

The Farming World

A PAPER FOR
Farmers and Stockmen



A good thing to remember You have to reap what you sow.

GOOD

RE-CLEANED

FARM SEEDS

We have an exceptionally fine stock of the following varieties, which have all been carefully re-cleaned. Our prices are reasonable and you will get good value for your money.

ORDER EARLY and avoid disappointment of stocks being sold out.

Send cash with order and 18c. each for good cotton bags.

REMEMBER we only send out "Strictly Best Goods."

IT WILL PAY YOU TO GET
OUR CATALOGUE.
It's Free

BARLEY

Beardless "Success"—six-rowed, a new and distinct variety. It is the earliest barley known. The straw is of medium height, stiff, and stands up well on all kinds of land, of unusual length, well suited with solid stamp grain. Price per bush, 48 lbs., 90c.
Canada Six-rowed—Price per bush, 48 lbs., 65c.
White Hollow—Makes excellent food for hogs, cattle and poultry, and the straw makes good hay. Per bush, 60 lbs., \$1.01.
Black Hollow—Its splendid yield, heavy weight, and good feeding qualities make it a most valuable variety. Per bush, 60 lbs., 95c.

BUCKWHEAT

Silver Hull—Grain of a beautiful light grey color. Per bush, 48 lbs., 90c.

OATS

Improved Ligona—A vigorous grower, very prolific and exceedingly early. Per bush, 34 lbs., 90c.
White Danish—Per bush, 65c.; **American Banner**, per bush, 59c.; **Black Tartarian**, per bush, 70c.; **Siberian**, per bush, 55c.

FIELD PEAS

Golden Vine—A standard sort. Per bush, 60 lbs., 90c.
Grass (Bug Proof)—The best results have been obtained when sown early in the spring on fall ploughing at the rate of 1½ to 1¾ bush. per acre. The average yield is from 20 to 30 bush. peas, and about 1 to 1½ tons of straw. The straw makes excellent feed for cattle if cut and harvested without rain. Price per bush, 60 lbs., 90c.

SPRING WHEAT

Colorado—A leading and heavy yielding variety. Per bush, 60 lbs., \$1.00.

SPRING RYE

Per bush, 55 lbs., 90c. **Tares or Vetches** (black) per bush, 60 lbs., \$1.00.

COTTON BAGS 18c. EACH. SEND CASH WITH ORDER.

SPELTZ

The wonderful grain from Russia. Price per pec 60c. bush, 40 lbs., \$2.00.

SEED CORN

White Cap Yellow Dent—Per bush, 56 lbs., 90c.; **Early Improved Leaming** per bush, 90c.; **Flammoth Southern Sweet**, per bush, 70c.; **Red Cob Ensilage**, per bush, 75c.; **Yellow Horse Tooth**, per bush, 70c.
Flint Varieties—**Crompton's Early**, per bush, 85c.; **Angel of Midnight**, per bush, 90c.; **Canada Yellow**, per bu. 85c.

RAPE—for sowing

Broad-Leaved Dwarf English or **Essex**, see our Retail Catalogue for description. Price per lb. 10c.; 10 lb. lots or over 9c.; 50-lb. lots or over 8c. per lb.

MANGEL

The most profitable variety for the farmer to grow

Evan's Improved Flammoth Saw Log—The largest and best Long Red variety grown. It takes the lead out of thirty varieties grown 5 years in succession on the Experimental Farm at Guelph, and has taken prizes wherever exhibited. Roots are massive, straight, and regular in size, broad-shouldered, small top, free from coarseness, and of most excellent feeding and keeping qualities. Price per lb. 22c.; 5-lb. lots or over 20c. lb.

SWEDES

Evan's New Ontario Purple Top—The hardiest and one of the very best Swedes in circulation. One trial will establish its superiority as a cropper. Price per lb. 25c.; 5-lb. lots or over 22c. per lb.

New Improved Monarch, per lb. 45c.; 5-lb. lots or over 42c. per lb. **Elephant**, or **Monarch**, per lb. 40c.; 5-lb. lots or over 37c. per lb. **Hall's Fine Improved Westbury** per lb. 22c.; 5-lb. lots or over 20c. per lb. **Hartley's Improved Bronze Top**, per lb. 30c.; 5-lb. lots or over 27c. per lb.



ROBERT EVANS SEED CO., Limited
Hamilton, Ont

Address

The Farming World

Confederation Life Building
Toronto

THE IMPROVED U. S. Cream Separator

Has fully established its position as
THE STANDARD SEPARATOR OF THE WORLD.

It has repeatedly beaten in competitive tests all other kinds of Cream Separators.

At the National Buttermakers' Convention

At St. Paul, Minn., Feb. 18 23, 1901,
With 829 packages in competition,

United States Separator Butter Scored the Highest, 98 Points

made by Edward H. Webster, Ames, Iowa, and entered for scoring only.

The Third Best Butter was also U.S. Separator Butter, made by W. R. Lund, Plainview, Minn., scoring 96 points.

THE GOLD MEDAL FOR HIGHEST IN GATHERED CREAM CLASS

was also the product of

United States Separators and Cooley Creamers,

made by W. C. Noble, South Waterford, Me.

Our "would be competitors," the DeLaval Separator Co., advertise that they had 668 entries to 19 U.S. entries, 35 chances to 1. Notwithstanding this, The United States Product Scored the Highest, Scored Third Highest, and Got a Gold Medal to its Honor. What Greater Victory Could Any One Ask For?

The United States Separator Stands Triumphant.

Ask for circular with full particulars and illustrations. Made in all sizes, from 150 lbs. to 3,000 or more lbs. per hour. Write for illustrated circular giving full particulars.

VERMONT FARM MACHINE CO.

BELLOWS FALLS, Vt., U.S.A.

There is no duty on Improved U.S. Separators shipped into Canada.

THE FARRINGTON CREAM RIPENER

A careful study of all conditions clearly demonstrates that proper methods of cream ripening more closely affects the quality of the curd than any other portion of the process.

Uniform
Ripening
Increases
Yield.



Increased
Yield
Represents
Increased
Profits.

About Uniformity. It is an impossibility for any creamery not using a cream ripener to have their make of butter absolutely uniform under all conditions. With the Farrington Ripener the curd is always under the control of the buttermaker and absolute uniformity can be secured. The cream can be cooled and held at the same temperature each day, the same amount of starter added and held the same length of time. Where an open cream vat is used the buttermaker is always at the mercy of the weather. Buttermaking experts all agree that the improvements in process to be looked for in the near future are along the cream ripening line. If you have failed of producing a uniform high grade of butter in your creamery, investigate carefully the conditions governing the care of your cream from the time it left the separator until it was churned, and you will undoubtedly locate the cause of your trouble. Write for descriptive circular of the Farrington Ripener.

CREAMERY PACKAGE MFG. CO.

Cowansville, Que.

Boilers and Engines, Australian Boxes, Refrigerating Machines, Hanson's Butter and Cheese Color and K-met Extracts, Wells, Richardson & Co.'s Improved Butter Color, Spruce Tubs, Stearns's Style Spruce Tubs, Victor Combined Churn and Worker, Ideal Skim Milk Weigher.

Maxwell's "Favorite" Churn.



Patent Foot and Lever Drive.	No.	Holds	CHURNS
Patented Steel Roller	0	6 gal.	1 to 2 "
Bearings.	1	10 "	2 to 3 "
	2	15 "	3 to 5 "
	3	20 "	4 to 7 "
Improved Steel Frame	4	26 "	4 to 12 "
	5	30 "	6 to 14 "
	6	40 "	8 to 20 "

Superior in Workmanship and Finish

DAVID MAXWELL & SONS
St. Mary's, Ontario, Canada.

Up
With the
Times...

Progressive Cheese and Butter makers use : : : : :

Windsor Salt

because they know it produces a better article, which brings the highest price.

THE WINDSOR SALT CO.
Limited
WINDSOR, : : : : ONT.

Cheese and Butter

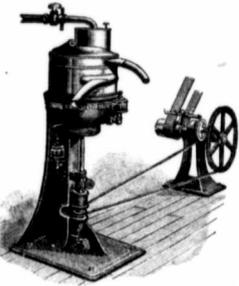
Makers of these articles, in many instances, do not pay the necessary attention to the quality of the salt they use. Some people think that "salt is salt," and it does not matter where it comes from or who makes it. This is a great mistake, for it is essential that to produce the best Butter or Cheese nothing but the purest salt should be used.

The number of prizes obtained by users of
"RIOE'S or COLEMAN'S" DAIRY SALT

at the various exhibitions is conclusive proof that these brands of salt stand unrivalled. For prices, etc., address

R. & J. RANSFORD,

Clinton, Ont.



OVERWHELMING TESTIMONY

THE Alpha DE LAVAL SEPARATOR

Is the Leader of Separators

THE WISDOM OF THINGS.

In the course of time, all things come to their natural or proper adjustment. So does public opinion in matters of practical every-day life; its judgments may not be evident at first but are finally asserted in unmistakable terms.

In the choice of a cream separator, the judgment of public opinion must be of a greater weight than in many other things, as a disregard of its tenets, in thousands of instances, have brought—and will bring—utterly disastrous results to the uninitiated creameryman.

What separator—what make of separator should you buy for your creamery or for your dairy?

We will not answer directly, but we will give you the elements to form a judgment for yourself; we will refer you to the general opinion of the men in the trade who undoubtedly constitute the best authority in the matter.

WHAT DO CREAMERYMEN SAY?

Let us look around us.

In the United States, they have a *National Butter Makers' Association* which has been established in 1892, the annual meetings of this essentially representative body, have so grown in importance that their butter competitions are now the largest in the world. One feature of these competitions has direct bearing upon our subject. Under the rules and regulations of the contest, all competitors must make known the kind of furnishings and appliances they are using, including of course, the make or style of cream separator.

Since the organization of this Association, the butter made with the Alpha Separators has, each year, carried off all the highest honors, without an exception. The successive First Prize Winners with places of convention and scores have been as follows:

1892.	Madison, Wis., Louis Brahe, Washington, Iowa.....	Score 98
1893.	Dubuque, Iowa, C. W. Smith, Colvin's Park, Ill.....	" 97
1894.	Rockford, Ill., F. C. Oltrogge, Tripoli, Iowa.....	" 98
1896.	Cedar Rapids, Iowa, Thos. Milton, St. Paul, Minn.....	" 97 1/2
1897.	Owatonna, Minn., H. N. Miller, Randall, Iowa.....	" 98 1/2
1898.	Topoka, Kas., Samuel Haudahl, New Sweden, Minn.....	" 98
1899.	Sioux Falls, S. D., A. W. McCall, Creston, Iowa.....	" 97

Last year, February 1900, at Lincoln, Nebraska, the three highest scores and Prize Winners were as follows:

1st—	H. T. Sundergaard, Litchfield, Minn.....	Score 98
2nd—	Martin Mortensen, Willow Creek, Iowa.....	" 97 1/2
3rd—	F. E. Barrett, Union, Ill.....	" 96 1/2

This year, at St. Paul, Minn., the two highest scores and Prize Winners were as follows:

1st—	E. O. Quenvold, Owatonna, Minn.....	Score 97
2nd—	C. H. Jensen, Bernedotte, Minn.....	" 96 1/2

What is still more directly important and conclusive, as giving the pulse of general opinion, is the number and the proportion of the different makes of separators used by the competing butter-makers in the two last annual conventions of the Association, as shown by the following table:

DO NOT BE MISTAKEN—BUY THE ALPHA DE LAVAL.

For Catalogue Apply to

CANADIAN DAIRY SUPPLY CO. 327 Commissioners Street **Montreal**

SEEDS Any 10 Packets 25c.

TAKE YOUR CHOICE. BY MAIL POSTPAID.
GUARANTEED FULL SIZE PACKAGES.
MONEY REFUNDED IF NOT SATISFACTORY.



2 Bulbs Giant Cyclamen, only 25c.

VEGETABLES. ORDER BY NUMBER.

1. BEANS, Golden Wax.
2. BEET, Eclipse, round.
3. BEET, Egyptian, flat round.
4. BEET, Long Smooth Blood.
5. CABBAGE, Winningstadt.
6. CABBAGE, Fottler's Branswick.
7. CARROT, Half-Long Danver's Scarlet.
8. CARROT, Gem or Oxheart.
9. CAULIFLOWER, Early Paris.
10. CELERY, Golden Self-Blanching.
11. CORN, Early Minnesota.
12. CORN, Stowell's Evergreen.
13. CUCUMBER, Chicago Pickling.
14. CUCUMBER, Long Green.
15. CUCUMBER, White Spine.
16. HERBS, Sage.
17. HERBS, Savory.
18. HERBS, Marjoram.

19. LETTUCE, Nonpareil.
20. LETTUCE, Denver Market.
21. MUSK MELON, Early Hackensack.
22. WATER MELON, Early Canada.
23. ONION, Large Red Wetherfield.
24. ONION, Yellow Danvers.
25. ONION, Silverskin.
26. PARSLEY, Moss Curled.
27. PARSNIP, Hollow Crown.
28. PEAS, First and Best.
29. PEAS, McLean's Little Gem.
30. PEPPER, Ruby King.
31. PUMPKIN, Large Cheese.
32. RADISH, Rose Gem.
33. RADISH, French Breakfast.
34. RADISH, Long Scarlet.
35. SALSIFY, Sandwich Island.
36. SQUASH, Vegetable Marrow.
37. SQUASH, Hubbard.
38. TURNIP, Red Top Globe.
39. TOMATO, Dwarf Champion.
40. TOMATO, Extra Early Atlantic.

FLOWERS.

41. ALYSSUM, Sweet.
42. ASTERS, Mixed.
43. BALSAM, Mixed.
44. CARNATION, Mixed.
45. CLIMBERS, Mixed.
46. EVERLASTING (Helichrysum), Mixed.
47. MIGNONETTE, Sweet.
48. MORNING GLORY, Mixed.
49. NASTURTIUM, Tall, Mixed.
50. NASTURTIUM, Dwarf Mixed.
51. PANSY, Mixed.
52. PETUNIA, Mixed.
53. PINKS, Dianthus, Mixed.
54. PHLOX, Drummond, Mixed.
55. SWEET PEAS, Fine Mixed.
56. VERBENA, Mixed.
57. WILD FLOWER, Garden, Mixed.
58. ZINNIA, Mixed.

WE SEND FREE with every order 1 Package New Royal Carnations (Price 20c.) and in return ask you to tell your friends of this Liberal Offer. It's not much trouble and may help us.

REMIT CASH WITH ORDER.

ADDRESS ALL ORDERS

WM. RENNIE, TORONTO.

BELL PIANOS AND ORGANS

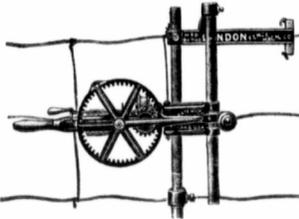


Built to last a lifetime
By the Largest Makers
In Canada



BELL is the Musician's Favorite

The BELL ORGAN AND PIANO Co., Limited, Guelph, Ontario
Catalogue No. 41 Free



YOUR Wheat would not be smothered, roads blocked or headlands wet when ready to plough if you fence your farm with

Coiled Spring Fence

woven with a "London" Fence Machine and it won't take long to make it either. A card will get you a catalogue.

The London Fence Machine Co.

Dealers in all Kinds of Wire and Fence Supplies.
LONDON, ONTARIO.

SHEPHERDS



SHEEP DIP

Kills Lice and Ticks, destroys all disease germs. Disinfectant and antiseptic. Is healing. Prevents and cures skin diseases.

Having so much confidence in this preparation we will give to any farmer who personally brings this advertisement to our warehouse a full-sized bottle for trial.

Any Dealer who has not got it in Stock can get it for you from us.

Put up in Qt. Bottles. Price 25 Cents. Manufactured by

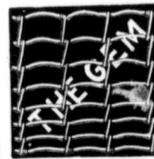
THE LYMAN BROS. & CO. Limited,
Wholesale Druggists,
71 73 Front Street, Toronto.

SALESMAN WANTED

To travel with most complete line of Paints Colors and Varnishes on the market.

Jewel Refining Co.,

Paint Department, Cleveland, Ohio.



COILED SPRING FENCE WIRE

for sale at lowest prices.

Also JEWEL FENCE MACHINE, the most practical device made for constructing wire fence.

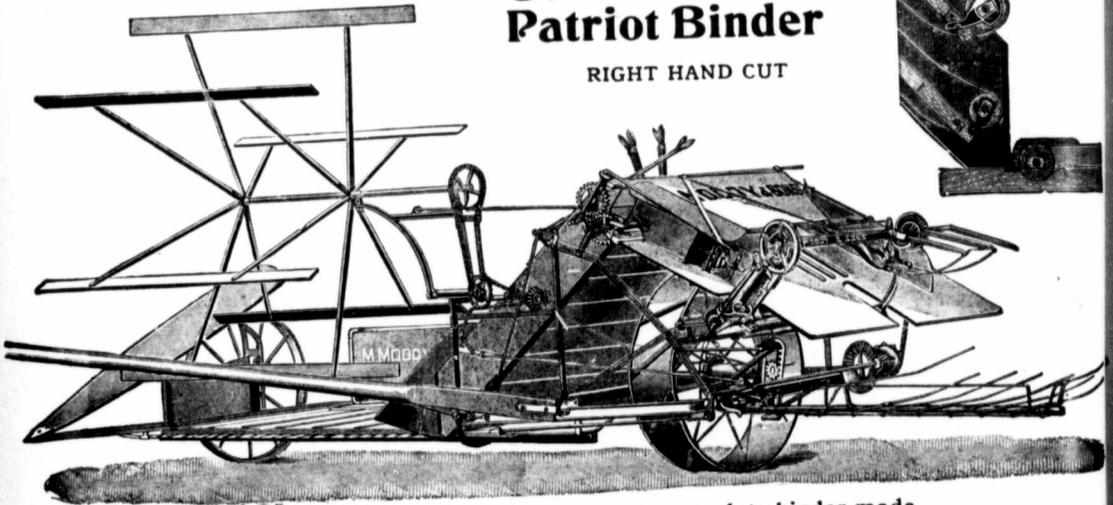
Write

McGregor, Banwell & Co. WINDSOR, ONT.

WIDE OPEN

Our Patriot Binder

RIGHT HAND CUT



Loosen canvas at end of day's work

MOODY PAYS FREIGHT

Absolutely the most reliable and most up-to-date binder made.

Labor-Saving Farm Machinery

MATTHEW MOODY & SONS Terrebonne, QUE.

The Farming World

For Farmers and Stockmen

VOL. XVIII

APRIL 2nd, 1901

No. 32

"The Sugar Beet World"

A New Department Added to "The Farming World"



THE movement for the development of the sugar beet industry in Canada has reached an important stage. It has been clearly demonstrated by Government experiments, and otherwise, that the soil and climate of Ontario, at least, are most suitable for growing the finest quality of beets. Following this has come the granting of a liberal bonus by the local Government to encourage the establishment of beet sugar factories in this province. All that remains now to be done to place the business on a good footing is the providing of the necessary capital to build factories and the supplying of sufficient beets by the farmers to keep these factories in operation. Sufficient capital is already in sight for starting at least two or three of these factories within the next year or two, and in more than one district enough farmers have been secured who will agree to grow sufficient beets to keep them in active operation. It is, therefore, safe to conclude that within a comparatively short time several factories will be in active operation in this province at least.

The farmers' interest in this movement is of great importance. In the United States the growing of sugar beets has been found to be a most profitable business for the farmer to engage in. No capital is required. All that is necessary from the farmers' point of view is the setting apart of five to ten acres of suitable land each year for sugar beets, and the giving to them sufficient care and attention to produce the very finest quality of product. To produce this fine quality, however, the farmer must know the character of the sugar beet, and the kind of soil and cultivation necessary to procure the best results. It will require some little application on his part to perfect himself as to the needs of the sugar beet in the way of plant food, cultivation, etc., and, therefore, any means adopted for supplying this knowledge should receive careful consideration at his hands.

In this connection the publishers of THE FARMING WORLD had about decided to issue a special organ devoted to this industry to be known as *The Sugar Beet World*, but as the growing of sugar beets is so closely allied to other branches of farming, it was thought wise not to separate the two, and to incorporate *The Sugar Beet World* with THE FARMING WORLD. This week's number, therefore, contains the first issue of *The Sugar Beet World*, which will henceforth appear as a special department of this journal, making it the recognized representative of the Canadian beet sugar interests. At least two pages each issue will be devoted to this subject, and will contain from week to week practical and definite information dealing with the various phases of the sugar beet question, such as

the development of the industry, its value to the country, how profitable it may become for the farmer, the nature of the sugar beet, the soil required for its growth, how to cultivate it, how to harvest it, and the value of the sugar beet pulp, or by-product for feeding all kinds of stock, and especially milch cows. In fact every branch of the business, more especially from the farmers point of view, will be fully dealt with, so that this department of THE FARMING WORLD will be of very great value to every grower of sugar beets, as well as to all parties interested in the development of the industry in Canada.

