Two of these ladies are with us yet, and are earning, at 25 cents a row, from \$2 to \$2.50 a day. They do their work equally well as the men who were receiving the three dollars a day, and I am almost ashamed to admit that some of these high-priced fellows charged us as high as 50 cents a row for doing the work. I never was much in favor of conscription, but almost I am persuaded that we would not miss some of our men if they were sent to the front as much as we think we would. Some of our Canadian women would surely fill their places with credit. This corn is growing nicely, however, but it is a serious thing to be built if no more serious thing happens it.

Does Spring-Sown Pasture Pay?

This is a question I have been asking myself all summer, especially when I look at the cows. I know how deep in this grain, and calculate how many bushels of grain I might have sold from this field at the prevailing high price.

When we consider only the present monetary returns we may have to answer this question in the negative, but the returns are not all in yet, and the final results may change the balance to the other side of the account.

It is impossible with any degree of accuracy to say how many pounds have given a seasonally high value upon it.

We have figures from at least 100 herds. These were on the average 1,850 lbs. a week, or the sown pasture 2,148 lbs. a week. A \$1.80 an eight received by the gain of \$5.66 however, that were falling and to be fair the pasture this should be the second new pasture milk over the turns have an seed work and we still were out waiting to the balance of

The Value of

Of

(Continued)

certain amount cause able in five of fifteen month (ing), whereas, adopted a cow probably produce. Moreover, cow would produce years than good many milk fact that so it would, I believe test were adopted would be a different principal use certainly the produce milk. To make a cow the greatest amount cost during her own a 300-lb. vine, because period which is for the above. For the above now already stated to the R. treat.

Strongly F

By M

IT is indeed ordinary battle, who come of his the support of that the idea of being of 300 dling to the front vently prophesied official test rules recognize record moment will the Ayrshire be and the income be greatly reduced.

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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 fair to the spring-sown pasture this should be added to the gain. The second and third weeks on the new pasture still show an increase of milk over the week previous to being turned on it. Yet the increase returns 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 it 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 her usefulness, because she can produce only 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 test their cows, because of the fact that so much time is taken up would, I believe, do so if 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 dairyman 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 convincing, 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.

It is indeed very gratifying to the ordinary breeder of 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 prophesy that the moment our official test rules are so amended to recognize records for that period, that moment will the popularity of the Ayrshire be given 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 offspring 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, attested to by all 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

value of the milk. In my own experience I have often fed a cow as high as one pound of grain for each pound of milk. It is better it would be if, during the year, the cow could be resting and eating a calf, and again become a source of income rather than an expense.

A Change Unwise By J. W. Clise.

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

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and 30 day tests will, I believe, in time discontinue same as misleading, but for us to institute a 300 day test would mean that the average investor would not distinguish between a 300 and 365 day test and 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 shorts 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.

Farm and Dairy

AND
Rural Home

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PETER ORO AND TORONTO

"Read not to contradict and to converse, 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 families 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 secured at, paying all expenses and allowing a fair business rate for depreciation, the farmers who have netted five per cent. on their investment are the exception rather than the rule. Surely this is not extortionate? 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 necessity 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

UGLINESS is not a virtue. Usefulness and beauty may go hand in hand. Usefulness does not interfere with beauty, nor does beauty 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, but 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 burned 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 soil 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 in 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.

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CITY MILK SUPPLY

The Vancouver Milk Probe

VANCOUVER city milk producers were in attendance at a meeting held recently in the City Hall, Vancouver, when Mr. Moses Cotworth, who has been investigating the milk supply of the city for some time, gave the results of his investigations. Dealing with the retail end of the business, Mr. Cotworth stated that the net profits of local dairies handling 65 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, but it was pointed out that newspapers were liable to action for damages did they publish 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 87 1/2 cents a pound butter fat, instead of 75 cents. Mr. Sherwood, the manager of the Producers' Association, said that his sales to the condenseries had netted four cents a pound butter fat more than the prices 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 would sell their milk. The association represented an investment of \$15,000,000 and controlled about 12,000 head of dairy cattle. The idea of the public having to pay more for milk because of the formation 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 into business, and that possibly next winter Vancouver consumers might have had to eke out their requirements with milk powders and water. While they were primarily looking after the interests of the farmers they were fully alive to the fact that the Vancouver market was 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

FALL-sown wheat and rye should be treated with formaldehyde to prevent stinking 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 is not only prevents the smuts mentioned, but probably increases yields by killing germs causing seedling blight and various imperfectly known diseases of grains.

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 baskets 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 sacks 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 sprinkling can until it is wet. It is then handled the same as if it had been dipped. A smut 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 smut 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 of each day to keep his silage from spoiling. Summer feeding is usually confined to the milking cows, and even they do not get one-half of their winter allowance. To take a couple of inches daily of 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 of being discarded, is to be thrown over onto the good ensilage and tramped 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

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

	1916.	1915.	Value.
Butter ..	83,824,176 lbs.	\$24,368,636	
Cheese ..	183,378,596 "	27,587,775	
Butter ..	82,564,130 lbs.	\$26,966,957	
Cheese ..	192,968,697 "	35,512,530	

The average price of butter in 1915 was 30 cents and in 1916, 33 cents. The average price of cheese worked out to average price of cheese in 1915 and 17 cents in 1916 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 87,235, whilst in Quebec the establishments numbered 1,984 and the patrons 79,145; so that the average total 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, 1,313 cheese factories, 10 combined factories (cheese and butter) and 16 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 157,920,636 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.

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Silos, Alpha Gas Engines, Alpha Churns and Butterworkers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER 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 Department:

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.—*Bruever.*

Winning the Wilderness

(Continued from last week.)

"IT'S very good," Hans murmured, licking his lips for more. "Wisky not so good 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 get Schmitt in der back and I only want Yacob. He send me der pen for sure yet next time. I hate Yon Yacob."

