

eggs. The question as to whether the hens will lay more eggs with a cock running with them than without will be the next question to settle. But it certainly will pay farmers to keep the cock birds away from the hens after all the eggs for hatching purposes are obtained.

Mr. Jarvis reports as follows: This season an experiment was made to test the keeping qualities of eggs laid by hens with which no male bird was permitted to run, and eggs laid by hens which were accompanied by the male. Further experiments along this line will be conducted at greater length during 1898, and also to determine what is the difference, if any, in the number of eggs laid by a pen of fowls mated with a male, and a pen of an equal number of birds of the same breed and ages not so mated.

On the 15th of July, 1897, four dozen fertile eggs and three dozen infertile eggs were placed in the egg closet used by the department (the construction of which was fully explained in my report of 1896), and subjected to a temperature varying from fifty to sixty degrees. These eggs were merely laid on their sides in bran and not turned. On examining some of the eggs a month after they were placed in the drawers, no perceptible difference could be discerned; and this was practically the case when the second trial was made on September 15th. At the test which took place on October 15th, however, it was noticeable that the whites of the fertile eggs were somewhat more watery than those of the infertile eggs, but not much difference could be found in the yolks. At the test made on November 15th, the result obtained at the October breaking was made more manifest, the whites of the fertile eggs being quite watery, while those of the infertile were to all appearance as good as in a newly laid egg. During the meeting of the Experimental Union, which was held in December, several thoughts were suggested by the speakers in regard to this important question; and on the 12th December, the remainder of eggs under experiment were broken by myself in the presence of Mr. Thomas Duff, of Toronto, and two of the students. The result was that the whites of the fertile eggs were like water, and in some cases the yolks were broken, while in the cases where the yolks did not break they were found to be very much spotted and discolored, and gave every evidence of going bad. These fertile eggs were totally unfit for table use, and of even a very poor quality for culinary purposes. We then broke the remainder of the infertile eggs and in every case the whites were found to be all right, and the yolks were standing up exactly as in a newly laid egg, and without showing the slightest tendency towards decay. These eggs were of as good a quality as any that could be bought in the stores for family use; but, of course, they could not be called fresh. The above would certainly go to show that infertile eggs are much to be preferred to fertile eggs; but, as I said before, further and more extensive experiments will be conducted during 1898. In the conclusion of this experiment, a striking feature was the fact that of the fertile eggs, the small, white shelled eggs were in a much worse condition and showed greater

loss from evaporation than did the large white or the brown shelled eggs. I am satisfied that brown shelled eggs or large white shelled eggs will keep much longer and lose less from evaporation than the small, white eggs. Experiments along this line will also be conducted in 1898.

Publishers' Desk.

Cheese Factory and Creamery Supplies.—Butter and cheese factory outfits are supplied by the Plessisville Foundry, Plessisville, Que. If in need of anything in this line write them for information.

Thrashing Machines.—The Waterloo Manufacturing Co., Limited, of Waterloo, Ont., are the makers of a high grade of thrashing machines and supplies, as well as sweep and tread horse power for all purposes. Write them for their catalogue.

Important to Dairymen.—When in need of a reliable cream separator or other dairymen supplies dairymen should not forget to apply for information to R. A. Lister & Co., 18 St. Maurice street, Montreal. Their advertisement points out some of the favorable qualities of the Melotte Separator; but more definite information may be obtained by writing to the firm.

Amalgamation of the Ayrshire Herdbooks.

The committee appointed at the last annual meeting of the Dominion Ayrshire Breeders' Association to meet a similar committee from the Quebec Association met this committee in Ottawa on the 14th of March. The following basis of amalgamation was agreed upon: Each association is to be represented by seven directors, who shall hold office for two years. The directors elect their own president and vice-president. The name of the association is to be The Canadian Ayrshire Breeders' Association. It was decided to issue a new herdbook, to be called the Canadian Ayrshire Herdbook. Vol. 9 will be the number of the first issue. This will do away with any confusion of numbers of the different volumes. It was also decided to cheapen the cost of publication by using an abbreviated pedigree, giving only the sex, color, age, sire, grandsire, dam, and granddam. Fuller pedigrees will be printed on payment of 25c. extra. Animals will be numbered consecutively, and numbers of foundation stock in either the Quebec or Ontario herdbooks will also be given. This will make the old herdbooks of both associations of great value.

The standard of the new book will be as before. Animals must trace to stock imported from Great Britain on both sides. After January 1st, 1899, imported animals must be registered in the Scotch Herdbook. The annual membership fee remains at \$2. The registration fees are to remain the same, but a penalty fee is added if animals are not registered within a given time. The new book is to be edited in Toronto, where the registry is to be kept. An assistant will be appointed for Quebec.

All pedigrees that were allowed into the different books by arbitration that cannot be clearly traced to imported stock will be suspended until a committee

has investigated each case. The committee consists of R. Ness, D. Drummond, and H. Wade.

The present directors continue during 1898. The Quebec president, R. Ness, becomes the new president, and the Ontario president the new vice-president. The annual meetings alternate between Montreal and Toronto. The meeting will be held in Montreal in Feb., 1899. The unprinted pedigrees of the Ontario book will be printed in the first part of the new volume, and in the same manner as before in order to avoid confusion, and the sixth volume of the Quebec book now being printed will also be accepted as part of the series.

The Quebec delegates did not have power to effect an amalgamation, so they reported the proposed terms to a special meeting of the Quebec Association. They were accepted, and a committee appointed to effect an amalgamation, which was done at a subsequent meeting of the committees held in Montreal on the 25th of March.