The Sugar Beet World will be edited by Mr. James Fowler, for eleven years a representative of the United States Government in Canada, and who for the past four years has made a special study of the sugar beet industry in the United States. For the past year and a half he has devoted his whole time to this work, during which he has made a thorough study of our climatic and soil conditions, with a view to the establishment of the industry in Canada. The interest in this movement, which has crystallized into the formation of a flourishing Beet Sugar Association, and the obtaining of a substantial bonus from the Ontario Government, as well as some tariff favors at Ottawa, is largely, if not altogether, due to Mr. Fowler's untiring zeal and energy and his executive ability, as an organizer. He is thoroughly informed as to the requirements of the industry, both from the capitalists' and farmers' standpoint, and is therefore in a position to render most valuable assistance through *The Sugar Beet World* to the grower as well as the manufacturer.

Mr. Fowler's first desire is to make this department of THE FARMING WORLD of the greatest possible assistance to farmers who have already agreed, and who will hereafter agree, to grow sugar beets for the production of sugar, as well as to all farmers interested in growing sugar beets for feeding and other purposes. To this end he would be pleased to hear from parties interested in this subject and to answer through *The Sugar Beet World* any questions bearing upon this important topic. In this issue he treats more especially of the growth of the industry in the United States and the efforts put forth so far to establish the industry in this province. In later issues subjects of a more practical nature will be dealt with.

In introducing this new department to the readers of THE FARMING WORLD it is very gratifying to be able to announce that a person so familiar with the industry in all its phases as Mr. Fowler is will take charge. The matter he will give from week to week will no doubt be of very great assistance to everyone interested in the establishment of the beet sugar industry in Canada. We bespeak for this new venture the consideration and co-operation which the importance of the industry it is destined to foster deserves. We would esteem it a favor if our readers would direct the attention of their friends and neighbors who are not already subscribers to THE FARMING WORLD to this new sugar beet department.

Selecting and Testing Seeds

As spring approaches the farmer should consider ways and means of securing good seed for his crop. It is all too true that many farmers are careless about the quality of the grass and grain seeds they buy, and as a consequence hundreds of dollars are lost because of inferior or dirty crops. These losses result chiefly from seed that will not germinate and from impure and adulterated seed, the latter often containing 25 to 30 per cent. of fowl seeds. These fowl seeds not only take the place of good seeds in the field, but nine times out of ten they stay with the farmer as plant pests, and are most difficult to get rid of. The greatest proportion of dead or fowl seeds is to be found in cheap seed. Hence it will always pay to give a little extra and secure the very best to be had. A good plan is for the farmer to follow a method of selection and pick out the plumpest and cleanest seed from his own crop for seeding purposes. This can be done very easily by going through the ripened grain before it is cut, and picking out the largest heads from the strongest and most vigorous plants.

Where the farmer has to buy even the most expensive seeds it will pay well to test all seeds before sowing. This can be done by the farmer himself or by sending samples to the experiment stations for examination. There are two ways by which the farmer can test the seeds himself. The first is to use a strong reading-glass or a pocket microscope to detect the impurities and fowl seeds. To do this accurately one would need to know the genuine from the weed seed.

But this method will not determine the per centage of germinating seeds. The safest and best way to test the germinating powers of seeds is to use two dinner plates and a folded piece of flannel cloth. The seeds should be placed between the folds of the dampened cloth, which is then laid on one plate while the second plate is inverted over the first. When tests are made during the winter the plates should be put in a warm place so that the temperature will not fall much below 50 degrees at night and 60 to 70 degrees during the day. The sprouts should be counted and removed from day to day until the conclusion of the test. If the seed is good and the conditions are right red clover should begin sprouting the second or third day, and in four or five days nearly all of the good seeds will have germinated.

Impure clover seed is more common than any other kind of seed, and farmers should be careful that they have a clean and good variety before sowing. Home grown seeds are the best, and farmers are specially cautioned against using any of the European clover seeds, because most of this seed is not adapted to our climatic conditions, and will prove a failure in the clover growing sections.

Dairy Herd Test Records

In November last Mr. J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa, sent out a letter to a few farmers in each province of the Dominion asking for some exact information as to the methods of feeding followed in different parts of Canada, and with a view to securing the co-operation of dairymen in carrying on some kind of co-operative test records of dairy herds. The response to this letter has been of such a character as to indicate the advisability of further extending this work, and bringing it before the public. Mr. Grisdale has therefore sent us a copy of this letter for publication, with a view to getting dairy farmers in all parts of the country interested in the movement. Parties desiring further particulars may obtain them by addressing "The Agriculturist, Experimental Farm, Ottawa." All letters so addressed are carried free.

Mr. Grisdale's letter introducing this movement is as follows:

DEAR SIR,—Your name has been handed to me as that of a farmer who is particularly interested in the production of milk. It is a well known fact that the great majority of dairy herds, if we may judge by cash returns alone, are losing investments. It is, however, certain that this need

not be the case if sufficient care and intelligence are exercised in selecting and feeding the cows intended for milk producers. So, in order to be able to work more effectively toward improvement along this line, I am desirous of securing some exact information as to the methods of feeding followed in different parts of Canada. I should, therefore, be much indebted to you if you would write me briefly upon the following points:

1. Kind and quantity of roughage ration fed to your milking cows in winter.
2. Kind and quantity of grain fed your milking cows in (a) summer, (b) winter.
3. Quantity of milk yielded per cow yearly.
4. Do you use pure-bred bulis? What breed?
5. What use do you make of by-products (whey, etc.), if you have any?

Would you care to carry on a simple dairy herd test during 1901 in conjunction with dairymen in different parts of Canada and us here? The only expense would be a spring balance for weighing the milk. We would furnish you with blanks each month for keeping the records. If Canadian dairymen are to raise the average yield of their herds and make a profit, it must be by first finding out what their individual cows are doing. If the cow is not paying for her keep, and leaving a good profit for the dairyman, either the cow is no good or the dairyman is not feeding her properly. Now if you are really interested in the dairy business, and care to go into a co-operative test as mentioned above, I should be pleased to send you further particulars *re* the same. In any case, I should like to hear from you on the aforementioned points.

N.B.—All business communications come post free.

Yours very truly,

J. H. GRISDALE, Agriculturist.

Central Experimental Farm, Ottawa, Nov. 10, 1900.

The movement for the establishment of a co-operative dairy herd record or test is to be commended. Aside from the fund of valuable information obtainable from such a record carefully and accurately kept, it will be of great value to every farmer who undertakes the work. The information he will gain about his individual cows will be of inestimable value in selecting and building up a dairy herd. There are too many unprofitable cows in the country that are a source of loss to their owners, and if by means of a herd record they could be found out and weeded out the profits to be derived from co-operative dairying would be increased many times. Then the value of the data obtainable to the country at large is of great importance, and it is hoped that dairy farmers will co-operate with Mr. Grisdale in this co-operative herd test movement.

More on the Dressed Meat Trade

In the past two issues we have dealt somewhat at length with the dressed beef and mutton trades, and more especially with the trend of affairs in Great Britain, which seems to indicate the rapid expansion of the dressed meat trade at the expense of the live animal trade. The present condition of the home supply in the United Kingdom will be of interest in considering the establishing of the Canadian dressed beef trade, and which has lately received some attention at the hands of the Government of this province.

The latest agricultural returns for the United Kingdom do not reveal any startling changes in the number of cattle or sheep in 1900 as compared with the preceding year, for while cattle increased by 110,206 head to 11,454,902, sheep decreased by 625,678 head to 31,054,547. In view of the steady growth of the population, these totals represent a smaller supply of home-fed beef and mutton per head in 1900 than was available in any of the past 18 years, except, perhaps, 1895. In other words, so far as home supplies, on paper, are concerned, the frozen or refrigerated meat trade has now less to fear than when the trade started in 1880-1. But in the interval much has been done to attain early maturity, and thereby increase the meat-producing power of British herds and flocks, so that

possibly the shortage of home-killed meat is more apparent than real.

Turning to the United States, the latest agricultural returns undoubtedly favor a maintenance of values there. The continuous reduction in the herds of that country since 1893, when they totaled 52,095,568 head, as against only 43,902,414 head on January 1, 1900, would appear to foreshadow shorter supplies, and, therefore, a stronger market for live cattle and beef; but as the imports into the United Kingdom from this source were only 248,892 cattle and 177,552,800 lbs. of refrigerated beef in 1893, against 350,209 head and 286,723,800 lbs. of beef in 1900, it is manifest that the export bears no very direct relation to the stock of cattle in the States. It is sufficient to note that prices in Chicago have been comparatively high of late, and are not unlikely to remain so. South American shipments of chilled beef, even if successful commercially, are not likely to seriously affect North American supplies for a long time to come.

A somewhat similar condition prevails in connection with the English colonial supply. The Australian drought is only partially broken; and as, in any case, time must be allowed for the flocks and herds to recover from the tremendous losses of the past three years, the probability is that exports in 1901 will fall short of those of last year. In New Zealand the stock of sheep has remained stationary since 1896, and the increase in cattle has been unimportant. The present season, too, is reported to be unusually backward. It would therefore appear as if no immediate extension in the output of the freezing works in New Zealand can be looked for. Reports from the Argentine point to a full supply of cattle and sheep being available, though possibly the quality of the latter may not immediately recover from the effects of the recent floods. The larger number of vessels being put into this branch of the trade will doubtless enable shippers to further increase their output. Freezing works are contemplated at two new centres (Bahia Blanca and La Plata), but the output for the coming year will not be large enough to materially affect values.

Another Successful Public Sale

In last week's Gazette Department of The Farming World appeared a short account of the Provincial sale of pure-bred stock held at New Westminster on March 15 last. Since then we have received a more detailed report, giving the prices obtained and a list of the sales made, and which will be found elsewhere in this issue. As this list shows, the prices obtained were good and high enough to ensure a profitable business for Eastern breeders who ship stock to the Canadian West. The success of this sale furnishes additional evidence of the wisdom of establishing the public auction sale system in Canada. That system has now become a fixture in this country and the holding of successful sales both east and west of this province will greatly assist breeders in disposing of their surplus stock to advantage. They owe a debt of gratitude to the officials and others who have so energetically promoted these sales and brought them to a successful issue.

The reference in the report to the C.P.R. and the assistance rendered by that corporation in the transportation of the stock to the West is worthy of note. While it is in the best interests of the railway companies to promote objects of this kind, yet it is very gratifying to know that the officials of this great Canadian railway took such a kindly and personal interest in this sale and so ably assisted in making it a success. Their action is very commendable, and it is to be hoped that all future efforts of our breeders to establish interprovincial trade in live stock will receive the same courtesy and attention from our great railroad corporations.

A few weeks ago we referred to one or two matters in connection with the passenger rates provided for those attending the Ontario sales. While it is of the greatest value that the best freight rates possible should be obtainable for conveying animals to and from these sales, yet it is of equal importance that the buyers and sellers of these animals should be considered. We sincerely hope, therefore, that this whole question of freight and passenger rates to and from these sales will receive generous consideration from

our railways. The success of the British Columbia sale should convince them that the same treatment accorded to eastern sales would be greatly appreciated by the breeders of this country.

Packing and Carrying Fruit

Last week Prof. Robertson gave evidence before the Agricultural Committee of the House of Commons as to the injury done to the Canadian apple trade by dishonest and improper packing. He spoke of the need for properly-ventilated stowage on steamers, and read a number of reports from Mr. Grindly, the department's agent in Liverpool, showing that where apples were carried in heated holds they arrived in bad condition. The shipments to Glasgow arrived in the best condition. This year the steamship companies were showing a desire to co-operate with the Government in securing proper carriage of apples. Mr. Fisher stated that he has a bill on the order paper respecting the marking and inspection of packages containing fruit for sale, which will obviate the grievances complained of in this connection and dishonest packing.

This question of having our apples honestly packed and all our fruit landed in Great Britain in good condition is most important. Legislation in regard to dishonest packing cannot come too soon, while every means in the Government's power should be utilized to induce, and, if need be, compel steamship companies to provide properly ventilated and isolated chambers for the carriage of fruit. But we are making progress along these lines, and a few years will doubtless witness a large improvement in the direction of better shipping and carrying facilities for all our perishable food products. In this connection the following comments on our fruit trade with Great Britain, taken from a recent issue of *British Refrigeration and Allied Interests*, will be found interesting.

"The recent shipments of Canadian fruit to this country, to which reference has already been made on several occasions in the columns of this journal, and as regards the quality, of which we give in another part of this issue an interesting report by a well-known expert, has sufficiently amply demonstrated the fact that the initial difficulties to the enterprise have been satisfactorily overcome, and that the time has now arrived when Canadian fruit, not only of the hardier class, but also that of the most delicate description, will be able to compete on exceedingly favorable terms in the markets of this country. Some years back, when shipments of Canadian fruit were first made, the result was disastrous, and the project was thus nearly killed in its earliest infancy. Nor, indeed, was this failure much to be wondered at when it is to be considered that fruit, beef, butter, etc., were all stored on board the steamer in the same cold chamber, although the temperature suitable for their preservation differ very considerably. For instance for fruit we do not want anything lower than 36 degrees Fahr., nor appreciably higher than 40 degrees Fahr., whilst for butter the temperature might with advantage be as low as 22 degrees Fahr., and for beef one of 28 degrees Fahr. would be the best. Under such circumstances it is not very surprising that as the temperature of the cold store was kept suitable for the latter goods, the fruit suffered very much damage, and when exposed to the warm air on its arrival in this country, the tissues burst, and it perished within twenty four hours."

CORRESPONDENCE

Prince Edward Island Dairying

Editor THE FARMING WORLD:

The part played by little Prince Edward Island last year in supplying the world's greatest market with cheese and butter has been creditable indeed. Every year sees a remarkable increase in the output of Prince Edward Island factories, and last year has been no exception. When we consider that in the year 1892, just eight years ago, there was but one solitary co-operative cheese factory in the province, and that being started in that year for the first time, with an output of cheese valued at about \$8,000, and that in the year 1900 there were in operation forty-six

with a gross output of cheese and butter valued at \$600,000, we can judge of the wonderful dairy progress in the short space of eight years.

We have now on the Island forty-two cheese factories and four creameries, making a total of forty-six cheese and butter factories in full operation. Twenty-seven of the cheese factories now manufacture cheese in summer and butter in the winter months, while the remaining fifteen make cheese only during the summer season. The four creameries turn out butter all the year round, and are among the most progressive in the Dominion. The total output of cheese from the Island factories last year was 65,000 boxes, valued at \$453,000. The total output of butter for the season from the four all the year round creameries was 395,000 pounds butter, valued at \$80,000, while that of the twenty-seven cheese factories making butter in the winter season totals something like 300,000 pounds, having a value of \$61,000. The whole industry shows a grand total value of, for the season of 1900, \$600,000, in round figures, being an increase over that of the preceding year of \$77,000. To give an idea of what some of the best cheese factories are doing, we have the figures of the eleven best factories, giving the number of boxes of cheese manufactured the past summer: Kensington, 4,484 boxes; Vernon River, 3,950; Stanley, 3,910; Emerald, 3,174; Orwell, 2,963; New Glasgow, 2,800; Hazelbrook, 2,779; Dunk River, 2,385; Hillsboro, 2,240; New Perth, 2,150; and North Wiltshire, 2,038, or a total for these eleven factories of 32,873 boxes of cheese, more than half the total output of the province, and valued at about \$300,000, or an average of \$27.272 for each of the eleven factories.

During the past year five new factories were erected and put in operation: St. Margaret's, Belle River, Cordigan Red Point, and Souris, turning out, during the year, 3,000 boxes. Considering that the population of the island is not much over 100,000 people the factory output of dairy products equals six dollars for each person, not including the sales from private dairies, for it is certain that dairying is yet carried on privately by fully one-third—perhaps one-half—of the farmers who are not yet patrons of the cheese factory or creamery. Island cheese has so far an enviable reputation, for during the season just closed it is a fact that Prince Edward Island cheese sold in the Charlottetown Board for a shade higher price than any cheese in Canada. The sales at Charlottetown are frequently higher than Brockville on the same day. This is certainly a matter of self-congratulation to Island dairymen. No doubt the coolness of the climate and its contiguity to the salt water of the Gulf of St. Lawrence gives a particular aroma to the grasses, while the equitable temperature favors the curing. The freedom from low forms of fungoid and other noxious grasses and weeds in the Island pastures also reflects on the high quality of the cheese. However, Island dairy men must not by any means rest upon their present enviable reputation. They need, on the other hand, to jealously guard it, and improve wherever improvement is possible.

Hermanville, P.E.I.

J. A. MACDONALD.

More on the Summer Fallow

EDITOR THE FARMING WORLD:

In reply to Mr. Elliott's letter of 1st inst., I would say that I am not an advocate of the summer fallow, except in extreme cases, and expect to make my first trial this summer. My object in writing before was to find out the most advanced method of cleaning the land and releasing fertility, and why the fallow was injurious to the land. The latter is not explained and I cannot even guess the reason.

As to fall cultivation, it is all right if time can be found for it, but in a wheat-growing section the fall is the busiest time of the year.

As to the field, it was my intention to plant half to corn and roots (and I have not changed my mind) and the other half for fallow. The latter half is stiff clay with lots of thistles. When hoeing time comes our men will be cost-

ing from \$35 to \$40 per month. The extra amount of hand labor required to clean out the thistles and other work necessary with corn or roots, I think would exceed the value of the crop.

As to the land being in a poor state for the second crop after fallow, this is not very clear. Most farmers expect four good crops after fallow, and it used to be customary to sow wheat, barley, wheat again and seed down. The first two crops often being so heavy as to smother out the seeds. As to light cultivation, I claim it was one year of this that put this field in a state that it requires fallowing. When the drought comes the three inches cultivated very soon dries out, and four inches below, already very solid, dries into hard-pan, so hard the roots of grain cannot go down, nor the water below rise up. Thus the fertility is locked up. It is here nature, whom we are told to follow, comes to the rescue, with thistles, to release fertility. This they will do in time, and when it is released natural grass will take possession. When this has had a couple of years' headway a man may plow it down, and after the sod has rotted he may repossess his field in a very much better state of fertility than when he was driven out.

The light cultivation system is the one practised at the Ontario Agricultural College, Guelph, and it has been sown broadcast over the province for years. I claim it is of little value to Ontario farmers, except to a few on sandy land. It would be all right on new land, which is full of decaying roots and wood, for a time. But this is frequently too loose for best results. It might also do in some favored spot where to miss a catch of clover is the exception. The clover roots are like the tree roots decaying in the new land, but on a smaller scale. The light cultivationist claims that everything of manurial value should be kept on the surface. I claim that if all the roots were taken out of a clover sod and laid on the surface on old clay or clay loam, there would not be half the good result. It is my opinion that on all heavy soils, which now comprise the greater portion of Ontario, all stubble, weeds, barnyard manure, etc., should be plowed in a reasonable depth. It will then get thoroughly mixed with the soil in the preparation of the seed-bed; and some will be left below to decay and keep the soil loose, that air and water may circulate. It is my opinion that plowing a reasonable depth, say 5 to 7 inches, on most soils will never hurt it, the trouble is it is not done often enough, and the sub-soil plow would do good to lots of old Ontario farms. As to nature spreading a blanket over the earth to save it from frost and wind, I did the opposite with this field, cut and covered it that the frost and wind might help to free fertility. In this I may be wrong, but expect it to work down this spring differently to last.

These are my conclusions founded on experience. Although this is longer than I intended, I would like to say a word in regard to Professor Robert's address in your issue of 26th Feb. It is along the same line as my own conclusions, and we may both be wrong. It is, in my opinion, the first thing I have read or heard that throws light on cultivation of the soil of old Ontario and should be read by every farmer. And, strange to say, with our boasted Institute system, our Ontario Agricultural College, with learned professors, it comes from another land. Weston, Ont., March 21, 1901. L. Rogers.

The Sugar Beet World

Devoted to Beet Sugar Culture in Canada and Allied Industries. Specially representing the Farmers' Interests.

EDITED BY JAMES FOWLER.

ONTARIO BEET SUGAR ASSOCIATION. OFFICERS FOR 1901.

President, John Parry, Dunnville; First Vice-President, F. M. Shuttleworth, Brantford; Second Vice-President, B. J. Freeman, Warton; Third Vice-President, T. A. Smith, Chatham; Fourth Vice-President, W. S. Caron, Aylmer; Secretary-Treasurer, D. H. Price, Aylmer; Solicitor, N. B. Gash, Toronto.

EXECUTIVE COMMITTEE.

E. R. Blow, Whitby; Charles Kelly, Uxbridge; S. A. Perry, Warton, T. E. List, Brantford; Ald. Parnell, London; Hugh Blain, Toronto; T. A. G. Gordon, Aylmer; F. G. Ramsay, Dunnville; D. A. Jones, Beeton; J. H. Glover, Aylmer; John A. Auld, M.P.P. Amherstburg; Charles C. Newmarket; J. R. McCallum, Welland; B. W. Stewart, Mount Forest; George E. Bristol, Hamilton; Howard Annis, Whitby.



Sugar Beetlets.

Over 62 per cent. of all the sugar manufactured in the world is made from sugar beets.

The difference between cane sugar and beet sugar can be detected only by an expert, and what little difference there is, is in favor of the beet sugar.

You are using beet sugar every day if you use any granulated sugar at all.

Beet sugar is absolutely pure white granulated sugar.

A beet sugar factory cannot manufacture any brown or yellow sugar.

Each man, woman, and child in the United States consumes on an average 60 lbs. of sugar in a year.

The inhabitants of the United States spend more money for sugar than they do for wheat flour.

It requires \$500,000 to build and equip the average beet sugar refinery.

One ton of wheat per acre is a large yield. Sugar beets often yield twenty tons per acre.

One acre of land planted to sugar beets will yield about one and one-half tons of sugar in a season.