A little silence, then Hans murmured: "I didn't go to Kansas City. I come back to Gretchen's home by Little Wolf. I hide where I watch for Yacob. I shoot twice to be sure of Yacob, an' Schmitt, hid'n' in der crack by der root, get one shot." So I come to Yermany and enlist. Gretchen, she come too an' she stay der. Well! I help fight Boxer some. Mine Gott, forgiw me. I do once some good 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 singing in 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 dugged and filled up the graves into which their comrades were deftly heaped. The Russian and Siberian Cossack lunged their fallen ones in heavily and unfeelingly. The Bezglesses and Sikhs thrust their own out of sight as they were planting for an uncertain harvest. Each soldier from France who 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 dumping of bodies into the holes awaiting them. Then his heart grew big with something unspeakable as he noted how in all that irreverent and unsympathetic action the American and English soldier alone were serving as brother for

brother. In the long 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, this task is simplified as will be noted from the illustration. Then, too, the members of the family can sit at the water's edge and enjoy the scenery while the task is being performed.

American Infantry in the sweet and sacred strains of the beloved old hymn:

Nearer, my God, to Thee,
Nearer to Thee,
'Een 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 briefest 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 musket (bearing 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 see it.

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 Stars and Stripes ever 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 this ten days' campaign, the soldiers undressed and bathed themselves like Christians in the unchristian Petho, and on the next day, which was the Sabbath, they listened to the military chapel service. Six days they forged 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

them," 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 an August day, out between Green Castle and Bismarck down in Indiana," Binford suggested.

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

"Oh, kill him, Aydelot, he's worse than the Boxers. Don't you know I'm from Boston originally which is only a State of Mind?" Goodrich urged.

"No matter what state you are 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 Sun flowers Bloom."

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 word of they felt secure behind their centuries-old walls.

Thaine Aydelot was acustomed 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 foremaning 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 poured in torrents upon the camp. A terrific cannonade was being waged on 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 hub of the thunder a more dreadful cannonading could be heard, hour after hour.

Thaine knew that inside the walls the Boxers were heaving the "Commandment." And inside that Commandment he were yet alive, and his old teacher, Pryor Gaines. He wondered if the God of Battles that had led the armies all this long way would fall them now when one more blow might mean 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 striving for food and drink, frenzied with the smell of blood and the sight of water, could have raged with more ferocity 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 brought to aid him.

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The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, to ask questions on matters relating to these matters and to suggest subjects for discussion.

Watch Churning Temperatures

THIS is the season of the year when creamer-men 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 leaky butter with a poor body. It will not hold 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 creameries which make 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 creameries 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 churns his cream cool 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.

Paraffining Cheese

IT 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 until they are five or six days old when they should be paraffined.

We always have the paraffine very hot and dip the cheese as quickly as possible completely covering them, 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 uncleanly. 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 the 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 wheels and skims. The wax coat prevents or materially reduces the normal shrinkage during storage and distribution, it protects the surface of 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 storage as handsome as they could be. 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 very moist atmosphere or at too high temperatures. 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 cheesemakers at a very little cost. The paraffine is not expensive and the probable cost per 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 paraffined.—C. R. W.

Dairy states that 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. I. LAND.
RICHMOND, AUG. 6.—Farmers are busy haying and doing an average crop. Wheat looks poor. Oats prominent and the Maytag record. Potatoes and turnips look well record. Bugs are plentiful. Caris green sells for 75c a lb. Cheese factories are busy. Milk cows patrons anticipate big prices. Milk cows and fat cattle command big prices and a ready market. Butter is worth 12c, eggs, 35c; oats, 75c; potatoes, 11.—J. D. M. L.

PRINCE COUNTY, P. E. I.
KENSINGTON, August 13.—Haymaking is about finished and is above the average. The grain crop above the average. Wheat is nearly a failure. Pastures are good. We have had a lot of dry weather till haying, when we had 24 saved in good order, as the weather was very promising. Horses are still dull, but are thinning out the burnish considerably.—T. G.