At this meeting it was decided to use the Stay There Aluminum Ear Tag. A tag with a number corresponding to the certificate number will be supplied with each pedigree, and must be placed in the ear of the animal. Exhibition associations are to be requested to pass resolutions insisting that these tags be in the ears of all cattle exhibited of this breed.

FOURTH ANNUAL

Canadian Horse Show

To be held in conjunction with the

Military Tournament

IN THE

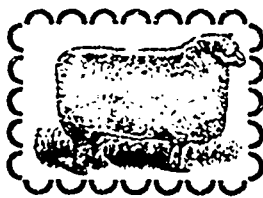
Armouries, Toronto, Canada

Wednesday, Thursday, Friday, Saturday, May 4th, 5th, 6th and 7th, 1898.

Prize Lists can be obtained from the Secretary. ENTRIES CLOSE on Wednesday, April 20, 1898, and should be addressed to Henry Wade, Secy., Parliament Buildings, Toronto

Millers'

TICK DESTROYER



Effectually Destroys Ticks, Scabs, and all Vermin

Makes the skin clean and healthy, and imparts a silky softness and lustre to the wool.

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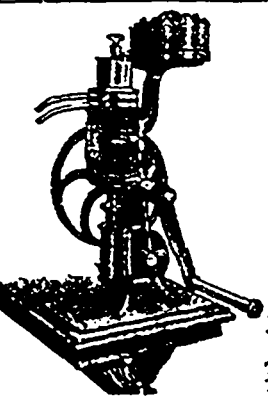
Is accepted without dispute by all other makers

ORGANS from \$40 upwards
PIANOS from \$250 upwards

Only the best materials used. All others are rejected.
On Reasonable Terms from all Agents

Manufacturers: GUELPH, Ont.

THE BELL ORGAN & PIANO CO., LIMITED



"Alpha" DeLaval Separators

Capacity from 175 to 2,500 lbs. per hour.

Retail Prices from \$65 to \$500 each.

The closest skimmer and best machine on the market. Gives perfect satisfaction wherever used. Send for Catalogue and full particulars.

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The Ballantyne Dairy Supply Co.,
Stratford, Ont. 327 Commissioners St.,
T. A. McLean & Co., Charlottetown, P.E.I.
T. L. Walworth, Vancouver, B.C. MONTREAL, CAN.

FREE SEEDS.

In making up our selection of Seed Premiums we have endeavored to include in it some of the best varieties obtainable from the collective products of Ontario's leading seedsmen. The selection has been made with a due regard to the special requirements of our readers and to the production of the best results.

From the stock of Messrs. JOHN S. PEARCE & Co., of London, the leading seedsmen of Western Ontario, we made the following selection:—

COLLECTION A.

10 Packets Vegetables. Price, 50c.

1 Packet Beet	1 Packet Parsnip
1 " Carrot	1 " Cabbage
1 " Cucumber	1 " Radish
1 " Lettuce	1 " Squash
1 " Onion	1 " Tomato

Given for one new yearly subscriber at \$1.

COLLECTION B.

10 Packets Flowers. Price, 50c.

1 Packet Phlox Drummondii	1 Packet Pansy
1 " Stocks	1 " Nasturtium
1 " Petunia	1 " Dianthus
1 " Portulacca	1 " Balsam
1 " Mignonette	1 " Aster

Given for one new yearly subscriber at \$1.

COLLECTION C.

20 Packets Vegetables and Flowers. Price, \$1.00.

1 Packet Aster	1 Packet Squash
1 " Pansy	1 " Watermelon
1 " Stocks	1 " Musk Melon
1 " Balsam	1 " Lettuce
1 " Phlox	1 " Celery
1 " Sweet Peas	1 " Carrot
1 " Cauliflower	1 " Beet
1 " Cucumber	1 " Radish
1 " Onion	1 " Tomato
1 " Cabbage	1 " Vine Peach

Given for two new yearly subscribers at \$1 each.

COLLECTION D.

20 Packets Vegetables. Price, \$1

1 Packet Beet	1 Packet Carrot
1 " Parsnip	1 " Cabbage
1 " Cucumber	1 " Lettuce
1 " Musk Melon	1 " Watermelon
1 " Onion	1 " Squash
1 " Radish	1 " Vine Peach
1 " Tomato	1 " S. Savory
1 " Parsley	1 " Thyme
1 " Sage	

Given for two new yearly subscribers at \$1 each

For reliability and a thorough knowledge of the requirements of the trade WILLIAM RENNIE, of Toronto, is justly considered one of the foremost in his business. At our request he has chosen the following Twelve Varieties of Garden and Flower Seeds as a

SPECIAL SEED OFFER

For one New Yearly Subscription at \$1.

Pkce. Beet, Early Intermediate	5c.
" Cabbage, First and Best	5c.
" Carrot, Half Long, Scarlet	5c.
" Cucumber, Long Green	5c.
" Lettuce, Selected Nonpareil	5c.
" Onion, Yellow Globe Danvers	5c.
" Parsnip, Intermediate, Half Long	5c.
" Radish, Olive Gem	5c.
" Squash, Hubbard	5c.
" Asters, New Giant Flowering, Mixed	10c.
" Sweet Peas, Selected, Finest Mixed	10c.
" Wild Garden Flower, Mixed	5c.

55c.

Seed Grains

Barley

For one new yearly subscriber at \$1, and 18 cents added to pay for bag, we will give one bushel of Mandscheuri Barley.

Oats

For one new yearly subscriber at \$1, and 18 cents added to pay for bag, we will give one bushel of Siberian White Oats.

These varieties are among the best in the market, and from reports gathered from reliable sources have headed the lists, both in yield and quality.

The remainder of our premium list is unavoidably crowded out. For a complete list see our next issue.

FARMING

44-46 Richmond St. W., Toronto