At the present rate of increase in the consumption of sugar in the United States, it will require the building of at least 25 modern beet sugar refineries each year to take care of the increase alone.

The operating season of a sugar refinery is known in the business as "the campaign," and lasts from 100 to 150 days of 24 hours each, stopping only in the case of break-downs or for an occasional clean-up. A 1,000-ton beet sugar refinery in a campaign of 150 days requires as follows: 150,000 tons of beets, 22,000 tons of coal, 2,500 tons of coke, 9,000 tons of limestone, 120,000 barrels or a like capacity in sacks, and miscellaneous materials to the value of \$15,000. It employs 300 men and pays out \$125,000 for salaries and labor. It pays to the farmers over \$500,000 for sugar

beets, and the pulp produced during the campaign is worth in actual value as food for live stock at least \$100,000.

It would require 30 beet sugar factories capable of slicing 500 tons of beets every 24 hours to supply the people of Canada with sugar.

The natural conditions of Canada for growing sugar beets and the manufacturing of beet sugar exceed any country on earth.

The Ontario farmers are the most successful growers of root crops in the world.

At four dollars per ton, the farmer can make five times as much per acre from sugar beets as from the average farm crop.

The pulp from the refinery makes a splendid food for all kinds of live stock.

Correspondence Invited.

You are invited to correspond with the undersigned regarding any and all matters connected with the growing of sugar beets and the beet sugar industry.

JAMES FOWLER,
C/O FARMING WORLD,
TORONTO, Ont.

Beet Sugar Industry.

The Government of the United States have spent very large sums of money in the investigation of the sugar industry and has collected much valuable information. In endeavoring, therefore, to ascertain the cost of raising beets and the yield which may be expected in this country, no more reliable data can be got than that which we find in the reports regarding the beet sugar industry in that country.

In 1897, Charles F. Saylor was appointed special agent of the Department of Agriculture of the United States to investigate the progress of the beet sugar industry. In his report for 1898 is given a review of the work

done in the various states during the year, summarizing results and status of sugar beet growing, as represented by officers of the various experiment stations; and from that review the following figures are taken.

The seed was distributed by Government officials and the results were noted by them.

In considering the figures given it should be borne in mind that the cost of raising the beets includes subsoiling, rent of land, and wages for all work, as well as other expenses of every kind connected with the growing of beets. The tonnage given is of topped beets ready for the factory.

The results were as follows:

State.	Tonnage per acre.	Costs per acre.
Arizona.....	12.9	
Idaho.....	15	\$20
Illinois.....	12 to 26	\$28 to \$36
Indiana.....	12 to 13	
Michigan.....		\$25 to \$40
Minnesota.....	14 to 16	\$30 to \$35
Nebraska.....	11 to 12	\$30
North Dakota.....	7 to 12	\$20 to \$25
Oregon.....	15	\$30
South Dakota.....	10 to 20	\$30
Washington.....	18 to 20	\$30
Wisconsin (1897).....	14.9	
" (1898).....	12	

ANALYSES OF SAMPLES AT STATE EXPERIMENT STATIONS.

The various experiment stations of the United States have been making some very careful experiments with beets grown in different parts of their respective States under special regulations prescribed by the stations and the analyses have been made by the officials.

The following results are given in Mr. Saylor's report:

State	Yield per acre.
Arizona (1898).....	12.9
New York (Geneva Station) 1897.....	14.29
Oregon (1897)—	
Union County.....	23.74
Washington County.....	15.7
Clabamas ".....	17.4
Jackson ".....	18.1
Oregon (1891).....	20.5
" (1893).....	20.0
South Dakota (1897).....	21.9
Wisconsin (1896).....	12.77
Maximum cost per acre (exclusive of rent).....	\$24.18

The following table which gives a comparative analysis by States of the yield of beets per acre was compiled by the Idaho Experiment Station:

States	Yield per acre. Tons.
Arizona.....	15.0
Colorado.....	16.0
Idaho.....	15.0
Illinois.....	12.5
Indiana.....	13.0
Iowa.....	22.0
Michigan.....	15.0
Missouri.....	15.0

Montana	15.0
Nebraska (average 5 1/7 years)	13.0
Nevada	10.0
New York—	
Ithaca	16.9
Geneva	12.0
New Mexico	10.0
Ohio	10.0
Oregon	18.5
South Dakota	21.9
Utah	17.2
Washington	18.0
Wyoming	15.0

Mr. Myrick is authority for the following figures: In Utah the average yield per acre for 1894 and 1895 was 11.47 and 11.54 tons respectively and the average cost of growing per acre was \$28 to \$35.

In New Mexico. In 1896 the first crop averaged 12 tons per acre, though many farmers irrigated too much and others did not cultivate properly. Some properly worked fields made nearly 20 tons to the acre. The sugar content averaged 16 per cent.

In Michigan in 1891 tests were made all over the State. The season was unfavorable, the drought serious. In western counties 28 farmers reported average of 15 tons per acre; south-east, 21 reports averaged 16 1/2 tons; central 40 reports averaged 13 tons; northeastern, 49 reports averaged 15 tons (see Bulletin 382 Michigan Experiment Station).

In Iowa experiments by the Agricultural College in 1891 showed an average yield of 20 tons to the acre with average sugar content of 14.4 per cent.

At Chino, California, reports from five representative farmers show the following results:

- E. M. Day planted 25.75 acres which yielded 15.9 tons per acre.
- G. C. Moore planted 36 acres which yielded 18.03 tons per acre.
- P. Verner planted 18 acres which yielded 20 tons per acre.
- N. S. Rice planted 16 acres which yielded 12.25 tons per acre.
- W. C. Rightmire planted 37 acres which yielded 14.9 tons per acre.

YIELD IN GERMANY.

The average yield of beets per acre in Germany for the year 1897-98 was 12.22 tons; and for the four preceding years the average were 12.83, 12.8, 10.9, and 11.7 tons respectively.

YIELD IN ONTARIO.

Until the past year no entirely satisfactory experiments have been attempted in Ontario with the view of ascertaining the probable yield per acre, but in 1891 some experiments were made, and show the following results:

Place	Size of Plot.	Estimated yield per ac Tons.
Dunnville	1/2 acre	37.4
Deseronto	6 1/4 yards	22.5
Deseronto	1 1/4 acres	11.0
Goderich	1-10 "	21.0
Goderich	1-28 "	6.0

Hastings	1-48 "	20.0
"	1-8 "	15.0
Oshawa	1-3 "	14.4
"	1-6 "	14.8
"	1-8 "	12.0
"	1-3 "	18.0
"	1-4 "	5.0
"	1-15 "	15.6
Harwood	1-4 "	12.10
"	1-4 "	12.0
"	1-4 "	14.4
"	1-4 "	13.2
Plainville	1-4 "	14.0
Peterborough	1-3 "	14.5
"	1-2 "	6.0
Marden	1-4 "	19.02
Ont. Exp. Farm, Guelph	1 "	20.0
"	"	16.90
"	"	20.7
"	"	21.3
Walkerville	1 1/2 "	22.0
"	3/4 "	40.0
Dunnville	1-10 "	21.3
Ont. Exp. Farm, Guelph	"	18.2
Average for Ont.	"	18.2
Average for Experimental Farm	"	19.7

During the past year experiments have been carried on under the direct supervision of the Agricultural Department, with the following results:

Thirty-one of the experimenters about Newmarket have reported cost of production, which averages \$25.80 per acre. Thirty-six of the experimenters have reported yield per acre, which averages 16 tons 1,845 pounds of tared beets, that is to say, beets as taken to the factory, less the dirt and trimming, which are deducted as waste by the factory. Of the 36 yields reported the highest of 25 tons 913 pounds, net weight, and the lowest 8 tons 1,400 pounds.

Twenty-eight reports from Aylmer regarding cost of production give an average of \$28.35 per ton. Forty-five have reported yield in tons per acre, the average of which is 18 tons 772 pounds. The highest yield reported from Aylmer is 30 tons 531 pounds, and the lowest 10 tons 62 pounds.

From the Welland experimenters 26 reports regarding cost have been received, which average \$30.40 per acre. Twenty-eight reports regarding yield in tons per acre show an average of 14 tons 415 pounds of tared beets. The highest yield in tons per acre of tared beets reported from Welland is 24 tons 83 pounds, and the lowest 4 tons 1,000 pounds.

In other parts of the province experiments have been made in a small way, notably at London, Dunnville and Alvinston, with very satisfactory results. At Warton quite a large quantity was raised. Nine car loads were shipped to Michigan, and some of them brought as high as \$5.86 per ton at the factory, but the grower had to pay freight and duty.

The following from Prof. Shuttleworth's report shows what was done near Wallaceburg and Sombra:

A five hundred ton factory was built last summer in Marine City, Michigan, but, failing to secure sufficient acreage

on the American side, the company in April last solicited acreage on the Canadian side of the St. Clair. Through the work of Mr. W. K. Snider, of Sombra, who engaged with the company, contracts to grow six hundred acres were signed, which acreage extended from a point below the town of Sarnia to Tupperville, on the east branch of the Sydenham, being in all a distance of about forty miles. During the early summer there was on the part of the growers a want of confidence clearly manifested; cultivation was more or less neglected, and in not one instance was thinning properly done. Mr. Snider, however, finally inspired the growers with sufficient confidence to encourage them to keep the patches clean and well cultivated. The entire crop, running from 12 to 28 tons net per acre, and selling at the flat price of \$3.20 per ton at a Canadian point, was shipped. The growers realized for their crop from \$40 to \$90, with a probable average of \$55 per acre. The results of this year's experience have created among the growers a keen anxiety to renew their contracts with the company. Had the beets been delivered and sold at the factory, they, the growers, would have received \$4.50 per ton for beets testing 12 per cent. sugar in beet, with an additional 33 1/3 cents for every 1 per cent. of sugar over 12. The growers in this case would have had to pay 50 cents freight per ton, and 25 per cent. duty, amounting in all to \$1.30 per ton; but they chose, however, the above flat price of \$3.20 per ton at the Canadian point of shipment, losing thereby the advantage of the additional 33 1/3 cents per ton for every 1 per cent. of sugar over 12. These beets tested at the laboratory of the sugar factory from 11 per cent. to 16 per cent. sugar in beets, with a purity of 80 and upwards. Mr. Snider writes: "The principal cash outlay in raising the crop is the cost of thinning and topping. We grew ten acres on our own farm this year, and find that these two operations can be performed for \$10 per acre. The rest of the work is done by horses, and is controllable by most farmers. We use a beet puller or lifter for pulling the beets; it is a simple, durable implement, and works perfectly. A pair of very light horses will easily pull three acres per day. We have thoroughly tested our district, and find it pre-eminently adapted in every way to the growing of beets, and we are making every effort to bring about the establishment of a factory in our midst."

CONCLUSION.

The results in yield, in quality, and in cost of cultivation of sugar beets make it perfectly evident that Ontario farmers, in certain extensive districts in the province, can realize comparatively large profits by growing sugar beets at

the prices paid for them by American beet sugar factories. Undoubtedly the beet sugar industry, once established in Ontario, will prosper. Our soils are, for the most part, quite suitable to the cultivation of sugar beets; the warmth and the bright sunshine of our early summer are favorable to the production of size of root and sugar, while the bright days and cool nights of autumn insure at an early date a high degree of maturity. We have in our province an abundance of water, and in many places extensive limestone deposits. Ontario farmers, through the helpful instruction of the Ontario Agricultural College, the meetings of the Farmers' Institute, the Live Stock, the Dairymen's, the Fruit Growers' Association, etc., have attained a well deserved and world-wide reputation for the high quality of their exported agricultural products. Farmers who, by their intelligence, close observation, industry and application of the most skillful methods, have won this reputation can be depended upon to apply these same qualities in the development of what promises to be, in this province, one of our most important industries.

What Farmers at a Michigan Factory Did Last Year.

That growers for the Caro factory were well satisfied with the returns from last season's crop is evident from the way the company is succeeding in securing acreage for this season. The territory tributary to the Caro factory is most excellent beet land, and the farmers are well up on caring for the crop. From the company's books we were given the privilege of making up a list of the acreage and amounts received for the crops. Like similar lists published in other editions these figures represent an average, and not the largest nor yet the smallest amounts received.

In all of these reports it has been our desire to make a fair and impartial showing.

Name.	Address.	Acres.	Am't Paid.
H. D. Hamilton, Caro.....		2	54.30
F. Dawson, jr., Gilford.....		12	770.64
S. G. Ross, Wells.....		6	481.84
Miles Fritch, Caro.....		5	242.20
F. B. Hongsinger, Fairgrove.....		5	261.50
Fred Parsell, Almer.....		3	244.33
Isaac N. Taggett, Almer.....		5	517.70
Bauer, Nickodemus, Richville.....		6	682.18
Chas. Vaugn, Almer.....		2	187.87
Fred Bernthal, Richville.....		4	485.79
J. Fulkerson, Caro.....		1 1/2	113.68
George W. Pelton, Fairgrove.....		7	525.42
Wm. F. Fitzgerald, Columbia.....		8	695.39
Malcolm A. Tibbitts, Caro.....		3	265.88
John Gilbert, Akron.....		5	599.56
Orlando LeValley, Fairgrove.....		2	203.46
Fred Humm, Fairgrove.....		4	368.73
Peter Cambell, Caro.....		4	394.35
Fred Long, Wells.....		10	690.88
Geo. H. Metcalf, Ellington.....		8	868.95
Herman Herbst, Reese.....		5	443.82

Abraham Jones, Columbia.....	10	526.13
Albert Ewald, Columbia.....	5	349.12
Eugene Ames, Almer.....	7	580.08
Henry Turner, Almer.....	15	1168.66
Josiah Simmons, Almer.....	14	828.69
Augustus Romain, Almer.....	12	993.64
G. E. Carpenter, Indianfields.....	23	1312.77
Jas. H. Connor, Indianfields.....	10	406.76
Richard Purdy, Indianfields.....	5	329.78
Curry G. Miller, Indianfields.....	2	166.76
Volney Parsell, Almer.....	14	1010.48
Arthur J. Stevenson, Almer.....	5	567.71
Harrison Arnold, Almer.....	2	173.25
D. M. Macomber, Almer.....	10	596.11
Frank W. Forsell, Almer.....	16	1131.12
Uriah Cross, Columbia.....	4	250.32
George R. Bates, Caro.....	5	389.72
Adam Schlicht, Denmark.....	2	118.13
Moses G. Garner, Vassar.....	2	148.05
Chas. Montague, Sec. 16.....	93	6190.77
Geo. Jos. Scott, Wells.....	2	186.30
Theo. Schultz, Reese.....	15	876.09
Seeley & Hooper, Caro.....	9 1/2	536.66
John G. Webber, Richville.....	2	154.14
Charles Morse, Caro.....	3	165.70
E. N. Bliss, Almer.....	3	217.47
John F. Seeley, Caro.....	25	1076.17
Nicholas Vandecar, Almer.....	5	327.16
A. E. Crampton, Vassar.....	20	1065.52
S. B. Wescott, Caro.....	8	405.52
Carl Nimtz, Brookfield.....	3	198.27
Koemer Bros., Brookfield.....	2	199.39
Ferdin'd Schultz, Brookfield.....	4	121.45
F. Schnepf, Brookfield.....	2	147.89
Frank Schember, Cassville.....	4	359.29
Gordon Dafoe, Colfax.....	2	111.71
Isaac Ogden, Fairhaven.....	2	119.91
Mat Borsyck, Oliver.....	3	297.00
Daniel Krohn, Oliver.....	2	190.03
Jas. W. Michener, Winsor.....	1	86.41
Johan Rohde, Buena Vista.....	4	436.00
John Bickel, Frankenmuth.....	1	86.43
John M. Lanx, Frankenmuth.....	2	230.10
Fred Schrader, Merritt.....	5	248.79
John Staehli, Elkton.....	4	232.69
Avery Severn, Elkton.....	2	129.97

—Michigan Sugar Beet.

Bounty on Beet Sugar Production.

The most important legislation of the present session of the Ontario Legislature is the bill introduced by the Hon. John Dryden, Minister of Agriculture, providing a bounty for the encouragement of the beet sugar industry.

The bill provides for the payment to the factory of 1/2 cent per pound for two years and 3/4 cent the third year on refined sugar manufactured in the province, and, while it is sufficiently liberal to encourage the manufacturers to establish plants, the interests of the agriculturist are carefully looked after. The honorable gentleman has certainly proven himself the "Farmer's Friend" in sections 6 and 7 of the bill.

A Sugar Factory for Dunnville.

The people of Dunnville are enthusiastic over the prospect of the establishment of a beet sugar factory in their town next year. That they have the proper soil and other conditions necessary has already been proven, and it only remains to secure the hearty co-operation of the farmers to bring the matter to a successful issue. A meeting is to be held in that town on Monday, 8th inst., and all townships contiguous will be represented by their Reeves and Deputy

Reeves. It is expected that prizes will be offered by each township for the best samples of beets grown this year, and every possible effort will be put forth to encourage the farmer to take an interest in the growing of the beets. Hon. Richard Harcourt, Minister of Education; Prof. A. Shuttleworth, N. B. Gash, Toronto; and W. K. Snider, Sombra, will address the meeting.

Meeting at Peterboro.

A meeting of farmers and others interested in the growing of sugar beets and the establishment of a beet sugar factory, is to be held in Peterboro, on Saturday, 6th inst. The primary object of this meeting is to interest the farmers in growing experimental plots of beets this year, and demonstrating in a practical way, that the soil and climate conditions are favorable to the establishment of a factory in that locality.

Other Factories.

Wallaceburg recently passed a by-law, by a: almost unanimous vote, offering a bonus of \$30,000 for the establishment of a beet sugar factory in that town. It appears that they have largely exceeded their borrowing powers in this by-law, and an effort is being made to have it legalized by the Legislature.

The Crystal Sugar Co. of Sombra are proceeding in the proper way to secure the erection of a factory. Meetings throughout that section are being held continuously, and contracts are being signed by farmers for the growing of beets for three years.

Onions vs. Beets.

By J. F. Thissell.

It costs about \$30 per acre to grow sugar beets for a factory, including seed, all work on the acre and everything one can think of. If we count the average crop as only fifteen tons per acre at \$4.50 per ton, we have \$67.50 less than the \$30 expense, which gives us \$37.50 profit on that acre of beets. We sow from 15 to 20 pounds of seed on that acre at \$3.

On an acre of onions we sow 60 pounds of seed, and it may cost us \$1 per pound. Other expenses will bring the cost of growing an acre of onions up to not less than \$130 or \$140. The acre, if it does well, may turn off 500 bushels, which may, or may not, average 40 cents per bushel, or \$200 total. Deduct the expenses of \$130, and we have \$70 profit.

But sometimes our onions fail to grow marketable bulbs, and such a case the profit is all gone. Besides, care is required about frost, and the crop must be graded to make the most out of it.

With our beets we can load them

on the car frozen solid, and they bring us just as much as if drawn in warm weather, in deep mud, and if we are as careful about selection of the beet field as we were about the onion field, we may grow 30 tons to the acre, which gives us \$135, less \$30, leaving a profit of \$105 per acre.—*Beet Sugar Gazette*.

Syrup From Beets.

A correspondent from Omaha writes as follows: "Some parties here have perfected a process by which they have made a good article of syrup from sugar beets. They made a practical demonstration last fall by building a small plant, and making some few thousand gallons from five acres of beets of their own growing.

"A company is now being organized for the purpose of building a few other plants beside the one here at Omaha. They figure a plant capable of cutting fifty tons of beets per day as being about right for an initiatory plant. Their returns were over forty gallons of syrup per ton of beets. It is a fine article in every way, of pleasant flavor and desirable color. I regard this as being a grand introduction for future beet sugar factories, although the profit from making syrup is certainly more, but the limit of its use will probably be less. These parties will contract to put up a plant, and guarantee forty gallons of syrup from beets averaging 12 per cent sugar. If you or your people are at all interested in this matter, I should be very pleased to hear from you."—*Michigan Sugar Beet*.

No Cash Required.

Among the many reasons on the strength of which farmers may be properly invited to go into growing beets some emphasis may be laid upon the fact that the undertaking involves no cash outlay on their part, which is quite an important consideration in agricultural communities where cash is usually not plentiful. In many other crops the farmer is obliged to buy his seed for cash, to pay for his agricultural implements either cash down or by instalments. In the case of growing beets, however, the conditions are different.

In nearly every instance the capital is furnished by the factory. It is the factory that buys the seed, in most cases it provides the fertilizer, purchases the implements, etc. Often the implements are not bought by the farmer at all, but rented from the factory. In buying the seed and fertilizer from the factory, and in arranging for the use of its implements, and often its hands to operate them, the farmer agrees to pay out of the beets which he will deliver to the factory when the crop is harvested. The fac-

tory makes the proper deductions and turns the balance over to the farmer.

This is an advantage of beet culture that farmers ought not to lose sight of. It is practically getting an opportunity to make money at little more risk than the loss of one's time, and study of the matter.—*Beet Sugar Gazette*.

Still Hauling Pulp.