KING'S COUNTY, P. E. I.
HURMANVILLE, Aug. 7.—Splendid crops all around. The wheat crop here is large and promises an excellent harvest. Our light dry gravelly soil is getting down too much of rain and moisture, is fairly "jumping" in late sown grain and the potatoes are shooting out and getting very rapidly in the water in rain in this locality on our naturally well-drained soil. Little or no insects or pests for all-round good. Potatoes probably were never bigger at this date than they are at the moment. Potatoes planted in winter, had some promise an immense crop. Hubs are made with the haying the last ten days on account of the wet. Hay, however, is growing and the crop now being cut is all the heavier for the wet weather. Being unprecedented price of 80c for good quality. Some of the best we thought we would see for 70c which we shipped will show five lbs. washed wool, but at 80c this would run be \$4. much more than the cost of keeping a sheep summer and winter, fanning included. There is money in sheep, fanning of 40c, 45c, 50c, 55c, 60c, 65c, 70c, 75c, 80c, 85c, 90c, 95c, 1.00, 1.05, 1.10, 1.15, 1.20, 1.25, 1.30, 1.35, 1.40, 1.45, 1.50, 1.55, 1.60, 1.65, 1.70, 1.75, 1.80, 1.85, 1.90, 1.95, 2.00, 2.05, 2.10, 2.15, 2.20, 2.25, 2.30, 2.35, 2.40, 2.45, 2.50, 2.55, 2.60, 2.65, 2.70, 2.75, 2.80, 2.85, 2.90, 2.95, 3.00, 3.05, 3.10, 3.15, 3.20, 3.25, 3.30, 3.35, 3.40, 3.45, 3.50, 3.55, 3.60, 3.65, 3.70, 3.75, 3.80, 3.85, 3.90, 3.95, 4.00, 4.05, 4.10, 4.15, 4.20, 4.25, 4.30, 4.35, 4.40, 4.45, 4.50, 4.55, 4.60, 4.65, 4.70, 4.75, 4.80, 4.85, 4.90, 4.95, 5.00, 5.05, 5.10, 5.15, 5.20, 5.25, 5.30, 5.35, 5.40, 5.45, 5.50, 5.55, 5.60, 5.65, 5.70, 5.75, 5.80, 5.85, 5.90, 5.95, 6.00, 6.05, 6.10, 6.15, 6.20, 6.25, 6.30, 6.35, 6.40, 6.45, 6.50, 6.55, 6.60, 6.65, 6.70, 6.75, 6.80, 6.85, 6.90, 6.95, 7.00, 7.05, 7.10, 7.15, 7.20, 7.25, 7.30, 7.35, 7.40, 7.45, 7.50, 7.55, 7.60, 7.65, 7.70, 7.75, 7.80, 7.85, 7.90, 7.95, 8.00, 8.05, 8.10, 8.15, 8.20, 8.25, 8.30, 8.35, 8.40, 8.45, 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44.45, 44.50, 44.55, 44.60, 44.65, 44.70, 44.75, 44.80, 44.85, 44.90, 44.95, 45.00, 45.05, 45.10, 45.15, 45.20, 45.25, 45.30, 45.35, 45.40, 45.45, 45.50, 45.55, 45.60, 45.65, 45.70, 45.75, 45.80, 45.85, 45.90, 45.95, 46.00, 46.05, 46.10, 46.15, 46.20, 46.25, 46.30, 46.35, 46.40, 46.45, 46.50, 46.55, 46.60, 46.65, 46.70, 46.75, 46.80, 46.85, 46.90, 46.95, 47.00, 47.05, 47.10, 47.15, 47.20, 47.25, 47.30, 47.35, 47.40, 47.45, 47.50, 47.55, 47.60, 47.65, 47.70, 47.75, 47.80, 47.85, 47.90, 47.95, 48.00, 48.05, 48.10, 48.15, 48.20, 48.25, 48.30, 48.35, 48.40, 48.45, 48.50, 48.55, 48.60, 48.65, 48.70, 48.75, 48.80, 48.85, 48.90, 48.95, 49.00, 49.05, 49.10, 49.15, 49.20, 49.25, 49.30, 49.35, 49.40, 49.45, 49.50, 49.55, 49.60, 49.65, 49.70, 49.75, 49.80, 49.85, 49.90, 49.95, 50.00, 50.05, 50.10, 50.15, 50.20, 50.25, 50.30, 50.35, 50.40, 50.45, 50.50, 50.55, 50.60, 50.65, 50.70, 50.75, 50.80, 50.85, 50.90, 50.95, 51.00, 51.05, 51.10, 51.15, 51.20, 51.25, 51.30, 51.35, 51.40, 51.45, 51.50, 51.55, 51.60, 51.65, 51.70, 51.75, 51.80, 51.85, 51.90, 51.95, 52.00, 52.05, 52.10, 52.15, 52.20, 52.25, 52.30, 52.35, 52.40, 52.45, 52.50, 52.55, 52.60, 52.65, 52.70, 52.75, 52.80, 52.85, 52.90, 52.95, 53.00, 53.05, 53.10, 53.15, 53.20, 53.25, 53.30, 53.35, 53.40, 53.45, 53.50, 53.55, 53.60, 53.65, 53.70, 53.75, 53.80, 53.85, 53.90, 53.95, 54.00, 54.05, 54.10, 54.15, 54.20, 54.25, 54.30, 54.35, 54.40, 54.45, 54.50, 54.55, 54.60, 54.65, 54.70, 54.75, 54.80, 54.85, 54.90, 54.95, 55.00, 55.05, 55.10, 55.15, 55.20, 55.25, 55.30, 55.35, 55.40, 55.45, 55.50, 55.55, 55.60, 55.65, 55.70, 55.75, 55.80, 55.85, 55.90, 55.95, 56.00, 56.05, 56.10, 56.15, 56.20, 56.25, 56.30, 56.35, 56.40, 56.45, 56.50, 56.55, 56.60, 56.65, 56.70, 56.75, 56.80, 56.85, 56.90, 56.95, 57.00, 57.05, 57.10, 57.15, 57.20, 57.25, 57.30, 57.35, 57.40, 57.45, 57.50, 57.55, 57.60, 57.65, 57.70, 57.75, 57.80, 57.85, 57.90, 57.95, 58.00, 58.05, 58.10, 58.15, 58.20, 58.25, 58.30, 58.35, 58.40, 58.45, 58.50, 58.55, 58.60, 58.65, 58.70, 58.75, 58.80, 58.85, 58.90, 58.95, 59.00, 59.05, 59.10, 59.15, 59.20, 59.25, 59.30, 59.35, 59.40, 59.45, 59.50, 59.55, 59.60, 59.65, 59.70, 59.75, 59.80, 59.85, 59.90, 59.95, 60.00, 60.05, 60.10, 60.15, 60.20, 60.25, 60.30, 60.35, 60.40, 60.45, 60.50, 60.55, 60.60, 60.65, 60.70, 60.75, 60.80, 60.85, 60.90, 60.95, 61.00, 61.05, 61.10, 61.15, 61.20, 61.25, 61.30, 61.35, 61.40, 61.45, 61.50, 61.55, 61.60, 61.65, 61.70, 61.75, 61.80, 61.85, 61.90, 61.95, 62.00, 62.05, 62.10, 62.15, 62.20, 62.25, 62.30, 62.35, 62.40, 62.45, 62.50, 62.55, 62.60, 62.65, 62.70, 62.75, 62.80, 62.85, 62.90, 62.95, 63.00, 63.05, 63.10, 63.15, 63.20, 63.25, 63.30, 63.35, 63.40, 63.45, 63.50, 63.55, 63.60, 63.65, 63.70, 63.75, 63.80, 63.85, 63.90, 63.95, 64.00, 64.05, 64.10, 64.15, 64.20, 64.25, 64.30, 64.35, 64.40, 64.45, 64.50, 64.55, 64.60, 64.65, 64.70, 64.75, 64.80, 64.85, 64.90, 64.95, 65.00, 65.05, 65.10, 65.15, 65.20, 65.25, 65.30, 65.35, 65.40, 65.45, 65.50, 65.55, 65.60, 65.65, 65.70, 65.75, 65.80, 65.85, 65.90, 65.95, 66.00, 66.05, 66.10, 66.15, 66.20, 66.25, 66.30, 66.35, 66.40, 66.45, 66.50, 66.55, 66.60, 66.65, 66.70, 66.75, 66.80, 66.85, 66.90, 66.95, 67.00, 67.05, 67.10, 67.15, 67.20, 67.25, 67.30, 67.35, 67.40, 67.45, 67.50, 67.55, 67.60, 67.65, 67.70, 67.75, 67.80, 67.85, 67.90, 67.95, 68.00, 68.05, 68.10, 68.15, 68.20, 68.25, 68.30, 68.35, 68.40, 68.45, 68.50, 68.55, 68.60, 68.65, 68.70, 68.75, 68.80, 68.85, 68.90, 68.95, 69.00, 69.05, 69.10, 69.15, 69.20, 69.25, 69.30, 69.35, 69.40, 69.45, 69.50, 69.55, 69.60, 69.65, 69.70, 69.75, 69.80, 69.85, 69.90, 69.95, 70.00, 70.05, 70.10, 70.15, 70.20, 70.25, 70.30, 70.35, 70.40, 70.45, 70.50, 70.55, 70.60, 70.65, 70.70, 70.75, 70.80, 70.85, 70.90, 70.95, 71.00, 71.05, 71.10, 71.15, 71.20, 71.25, 71.30, 71.35, 71.40, 71.45, 71.50, 71.55, 71.60, 71.65, 71.70, 71.75, 71.80, 71.85, 71.90, 71.95, 72.00, 72.05, 72.10, 72.15, 72.20, 72.25, 72.30, 72.35, 72.40, 72.45, 72.50, 72.55, 72.60, 72.65, 72.70, 72.75, 72.80, 72.85, 72.90, 72.95, 73.00, 73.05, 73.10, 73.15, 73.20, 73.25, 73.30, 73.35, 73.40, 73.45, 73.50, 73.55, 73.60, 73.65, 73.70, 73.75, 73.80, 73.85, 73.90, 73.95, 74.00, 74.05, 74.10, 74.15, 74.20, 74.25,

Peter Hamilton Carrier Silo Filler and Feed Cutter

If you have a gasoline engine, you not fill your own silo and cut your own feed? We have a machine that runs on gas and runs in an efficient manner, and which will answer all your feed-cutting requirements.

PETER HAMILTON machines have tremendous strength and great capacity. They will cut in an enormous pile of feed day after day, and because of their shearing method of cutting only a small amount of power is required.

Free Booklet There are so many points in connection with these machines that it will pay 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 4 or 5 left. Write at once. Price \$10.00, six weeks old.
A. G. KERR, NORTH GORE, QUIBEC

DO YOU WANT REGISTERED HOLSTEINS

Write to-day to
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Norfolk Holstein 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.

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Young Sons and Boars from
several litters just landed.
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Live hens, poultry of all kinds.
Write for price list.
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BRED BY FLEMING'S SPAVIN
and Ringbone
Bulls, no matter how old the blemish,
full grown ringbones, or bulls either
Bred Spavin, Ringbone, or Sidebone.
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Asph. Roofing, Green or Red. One-
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anteed 15 Years. Special Aug-
ust and September price, \$2.25
per square.
Send for Free Samples.
THE HOLIDAY CO'Y, V. LIMITED
Factory Distributors.
HAMILTON, CANADA

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

Mature Class.

1. Lady Waldorf Pieter, 2278, 7y. 4m.
184; 77.0 lbs. milk, 23.3 lbs. fat,
35.29 lbs. butter.
30-day record: 7y. 4m. 184; 326.5 lbs.
milk, 117.48 lbs. fat, 148.90 lbs. butter.
C. O. Hardy, Brockville.
2. Jeanne de la Prairie, 2nd, 11694, 9y.
0m. 6d.; 70.6 lbs. milk, 24.16 lbs. fat,
30.20 lbs. butter.
14-day record: 9y. 0m. 5d.; 137.6 lbs.
milk, 46.71 lbs. fat, 58.29 lbs. butter. W.
C. Hooper, Black River.
3. Daisy Gerben Korndyke, 38716, 6y.
1m. 13d.; 561.0 lbs. milk, 22.30 lbs. fat,
27.8 lbs. butter. W. H. Gough, Bloom-
field.
4. Bettina 1st, 11891, 8y. 8m. 29d.; 59.2
lbs. milk, 20.04 lbs. fat, 25.06 lbs. butter.
14-day record: 8y. 8m. 24d.; 122.4 lbs.
milk, 38.0 lbs. fat, 48.53 lbs. butter. W.
A. Rife, Hespeler.
5. Odavia Mercena Pieter, 12282, 9y.
3m. 16d.; 60.6 lbs. milk, 18.19 lbs. fat,
22.74 lbs. butter. E. B. Durham, Smith-
ville.
6. Hillcrest Pontiac Duchesne, 27714, 5y.
2m. 27d.; 46.6 lbs. milk, 17.52 lbs. fat,
21.90 lbs. butter.
14-day record: 5y. 1m. 27d.; 93.5 lbs.
milk, 32.41 lbs. fat, 41.5 lbs. butter. Geo.
Smith, Port Perry.
7. Pictet's Young, 21818, 6y. 11m. 11d.;
454; 48 lbs. milk, 17.72 lbs. fat, 20.0 lbs.
butter.
14-day record: 6y. 11m. 11d.; 94.0 lbs.
milk, 31.57 lbs. fat, 39.47 lbs. butter. Geo.
Smith, Port Perry.
8. Snow Hill Seals, 15681, 7y. 5m. 15d.;
459.9 lbs. milk, 14.1 lbs. fat, 18.27 lbs.
butter. E. Ver.
9. Beale's Star of Campbelltown,
14826, 2y. 1m. 4d.; 40.7 lbs. milk, 14.82
lbs. fat, 18.54 lbs. butter. J. H. Wincke,
Stony Mountain, Man.
10. Madam Fong, Pauline, 10291, 250-
day record: 8y. 6m. 3d.; 595.3 lbs. milk,
849.25 lbs. fat, 1061.42 lbs. butter.
250-day record: 8y. 6m. 3d.; 2379.7 lbs.
milk, 523.04 lbs. fat, 1115.11 lbs. butter.
Colony Farm, Bloomfield.

Four-Year Class.

1. Jeannina Johanna of Lanark, 27850,
4y. 6m. 1d.; 501.0 lbs. milk, 18.47 lbs. fat,
23.09 lbs. butter.
30-day record: 4y. 6m. 1d.; 214.3 lbs.
milk, 74.59 lbs. fat, 92.24 lbs. butter. W.
C. Hooper, Black River.
2. Fannie Sogis Countess, 26232, 4y. 5m.
1d.; 577.3 lbs. milk, 17.49 lbs. fat, 21.76
lbs. butter. W. H. Gough, Bloomfield.
3. Queen Mercena Emma, 27132, 4y. 1m.
17d.; 484 lbs. milk, 16.7 lbs. fat, 18.68
lbs. butter. W. H. Gough, Bloomfield.