Farmers having been delayed in their farm work are putting in time in hauling beet pulp from the refuse piles at the factories and storing it on their farms for spring feeding of stock. A visit at the factories at any time will find a number of wagons backed up to the pile being loaded. Some farmers claim that the pulp is more valuable for feeding now than when freshly made, having become soured, the same as siloed feed. Many farmers in this section will, during the fall, make preparations for storing the pulp during the winter in order to do away with hauling it in the spring. The pulp is fed generally to milch cows and to stock being made ready for the market. The farmers in the vicinity of Pekin, Ill., and St. Louis Park, Minn., realize the value of the pulp to such an extent that when the factories at these places closed the pulp was all gone.—*Michigan Sugar Beet*.

Helping Uncle Sam.

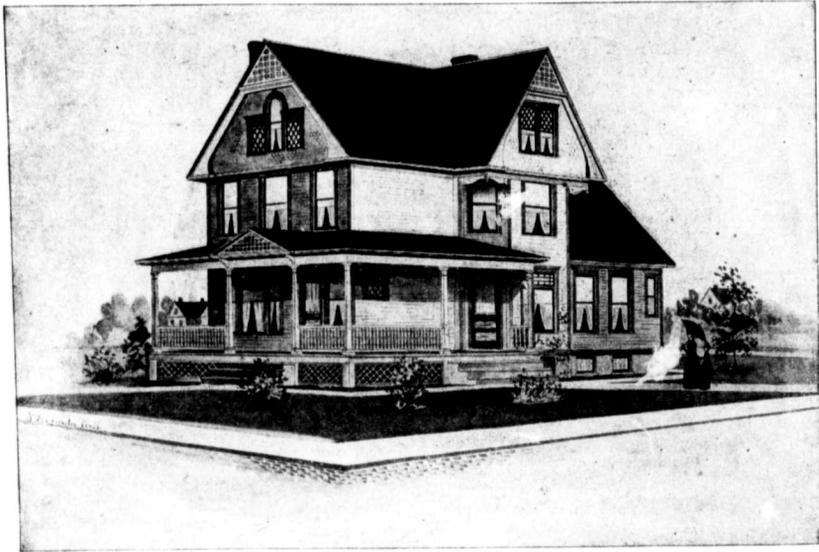
A correspondent of *Sarnia Canadian* writes as follows:

During the last fifty years we have been putting money in to Uncle Sam's treasury. At present the farmers are growing beets and shipping them to Michigan, paying one dollar a ton duty. An average crop is twelve tons, but fifteen tons have been grown to the acre. This means that every farmer who grows an acre of sugar beets for export is putting twelve to fifteen dollars into Uncle Sam's pocket; and if he grows ten acres, it means from \$120 to \$150, a pretty good sum for a poor man to lose. Think what a lot of good things he could buy with that, what a lot of good trade for the business men of the town. Let us help ourselves.

On many farms weeds have been one of the causes of a decline of fertility. One of the satisfying conditions of sugar beet culture is that you are each year driving the weeds off your farm. With the grain crop you harvest weeds and grain together, while with the beet crop the weeds are left out of the race long before the harvest. The weeds are left to die by the roadside, and in the loss of this constant companion you never shed a tear.

The Beet Sugar Factories of the United States.

NAME.	LOCATION.	DAILY CAPACITY TONS.
IN OPERATION.		
Alameda Sugar Co.	Alvarado, Cal.	800
Western Beet Sugar Co.	Watsonville, Cal.	1,000
Chino Valley Beet Sugar Co.	Chino, Cal.	1,000
Los Alamos Sugar Co.	Los Alamos, Cal.	700
California Beet Sugar and Refining Co.	Crockett, Cal.	1,200
Oregon Sugar Co.	La Grande, Ore.	350
Utah Sugar Co.	Lehi, Utah.	350
Ogden Sugar Co.	Ogden, Utah.	350
Pecos Valley Beet Sugar Co.	Carlsbad, N.M.	200
American Beet Sugar Co.	Grand Island, Neb.	350
American Beet Sugar Co.	Norfolk, Neb.	350
Minnesota Sugar Co.	St. Louis Park, Minn.	350
Michigan Sugar Co.	Bay City, Mich.	500
Binghamton Beet Sugar Co.	Binghamton, N.Y.	350
Spreckels Sugar Co.	Salinas, Cal.	3,000
American Beet Sugar Co.	Oxnard, Cal.	2,000
Union Sugar Co.	Santa Maria, Cal.	500
Illinois Sugar Refining Co.	Pekin, Ill.	700
Colorado Sugar Mfg. Co.	Grand Junction, Colorado.	350
Standard Beet Sugar Co.	Ames, Neb.	500
Bay City Sugar Co.	Bay City, Mich.	600
Detroit Sugar Co.	Rochester, Mich.	500
Wolverine Sugar Co.	Benton Harbor, Mich.	350
Peninsular Sugar Refining Co.	Caro, Mich.	600
West Bay City Sugar Co.	West Bay City, Mich.	500
Alma Sugar Co.	Alma, Mich.	600
Holland Sugar Co.	Holland, Mich.	350
Kalamazoo Sugar Co.	Kalamazoo, Mich.	500
D. C. Corbin.	Waverly, Wash.	350
American Beet Sugar Co.	Rocky Ford, Colo.	1,000
National Sugar Co.	Sugar City, Colo.	500
Continental Sugar Co.	Freemont, O.	350
Empire State Sugar Co.	Lyons, N.Y.	500
Marine Sugar Co.	Marine City, Mich.	350
NOW BUILDING FOR THE CAMPAIGN OF 1901.		
Saginaw Sugar Co.	Saginaw, Mich.	800
Lansing Sugar Co.	Lansing, Mich.	800



Ideal Farm Homes

With this issue we present to our readers design No. 19. The expense of building this house would be about \$1,900.

By looking at the perspective view, it will be seen that this is a very handsome, though modest appearing residence. Having a porch on the front and a portion of one side gives it a very fine appearance, besides the comfort that there is in having a porch. There, perhaps, might be a word more

said on this porch question, as almost everyone knows, who has a small one in connection with their house, that when it is only on one side or one end of the house there are a good many times when it cannot be used on account of the relative position which it occupies to the sun. In having it on two sides of a house, it always leaves one place ready for occupancy.

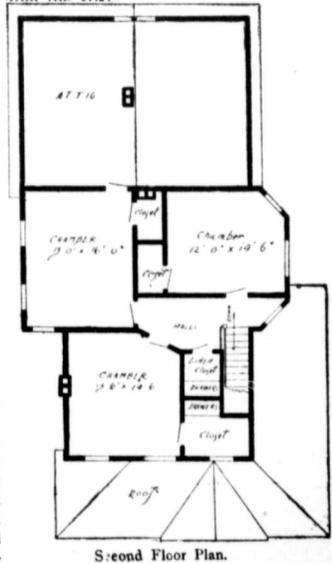
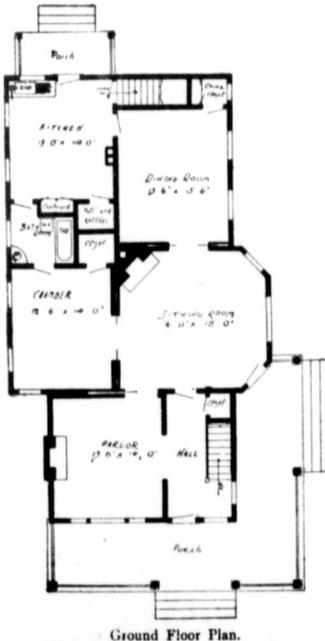
The arrangement of the rooms is very good. We do not take the architect's word for this altogether, but it bears investigation. The bath-room is downstairs, next to the downstairs sleeping room. The arrangement of these rooms makes it a complete, cozy home. It will be seen that the rooms are so arranged that one can go from the kitchen through the bath-room into the sleeping-room, and this sleeping-room is also accessible from the sitting-room, or living-room, as it probably would be more properly called. For the most part these rooms are square, which is always a great thing with the housewife, although it does not always give as good an appearance to the outside as the one that is portrayed here. For instance, the sitting-room has only one square corner. This is not the inconvenience that it once was, when carpets were made and fitted to the rooms; rugs being now preferred, and the corners seldom carpeted. This not only makes a handsomer room from the inside, but it adds to the appearance of the house.

The size of the house is 32 feet in width and 52 feet in length, exclusive of porches. The blue prints consist of cellar and foundation plans, first and second floor plans, front, rear and side elevations, wall sections, and all necessary interior detail. Accompany-

ing the blue prints is a complete set of typewritten specifications.

The specifications call for all good material. Of course it is not to be the most expensive kind, but it is to be good of the kind specified. There is supposed to be nothing shoddy about these houses, either in the material used or in the manner of construction. Windows and doors used are all to be stock sizes, and can be had of anyone who handles a regular stock of sash and doors.

and is joined invisibly to the neck, so giving the suggestion of continuing from the neck.



Studies in Nature

A Monthly Review of Insect and Bird Life on the Farm

Edited by C. W. Nash

BIRD NOTES.

In my notes of last month I stated that I thought the horned larks would be found to spend the winter in our south western counties. My suspicion turns out to have been well founded, for I have since received many reports from that part of the province which show that these birds are resident in all the counties bordering on Lake Erie. The probabilities are that there is a change in the individuals that frequent the locality. The birds that spend the summer there, moving south at the approach of winter, and being replaced by others from the northern part of the country, the species thus being always represented, but the individual representatives being different.

Winter birds were just as scarce through the southern counties as they were in the north and east, but from many places have come records of robins and meadow larks having spent the winter with us, and as "Nature Study" has now become popular and people are beginning to observe, we shall soon find that such cases are much more common than we formerly believed.

The wonderful flight of the birds from south to north, which we call migration, has now commenced, and the species that are first to move have already reached us. It is my intention this spring to trace their movements in distributing themselves over

No Cash Required.

Among the many reasons on the strength of which farmers may be ^{well} induced enough to send me notes of the dates on which they first saw any of our commoner birds. In this issue I publish the dates of arrival of some of our best known birds at four points along our southern boundary, viz., Byron, in the county of Middlesex; Dunnville, in the county of Haldimand; Toronto, in York; and Kingston, in Frontenac. These dates are rather irregular. However, it is too early to comment upon them yet. When all the information is in, we shall be better able to discover the various points at which they cross the lakes and first enter the province, and what routes they follow in order to reach their several destinations.

The little screech owls have been more than usually abundant about farm buildings this season, and many reports have reached me as to the value of their services in the destruction of mice. Mr. J. C. Robson, of Byron, says: "In discussing the screech owl last week, one of my boy pupils said he had seen one in the barn at home, and that he had found its nest (as he thought) lined with dead mice." The screech owl has this habit of killing a

great many more mice than it requires for its immediate wants and storing them away in its hiding places. It probably does this in order to provide against stormy nights when mice are not easily obtainable. In any case it will generally be found that they are well ahead of any danger of famine. Not only are they extremely valuable by reason of their mouse-hunting proclivities, but they also do good work in thinning down the too numerous house sparrows.

Mr. E. B. Yarwood, of Picton, says: "The little screech owls have been very numerous around here this winter in the barns, and they are playing hob with the sparrows. My little boy saw one fly off to the woods with a sparrow in its claws. Two or three of my friends have mentioned them being in their barns. A good many have been foolishly shot, mostly by boys." It seems strange that even boys can be so stupid as to wantonly destroy the life of a bird that is so valuable to the country as a screech owl, a bird that does no harm at any time, and that asks nothing for its services but to be allowed to rest in peace in some corner of the barn during the daytime, and hunt there at night. People will keep half a dozen cats about a farm, and feed them, and pet them, knowing well that these cats are all the time harassing and destroying our valuable small birds, and keeping them out of our gardens and orchards. This they do because they say "they must have cats to keep down mice," yet, when a screech owl, that will kill more mice in a night than all their cats will in a week, ventures into the barn they immediately shoot it. Men are said to be reasoning creatures; it is sometimes difficult to believe it, when we consider the way we deal with the animal life about us.

Now is the time to put up nest boxes for the birds to build in. Almost any sort of a small box will do, if nailed up against a tree or fence or building in some quiet place. Cut a hole in the front about two inches wide, and do not hang it too high, or the sparrows will take possession of it. Eight feet is quite high enough for bluebirds or wrens. If either of these birds once occupy a box and raise their young in it safely, they will return year after year and continue to use it, greatly to the benefit of the garden or orchard in which they locate themselves. Both bluebirds and wrens are almost purely insectivorous in their diet, never in any case feeding upon cultivated fruit or grain, and the number of insects they destroy when raising a brood of young is almost beyond belief.

In previous issues I have given the history of that feathered parasite, the

cow-bird. In a few days they will arrive, and can easily be identified by their blackish plumage and squealing voice. Anyone who has a gun handy and will use it in killing off some of these pests will be doing good service to the country. They have been far too abundant in the last few years, and are more destructive to our valuable birds than almost all their other natural enemies put together.

MOVEMENT OF BIRDS.

BYRON—MIDDLESEX.

Observed by Mr. J. C. Robson:	
Robin	March 17
Song sparrow	" 17
Bluebird	" 16
Bronze grackle	" 18
Killdeer plover	" 18
Meadow lark	" 20
Red winged blackbird	" 18
Phoebe	" 23

DUNNVILLE—HALDIMAND.

Observed by Dr. McCullum:	
Robin	March 12
Song sparrow	" 14
Bluebird	" 12
March hawk	" 16

TORONTO—YORK.

Observed by Mr. J. Hughes Samuel:	
Robin	March 11
Song sparrow	" 25
Bluebird	" 16
Bronze grackle	" 26
Killdeer plover	" 18
Meadow lark	" 26
Red wing blackbirds	" 24
Woodcock	" 26

KINGSTON—FRONTENAC.

Observed by Dr. Clarke:	
Robin	March 17
Song sparrow	" 24
Bluebird	" 17
Bronze grackle	" 24
Red wing blackbird	" 24
Phoebe	" 24

INSECTS.

One of the most injurious insects that frequent our gardens is the imported white cabbage butterfly. This pest was first introduced into Canada somewhere about the year 1860, when it was found in the Province of Quebec, having in all probability been brought there among the vegetables supplied for some ship from the British Islands. Owing to the carelessness and want of observation of our people, it rapidly increased, so that by 1876 it had spread nearly all over the cultivated parts of Canada.

Last season these butterflies were enormously abundant everywhere, so that unless the larvae were more than usually affected by parasites, the chances are that we shall have a large and early swarm this spring, in which case young cabbage plants will suffer severely, and radical measures will have to be adopted to protect them.

The cabbage butterfly passes the winter in the pupa or chrysalis stage,

the chrysalids being curious angular looking things, generally to be found attached to fences or the sides of buildings near where some of the numerous food plants of the larvæ have been grown.

The butterfly emerges quite early in the spring, and soon commences its search for plants upon which to deposit its eggs. As its name implies, it seems to prefer the cruciferous plants, that is, plants belonging to the same family as the cabbage, such as turnips, rapz, etc., but it by no means confines its attention to the plants we cultivate as food crops; the flower garden has also attractions for it, and there it deposits its eggs upon mignonette, nasturtium, canariensis, and several other of our favorites. The eggs are not deposited in clusters, seldom more than two or three being found upon a leaf, more often only one. Where the larvæ have been feeding the damage done is easily apparent, but the insects themselves are not so easily seen. Their ground color is green, of nearly the same tint as that of the food plant, and along the back and on each side is a yellow line; sometimes these lines are rather indistinct, but they are generally visible.

From early spring until the chilly days of late autumn these larvæ may be found, for there appears to be a continual succession of broods all through the summer, one overlapping the other, and larvæ of all sizes being found at any time on their food plants. When not feeding, the larvæ usually lie at full length on the top of a leaf, the similarity of their coloring protecting them, to a certain extent, from some of their enemies. The sharp eyes of the birds, however, detect them, and enormous numbers are destroyed by these guardians of our crops, all our birds being particularly fond of smooth caterpillars.

Although these butterflies are natives of Europe, and were common in Great Britain, yet they never seem to be the plague there that they have been here of late, probably because their natural enemies there are sufficiently numerous to keep them in check. I recollect that in my boyhood days in one of the southern counties of England, the field crops were never noticeably injured by them, and the market gardens but rarely. Birds were abundant, and fed upon the caterpillars continually, and whenever I tried to rear the butterfly from the larvæ or pupa stage, I generally found that my specimen had been parasitized by some ichneumon, or kindred fly. Some effort ought to be made to introduce some of these parasitic insects into this country, where they would no doubt soon establish themselves, and help to rid us of what threatens soon to become a serious scourge.

Fortunately the larvæ are not difficult to kill when on their food plants. The best remedy is, one part Pyrethrum (Persian insect powder) to five or six parts of flour; mix these thoroughly together, and let them stand in a tight jar for a day or two before

using; then apply to the plants by puffing it over them with a greenhouse bellows, or sprinkle it over them with a fine dredge. The trouble is that this can only be done where the plants are grown on a comparatively small scale, and even then has to be done frequently on account of the constant succession of broods of the insect. For field crops, spraying with Paris green would be effectual where it could be put in practice.

CORRESPONDENCE.

E.B.Y.: The bird of which you send drawing is the horned grebe (*Colymbus auritus*). It is very common in spring and autumn on Lake Ontario, all the large bodies of water in the southern part of the province, and some few pairs breed in our larger marshes. Your bird is in the fall plumage, which is very different from that of spring.

The First Birds.

In a recent lecture before the Audubon Society, Boston, Ralph Hoffman gave the list of birds in the order of their arrival in the spring, with he approximate dates on which they may be looked for, as follows:

March 6-10—Bluebird, robin, red-winged blackbird.

March 10-20—Meadowlark, rusty blackbird, fox sparrow, cowbird, phoebe.

April 1-5—Kingfisher, tree swallow, Savannah sparrow.

April 5-8—Pine warbler, vesper sparrow.

April 6-10—Field sparrow, chipping sparrow, yellow redpoll warbler, yellow rumped warbler.

April 10-15—Hermit thrush, swamp sparrow, purple finch, sharp-shinned hawk, ruby crowned kinglet, winter wren, Carolina rail.

April 20—Sapsucker, solitary vireo, barn swallow.

April 25-30—White throated sparrow, chewink, brown thrasher, chebec.

May 1—Chimney swift, yellow warbler, black throated green warbler.

Hints by May Manton.

Woman's Peasant Waist. No. 3772.

The simple shirred waist has a charm and a definite usefulness that is peculiarly its own. Made from figured silks of any soft sort, the new Louisines, such as the birds-eye, moire armure, wash silks and soft crepes, it is charming and effective without trimming or addition of any sort, and made from Liberty India, Mousseline and the like makes an ideal bodice for wear beneath the charming little beleros that are cut out of the neck and short enough to reveal the belt. As shown, the material is figured Louisine in pastel violet, the figures being of slightly deeper hues touched here and there with lighter threads that give a subtle shadowy effect, and the belt is of harmonizing violet panne held by a gold clasp; but colors are always a matter of personal choice and afford as

wide a range as that offered by materials.

The foundation is a fitted lining with single darts, shoulder and made-arm seams only. The waist proper is shirred on the lines indicated in the pattern, then drawn up to the requisite size and arranged over the lining after the shoulder seams have been closed. The fulness at the waist is arranged in gathers and the waist closes at the centre front, but separately from the lining below the shirred yoke where the fulness conceals the fact. The sleeves are in bishop style shirred to form cuffs, and are finished with frills, formed by the sleeves themselves that fall becomingly over the bands. The collar has a plain foundation over which the shirred material is arranged



3772 Peasant Waist
32 to 40 n. bust.

and is joined invisibly to the neck, so giving the suggestion of continuing from the yoke.

To cut this pattern for a woman of medium size $4\frac{1}{2}$ yards of material 21 inches wide, $3\frac{1}{4}$ yards 32 inches wide or $2\frac{5}{8}$ yards 44 inches wide will be required.

The pattern No. 3772 is cut in sizes for a 32, 34, 36, 38 and 40-inch bust measure.

The price of above pattern post-paid is only 10 cents. Send orders to "The Farming World," Confederation Life Building Toronto, giving size wanted.

Horticultural Societies.

Supt. Creelman has arranged for a series of meetings in connection with the local Horticultural Societies of the Province to be addressed by Prof. Lochhead, Wm. McNeill, Wm. Bacon, W. N. Hutt, Miss Rose, Miss Mattock, C. W. Nash, and Dr. James Fletcher. These meetings will begin on April 9th, and full particulars will be given in next week's Gazette Department.

The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep, and Swine Breeders' Associations, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$1.
BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Swine Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Sheep Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

Who name and address of each member, and the stock he has for sale, are published once a month. Over 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 15th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

A. P. WESTERVELT, Secretary.
Parliament Buildings, Toronto, Ont.

Stock for Sale.

All members of the Dominion Cattle, Sheep and Swine Breeders' Associations who have stock for sale, and wish to take advantage of the privilege they possess of advertising the same in THE GAZETTE, should see to it that their lists of stock reach the office by April 9, in order to appear in the issue of the following week.

FARM HELP EXCHANGE

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his or her name and full particulars to A. P. Westervelt, Secretary, Live Stock Associations. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected, and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Man wanted for eight months or a year, to commence about April 1. Wages \$12 a month for first month, and more for the balance of the term, if man proves satisfactory. No. 773. a

Good single farm hand, about 30 years of age, temperate, a good milker, and who understands the care of milch cows, wanted about April 15, on a farm in Quebec. Must work on the farm at all kinds of work and look after pigs. Wages \$18 a month, and board and washing, but might do better for an exceptionally good man. No. 774. a

Young man, well accustomed to horses, a good plowman, and able to milk, wanted on a farm near Midland, for six or seven months. Must be

sober. Protestant preferred. Good wages. No. 775. a

Wanted, for eight months, or longer, a sober, industrious young man, who must know how to plow well, and be kind to horses. Short hours, and no chores besides care of a team. Work is chiefly fruit and light farming. State wages expected. No. 776. a

Wanted, a married man to do general farm work. House, wood, vegetables and fruit provided. State wages expected, age, number of family, and experience. Engagement by the year. Apply to A. E. Mather, Weston, Ont.