Three-Year Class.

1. Countess Walker Seals, 28561, 3y.
11m. 5d.; 524 lbs. milk, 21.09 lbs. fat,
26.23 lbs. butter. E. B. Durham, Bloom-
field.

Two-Year Class.

1. Colony Wadmanje Newman, 20196,
2y. 1m. 18d.; 587.3 lbs. milk, 20.08 lbs. fat,
25.16 lbs. butter.
14-day record: 2y. 1m. 16d.; 115.5 lbs.
milk, 38.41 lbs. fat, 48.53 lbs. butter.
Colony Farm, Bloomfield, B.C.
2. Pieter's Lottie Wayne, 23552, 2y.
0m. 11d.; 486.1 lbs. milk, 15.29 lbs. fat,
19.11 lbs. butter. W. A. Rife, Hespeler.

One-Year Class.

1. Tonilla Pontiac Top, 4743, 2y. 10m.
29d.; 74 lbs. milk, 25.1 lbs. fat, 31.45
lbs. butter.
14-day record: 2y. 10m. 5d.; 152.3 lbs.
milk, 47.41 lbs. fat, 42.02 lbs. butter. W.
C. Hooper.
2. Pontiac Ormsby Hook, 37160, 2y. 7m.
8d.; 587.6 lbs. milk, 19.94 lbs. fat, 13.65
lbs. butter. J. M. Holtby.

Two-Year Class.

1. Het Loo Pieter, 28502, 2y. 3m. 1d.;
578.0 lbs. milk, 21.25 lbs. fat, 30.32 lbs.
butter.
30-day record: 2y. 3m. 1d.; 232.2 lbs.
milk, 97.61 lbs. fat, 122.01 lbs. butter.
60-day record: 2y. 3m. 1d.; 453.1 lbs.
milk, 176.61 lbs. fat, 203.26 lbs. butter.
W. L. Shaw, Newmarket.
2. Queen Grandmother, 40353, 2y. 2m.
16d.; 412.0 lbs. milk, 13.72 lbs. fat, 17.16
lbs. butter.
21-day record: 2y. 2m. 16d.; 115.5 lbs.
milk, 36.75 lbs. fat, 46.94 lbs. butter. G.
P. McArthur, Midland.
3. Maple Grove Fries, 37815, 2y. 2m. 4d.;
378.9 lbs. milk, 12.82 lbs. fat, 14.16 lbs.
butter. H. Bolter, Tavistock.
4. Agassia Priscilla Korndyke, 32145, 2y.
5m. 7d.; 284.5 lbs. milk, 12.31 lbs. fat,
16.02 lbs. butter.
30-day record: 2y. 5m. 4d.; 157.5 lbs.
milk, 51.19 lbs. fat, 62.24 lbs. butter. Dir.
Exper. Farms, Agassia, B.C.
5. Fanny Light Pontiac, 30707, 2y. 1m.
14d.; 297.1 lbs. milk, 8.26 lbs. fat, 10.49 lbs.
butter. Geo. Smith, Port Perry.
6. Duplicate Pontiac, 37655, 2y. 5m.
29d.; 275.0 lbs. milk, 8.46 lbs. fat,
10.58 lbs. butter. Geo. Smith.
Records of the official judges 24 cows
and heifers were received and accepted for
entry in the Record of Merit during

the month of July. Lady Waldorf Pieter
leads the mature class with the fine rec-
ord of 23.29 lbs. butter and 77.0 lbs. milk
in seven days, and 146.86 lbs. butter
and 526.5 lbs. milk in 30 days. Her best
day's milk was 112.4 lbs. In the 3-
year-old class, Het Loo Pieter makes a
sensational showing in gaining 1 believe
the world's championship for butter in
the seven, 30- and 60-day divisions with
30.32 lbs. butter and 429.9 lbs. milk in
seven days; 122.01 lbs. butter and 232.62
lbs. milk in 30 days and 229.26 lbs. butter
and 451.1 lbs. milk in 60 days. Taking
into consideration type, size, constitution
and production, and undoubtedly one
of the greatest heifers the breed has yet
produced—W. A. Clemons, Secretary.

SEMI-OFFICIAL RECORDS OF HOL- STEIN-FRIESIAN COWS FROM JULY 1 TO JULY 31.

Mature Class.

1. Canary Queen DeLo, 9245, 8y.; 19867
lbs. milk, 737 lbs. fat, 921.86 lbs. but-
ter. J. M. Stevens, Steveston, B.C.
2. Leonora McEubille, 11542, 7y.; 16210
lbs. milk, 664 lbs. fat, 830.00 lbs. butter.
J. M. Stevens.
3. Rawdon's Pride, 8899, 9y.; 12650 lbs.
milk, 510 lbs. fat, 675.90 lbs. butter. John
Durran, Campbellton.
4. Rhoda Parthena Caprice 2nd, 14179,
9y.; 14320 lbs. milk, 479.0 lbs. fat, 661.35
lbs. butter. Wellington Brier & Son, St.
George.
5. Heildina Abberker, 19597, 5y.; 15946
lbs. milk, 521 lbs. fat, 651.25 lbs. butter.
W. C. Hooper, Black River.
6. Gammy's Knockout, 5th, 2nd, 18235,
5y.; 14848 lbs. milk, 475 lbs. fat, 575.75 lbs.
butter. J. Stanley Watson, Pine Grove.
7. Verona, 8419, 11y.; 13786 lbs. milk,
412 lbs. butter, 56.64 lbs. butter. Colony
Farm, Bloomfield, B.C.
8. Inka Lulu Maude, 19615, 6y.; 11297
lbs. milk, 373 lbs. fat, 465.90 lbs. butter.
John Durran, Campbellton.
9. W. A. Clemons, 15530, 6y. 11m. 13d.;
10883 lbs. milk, 358 lbs. fat, 447.50
lbs. butter. Wellington Brier & Son.

Four-Year Class.