Good young man wanted at once on a farm near Montreal. Wages, \$200 a year and board. Also domestic wanted. No. 777. a

Trusty man wanted on a farm. Wages, \$160 a year, board and lodging. No. 778. a

Man wanted by the year at once. Write, stating wages, to G. M. Smith, Haysville, Ont.

Sober, steady, and trustworthy young man, from 18 to 22 years old, wanted for general farm work, on a 100 acre farm. Good wages given. Will hire for nine months, or a year. Give experience and references, and mention wages required. No. 779. a

Wanted, middle-aged man, who understands stock generally. Also young man, good teamster, and who understands marketing, required on a farm ten miles from Toronto. No. 780. a

Young man wanted, who thoroughly understands cheesemaking, to work in a private dairy, where a soft, mild cheese is made from about 30 cows, also to milk and make himself generally useful. Address M. Richardson & Son, Box 34, Caledonia, Ont.

Wanted, on a grain and hay farm, a young man about 16 years old. No. 781. a

Wanted, on a stock farm in British Columbia, two or three men. Wages for eight months, \$25 a month and board. No. 782. a

Wanted, a boy about 18 or 19 years old, who has worked on a farm and is capable with horses. Will give \$14 a month for 8 months. Must be well recommended and be of good character and habits. Also girl wanted who can milk; must be over 15 years old and have good references. Good wages given. No. 760. b

Four men wanted at once for general farm work on a 400-acre farm. Must be able and willing to work. Work will be mostly following teams. Will hire for 7 or 8 months, and, if satisfactory, 2 or 3 of the men would be kept through the winter. Good wages. No. 761. b

Boy wanted, about 15 or 16 years of age, for 8 months, or for the year, to help in general farm work. Apply to Box 153, Ridgeway, Ont. b

A willing, capable man wanted on a 100 acre farm. Good wages to one who suits. No. 762. b

Wanted, a good, stout boy or man to work as an assistant in a medium-sized cheese factory for the coming summer, starting on May 1 and running for 6 months. Must have no bad habits and be trustworthy and honest. State size, age, experience, and wages expected, with or without board. One with experience preferred. Apply to Cheesemaker, Clayton, Ont.

Good plowman and teamster, who is steady and industrious and without bad habits, wanted at once. Will live in the house and have the same fare as the family. Good place for a careful man. No. 763. b

Trusty man wanted, either married or single. Free house, garden and \$240 a year provided for a married man; to a single man board and \$150 a year will be given. No. 764. b

Wanted, at once, a steady young man to work on a farm near Port Hope. Must be accustomed to all kinds of farm work and be willing to milk whenever required. Good home and good wages for 8 months or longer. No. 765. b

Married, and also single, man wanted, who are used to all kinds of farm work, and experienced with live stock. Good wages given to capable men. Address F. A. Gardner, Britannia, Ont. b

Wanted, a good, reliable man, who understands general farm work. Must

be a good milker. Farm is 14 miles from Ottawa. Mixed farming carried on. State length of time that you would engage for, and wages expected. Address R. H. Grant, Hazledean, Ont.

Steady employment to a young man, who must be good with horses, and not afraid of work. State wages asked. No. 766.

Young man, or boy of 16, wanted on a farm; also a general servant. No. 767.

Man wanted for a farm near Syracuse, N.Y. Must be reliable and up-to-date. Will provide house, garden truck, milk, and wood. State wages expected. Might let farm on shares. No. 768.

Wanted, at once, a young, single man on a small farm to do general work for eight or twelve months. Must not drink, smoke, or use profane language. A good home. Wages \$12 to \$16 a month, according to ability and worth of man. No. 769.

Steady man, experienced in plowing, milking, and general work, wanted for the summer, or by the year. Will pay \$16 to \$18 per month, for seven or eight months, or \$150 to \$180 per year, according to proficiency; board and lodging included. No. 770.

Wanted, working foreman, or manager, who thoroughly understands raising horses, cattle, and swine. Must have good references. Also for rent, for a term of years, farm of over 300 acres, with first class house and buildings, suitable for dairying or stock raising. No. 771.

Wanted, for 7½ months, a single man, able and willing to do all kinds of farm work, plough, milk, and work machinery. Must be a Protestant and total abstainer. Wages \$125, for period named. Also strong boy, about 17 years old, required, who can plough and milk. W. C. Brown, Meadowvale, Ont.

Domestic Help Wanted.

Wanted, on a farm, where there is a small dairy and no children, a domestic who can milk. No objection to a widow and child. No. 783.

Young woman wanted by May 1, in a model farm house with every convenience, as general servant. Must be willing to milk, if required, and be a fair cook. Wages, \$10 a month. No. 784.

Good strong girl, or widow, without family, wanted on a farm. Comfortable home; no milking; no hired man in house; small family; good wages. No. 772.

Situations Wanted.

Situation wanted on a fruit farm by man 20 years of age, who has always lived on a farm. Has taken a course at a school of horticulture. No. 925.

Place as assistant in a dairy wanted during the coming season; creamery preferred. Wages, \$15 a month, board and washing. No. 926.

Man who has been manager of a large stock and fruit farm for some years wishes to secure a position as manager of a farm where stock is kept. Is a good feeder. Wages asked, \$30 a month, house, wood, garden, and cow. Family consists of self, wife, and daughter, aged 17. No. 923.

Young man, of good character, who does not smoke, chew, drink or swear, and has lived on a farm all his life, having cared for cattle, wishes a position. No. 924.

N.B.—Where no name is mentioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

Farmers' Institutes.

Under this head the Superintendent of Farmers Institutes will each week publish matter relating to Institute work. This will include instruction to Secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to the Superintendent he will be put in direct communication with the Institution that has carried on the work.

G. C. CREELMAN,
Superintendent Farmers' Institutes.

List of Institute Members Received Since March 20.

The following additional membership lists have been received since the list published last week, thus raising the total membership of Farmers' Institutes to 18,286:

FARMERS' INSTITUTES.	
Bruce, N.	7
Durham, W.	4
Hastings, W.	3
Lincoln	1
Lambton	114
Leeds	2
Muskoka, N.	26
Oxford, N.	247
Peterboro', E.	2
Simcoe, C.	84
Simcoe, S.	14
Waterloo, N.	52
York, N.	4
Total	560
WOMEN'S INSTITUTES.	
Grey, N.	52
Huron, W.	5
Lennox	12
Victoria, E.	1
Wentworth, S.	12

The Care of Manure and How to Apply It.

By James McFadyean, Walton.
(Concluded).

If the straw has been cut, and is reasonably free from foul seeds, I would recommend spreading it broadcast upon the land where it is to be applied as soon as possible, if the land is not too rolling and subject to flooding in the spring. I believe that most soils are capable of extracting that portion of it that they require, just as well

as the plants are capable of extracting from the soil what they require. I think this statement is proven from the fact that our soil was so rich in plant food when man began to deprive her of her chances of retaining it.

By an experiment conducted at the Ottawa Experimental Farm, and which lasted over a period of years, it was proven that an equal weight of fresh stable manure, and of well rotted manure applied to all the principal crops of the farm, gave practically equal results; there being a slight difference in favor of the fresh manure. It is a great mistake to believe that manure wastes to any extent when spread upon the land. Unless there is considerable fermentation, very little of the valuable elements will escape by evaporation. I do not recommend too heavy an application at one time. We seek to have it divided so that it will cover all the land every second year, if possible. If the manure is reasonably short so that we may have it incorporated into the surface soil with the disc or spade harrow, cultivator or gang plow in the spring, and to about the same depth as we wish to sow our grain, its indirect value to the growing crop may be as great as its direct value as a plant food. I believe that farm-yard manure is the most natural and perfect plant food available, and it has indirect results that no commercial fertilizer can give, because it adds to the soil so much vegetable matter, so much humus by which all clay and sandy soils, especially, are greatly benefitted, though not just as available as plant food. But, whenever there is a decaying of vegetable matter, there is always a certain degree of heat formed. We see this very plainly in the manure heap. Then let us have this heat formed in the soil so that the growing plants may derive some benefit from it, and the soil will be made more mellow, crumbly and porous because of the heat and moisture.

CONSERVING SOIL MOISTURE.

To have two or three inches of the surface soil mixed with this decaying vegetable matter makes for us the very best possible sponge for holding the frequent showers, until such times as the growing plants can make use of it. Here again the manure heap teaches us an important lesson, for it will be the last place to dry out, and, as the water is the medium by which plant food is conveyed from the soil to the plants, this is a benefit worthy of our consideration. Many people believe that there is quite enough moisture in the soil in the spring to nourish an average crop, provided it is all preserved and not allowed to evaporate. The movement of water in the soil is due to a sympathetic nature, or the capillary attraction that one particle of earth has for another. Suppose the particles of soil be as grains of wheat in a bin. If one grain be dry and its neighbor be saturated, this sympathetic nature or capillary attraction will bring about an uniformity, and in this way

the water will continue to move from the saturated particles below to the dry ones above, in proportion as the grains of soil are closely packed to each other, and will rise right to the surface if not checked, and be evaporated by the heat of the sun. Now, if we have two or three inches of a looser soil mixed with the manure to keep it open at the surface to check this evaporation, and at a place where the roots of the plants are searching for moisture, they will have the first chance to use it. This is very nicely explained and understood by the rise of oil in a lamp wick. If, within a little of the top, the texture of the wick be broken or looser the oil will not rise to feed the flame as readily, but will rise to where the wick is broken just as well. But when all is said and done, the important thing for each farmer is to have his mind impressed with the conditions and requirements of his own particular farm, and his own particular fields, for different soils need vastly and entirely different treatment. For instance, we might plow down a coat of rough, straw manure into a stiff clay soil with advantage, while with a light black loam we had better let it rot in some other place.

Again, he must study his different crops. We have invariably had better crops by manuring the root land the fall before; while with spring cereals, if the manure is sufficiently short to allow a thorough cultivation of the surface soil to make a seed bed, I would recommend working in the manure at the same time, and to the same depth; while for fall wheat it would perhaps be as well to have it plowed in a little deeper.

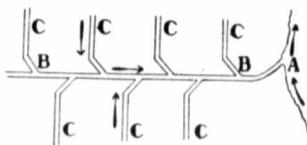
Management of Soils

By. A. W. Peart, Burlington, Ont.

Four distinct operations appear to be involved in the management of soils, viz., drainage, cultivation, manuring and rotation.

(1) Drainage may be subdivided into surface and under-draining. The necessity of running furrows across the lands or ridges, in the hollows or lower parts of the field when finishing it, in order to get rid of the standing water quickly is recognized by every good farmer. We use tile underdrains to draw away the surplus water in the low, wet spots of our fields, and have found them to be a most profitable investment. Where lands are rolling or porous and have a good natural drainage, and are giving reasonably good crops, we do not think that under the present condition of farming it would pay to tile them. Where, however, they are flat, wet or springy, and give but very poor crops, drainage is good economy, and the increased crops will pay for it in four or five years. Before beginning to drain, two things must be settled: Can you get an outlet for your main drain at a reasonable cost? And can you get enough fall in your main drain to warrant you in going to the expense? An inch to every 20 feet is a good fall, but I would drain on less, using a larger tile for the lesser

fall. Thoroughness is absolutely necessary. The bottom of the drain must have a uniform fall, otherwise the tile will eventually fill up with mud or silt. The main should be laid about three feet deep, and the branches a few inches shallower, so as to permit a rapid descent the last twenty feet or so, and prevent filling up at the point of junction. As to the distance apart of branch drains, that depends upon the nature of the subsoil. In heavy clays fifteen or twenty feet apart will answer, while in light or porous subsoils thirty or forty feet will give good drainage. The more porous the subsoil the farther the drain will draw from either side. Branches should join the main, and the main empty into the creek, or whatever it may be, thus:



A—Creek. B—Main Drain. C—Branches.

This prevents collision and clogging. For the same reason branches must not empty into the main opposite each other. Drainage makes the soil more porous, improves its texture, sets free plant food, and converts practically barren wastes into rich, productive lands. Soils otherwise wet, when drained, may be worked much sooner in the spring, which means increased production of crops.

CULTIVATION.

(2) Cultivation is probably the most important feature connected with the handling of soils. Nature has placed large quantities of plant food in our soils, and it depends upon our skill and knowledge how far we can make use of and work this mine for the benefit of our crops. Cultivation is vital, and the subject is so wide that one scarcely knows where to begin. For spring grains I try to plough in the fall. When the furrows are well and evenly set up and are frozen, and when the frost comes out, fertilization takes place and the soil is left in a fine granular condition. Plant food is liberated and a warm seed bed is formed. When ploughing for spring grain is left until the spring, our teams are ploughing when they should be surface cultivating, and drilling in the seed. Every day's delay in getting in grain after the soil is dry enough to work, means fewer bushels at threshing time. Soil ploughed in the spring, too, is colder on the surface than that ploughed in the fall, which involves slower germination and vegetation. As to the proper depth to plough it seem to me that is a question which each farmer must decide for himself, according to his own soil, conditions and crop requirements. If the soil of a given field is deep, say ten or twelve inches, and that field were ploughed in the fall for spring

grain, I would try to plough it about seven inches deep. But if by some mischance that field were not ploughed until the spring I would plough it lighter, as the deeper the ploughing the colder the surface turned up. If that field were ploughed in the fall for mangolds I would try for about 8 inches. But if the surface soil of this field is only 6 or 7 inches deep, I would try to plough it only 5 or 6 inches deep. In other words the depth of the soil, the time of ploughing and the nature of the crop grown are all factors in determining how deep to plough. I do not wish to bring any subsoil to the surface if I can avoid it. Sometimes, however, the surface soil is so shallow, that some of the subsoil must necessarily be brought to the surface in ploughing. If I have a deep soil I want to give the roots of the plants liberal feeding grounds, because they will, if allowed, strike down deeply. As to the question of frequency of ploughing it appears to me that that also depends upon soils and circumstances. Heavy compact soils require more ploughing than lighter ones. Such soils tend to get hard, and bake and become inert, and hence require the plow to open them and improve their mechanical condition. The plow, too, is the surest and quickest way to destroy many sorts of weeds. Where the land is clean and the soil will permit it, surface cultivation with a disc or spring tooth often forms a better seed bed than the use of the plow.

The best way to retain moisture is an important one to our farmers. I take it that the answer lies along the line of beginning to work our fields in the spring while there is still moisture in them, but they are still dry enough to go on. It does not pay to work any land when it is wet, more especially the clays. It takes the life and heart out of them, sometimes for years. But we can very largely control the moisture in our fields for hoed crops, our orchards and fruit plantations, by ploughing or cultivating—as the case may be—in the spring while there is still moisture, and then surface working them persistently every ten days or two weeks. A surface mulch is thus formed which checks capillary evaporation. In the nature of things we have very little control over moisture in fields of spring wheat, barley, oats or peas after they are once sown and finished, but we can give these crops a good start by getting on the land at the right time. Placing humus of some form in the soil is also an important factor in retaining moisture.

(To be continued.)

Oyster Bay Schoolboy—"Did you know about that baby that was fed on elephant's milk, and gained twenty pounds a day?"

Oyster Bay Schoolmaster (indignantly)—"No, I didn't. Whose baby was it? Answer me or I'll thrash you."

The Schoolboy—"The elephant's baby."—The Schoolmaster

The Farm Home

Nobody Knows But Mother.

How many buttons are missing to-day?
 Nobody knows but mother.

How many playthings are strewn in her way?
 Nobody knows but mother.

How many thimbles and spools has she missed?
 Nobody knows but mother.

How many burns on each fat little fist?
 How many bumps to be cuddled and kissed?
 Nobody knows but mother.

How many hats has she hunted to-day?
 Nobody knows but mother.

Carelessly hiding themselves in the hay,
 Nobody knows but mother.

How many handkerchiefs wilfully strayed?
 How many ribbons for each little maid?
 How for her care can a mother be paid?
 Nobody knows but mother.

How many muddy shoes all in a row?
 Nobody knows but mother.

How many stockings to darn, do you know?
 Nobody knows but mother.

How many little aprons to mend?
 How many hours of toil must she spend?
 What is the time when her day's work shall end?
 Nobody knows but mother.

How many cares does a mother's heart know?
 Nobody knows but mother.

How many joys from her mother's love flow?
 Nobody knows but mother.

How many prayers for each little white bed?
 How many tears for her babes has she shed?
 How many kisses for each curly head?
 Nobody knows but mother.

—New York Mail and Express.

A Transformed Farm House.

By Caroline Benedict Burrell.

Marcia stood in the door of the "best room," surveying it thoughtfully. She had graduated from college the week before and was going to teach in the village in the Autumn. Meanwhile, she was expecting a class-mate to visit her, and she was trying to look at the farm house with another's eyes.

The best room was dark. Marcia raised the window with difficulty. The blinds also stuck, as though their hinges had rusted fast, but the light streamed in at last. Marcia sat down and looked about her.

She saw a brown ingrain carpet, a walnut table with a marble top, on which reposed the family Bible upon a green worsted mat, a sofa and six chairs, hard and slippery in stiff black haircloth; a narrow wood mantle with an ornament of waxen fruit under a glass shape, and walls of stainless whiteness, on which hung cuts of Washington's death-bed, Grant's family, a framed wreath of immortelles from the coffin of mother's aunt, and a couple of chromos, "Asleep" and "Awake."

"Strange I had forgotten how hideous this room is," she murmured, "but I have really never seen it lighted before. And then the best room of all our neighbors is just like it, and until I went away from home I had no other to compare it with. It is a perfect nightmare!"

She studied it for some time, and then passed out into the room behind. This was really the dining room, but

as there were two kitchens the family usually ate in the larger and better one and cooked in the one beyond, and used this as a sitting room. It, too, was darkened, but she threw open the blinds and surveyed it. It was papered, and had a rocking chair and a lounge, besides its dining room furniture; a pocket filled with newspapers hung on the wall beside a walnut bookcase.

Marcia went back to the front of the house and turned the key in the hall door. It creaked noisily and yielded with reluctance. The door opened stiffly on its unused hinges. Marcia looked out into the little porch. She had never sat there. The family used the side piazza familiarly and this seemed strange. A honey-suckle climbed over it, and a sweet briar bush crowded against one end.

"Here is some comfort, anyway," the girl murmured to herself. The air of the hall was chill and pungent with long dead odors, yet the stairs gave a certain dignity with their slender white balustrade topped by a shining cherry rail. Marcia left the door open and went up to the bed-rooms.

They were four in number. First the guest room, stiff and somber with an old fashioned bed, bureau, dull carpet and four chairs. Then her mother's bed room; it was equally uninteresting, with walnut furniture, an elaborate patch-work quilt on the bed, and a few family photographs in oval walnut frames hung high on the walls. Marcia turned away with a shiver. Her own room came next, and here was a difference. True, the furniture was painted yellow, but her college acquisitions of pictures, flags, pillows, bits of silver and memorabilia of all kinds gave a cheerful air.

"That's not so bad," she said. The room over the kitchen was used by the various "hired girls" who came and went. It too was stuffy and dull.

Marcia went slowly down stairs to the front porch and sat for an hour with pencil and paper in her lap.

When dinner was over, the farmer and his wife came into the dining room. The day was warm and they were glad of a rest. Mrs. Noble took up her mending-basket and rocked leisurely, while the farmer stretched himself on the lounge.

Marcia drew a chair up to the table and began resolutely.

"Father, I want to talk something over with you and mother. You see, I am through college now, and I've come home to stay, and I want some of the girls to visit me; you know Eva Winslow promised to come next month for the first one. Would you mind if I fixed the house up a little before she comes? Of course, I don't mean to make great changes, but here and there?"

Mr. Noble looked bewildered. "Why, I thought we looked petty

well, didn't you, mother? We was painted inside and out not long ago, and the carpets ain't old—"

"Oh, father," said Marcia, hastily, "I didn't mean to do great things. Will you trust me and just let me make the house a little prettier if I can? I've a hundred dollars I earned by tutoring this last year that I laid aside on purpose."

"I've got most as much egg money myself," interposed her mother. "You shant spend a cent of yours. Your father was calculating to buy a parlor organ—"

"Oh, mother, how lovely!" Marcia burst out. "Not the organ, for I don't want one, but if I can have that money, too—"

"Of course you can, child," said the farmer, smiling. "I guess you shall have as much as you need to fix the house up if you want to."

Mrs. Noble smoothed down her apron. "Mrs. Root has got a new parlor suite of red plush, and an art square she calls it in the best room. I think we can afford as much as she can!"

Marcia laughed.

"We'll do better than that, mother. We'll have a really pretty house, the prettiest one around, if only you will let me do as I like."

"Go ahead," said the farmer complacently, as he composed himself for his nap.

"Haine's Corners was two miles from a large village and twenty from the city. Marcia's first trip was to the former, where she drove in the buggy, followed by the hired man upon a wagon load of furniture. The proprietor of the store was horrified to find that Farmer Noble wished to sell his walnut chairs and table, and three ingrain carpets.

"Just as good as new," he exclaimed—"What in the world—"

"It's just to please me, Mr. Stacy." Marcia smiled, and before he knew what he was doing he had bought and paid for the entire load. The next day she went to the city and spent the money and more besides.

It was not long before the farm house was transformed. Every door and window was open wide, protected by wire screens. The front porch was adorned with easy chairs and a low table piled with magazines. The sweet breath of the roses filled the hall in the place of the former damp and musty odors, and its walls were hung with an apricot ingrain paper, which softened the light and made its width apparently greater.

Marcia had hesitated whether or not to permit the dull ingrain carpet to remain here, but had decided to do so, laying over it an odd, bright square rug she had found in an auction room for a small sum. There had been a queer collapsible hatrack suspended by pegs. This Marcia discarded. In its place she took her grandmother's

long mirror from the dining-room wall and hung it up, turning it side wise. The old gilt frame looked a little worn, but the effect was good. Beneath it she put one of her purchases, a simple, narrow table of good shape; the hair cloth sofa from the best room, stood across the end of the hall, but so altered by an Italian blanket thrown across it and two large, bright pillows that one would not recognize it.

She sighed delightedly as she looked around, when she had put on the last touch; she decided on a final tour of inspection and ascended the stairs.

She went to the guest room first. Here stood an old mahogany bed and bureau, of no great beauty or value, but substantial and good. They were polished till they shone, and each rejoiced in new coverings. The bed had a quaint old blue and white spread, woven many years before, but as Marcia knew, to be prized more highly to-day than ever. The bureau had a frilled white muslin square on it, and an inexpensive tray or two of blue and white china. The walls were papered in Delft and blue and white in a large, old-fashioned pattern. The floor had a cheap matting, and its centre was covered with a blue and white Japanese rug. It would not receive much wear here, and so was not a foolish purchase, as it would have been for another room.

There were a couple of mahogany chairs with chintz cushions like the paper;—Marcia had recovered all the chairs in the house herself—and a willow rocker. There was a good-sized table at one side with some books on it. The wash-stand had been an anxiety, for there was none in the house like the furniture and she did not wish to use another wood, while buying one of mahogany was out of the question. A compromise was finally made by getting a cheap iron one painted white, and putting it behind a dainty screen; this was originally a small clothes-horse, but was now disguised by a covering of paper, like that on the walls, tacked on over unbleached cotton. There were muslin curtains in the windows, as fresh as possible, and the effect of the whole Marcia pronounced "charming," with complacent self-approval.

"The benefits of a college education are truly marvellous," she meditated. "House furnishing was not in the curriculum, yet I learned it because I went there. This room is like the guest room at Helen Anderson's where I stayed at Easter in my Junior year, only it's really prettier, if anything. And my room is like one in Howell dormitory, and the parlor is like the Dean's. So after all, nothing is wasted!"

She passed out and crossed to her mother's room. This Mrs. Noble had begged her not to change but Marcia had papered it like the hall, put up muslin curtains, spread a bright rug by the bed, and lowered the family pictures a foot, and it was vastly improved.

Her own room was lovely, though

simple. A white paper covered with huge roses, was on the wall, and the chairs were covered with chintz to match. Marcia had repainted the furniture herself with two coats of white paint; she had also nailed strips of wood to the four corners of the bed and others across them, until she had a frame work from which to hang a canopy of muslin curtains; a valance to match reached from the mattress to the floor, where a matting took the place of the discarded carpet; the room was dainty and pretty enough to suit the most fastidious and exacting of womankind.

The room over the kitchen belonged to the hired girl, when they had one. It has always been close and hot, and crowded with furniture too shabby to be used elsewhere. Now it was fresh and cool, with open windows, a little iron bed with a white spread, a plain chair or two, a shelf of books, and a wash stand with a mirror over it. The floor was painted yellow, and a strip of fresh rag carpet lay by the bed.

"I fancy our next girl may stay," Marcia thought contentedly.

Down stairs the dining room was now one not only in name but in fact. To be sure the lounge was still there, but it had been recovered, and the book case changed into a cupboard. Plates and cups were visible through the glass doors; and it wore quite a fashionable air. A very simple oak side-board stood opposite it. Mrs. Noble felt this was almost too, "stylish," but still she admired it. This floor was stained brown, and nearly covered with a plain, finely woven English rug of olive green. The walls too were olive, and held a few framed photographs. Marcia luckily owned a dozen fine ones, brought her from Europe by a class mate. The open windows looked into a shady side porch, and altogether everything seemed cosy and home-like. Best of all Mrs. Noble had promised that there should be no more meals served in the kitchen.

The "best room" was inspected last. It had been rather difficult to arrange, for Marcia wished it dainty and not too fine for daily use. It was a north room, and as a substitute for sunshine it had now a yellow paper with large but indistinct figures in the same shade. The floor was stained brown like that of the dining-room, and a large rug of mixed but harmonious colors lay upon it. "No one would ever guess its origin," thought Marcia. It looked oriental, it was thick and velvety, and would wear a life-time, but it was really woven in the city from all the old carpets of varying ages and textures in the house.

The mantle and wood-work were white. On the walls were hanging shelves also white, some filled with books, some holding pieces of Grandmother Hood's old blue china, rather cracked to be sure, but of beautiful color. There were framed photographs here, also, not many, but good ones, a

Madonna, a Venetian scene in colors, and a silver print of Windemere. There was a low white table with books on it; a pretty willow rocker; a box-couch made by the village carpenter and draped with the other one of Marcia's pair of Italian blankets. It had some pillows made from a discarded feather-bed and covered with oriental cotton. The chairs were the old ones, recovered with remnants of tapestry. In the windows, under the muslin curtains, were green-painted boxes full of beautiful ferns, and a great pot of them stood in the empty fire place also. Marcia sat down in the rocking chair.

"Its certainly a transformation," she mused. "It is cheerful and fresh and harmonious. I'll not be ashamed now to have any one of the girls visit me. Mother and father are really delighted, and when I tell them that I've spent less than a hundred dollars on it all they won't be able to believe me. It's all perfectly satisfactory, simple, suitable to our station in life, and yet as pretty as can be. Isn't it pretty, mother?" she repeated aloud, as Mrs. Noble appeared in the door.

"Pretty!" repeated the mother with emphasis, "there isn't as pretty a house at the corners, no nor in the village either. Marcia, what a thing it is to go to college!"—*The American Kitchen Magazine.*

Poor Man's Pudding.

Three tablespoons of rice, one quart of milk, one-half teaspoon of salt, three tablespoons of sugar. Pick over the rice, turn it into a gravy strainer and place the strainer in a pan of warm water. Wash the rice thoroughly, lifting it from the water and changing the water until clear. Put all the ingredients into a deep pudding dish, and stir until the sugar is dissolved. Cover it and cook in a moderate oven about two hours, or until the rice has swollen and absorbed nearly all of the milk. Stir it often during the first half hour. If cooked too rapidly or for too long a time the pudding will be stiff; but when just right it will be soft, and every grain of rice distinct in the creamy mass. Serve hot with butter, or cold with cream. Half a cup of seedless raisins or three mildly acid apples pared and quartered, may be cooked with the rice, or it may be served round a mould of orange or coffee jelly, or decorated on the top with crap-apple jelly. Or it may be flavored with cinnamon or ginger.—*American Kitchen Magazine.*

Muggins—Newrich has purchased a family tree.

Buggins—Well, I guess that isn't his first shady transaction.

Owing to our "Farm Home" space being limited this week, our weekly hints for May Mantons will be found on page 783.

The Farming World

▲ PAPER FOR FARMERS AND STOCKMEN.

Publisher, D. T. McAINSH.
Editor, J. W. WHEATON, B.A.

The Farming World is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

Postage is prepaid by the publishers for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

Change of Address.—When a change of address is ordered, both the new and the old address will be given. The notice should be sent one week before the change is to take effect.

Receipts are only sent upon request. The date opposite the name on the address label indicates the time up to which the subscription is paid, and the change of date is sufficient acknowledgment of payment. When this change is not made promptly notify us.

Discontinuance.—Following the general desire of our readers, no subscriber's copy of THE FARMING WORLD is discontinued until notice to that effect is given. All arrears must be paid.

How to Remit.—Remittances should be sent by cheque, draft, express order, postal note, or money order, payable to order of THE FARMING WORLD. Cash should be sent in registered letter.

Advertising Rates on application.

Letters should be addressed to:

THE FARMING WORLD,
CONFEDERATION LIFE BUILDING
TORONTO

Business Notes.

Shorthorns, page 796.

Sheep, page 796.

Jerseys, page 796.

The Robt. Evans Seed Co.'s announcement on front page.

Canadian Dairy Supply Co., half page announcement on page 771. These separators are giving good satisfaction where sold. For list of testimonials, send to their address, Montreal.

The Vermont Farm Machine Co. advertise the U.S.A. Cream Separator on page 770. This machine has repeatedly beaten in competitive tests. They hold the gold medal for highest in gathered cream. Ask for circular and full particulars.

The Creamery Package Mfg. Co., of Chicago, have opened a Canadian branch at Cowansville, Que. They especially announce for the cream ripener, that uniform ripening increases yielding, and increased yield represents increased profits. Write for descriptive circular of the Farrington ripener to their address, page 770.

David Maxwell & Sons, St. Mary's, Ont., advertise their favorite churn with patent foot and lever drive, steel roller bearings, superior workmanship, and finish.

Wm. Rennie, of Toronto, is putting up a splendid variety of seeds, to packages for 25c., by mail, postpaid, guaranteed as full-sized packages. See their advertisement, page 771.

London Fence Machine Co. have placed on the market a machine to weave wire fence. It makes the best, strongest, and cheapest. Particulars and catalogue will be mailed for the asking. Would recommend agents to handle this machine.

McGregor Banwell Co., of Lindsay, advertise the gom fence machine, made for constructing wire fencing. Page 772.

Mathew Moody & Sons, Terrebonne, Que., advertise their beautiful binder, which they claim to be absolutely the most reliable and up-to-date binder made. Agents for agricultural machinery in Ontario especially should get in a line of their machinery. See their advertisement in page 772.

The Deering Harvester Co. on back cover advertise their Ideal binder. The honors received by this company speak well for their machines. They claim to have honors enough for a nation. Under the management of Mr. H. H. Hannon you will receive the best

attention at the Toronto office, 11 King street east.

Tolton Bros., of Guelph, advertise their all steel and flexible harrow on page 792. They guarantee more than double the strength and wear in this harrow than there is in any other make. Write direct or apply to the local agent.

The Atlantic Refining Co., on page 791, is advertising a paint especially adapted for farm buildings. Before placing your orders for your paint this spring, require of these people for a list of testimonials, which will be a proof as to the standing qualities of this elastic carbon paint.

QUESTIONS AND ANSWERS

Salt as a Fertilizer.

W. J. M., Kirkfield, Ont., writes :

- (1) What effect has salt on land?
- (2) Will it make the grain stand up better?
- (3) Is the salt used on land the common coarse salt sold in 100 lb. sacks?
- (4) How many lbs. per acre is usually put on?

Answered by Frank T. Shutt,
Chief Chemist Dominion Experimental Farms, Ottawa.

(1) Though salt has been used on land since the earliest times, its action as a manure cannot yet be said to be entirely understood. It can scarcely be regarded as a direct supplier of plant food, but undoubtedly owes its value for encouraging crop growth to its indirect action, namely, the liberation of potash from its locked up stores in the soil. Salt is chloride of soda, and some have thought that soda can replace potash in plants, but careful and extensive research does not bear out this view, and consequently salt is not to be considered as in the same category with wood ashes or the German potash salts.

Salt, as is well known, attracts and holds moisture, and very probably this property makes it of additional value to light sandy loams in seasons of drought.

When applied to clay soils it is said to cause flocculation and prevent puddling, but for this purpose lime would be both better and safer.

(2) Many have found it to do so, and particularly recommend it, for this and probably other reasons, for barley.

(3) The common coarse salt, usually sold in barrels, is employed. There would be no object in purchasing the finer and more expensive grades.

(4) Dr. Voelcker, an eminent English Agricultural Chemist, advised for manures on a light soil, between 4 and 5 cwt. per acre. The application seems to vary from 100 to 500 lbs. per acre. As excess is apt to do positive harm, it is better to give light and frequent dressing rather than heavier application at greater intervals.

Kaffir Corn Seed.

Mr. Wilbert B. Stephens, Shetland, Ont., writes :

"I would be much pleased if you will kindly call the attention of your readers to the Kaffir corn question. The 25 kernels I bought are not in any way like the Kaffir corn for sale by seedsmen. What they sell resembles sorghum seed. But what I bought looks like any corn, every kernel being enclosed in a small, tight husk."

It is far better to purchase seed from some reliable seedsmen who has a reputation at stake than from any faker going through the country soliciting orders. There is nothing to be gained in the way of quality or cheapness by such a plan, while one is likely to be taken in by getting something quite dissimilar to what he has purchased. With a reliable seed house it is quite different, and one is pretty sure of getting what one asks for.

Provincial Auction Sales of Pure Bred Live Stock in British Columbia.

On March 15, 1901, was held at New Westminster, B.C., the most successful provincial auction sale of live stock heretofore held in Canada. The business was managed by the Dairymen's Association of British Columbia, assisted by Mr. A. P. Westervelt and F. W. Hodson. Messrs. J. M. Guardhouse, Mr. A. W. Smith, Arthur Johnston and the Hon. John Dryden deserve much credit for the public-spirited way in which they gave their services, free of all expenses, as selectors of stock for this shipment and sale. The two men in charge of the stock, Lester Higgins and John Teasdale, did their part well. The C.P.R. officials deserve the sincere thanks of the Canadian people for broad-minded liberality in assisting ventures of this sort. As soon as the three cars were loaded at Myrtle, a station thirty-seven miles east of Toronto, the C.P.R. officials took charge of them, and hurried them forward with all possible speed, landing them at their destination in British Columbia in thirteen days, covering a distance of 2,823 miles, a remarkable service for freight cars loaded with live stock. From start to finish the C.P.R. officials were attention and courtesy itself. Not is this the first time the Canadian Pacific has treated the breeders of live stock in this incomparable manner. But for the interest taken in live stock matters by the leading men interested in the C.P.R., the breeders of pure bred live stock would be called upon to pay full rates on every animal shipped from point to point in Canada. The concessions granted to us through the efforts and good offices of the C.P.R. have added tens of thousands of dollars to the wealth of Canada annually, and have made possible the improvement of Canadian live stock on a scale heretofore impossible.

In an editorial published March 16, 1901, the *Daily Columbian* of New Westminster, British Columbia, says :

"Yesterday was a proud one for the Dairymen's Association, for the sale of pure-bred stock, upon which they had staked so much, turned out a complete success. The prospective buyers were numerous, and the bidding was brisk and liberal, so that in the few hours of the afternoon, every one of the hundred lots making up the catalogue was disposed of. The prices realized were good, but better for the purchasers than could have been offered to them through any other agency.

The dairymen are not content to rest upon their laurels, but this sale was no sooner over than in the light of their experience they discussed plans for the next. The practical advice of Mr. Hodson, the Dominion Live Stock Commissioner, found ready and appreciative listeners, and several of his suggestions are likely to bear fruit in the near future.

It will be noticed from the report of the proceedings at the banquet that Mr. Hodson advises against attempting a sale of this kind in connection with the Provincial Exhibition.

Mr. Hodson suggests that the organization of the dairymen might make it feasible for them to circulate monthly lists of stock for sale, and no doubt something will be done in this direction. In response to a hint that the co-operation of the press would be desirable, the *Columbian* has placed its columns at the disposal of the Association, so that there will be no expense for advertising involved in giving effect to the suggestion.

The thanks of the live stock men from all parts of Canada are due the editor and proprietor of the *Columbian* for his liberal offer, which will certainly be accepted.

The press of Canada, WITH ONE EXCEPTION, have treated the extension of the live stock trade in a most liberal and public-spirited way.

The following is a list of the animals sold at the British Columbia sale. Animals bred in the Province brought an excellent price when they were properly fitted for sale and duly catalogued.

SHORTHORNS.

Males.

- Lucky Jim 36390, roan, calved June 20, 1900; bred by Jeffrey Bros., Whitby; sold for \$265.
 Cecilia's Statesman 33027, red, calved April 20, 1899; sold for \$165.
 Fairfax 36325, red and white, calved Feb. 1, 1900; sold for \$160.
 Cavalier's Heir 36326, roan, calved December, 1899; bred by C. S. Guardhouse, Humber, Ontario; sold for \$170.
 Royal Lincoln 36461; two years old; sold for \$170.
 General Hope 35025, roan, calved Jan. 17, 1900; sold for \$165.
 Prince of Malton 33862, red, calved Nov. 1,

1899; bred by J. Watson, Malton, Ont.; sold for \$180.

Savengen 33042, calved Jan. 6, 1900; bred by Arthur Johnston, Greenwood, Ont.; sold for \$170.

Females.

- Maple Bank Rube, red and white, bred by T. Douglas & Sons, Strathroy, calved Dec. 29, 1898; sold for \$165.
 Betty Wikes, red and white, calved Dec. 15, 1898; bred by T. Douglas & Sons; sold for \$90.
 Fleda Wikes, red and white, calved Dec. 12, 1898; bred by T. Douglas & Sons; sold for \$85.
 Princess Mildred, red, calved Dec. 18, 1898; bred by T. Douglas & Sons; sold for \$130.
 Gay Rantic, roan, calved Feb. 26, 1899 bred by Douglas & Sons; sold for \$100.
 Lady Dorn, red and white, calved Feb. 18, 1899; bred by Douglas & Sons; sold for \$135.
 Lily of Denfield, roan, calved June 1, 1899; bred by W. B. Rosser, Denfield, Ont.; sold for \$130.
 10th Lily of the Manor, roan, calved Nov. 20, 1898; bred by J. T. Gibson, Denfield, Ont.; sold for \$115.
 Glanworth Beauty, two years; sold for \$135.
 Rose of the Valley 35009, red, calved Aug. 3, 1898; sold for \$125.
 Kate Carnegie, red and white, calved Aug. 6, 1898; sold for \$145.
 Duchess of Humber, red, calved Jan. 15, 1899; bred by J. S. Snyder, Humber, Ont.; sold for \$100.
 Scarboro Lass, red, calved Aug. 25, 1898; bred by Wm. J. Watson; sold for \$130.
 Snowdrop's Gem, white; sold for one year \$110.
 Shorthorn cow, Dewdrop; bred by J. Bright, Myrtle; sold for \$125.
 Shorthorn cow, Minnie Duchess; sold for \$135.
 Ruby, red and white, calved Dec. 28, 1898; sold for \$100.

AYRSHIRES.

Males.

- Stanley 1985, white and red, calved July 12, 1895; sold for \$130.
 Dolly of the Cliffs 3374, red with white, calved May 3, 1895; sold for \$135.
 Ayrshire Queen 3401, red and white, calved April 4, 1897; sold for \$130.

SHEEP.

Southdowns.

- Ram lamb; bred by G. A. Drummond; sold for \$30.
 Ram, London 13415; sold for \$30.
 Ewe, 12818, McEwan ewe "26"; sold for \$24.
 Ewe, McEwan ewe "22"; sold for \$24.
 Ewe, McEwan ewe "30"; sold for \$20.

Shropshires.

- Ram lamb, Carpenter's 24, 145816; sold for \$37.
 Ram, Jingo 133228, dropped spring 1899; sold for \$30.
 Ewe, Gibson's 613, 142676; sold for \$30.
 Ewe, Gibson's 554, 131592; sold for \$15.
 Ewe, Woolleys 15, 142564; sold for \$45.

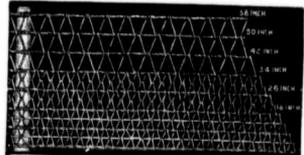
Oxfords.

- Ram; sold for \$35.
 Ewe; sold for \$29.
 Ewe; sold for \$27.
 Ewe; sold for \$20.

PIGS.

Berkshires.

- Model Duke 8418, July 19, 1900; bred by Thomas Teasdale, Concord; sold for \$26.
 Longfellow 8419, same litter as above; sold for \$30.



Eilwood Steel Wire Fences

Six styles—18 to 58 inches—best steel wires, heavily galvanized. Expansion and contraction provided for. Every rod guaranteed. Sold by local agents. If no agent in your town write to the makers.
 American Steel & Wire Co., Chicago or New York.

Baron Victor 8416, bred by Thos. Teasdale, Concord, Sept. 10, 1900, sold for \$26.
 Baron Duke 8417, same litter as above; sold for \$26.
 Creelman 8424, bred by R. Snell; sold for \$20.

Jingo 8425, bred by R. Snell; sold for \$20.
 Joe 8422, bred by R. Snell; sold for \$27.
 George 8425, bred by R. Snell; sold for \$16.

Sow, Cassie 8421, bred by R. Snell; sold for \$25.

Sow, Sallie 8420, bred by Snell, \$26.
 Sow, \$50.
 Sow, \$30.
 The four young sows are all in pig.

Tamworths.

Boar, Forward 2112, \$18.
 Sow, Spring Bank Rose 2051, \$20.
 Chester White boar, \$16.

POULTRY.

Silver Laced Wyandottes

Five lots of one cockerel and two pullets made an average of \$6.50 per lot.

White Wyandottes.

Five lots of one cockerel and two pullets made an average of \$6 per lot.

Barred Plymouth Rocks.