1. Plus Pontiac Artia, 16739, 4y. 331d.;
20911 lbs. milk, 816 lbs. fat, 1020.00 lbs.
butter. S. Lennox.
2. Frolo Betsy Bobbet, 21233, 4y. 135d.;
14297 lbs. milk, 503 lbs. fat, 638.75 lbs.
butter. T. H. Dent & Son, Woodstock.
3. Mutual Shalanda Queen, 23174, 4y.
46d.; 16284 lbs. milk, 517 lbs. fat, 536.25
lbs. butter. Paul Marshall, Beamsville.
4. Julia Rose O. Bell, 19238, 4y. 312d.;
14484 lbs. milk, 440 lbs. fat, 460.00 lbs. fat.
J. F. Gibbons, Renfrew.
5. Huppoy, 21259, 4y. 234d.; 15681
lbs. milk, 397 lbs. fat, 496.25 lbs. butter.
T. H. Dent & Son, Woodstock.

Three-Year Class.

1. Dosta 2nd, 23221, 3y. 211d.; 14331 lbs.
milk, 537 lbs. fat, 671.25 lbs. butter. J.
F. Gibbons, Renfrew.
2. Hillside Korndyke Lady, 26124, 3y.
65d.; 12850 lbs. milk, 472 lbs. fat, 590.00
lbs. butter. W. C. Hooper, Black River.
3. Adelaide DeLo's Springbank 2nd,
21236, 3y. 12d.; 15314 lbs. milk, 456 lbs.
fat, 566.25 lbs. butter. T. H. Dent & Son.
4. Dairy Dale, 26027, 3y. 131d.; 12288 lbs.
milk, 424 lbs. fat, 512.50 lbs. butter. Hos-
pital for Inane, Seokik, Man.
5. Lady Pearl Henrievette, 22867, 3y.
5m. 1; 11549 lbs. milk, 405 lbs. fat, 502.50
lbs. butter. G. A. Kingston, Campbellton.
6. Madrona Pafori, 28234, 3y. 168d.; 12752
lbs. milk, 378 lbs. fat, 472.50 lbs. butter.
J. Stanley Watson, Pine Grove.
7. Netherland Sarah Korndyke, 42626,
2y. 10m. 1; 1113 lbs. milk, 370 lbs. fat,
452.50 lbs. butter. Wm. Brier, Spencer-
ville.

Two-Year Class.

1. Lena Springer, 25058, 2y. 32d.;
9511 lbs. milk, 322 lbs. fat, 440.00 lbs. but-
ter. T. H. Dent & Son.
2. Queen Mercena Emma, 27132, 3y.
11d.; 10866 lbs. milk, 344 lbs. fat, 430.00
lbs. butter. W. F. Young, Port Huron.

One-Year Class.

1. Molly Dee Butler 2nd, 21437, 2y.
10d.; 9123 lbs. milk, 314 lbs. fat, 457.25
lbs. butter. O. A. Gushp.
2. Maud Bessie DeLo 2nd, 29490, 2y.
120d.; 1043 lbs. milk, 345 lbs. fat, 425.00
lbs. butter. S. M. Peacock, Aylmer.
3. Grace Fanny Duchesne, 22211, 2y.
310d.; 851 lbs. milk, 296 lbs. fat, 372.50
lbs. butter. Joseph North, Nantawake.
4. Bessie DeLo, 28181, 2y. 8d.; 797 lbs.
milk, 293 lbs. fat, 365.25 lbs. butter. C.
E. Barry, Bramford.
5. Kolo Queen, 29160, 2y. 122d.; 8006
lbs. milk, 268 lbs. fat, 335.00 lbs. butter.
P. M. 2044.
During the month of July, 28 cows and
heifers qualified for enrollment in the
Record of Merit. In the four-year-old class
a new champion appears in Plus Pontiac
Artia, holder and 20911 lbs. milk—W.
A. Clemons, Secretary.

It is evidence that you are an
up-to-date dairy farmer when
you say you read Farm and
Dairy regularly.



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**WILSON'S
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READ DIRECTIONS
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Far more effective than Sticky Fly
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**SHIP YOUR
BUTTER & EGGS**
—to us. We are not com-
mission merchants, but we
pay net prices and remit
promptly.
THE DAVIES COMPANY LIMITED
Established 1854. TORONTO, ONT.

MILK! MILK! MILK!
Wanted—40 cans milk daily,
P. O. B. West Toronto.
White Oak Park Farm Dairy,
Phone Junct. 198
210 Mary St. - Toronto.

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF.
Reduces Strained, Puffy Ankles
Lymphangitis, Puff Eels, Fistu-
laris, Swellings, Sores, Lacerations
and lumps pain. Heals Sores, Cuts,
Bruises, Blisters and Chafes. It is an
ANTISEPTIC AND GERMICIDE
(FROM POISONOUS)
Does not blister or remove the
hair or bore can be worked. Pleasant to use.
\$2.00 a bottle, delivered. Describe your case
for special instructions and Book 5 Free.
ABSORBINE, JR., antiseptic salve for marks on
corns, freckles, freckles, freckles, freckles, freckles,
Gout. Concentrated—only a few drops required at appli-
cation. Price \$1 per bottle at druggists or direct.
W. F. YOUNG, P. O. Box 1225, Lyons, Minn., Can.
Absorbine and Absorbine, Jr., are made in Canada.

DIGGERS
For pasture. All growers know that it pays to use
diggers even on iron-ace—because valuable time
is saved.
IRON ACE DIGGER
Works up to 18 in. Elevator, or 24 in. wide,
Turns 400 lbs. of manure into fertilizer.
No. 15
Has 11
shells to
clean the
soil to
the
depth
of 18
inches.
We guarantee our diggers
and our fertilizer.
Ask your dealer about them and
write for booklet.

IRON ACE DIGGER
Has 11 shells to clean the soil to the depth of 18 inches. We guarantee our diggers and our fertilizer. Ask your dealer about them and write for booklet.

IRON ACE DIGGER
Has 11 shells to clean the soil to the depth of 18 inches. We guarantee our diggers and our fertilizer. Ask your dealer about them and write for booklet.