Sixteen lots of one cockerel and two pullets made an average of \$5.60 per lot.
 Five Plymouth Rock cockerels made an average of \$1.62 per lot.

Light Brahmas.

Seven lots of one cockerel and two pullets, \$5.

The cost of advertising the sale, and the transportation, food, and care of the animals from the time they were loaded in Ontario until they were sold by auction at New Westminster, B.C., amounted to about \$25 per head on the sheep and swine, and about 50 cents per head on the birds. Thus the gentlemen who sold to Mr. Westervelt in Ontario can easily compute whether or not the British Columbia Government found the animals they purchased from the respective sellers profitable or otherwise.

He said to her no foolish words
 That he would fain recall;
 For she, in truth, talked on so fast
 He got no chance at all.

—Chicago Record.

SHIRE HORSES

The subscribers offer for sale a number of choice-bred Stallions, Brood Mares and Fillies. Distance from either Welland or Fenwick four miles. Will meet parties wishing to inspect the stock at either of these places.

MORRIS, STONE & WELLINGTON, Fonthill P.O., Ont.

The Prince Edward Island Dairy Association.

The annual meeting of the Prince Edward Island Dairy Association was held in Charlottetown on Thursday, March 14th. There was a good attendance of delegates.

Arthur Simpson, of Bay View, president of the Association, in the chair.

The president, in the course of his address, congratulated the Association upon the success of the dairy industry during the year. The output was larger than any previous year, and good prices were realized. Though our products still show room for improvement, he was glad to state that they compared favorably with the products of any other province. The present condition of the industry is well worthy of consideration. He recommended better care of the milk before it is sent to the factory. More care should be taken in the feeding of cows. They should not be fed anything that will give an "off" flavor to the milk. Milk cans and all dishes used in milking should be thoroughly cleansed, as the tainted milk of one patron will injure the whole vat in which it is placed, and cause a decrease in its value.

The whey, if sent back in the milk cans, should at once be removed, and the cans thoroughly cleansed. Better care will have to be taken as to the sanitary condition of the factory buildings and grounds. Drains must be kept in a proper condition. Directors should take turns examining the factory and premises with a view to seeing that everything is in first-class condition. Only a competent manager should be selected. A cheap man is dear at any price.

The Secretary-Treasurer's report showed receipts for the year \$1,239.38, which was sufficient to meet the expenditure and leave a small balance.

The value of the cheese manufactured during the year 1900 was \$440,852.89. The value of butter was \$122,152.32, showing an increase during the year over the one previous of \$47,887.90. There have been 48 factories in operation.

Mr. Morrow, the instructor and inspector, submitted his report dealing with the work of the factories during the year. He reported improvements all along the line, but still there was need of better work being done.

The president's address and the reports of the secretary and inspector were referred to a special committee, and at the recommendation of said committee were ordered to be published in the minutes.

The election of directors for the ensuing year resulted as follows: Arthur Simpson, Bay View; Robt. Jenkins, Mount Albion; John Anderson, Kensington; Sydney Richardson, St. Elanors; William Jenkins, Vernon River; Laughlin McDonald, Lakeville, and James E. Macdonald, Cardigan. At a subsequent meeting of the directors Arthur Simpson was re-elected president, and Robt. Jenkins, secretary-treasurer.

Mr. MacMillan, of New Haven, next

\$5,000 in Prizes

CANADIAN Military Tournament

and

HORSE SHOW

Toronto Armories

April 24, 25, 26, 27

Entries close Thursday, April 11th and should be addressed to

HENRY WADE, Secretary
Parliament Bldgs., Toronto

GEORGE W. BEARDMORE, Chairman **STEWART HOUSTON, Manager**

Farms For Sale

Rate—One dollar per inch each insertion.

150 Acres, half-mile from Royalton; Churches, High School and station, a fine two-storey house, 15 rooms, extra well finished, 3 barns, never-failing running water at the house and barns, 2 good orchards—a fine locality. Address E. W. W., Royalton, Vt.

FOR SALE

FIFTY-ACRE FARM

North half of lot 7, on 6th concession, Barton, two miles from Hamilton. House of seven rooms; barn, with stone basement, cement floors. Five hundred plum and 50 apple trees; 10 acres wheat.

C. G. DAVIS, Freeman P. O., Ont.

TO RENT

For a term of years, farm of over 300 acres; first-class house and buildings, with modern improvements; suitable for dairy or stock raising.

Mrs E. C. ATTRILL,
Ridgwood Park, **GODERICH, ONT.**



ROCK SALT for horses and cattle, in ton and car lots. **Toronto Salt Works, Toronto**

"The value of a thing is measured by its utility"

From this standpoint the...

"Joliette" Grain Grinder

IS THE VERY BEST VALUE THAT A MAN CAN GET FOR HIS MONEY

The beauty of it is that you can use it with any power, large or small

S. VESSERT & CO.
108 Front Street East - - - TORONTO
Factory at Joliette, Quebec.

ABSOLUTELY NO CONNECTION

WITH ANY COMBINE OR TRUST

ELASTIC CARBON PAINT Especially adapted for farm buildings; proof against weather, fire and rust; will not crack, run, blister or scale; will stop leaks, and last a lifetime; great protector for everything from a hot boiler front to a plow, bridge, roof and fence. Our immense buildings are covered with Metallic Roofing and Siding and painted with **ELASTIC CARBON PAINT**. Write us for prices. We have received thousands of valuable testimonials from Canadian and American customers.

Manufactured in Canada only by
THE ATLANTIC REFINING COMPANY
Manufacturers and Importers of Illuminating and Lubricating Oils, Grease and Specialties
Foot of Jarvis Street, **TORONTO, CAN.**

read a highly interesting paper on the feeding of the dairy cow. He showed the necessity of a proper balanced ration during the time when good pasturage is not to be had, as green forage crops during the autumn months, and roots, clover, hay, and grain during the winter.

An interesting discussion followed, in which a large number of leading farmers and dairymen participated. All present agreed that it was necessary to use every means to secure the best possible quality of dairy products, and that the greatest care must be taken to this end by refusing all milk not in a proper condition, and by paying the best attention to all the details of the industry, so as not only to maintain our position, but to continue to improve until our butter and cheese are second to none in the markets of the world.

A committee of three persons was appointed to wait on the local Government, and impress upon them our claims for a provincial grant in aid of our funds.

By vote of the Association the directors were authorized to assess the different factories in proportion to the milk received at each, for a sum not exceeding one thousand dollars, to defray the expenses of the Association.

After the adoption of the minutes, the meeting closed by singing God Save the King."

Poultry Raising in Great Britain.

An English Poultry Breeder Replies to Our Questions.

The questions which we submitted to our readers a few weeks ago in connection with our poultry census have attracted attention beyond the confines of the Dominion. Since our poultry number appeared we have received a most interesting letter from Mr. Frank Rice, a large poultry breeder, of "Standstead Lodge," Glenford, Suffolk, England, in which he replies to the questions. As his answers will be of interest to our readers we reproduce his letter in full as follows:

In reply to the questions you put I am pleased to give you my answers, which may be interesting, as my stock are Bantams and Yokohamas only, the largest and finest collection in the world.

- (1) My farm is four acres of meadow.
- (2) I keep 250 hens and 100 cockrels.
- (3) I keep 66 breeding pens of Bantams and Yokohamas, all the known varieties.
- (4) I feed on barley meal, sharps, Spratts', and meat mixed for breakfast, and wheat, dairy products, barley, oats, buckwheat, at night throughout the year.
- (5) I have a special poultry house made from my own design, 3 feet square and 2 feet shade underneath, placed in wire runs 20 feet by 10 feet on grass.
- (6) I sell all chickens from 10s. to 100s. each bird, which I sell in the

autumn, and find a very large sale for these birds.

(7) I sell all eggs for setting at 6s. 6d. to 20s. per dozen, and plenty come over to America every year, and hatch well.

(8) We use about 20 eggs per week in the house, and kill an odd cockerel or two sometimes when they come out a bit faulty.

(9) I sell most eggs to private ladies and gentlemen, who keep them for a hobby only.

(10) I send several boxes of eggs to station every day during the season, and find an enormous sale for all I can spare and a great many more.

(11) It costs me 1d. per week to keep Bantams, and a trifle more for Yokohamas.

(12) I usually get about 60 to 100 eggs from each hen Bantam a year, and the Yokohamas lay from 100 to 200 eggs a year. These are most prolific layers.

(13) Rearing and marketing poultry for the table never pays in England, and I believe it never will.

(14) It is not profitable to rear poultry for the table, and farmers do not understand pure-bred poultry.

If these answers are of any interest to your readers you are quite at liberty to print them.

America is coming well to the front with high-class, home-bred poultry, and I am very pleased to see it.

There are a great many Englishmen in Canada, and it is very pleasing to see such progress in the poultry world.

Canadian Horses Wanted.

Premier Ross last week received the following letter from Lord Strathcona:

"In continuation of my letter of the 15th ultimo regarding the horse question, I am pleased to be able to tell you that, as the result of my interview and correspondence with the Right Hon. W. St. John Brodrick, Secretary of State for War, the Army Remount Department are forthwith sending an officer to Canada to purchase horses. The officer selected is Lieut. Col. Dent, who has visited Canada on similar missions previously, and he will sail by the steamship 'Teutonic' on the 20th instant.

"I am informed that he will purchase, in the first place, 500 horses for cavalry purposes and 500 cobs for the use of mounted infantry, and that he

will also visit the Northwest as well as other parts of Canada. Colonel Dent will, I believe, also look into the question of establishing two or three remount depots in different parts of the Dominion. As I thought you would like to meet Col. Dent, I have given him a letter of introduction to you, and I have no doubt that you will be pleased to facilitate the objects of his visit to Canada in any way that may be possible. Believe me, yours very truly. (Signed) Strathcona."



"A Stock Holder"

For holding stock the "Page" is the only reliable kind. It is used on the largest Stock Farms in Canada; equally suitable for small or large stock. We now make our own wire. Could not get good enough before. It is twice as strong as that in other fences and better galvanized. Our Fencing is shipped from our factory ready-made, and our local representative can put up a string of it for you in short order. Prices lower this year.

THE PAGE WIRE FENCE CO. (Ltd.)
WALKERVILLE, ONT.

"VEGETABLE GARDENING" FREE
Prof. S. B. Green's book, 348 pages, 120 illustrations, regular price, \$1.25 used in all leading colleges, free to every one buying Seed Drill, HAND SEEDERS and CULTIVATORS
Suitable for use, also for work.
All styles. Only combination 1 and 2 wheel cultivator and drill made. Every way adjustable. All our tools have tough oak bent handles and are made of best material throughout. Popular prices. Send for catalog, describing complete line and AMES PLOW CO. 32 Market St., Boston.

For Sale

Salzer's Big Four Seed Oats, good yielding, weighs 42 lbs. per bushel, and eight varieties seed potatoes. Also Imported Chester White and English Berkshire Pigs.

TILMAN E. BOWMAN, Berlin, Ont.



We can guarantee more than double the strength and wear in this Harrow than there is in any other make.

Parties wishing a first-class Harrow will do well to write us direct or apply to the local agent.

OUR MOTTO: "Not how Cheap but how Good."

TOLTON BROS., GUELPH, Ont.

Why—In these times of keen competition, is there such a great demand for this All Steel Flexible Harrow?

BECAUSE The Flexibility of the Harrow enables it to adapt itself as readily to rough and uneven ground as to smooth, and the oscillating motion produced by its flexibility pulverizes the ground, and leaves it in a loose and more porous condition than any other Harrow, and it is made of the very best material money can buy for the purpose. The bars are made of Hard Spring Steel, very stiff and strong, the hinges and teeth being of solid steel, all of which are of a higher grade than is possible to use in any other make of Harrows.

Massey-Harris Prize Com- petition

Following out a similar plan to last year, the Massey-Harris Co., Limited, Toronto, have donated \$1,000 in cash prizes to be competed for at the Toronto, London and Ottawa Fairs this fall. These prizes are given for the benefit of the agricultural and horticultural community, and with a view to increasing the interest in the above fairs.

Prizes will be given at each of these fairs for the best judging of dairy cattle, beef cattle, sheep and bacon hogs, four prizes in each class at each fair, open only to farmers or farmers' sons not over 25 years of age.

Three prizes at each of the fairs will be given for the best collection of injurious weeds, the work of the exhibitor (open to school children) and also for the best collection of insects injurious to Canadian agriculture or horticulture, the work of the exhibitor.

Prizes will also be given for the best selection of eggs and also for the best judging of poultry—fancy points not to be taken into account.

In addition, prizes will be given for bare-back riding on horses which have never won public money in a race, owned and ridden by farmers or farmers' sons engaged exclusively in farming; for the best set of farm barn and farm house plans; and for the best collection of grain, all the growth of the exhibitor.

All entries and applications should be addressed to the secretaries of the Fairs mentioned, when catalogues and entry forms will be supplied.

Canadian Live Stock at the Pan American.

The following from a recent issue of the *Jersey Bulletin* will be of interest to Canadian breeders of dairy cattle, and shows the interest our American friends are taking in the preparations Canada is making for an exhibit of live stock at the Pan-American:

Canadian breeders exhibiting cattle at the Pan-American Exposition are to receive substantial aid from the Canadian Government. To stimulate interest in the coming show the Canadian Government has decided to pay all transportation charges to and from the exposition; also the feeding charges; and in order that all things should be done correctly and properly, our friend Mr. E. B. Elderkin, who is best known to us as a breeder of first-class Jerseys—his herd always scoring high at the provincial fairs,—has been appointed Canadian Live Stock Commissioner, and he is to have full charge of the Canadian exhibits.

Mr. Elderkin, accompanied by Mr. G. C. Creelman, of the Farmers' Institute Society, Toronto, were in Buffalo Tuesday, March 12, their purpose being to secure only one-half of the available space for live stock exhibits. The live stock commissioner, Mr. F. A. Converse, although he would have liked to accommodate them in their

very modest requests, did not see his way clear to give away so much at one time. However, a liberal space will be allowed for the Canadian breeders, who will show Jerseys, Ayrshires, Holsteins, Shorthorns and French Canadian cattle.

JERSEYS IN MODEL DAIRY.

The American Jersey Cattle Club having withdrawn from the Class A test, which also affected the Class B exhibit in the model dairy, and the Holstein association having done the same, there was a vacancy for ten cows created in the arrangement of the model dairy—five Jerseys and five Holsteins.

This matter was taken up by the live stock commissioner and Mr. Elderkin, with the result that the Canadian Live Stock Commissioner has agreed, so we are informed, to furnish five Canadian-bred Jerseys and five Canadian-bred Holsteins to fill the vacancies in the dairy breeds.

Should the Canadian commission be unable to procure enough breeders to voluntarily exhibit high-class cattle, they are empowered to purchase enough cattle outright to complete the exhibit.

Mr. Elderkin was somewhat dissatisfied with the attitude of the A. J. C. C. in withdrawing from the contest, and this, no doubt, prompted him to decide to enter the Jerseys, notwithstanding the A. J. C. C.'s position toward the Pan-American Exposition.

Mr. Elderkin and Mr. Creelman visited the exposition grounds later in the day, and expressed themselves as well satisfied with the buildings, etc. The barns are very near completion.

The Bureau of Publicity is now having a cut made of the live stock buildings, including the model dairy, which will be given out for publication shortly.

JUDGES.

We are informed that the manner of choosing judges for the different breeds will be as follows:

The association of each breed will name three men who would be suitable to them as judges of their breed, and the Pan American live stock commissioner will then appoint one of these three as the judge. This plan, however, will be amended in the case of Ayrshires, where they are divided on type; in their case the United States association will appoint three and the Canadian association three; and should the live stock commissioner not find a man in the six named suitable to both, he will then appoint one from each association and a third who shall not be a member of either, the three acting as a jury.

Somebody did a golden deed;
Somebody proved a friend in need;
Somebody sang a beautiful song;
Somebody smiled the whole day long;
Somebody thought, " 'Tis sweet to live";
Somebody said, "I'm glad to give";
Somebody fought a valiant fight;
Somebody lived to shield the right,
Was that somebody you? —Selected.

Choice Vegetables

always bring high prices.
To raise them successfully, a fertilizer containing at least 8% Potash should be used.

Our books furnish useful information on all subjects relating to crop raising. They are sent free.



GERMAN KALI WORKS
93 Nassau Street,
New York.

Big Strawberries

150 plants, post-paid, for \$1.00. Send for list. N. E. MALLORY, Blenheim, Ont.

CABBAGE SEEDS and PLANTS of undoubted purity and excellence. Pedigreed stock. Price list free. Tillingshast Seed Co., La Plume, Pa.

ENSILAGE SEED CORN

THE YIELD IS WHAT COUNTS

Mammoth Southern.
Giant Prolific.
Yellow Dent.
Leaning Yellow—early maturing.
White Cap Yellow Dent—early maturing.
Red Cob White.

Read the yield from one who has tried our Mammoth Southern, and knows what it is. Don't let your dealer catch you with some cheap John variety by that name. Get the **PLUME** article—take no other. Write us if your dealer does not keep ours, and we will tell you where to get it pure. "Blood will tell."

E. R. ULRICH & SONS.

Springfield, Illinois, U.S.A.

Messes, E. R. Ulrich & Sons, Springfield, Ill. Gentlemen,—I used to buy seed corn from you several years ago, and it was always good, and gave me great crops, 20 to 24 tons to the acre, but late years I have bought my seed corn from a dealer from which I have had poor crops, yielding 4 to 6 tons less per acre than what I got from your seed. Two years ago, one-half of my seed failed to grow at all. I had to replant with other seed. Are you still selling that good, sound, Mammoth Southern Sweet Corn that I used to buy from you? If so, what would it cost me per bushel, delivered in Bond; and have you some good earlier varieties that you can recommend as large yielders of ensilage? We like some earlier that will mature for ensilage. Earlier varieties make richer and sweeter silage, but not so much of it to the acre. I grow 60 acres for silage. Yours, truly,
E. E. TILLSON.

Giant Prolific yielded on Government Farm, Agassiz, B.C., summer of 1898, 38 tons and 450 lbs. on one acre.

RELIABLE SEEDS! For Farm and Garden

OUR stock includes all that is best in Garden and Field Roots, Flower Seeds and Flowering Plants, Grasses, Clovers and Seed Grain.

Illustrated Catalogue mailed free on application.

W. EWING & CO.

Seed Merchants
142 McGill St., MONTREAL, Que.

When writing to advertisers please mention **The Farming World.**

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement, will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Cattle.

Just on the outskirts of the thriving railroad town of Allandale is situated the stock and dairy farm of Mr. S. Dymont, where in addition to keeping a choice herd of pure-bred Shorthorns he manages a dairy herd which supplies the town of Barrie with milk. Though Mr. Dymont has only been breeding two or three years he has been especially careful in the selections made, being determined that the best is none too good, with the result that he has a choice lot of cattle that would do credit to a much older breeder. The stock bull is Aberdeen Jock, a son of imported Aberdeen, one of whose daughters sold in Chicago lately for \$1,000. His dam was a daughter of "Ice-Consul, imported. Aberdeen Jock is a beautiful red in color and of a thick massive type. Mr. S. Dymont and not Mr. N., as reported in FARMING WORLD, was the buyer of the high-priced bull at the Guelph sale. This was a wonderfully good 10-months old bull calf of Arthur Johnson's breeding, got by imported Sirius out of Sarcasm, a half-sister of Scottish Archer, the sire of Brave Archer, purchased by Mr. Kelly, of Ohio, for \$6,000. On the dam side he traces to Lord Roberts, out of Isabella, a daughter of the well-known bull Indian Chief. Another especially good bull is of Mr. Dymont's own breeding, Imperial, a roan about a month older than the above, got by Sir Adolph, a son of Albert Victor, imported by H. Cargill & Son, dam Osa Duchess, a grand-daughter of Indian Chief. Osa Duchess is a wonderfully-developed cow, just past four years, and weighs eighteen hundred pounds. She is of massive build, with well sprung ribs and great heart girth. Another grand daughter of Indian Chief is Red Lady, a five-year-old cow of much the same style. Another choice three-year-old heifer is Rosedale, by the stock bull Aberdeen Jock and out of Pride of Lakesdale of Crown Prince of Strathallen blood. Another yearling heifer, out of Red Lady, is one that would be hard to beat in any show ring. In another stall were three lusty yearling bulls, by Aberdeen Jock, which would be a credit to any herd. Mr. Dymont has about thirty choice animals, and he has in the short time he has been breeding obtained the confidence of the breeders of Shorthorns to such an extent that he was elected a director of their association at their last meeting. He also has a choice lot of Shropshires and Berkshires of the most fashionable breeding. In the afternoon Mr. Dymont drove our representative out to the farm of Mr. Geo. Raikes, but unfortunately he was not at home. However we passed a pleasant half-hour in inspecting his Shorthorns, and trust we will have the pleasure of meeting him at a future visit to his herd.

At the head of Mr. Dymont's swine herd are the well-known stock boars, Allandale Boy and Royal Lad, while he has a number of young boars and sows on hand carrying the blood of Baron Lea 4th, Bright Star, Enterprise, and High Clero, on Bow Park, Teasdale, and Snell families.