**EASTLAKE
SHEETS
SHINGLES**
WRITE FOR PRICES
METALLIC ROOFING CO
TORONTO, CANADA

Man
T O R O N T O
estimates
the Central
total yield of
2500 acres
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higher than
816,000 bushels
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Market Review and Forecast

TORONTO, Aug. 20.—A preliminary estimate of the yield of fall wheat, rye and clover has been issued by the Census and Statistics Office. The total yield of fall wheat for 1917 is estimated at 72,150,000 bushels, from 259,250 acres, as compared with 20,060,000 bushels from 322,000 acres in 1916. The average yield per acre was slightly higher than last year, but with a decreased acreage. Out of the total, 17,816,000 bushels, Ontario will supply rye and clover is placed at 13,275,000 tons compared with 14,487,000 tons in 1916. Only twice has this total yield of hay and clover been exceeded; that is in 1911 and 1914.

Throughout Eastern Canada, the spring grain crops are reported as excellent. Spring wheat may be above the average yield and probably in acreage. Oats in Ontario has been a revelation, some of the yields running as high as 70 and 80 bushels to the acre, while 10 and 60 bushels is common. Conditions for Western wheat are somewhat better than at the first of the month. Rains and cool weather have been pretty common throughout the prairie. Oats, however, will be a very short crop, and feed of all kinds, including hay, will be scarce in the Western Provinces. In both Eastern and Western Canada, harvesting is now in full swing. The prices for live stock are continuing high. Good stock from Ontario are bringing from \$175 to \$200, general purpose from \$125 to \$150. Milk production is decreasing, owing to a falling off in pastureage, but the flow is showing fairly well up for this time of year.

WHEAT.

The Board of Grain Supervisors has prohibited trading in futures after Aug. 1st, unless they are to press this the most unsettled feature of the market. October wheat is at \$2.06. Old wheat is holding strongly in the market. Canadian wheat would go higher if the law allowed, and early wheat, new crop, is set nominal at \$2.30. Old wheat is quoted at \$2.58 to \$2.60 for No. 2 and \$2.63 to \$2.68 for No. 3.

COARSE GRAINS.

The coarse grain market is at a standstill as buyers are waiting for an early crop and are unwilling to pay present prices. Western rates are now down to 70c. At Montreal, quotations are as follows: Oats, C.W. No. 2, 77c; No. 3, 74c; feed barley, 71c.

MILL FEEDS.

Mill feeds are climbing steadily upwards, with the following prices prevailing: Shorts, \$45; middling, \$38; middling, \$37 to \$45; good feed flour, per bushel, \$2.25. At Montreal, same, \$1.75 to \$1.77; shorts, \$40 to \$45; middling, \$45 to \$50; middling, \$50 to \$55.

HAY AND STRAW.

No. 2 old hay is quoted on the rack, Toronto, at \$11.50 to \$12; mixed, \$9 to \$10; Montreal, No. 2, our best, \$2.50 to \$10; straw, in our lots, is quoted at \$7 to \$7.50.

EGGS AND POULTRY.

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

lightest on record, but more eggs are now coming forward, 25c to 40c a dozen at country points are the prevailing prices. The Montreal market has seen somewhat prompt, and the producers have been paid the egg circle about bringing a cent or two more. Very little live and fresh dressed poultry is being sold here, and why is arriving is in poor condition. With the closing of the new crop, however, poultry will no doubt have a better chance to flesh up for the fall market. The most promising feature of the past week was the optimistic report on the outlook of the United States corn crop. This should encourage the poultrymen, who are now paying such high prices for poultry food.

Live weight. Dressed.
 Chickens, spring 25c to 25c 25c to 25c
 Hens, under 5 lbs. 15c to 15c 15c to 15c
 Hens, over 5 lbs. 15c to 15c 15c to 15c
 Roosters 15c to 15c 15c to 15c
 Ducks 15c to 15c 15c to 15c
 Backings 14c to 15c 15c to 15c
 Turkeys 15c to 15c 15c to 15c

DAIRY PRODUCE.

The strong feeding which developed in the butter market about three weeks ago was more than ever evident during last week. Shipments show a slight falling off, due, no doubt, to the falling of pastures, and the market has been correspondingly firm. Butter is selling at 35c to 40c a lb. at country points for creamery prints. Toronto quotations are: for creamery stocks, 41c to 42c; creamery print, 42c to 43c; choice dairy prints, 35c to 36c; ordinary dairy prints, 33c to 34c; bakers', 29c to 30c.

The exports of cheese during the past week have been large, and on the whole market has been active. The total receipts show a slight falling off, a decrease of 296,000 boxes. Buyers are generally buying for immediate use, and to the margin of safety allowed them in the fixed price. Cheese, new large, is quoted at 31c to 32c; extra, 30c to 31c; twins, 31c.

CHEESE BOARD SALES.

Madoc, Aug. 15—420 boxes sold at 21 5/16c.
 Woodstock, Aug. 15—720 factories made offering; 21c was accepted.
 St. Paschal, Que. Aug. 14—700 boxes sold at 21 1/16c; 96 packages of butter at 40c.
 Mont Joli, Que. Aug. 17—300 boxes cheese sold at 23 1/2c; 300 boxes butter sold at 41c.
 Liverpool, Ont. Aug. 17—2,875 cheese sold at 21c.
 Napanee, Ont. Aug. 17—1,365 white and 360 colored cheese at 21 1/2c.
 Picton, Ont. Aug. 17—1,620 boxes sold at 21 5/16c.
 Perth, Ont. Aug. 17—540 boxes sold at 21 5/16c.

LIVE STOCK.

Toronto market has at last furnished the spectacle of 150 hours; as high as \$15.25 was paid last week for feed and watered. The market continues strong. Cattle advanced 1c to 2c during the week; most killers were scarce. Milch cows most with ready sale. Sheep and lambs are steady.

Choice heavy steers \$11.75 to \$12.65
Butcher's choice heavy 11.25 to 11.75
do good 10.50 to 10.90
do common 8.25 to 9.50
Butcher's bulk, choice 9.00 to 9.50
do good 7.50 to 8.25
do medium 6.25 to 7.25
Butcher's choice 10.00 to 10.50
do good 7.00 to 7.50
do medium 5.25 to 5.75
Feeders, 900 to 1,000 lbs. 8.50 to 9.25
do medium, 700 to 900 7.75 to 8.25
Stockers, 700 to 900 lbs. 7.00 to 8.25
do medium 6.00 to 6.50
Canners 6.00 to 6.50
Milkers, good to choice 8.00 to 120.00
do common and medium 6.00 to 8.00
Springers 40.00 to 120.00
do medium 14.00 to 16.00
do good 12.00 to 14.00
do common 6.00 to 8.50
do heavy fat 8.00 to 10.20
Spring lambs, cwt. 14.00 to 14.50
Sheep, yearling 9.00 to 10.00
Sheep, ewes, light 8.00 to 9.75
do heavy and watered 5.25 to 5.75
do culls 4.00 to 5.20
Hogs, fed and watered 14.00 to 16.00
do off care 10.25 to 11.00
do f.o.b. 10.00 to 10.00

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 hired 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 the full number of subscriptions, 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 well grown. His dam and sire are tuberculin tested. Sire—Lakewood Hengerveld 2nd, Grand Champion at the Canadian National Exhibition and London, 1914. His sister is the Canadian Champion completed a record of 467 lbs. milk with 94.48 lbs. butter in 7 days. His dam has just average record of 4.63 per cent. fat.

Dams—Cherry Columbia Queen, a yearly cow with great capacity and a record fat. The average test for the two nearest dams of this bull is 4.77 per cent. Write for a copy of the Correspondence solicited.

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

LAKEVIEW HOLSTEINS

Are still in the lead. The latest Holstein year book shows that they held possible at both Toronto and London Exhibitions, 1915 and 1916. Now we the fall fair, and we have decided to give \$30.00 in gold to the man that wins the 1917 winner.

Don't miss this opportunity. Act quick, and plan to spend a day at Lakeview. Terms cash or time.

Major E. F. OSLER, Prop. Bronte, Ont. T. A. DAWSON, Mgr.

VILLA VIEW OFFERS FOR SALE

Villa View, the home of King Segis Alacraft Calamity and Dutchland Pontiac Colantha, the two herd sires that are backed up by more dams that have held world's records than the herd sires of any other herd in Canada. We have a few Alacraft bulls for sale at reasonable prices.

ARBOGAST BROTHERS, Springville, Ont.

HOLSTEINS

We have the only two sons in Canada, of the 44-lb. bull Ormsby Jane sale, also a 25-lb. bull, whose sire is Segis Faye Jane, sire of the bull in 7 days. Also 11 bull calves of lower note, and females of R. M. HOLTVY, R. R. No. 4, PORT PERRY, ONT.

Registered Holsteins

Bulls from one month to 17 months old for sale. All from our grand herd the tre, Echo Segis Faye, whose sire is half-brother, also to Segis Faye Johanna. If you see a well backed bull write at once. 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—decide and good feeders.

WRITE W F STEPHEN Secretary
CANADIAN AYRSHIRE BREEDERS' ASS'N
 BOX 308—HUNTINGDON, QUE.

TANGLEWYLD AYRSHIRES

The Leading R. O. F. Herd Large Cows, Large Testes, Large Records, High Testers. Choice Young Bulls and Bull Calves and a few Cows for sale.

WINDSOR BROS., R. R. No. 1, MARIEFIELD, ONT.

PEACH BLOW AYRSHIRES

Young Stock for sale, always on hand (both sexes), from high-testing heavy producers. Good udders and large test. A special feature of my herd. Three fine sires ready for service. Get particulars from the sire you need a sire. R. T. BROWNLEE, Peach Blow Farm, HEMMINGFORD, Que.

SEEDS

TIMOTHY

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

Government Standard No. 1 (Extra No. 1 for Purity) \$1.50 bus.
 Government Standard No. 2 (Extra No. 1 for Purity) \$1.50 bus.
 Government Standard No. 3 (No. 1 for Purity) \$1.50 bus.
 Dawson's Golden Chaff Pail Wheat (Bags included) \$3.00 bus.

GEO. KEITH & SONS IRANKING ST. E. TORONTO

BOOKS Make yourself more efficient. Improve your spare time by reading. Send for our descriptive catalogue of Farm Books. A postal will bring it to your address. Write.

Book Dept. 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 15th, 1918, with two weeks holidays at Christmas. Most of the hardest work on the farm is completed before college opens and students leave again in the spring before seeding commences. They are free all summer to work at home and can then put into practice some of 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 the following subjects: Varieties and culture of all farm crops; care and judging of all farm stock; farm dairying; fruit and vegetable growing; farm surveying and drainage; road making; farm bookkeeping; carpentry and blacksmithing; veterinary treatment of stock and fertilizers; bee-keeping; extermination of insects and plant diseases; eradication of weeds; farm forestry; poultry raising; English Literature and Composition; public speaking. The course not only gives a practical education for life on the farm, but also "airs up" young men to observe, read, and think for themselves. At the end of the two-year course 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 complete the second year average and 60 per cent. on English subjects, at the second year examinations, are allowed to 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 engaged as farm managers, district representatives, agricultural teachers, Government investigators, 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 bears a large share of the expense of the institution, and has fixed all college fees at the lowest possible figure. It is the cheapest school in Ontario. Figure this out for yourself. Tuition fee for one year, \$20.00. Board and room at \$4.00 per week. A rough estimate for one year, exclusive of railway fares, etc., is \$18.00. At this figure? It need not cost this much the first year as students have opportunity to make some 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 people realize. The land property consists of 700 acres. Over one hundred acres is used for experimental purposes, where hundreds of small plots are arranged to test different varieties of all manner of farm crops and for creating new varieties by plant breeding. In this way the very best varieties for Ontario are discovered. The farm proper consists of 600 acres. This is used largely to raise roots and fodder for the many head of stock which it is necessary to have at an agricultural college. The College buildings consist of the Men's Residence, dining-hall, barns and stables and twelve departments is carried on. A staff of over sixty professors, lecturers, and investigators is 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 countries there were students from eighteen different countries. The Ontario boy is in close association with men from many parts of the world, as well as those from every province of the Dominion. The result is a broadening of ideas. Education is not confined to class rooms; but includes social and residence associations. The average age of the O. A. C. student is 22 years, though it may vary from 17 to 35 years. Do not think you have been out of school too long. In the first year a good deal of elementary work is reviewed for the sake of students 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. Rugby, track, hockey, basketball, gymnastics, swimming, etc., are popular pastimes. A large, well-equipped gymnasium, a fine campus and a covered rink 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, and add to the attractiveness of the college course. The Student Cooperative Association operates a store which supplies books, stationery, and athletic goods, at reduced prices. It also composes 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.