Five miles from the prosperous town of Stouffville, on the G.T.R., is situated the farm of Mr. G. A. Brodie, Bethesda, Ont., where he is breeding Shorthorns and Shropshires. Mr. Brodie is one of the old boys of the Guelph Agricultural College, having won the gold medal for general proficiency in 1886, since then he has been putting theory into practice. His first experience was in renting a rundown farm which had starved all its previous tenants. By his good management, in five years, he brought the farm up to such a high state of cultivation that it was producing crops equal to any in the neighborhood. When at the end of term he gave

it up the owner had plenty of applicants, where before the place had gone begging for tenants. He has no faith in the present popular system of shallow plowing, but believes in sinking the plow to the beam at least once in four crops. He also believes in the truth of the old adage "plough deep while sluggards sleep." He early began breeding Shorthorns in a small way, and by careful selection and good judgment has become one of the acknowledged leaders in the business. He has, doubtless, the largest trade with Nova Scotia of any breeder, having shipped this year over fifty animals, all of which have given the best of satisfaction. Last year he imported a choice flock of about thirty Shrops, mostly ewes of Mansell's breeding that have been pronounced by good judges the best lot in Ontario, which certainly is saying a great deal.

Our representative made a flying visit among the stock men of Myrtle one day recently. The first call was made at the home of Mr. John Bright, where he is breeding Clydes, Shorthorns and Shrops. We found him pretty well sold out of Shorthorns, as he had sent fourteen head to the provincial sale at Ottawa. He still has some nice young stock to dispose of.

At Glen Hodson, the old homestead of the energetic Dominion Commissioner of Live Stock, we found that the superintendent, Mr. D. Drummond, had not as yet returned from his Institute trip. The stock was all in especially good thriving condition, showing the care and attention of the herdsman. Their stock Ayrshire bull is a perfectly marked, showy animal, two years old, got by the well-known prize-winner, Kelso Boy, and out of a Lady Nancy cow, and a half-sister to the celebrated Tom Brown of World's Fair renown. He has already proved himself a good breeder, and has two calves to his credit, one out of a Gertie cow, the other out of a cow bred by D. Drummond, of the well-known Maggie Burnside tribe. Both are good milkers, but the latter is probably one of the greatest producers at the pail in Ontario. In another pen we noticed four splendid heifers by Kelso Boy. Their Yorkshires are from the celebrated breed of Brethour & Saunders. They have a complete equipment of dairy machinery, including a separator run by a tread power. Their cream is all shipped to Toronto where they have a good trade. Last year they experimented in the raising of chickens for the British market, the results were so satisfactory that they have added a second incubator this spring.

Upon arriving at Maple Shade farm we found that the Hon. John Dryden was in Toronto attending to his parliamentary duties. We were, however, shown around by the farm superintendent, Mr. Christian, a graduate of the Ontario Agricultural College.

The Shorthorns consist of about seventy head of choice even animals, mostly of his own breeding, which goes to show what Canadians can do in their own country. The imported stock bull, Scottish Archer, is a grand bull of a beautiful red color, broad, deep and massive. In the yards we noticed two especially good cows of the well-known Lavender strain, Miss Lavender and Spotted Lavender. Bertie II., of the famous Bertie strain, out of imported Bertie, is another of their favorites. Jubilee Bell is a large massive roan cow with a great heart girth.

The Shrops are also mostly of his own breeding, and are a very even lot of heavy, well-made sheep, with face and legs well woolled.

Mr. Christian has been paying special attention to the proper cultivation of the soil. He keeps about one-half the land in clover all the time and depends on shallow plowing

Horses



The Estate of the Late
JOHN BELL.

4 CLYDE STALLIONS

2 four-year old
1 seven-year old
1 ten-year old,

All in first class shape. Prices reasonable. Address, **G. F. MORGAN,** Station Agric. ont.,
on C.P.M. and G.T.R. Executor,
L'Amaroux Ont.

NO SPAVINS

The worst possible Spavin can be cured in 45 minutes! Curbs, Splints and Ringbones just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.

Write to-day. Ask for Pamphlet No. 1.

FLEMING BROS., 58 Bay St., Toronto, Ont.

CLYDESDALES FOR SALE

1 Stallion, 6 years old ;
1 Stallion, 2 years old ;
3 Yearling entire, 9
brood mares in foal to
good sires. Also several
fillies and a few young
Shorthorns. Farm a
quarter of a mile from
Burlington. Station on
G.T.R.

I. DEVITT & SON
Freeman, P.O., Ont.

HORSEMEN! THE ONLY GENUINE IS

GOMBAULT'S
CAUSTIC BALSAM.

Get genuine without the signature of
The Lawrence-Williams Co.
Sole Agents in Canada for the
U.S. & CANADAS. 1 CLEVELAND, O.

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blisters from Horses and Cattle. SUPERSEDES ALL CAUTERY or FIRING. Impossible to produce scar or bluish. Every bottle is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for its use. Send for free descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

ONTARIO VETERINARY COLLEGE, Limited

Temperance St., Toronto, Can.

Affiliated with the University of Toronto.
Patrons: Governor General of Canada and Lieutenant-Governor of Ontario. The most successful Veterinary Institution in America. Experienced Teachers. Fees, \$65 per session.

PRINCIPAL, PROF. SMITH, F.R.C.V.S.,
TORONTO, CANADA

JERSEYS AND TAMWORTHS

Young Stock For Sale

A. ELLIOTT & SON, Inglewood Farm
GALT, ONT.

WRITERS, CORRESPONDENTS or REPORTERS

Wanted everywhere. Stories, news, ideas' poems, illustrated articles, advance news drawings, photographs, unique articles, etc., etc., purchased. Articles revised and prepared for publication. Books published. Send for particulars and full information before sending articles.

The Bulletin Press Association, New York.

Poultry

S.C.W. Leghorns. Pekin Ducks.

Large, vigorous, great layers. breeding stock for sale. Single settings, \$2.00. Two settings, \$3.00. Incubator lots, \$8.00 per 100. Duck eggs, 15 for \$1.00.

R. C. ALLAN, Cobourg, Ont.

SHROPSHIRES

Bred from the best Imported Stock.
Also Silver and White Wyandottes.

W. D. MONKMAN, Bond Head, Ont.

CRYSTAL SPRING POULTRY YARDS

ELIAS SNYDER, Prop.

Burgessville, Ont.

Barred Rocks exclusively.
A few choice cockerels for sale.
Eggs from prize-winning stock.
Correspondence invited.

Money Easily Made..



IS THE POULTRY ON YOUR FARM A PAYING DEPARTMENT? IF NOT, WHY NOT?

We all know that it is absolutely necessary to continually bring in new blood if we wish to make a success of breeding any live stock on the farm. This rule applies to your poultry just the same as any other department; and for this purpose we make a special offer to farmers by offering them settings of eggs from our magnificent stock of White Wyandottes, Barred Plymouth Rocks and White Leghorns at very reduced prices. All our original stock was imported from the best breeders in the United States, and our present stock is second to none in Canada. Good healthy thoroughbred birds improve the look on the farm, bring more money into your pocket, and they mature earlier, lay many more eggs and demand a far greater price either dead or alive, and they do not cost a cent more to feed than mongrel stock.

Wyandotte Eggs, per setting . \$1.50
S.C. White Leghorn Eggs, per setting . \$1.50
Barred Plymouth Rocks (Hawkins' Strain) . \$2.00

We are willing to give farmers any information that we can in reference to their poultry, and all letters will be willingly answered. Address—

The Toronto Poultry Company LIMITED

J. M. WILSON, Manager.

Davisville P.O., Ontario

with a deep stirring of the soil with a sub-soil attachment to the plow of his own invention; by this means he can stir the soil to a depth of a foot or more. He states that three horses will do the work as easily as two will handle the ordinary plow. His great aim is to add humus and nitrogen to the soil, and for this purpose has plowed under considerable clover. He also believes in keeping the rich mould near the surface by shallow cultivation at first and to gradually deepen the top soil and loosen the subsoil up with a grubber.

That veteran stock-breeder, Jas. I. Davidson, reported a prosperous season, as his sales had been good. While there he showed a letter he had just received from Mr. D. Cookston, West Branch, Iowa, expressing his satisfaction with a 10-months' old Field Marshal bull which Mr. Davidson had shipped to him lately.

The well known Shorthorn herd of Samuel Johnston, Ashburn Hilllocks, is headed by the well-bred bull Caesar, a good animal of the Cruickshanks line of breeding. We were shown three choice Ury cows and heifers in calf to the stock bull Caesar. In another stall was a pair of fine Revenue heifers. Lady Elgin is another broad, massive red cow, well gone in calf to Bonnie Lad. We were shown other typical specimens of the breed belonging to such well-known families as the Sultans, Siamfords and Scottish Princes.

The Westrope Shorthorn sale, held at South Omaha, was pronounced the second best sale of thoroughbred cattle held in this country for twenty five years. Forty head were sold at an average of \$500 per head. Last year Colonel William Colwood held the banner sale at Dexter Park, Chicago, where the W. B. Platt herd of Shorthorns, fifty-nine

Parkhill Poultry Yard

Offers Eggs from the best of stock of the following varieties: L. Brahmas, Black Langshans, W. and Barred Rocks, Golden Silver Laced and W. Wyandottes, Buff, Brown and W. Leghorns, S. S. Hamburgs, and Golden Seabright. \$1.00 per 13 eggs. Pekin Duck eggs, \$1.00 per 11. W. B. Turkey eggs \$2 per 9.

D. A. GRAHAM, Parkhill, Ont.

EGGS FOR HATCHING

Barred Plymouth Rocks
White Plymouth Rocks
Golden and White Wyandottes

\$1.00 per setting, \$5 per 100. Express paid on orders of \$3 and upwards.

A. L. KENT, Box 203, Oakville.

TREES TREES TREES

We have a full line of Fruit and Ornamental TREES for Spring, 1901, at lowest possible prices.

HEADQUARTERS FOR PACKING DEALERS' ORDERS

Farmers wishing to buy first-class stock, absolutely **First Hand and without paying commission to agents** should write to us at once for a catalogue and price list. Don't wait until the last minute, as you will be disappointed. Place orders early and secure the varieties you want. Correspondence Solicited.

WINONA NURSERY CO., Winona, Ontario



Dr. Hess' Stock Food

Is a Guaranteed Flesh Producer.

It makes animals eat well, do well and pay well. It produces that sleek, glossy coat that commands the fancy price. Cows fed DR. HESS' STOCK FOOD give more and richer milk. Make a test—your money back if it don't do what we claim.

7 lb. Sack, 65c. 12 lb. Sack, \$1.00.

Sold by dealers generally, or address, THE GREIG M'F'G CO., Canadian Agents, Montreal. For a two-cent stamp we will mail you our 64-page veterinary book. Address.

DR. HESS & CLARK, Ashland, O., U.S.A.

Eggs For Sale

Black Minorcas (Duff and Senior Strain),
Barred Plymouth Rocks,
Brown Leghorns,
Black Brested Exhibition Games.

All Prize Winners. Farm raised, \$1.00 for 13.

H. A. SHAW, Snacone, Ont.

BUFF LEGHORNS: CANADA'S BEST.....

My birds won at Johnstown, N. Y., Ontario, Guelph, Woodstock, Stratford, Petrolia, Goderich. I believe I have as fine a lot of Buff Leghorns as were ever bred in Canada. Eggs \$2; two settings \$3; express paid.

P. H. ROOS, Waterloo, Ont.

Yorkshire Hogs:
White and Barred Rocks;
Rouen Ducks and Bronze Turkeys.

Eggs from White and Barred Rocks and Ducks, \$1 per setting; Bronze Turkey eggs, \$2.50 per setting. T. J. COLE, Bowmanville, Ont. Box 188.

Drumbo Poultry Yards

Offer Eggs at \$2.00 per setting from the following varieties: Light Brahmas, Barred and White Rocks, Golden, Silver and Buff Wyandottes, Silver Spangled and Golden Penciled Hamburgs, White and Buff Leghorns, Golden Seabright Bantams, and White Crested Hk. Polish. See Poultry Notes in FARMING WORLD of March 12 description of above.

J. J. PICKARD, Secretary,
DRUMBO, ONT.

ENGLESIDE FARM

Eggs for hatching from high-class poultry. Ideal types of table fowl with great laying and exhibition qualities.

Barred and White Plymouth Rocks, Silver-Laced and White Wyandottes.

Selected matings from noted breeders in the United States and Canada, including A. C. Hawkins, Lancaster, Mass. Prices, \$1.00 and \$1.50 per setting. Liberal reduction on incubator lots.

J. W. NEWMAN,

Box 457
Phone 216
Brockville, Ont.

Eggs for Hatching

From the following varieties of utility fowls with prize winners in every pen at \$1.50 per 15. 80 per cent guaranteed fertile.
Barred Plymouth Rocks, White and Buff Wyandottes and S. C. White Leghorns. Eggs \$1.50 per 15; \$2.50 per 30; Rocks \$3.00; Wyandottes \$6.00 per 100.

C. C. HEAVEN, Westwood, Oakville, Ont.

Shorthorns

SHORTHORN BULLS

Two choice bulls about a year old

FOR SALE

JOHN McNAB,
Rockwood, Ont.

Shorthorn Bulls For Sale, from 8 to 17 months old. Color, red. JAMES BROWN, Thorold, Ont.

GLEN CRESCENT SHORTHORNS AND OXFORDS.

A few shearing rams by imported "Royal Windsor 5th" and one two-year-old bull for sale.

J. W. WOODFIELD, Exr. Edge, Ont.

SHORTHORN BULLS

Four Bulls, eleven months old, and a few Heifers for sale. All eligible for registration in American Herd Book.

Also 25 Yearling Grade Rams, and 6 registered Cotswold Lambs.

JOHN SOCKETT, Rockwood, Ont.
P.O. and Station.

T. Douglas & Sons, Strathroy, Ont.

Breeders of

SCOTCH SHORTHORNS

(100 head to select from)

Offer for sale 14 young bulls, and cows and heifers of all ages, of the most approved breeding, bred to (imp.) Diamond Jubilee—28861—, at head of herd. Farm one mile north of town.

Shorthorn Bulls For Sale

Three strong lusty sons of Aberdeen Jock 245031.

S. DYMENT, Barrie, Ont.

ARTHUR JOHNSTON,

GREENWOOD P.O., ONT.

Offers for sale at Moderate Prices:

11 Imported Bulls and Bull Calves.

36 Imported Cows, Heifers and Heifer Calves.

45 Home-bred Cows and Heifers

13 Home-bred Bulls.

CATALOGUES ON APPLICATION.

R.R. Stations:

Claremont on the C.P.R.
Pickering on the G.T.R.

22 Miles East of Toronto

Lake View Farm

OSHAWA, ONT.



- 1 Bull, 11 months, Color Red.
- 1 Bull, 12 months, Color Red.
- 1 Bull, 10 months, Color Red.

All Shorthorns.

These Registered bulls were sired by Grand Sweep, an imported bull and half brother to the James. Terms on application.

THOS. ALLIN & BROS.

Lake View Farm, OSHAWA
ONT

head, sold at an average of \$800. This sale beats it in the feature of getting the highest price paid for any cow of any breed now living. This beautiful animal bears the name Sweet Violet II., and sold to Colonel G. M. Casey, of Missouri, for \$3,705. Golden Abbottsburn was another fine animal that sold early in the sale to Colonel Casey at \$1,400. The other sales and names of purchasers where the price paid was \$750 or over are as follows: R. G. Robb & Son, Morning Sun, Ia., Velvet, 9 year old cow, \$884; H. Rees, Papillon, Neb., Nonpareil King, 1 year old, \$750; M. E. Vandenburg, Sargent, Neb., Mina Abbottsburn, heifer, \$775; William Leeper, Maitland, Ia., Dora, cow, 6 years old, \$900; S. J. Ryan & Son, of Irwin, Ia., Young Abbottsburn II., 4-year-old bull, \$1,100; A. Bentel, Buck Grove, Ia., bull calf, Lavender Lad, \$755.—Kansas City Star.

Swine.

One mile out of the thriving town of Bonnaville is situated the farm of Mr. Thos. J. Cole, where he is breeding Yorkshires, White and Barred Rocks, Minorcas and Bronze turkeys. The Yorkshire herd is headed by Oak Lodge Cornudas, an especially fine, lengthy hog of Brethour and Saunders breeding, Burford, which has never been beaten in the show ring. He has two deep, lengthy sows, obtained from Mr. Flatt and sired by Look-me-over, one of which is suckling a nice litter of pigs. In all he has six sows, from which he will be able to supply the wants of his many customers. In turkeys he has some especially good ones, including Bell's first-prize winner at Guelph and a choice imported pair of prize-winners from Mr. Johnson, of Indiana, while his fowl are all as carefully bred.

On the adjoining farm Mr. Sam Snowden has a choice lot of Shorthorns and Berkshires, the foundation stock of which was selected from the best herds in Ontario.

Snow Birds.

On twinkling wings they eddy past,
At home amid the drifting,
Or seek the hills and weedy fields
Where fast the snow is sifting.

Their coats are dappled white and brown
Like fields in winter weather,
But on the azure sky they float
Like snowflakes knit together.

I've heard them on the spotless hills,
Where fox and hound were playing,
And while I stood with eager ear
Bent on the distant baying.

The unown fields are their preserves,
Where weeds and grass are seedling;
They know the lure of distant stacks
Where houseless herds are feeding.

O cheery bird of winter cold,
I bless thy every feather;
Thy voice brings back dear boyhood days
When we were gay together.

—The Century.

SHORTHORN BULLS

—for sale—

Also a few Heifers

ALEX. BURNS, Rockwood Ont.

LIVE STOCK LABELS



Send for circular and price list.
R. W. JAMES,
Bowmanville, Ont.



OAK LODGE YORKSHIRES



are acknowledged to be the best type of bacon hog to produce the ideal carcass for the best English trade. CHAMPIONSHIP HERD AT TORONTO INDUSTRIAL EXHIBITION FOR NINE YEARS also sweepstakes on Dressed Carcass at Provincial Winter Show. We have on hand now a large herd of different ages. Our prices are reasonable and the quality is guaranteed to be choice. Write

BRETHOUR & SAUNDERS,

Burford, Ontario

Shorthorns

MAPLE LODGE STOCK FARM.

Shorthorns For Sale.

A few choice young bulls, and some excellent heifers and young cows. Our cows were awarded first prize at Prov. Dairy Test, 1899 and 1900. Imp. Knuckle Duster, and Imported Sir Wilfrid, at head of herd. Leicester sheep, imported and home bred. The best. A. W. SMITH, Maple Lodge P. O., Ont.

J. A. RICHARDSON, South Marsh, Ont., Breeder of Holsteins, Dorset Horned Sheep, Tamworth Swine.

F. PANNABECKER, Fairview Farm, Heepeler, Ont., breeder of reg. Holsteins. Stock for sale

DAVID McCRAE, Janefield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Clydesdale Horses, and Goswold Sheep. Choice animals for sale.

"Nether Lea"

Ayrshire Cattle, Yorkshire and Berkshire Swine, Rough-Coated Cottes



3 Choice young Bulls by the noted bull "Matches," 2 by the "Wee Earl Imp." A few choice young Berkshire Boars and Sows, also young Sows to farrow in April, a litter of pups now ready by "Roseath" and out of "Perfection's Queen Imp." Write for prices.

T. D. McCALLUM, Danville, Que.

SMITH EVANS, GOUROCK, ONT.

Breeder and Importer

of registered Oxford

Down Sheep. Selections

from some of the best

flocks in England.

Stock for sale at

reasonable prices. In-

spection invited

SMITH EVANS : GOUROCK, ONT.



Sheep

FARNHAM FARM

OXFORD DOWN SHEEP

All ages and sexes for Sale. Can spare a few ewes in lamb to imported Bryan.

HENRY ARKELL. - Arkell, Ont.

SHAWANOO

We breed for Mutton and Wool

HILL

Have for Sale

FLOCK

50 shearing rams, 30

shearing ewes, and 100

lamb, good quality and

excellent breeding.

JOHN RAWLINGS,

Forest, G. T. R. RAVENSWOOD P. O.
ONT.

SHROPS.

I will sell a small flock of registered Shropshire sheep, now at Eastwood village, 4 miles east of Woodstock, cheap. T. C. Paterson, P. M., Toronto.

YORKSHIRES and BERKSHIRES

Yorkshire boars and sows 8 weeks o'd from large sows of bacon type. Berkshire sows ready to breed. Barred P. Rock eggs also for sale.

JAMES A. RUSSELL,

Precious Corners - Ontario

Market Report and Forecast

Office of THE FARMING WORLD,
Confederation Life Building,
Toronto, April 1, 1907.

Trade in wholesale lines has been rather disappointing during the week, there being very little new business doing. This may be partly due to the unsettled weather and the bad condition of the roads. Business will probably rule quiet between now and the opening of navigation. Money keeps steady at 4½ to 5 per cent. on call, and 4½ per cent. on time. Discounts are steady at 6 to 7 per cent.

Wheat.

The general wheat situation shows little change. For the past few weeks there has been a gradual decrease in the export demand, and the clearances of wheat from several of the leading ports of the United States show a decrease of fully 50 per cent. within the last week or two. Coupled with this there has been a large increase in supplies at interior points in the States. The situation then is not very favorable for the seller. This is the season when the condition of the growing crop has a large influence on the market. Every report of injury is magnified by speculators to such an extent that prices advance, though conditions of legitimate trade would not warrant an increase. These crop scare reports may serve to keep the market excited and firm for a time. There are reports of serious ravages of the Hessian fly not only across the line, but in Canada. It is rather early perhaps to estimate fully the damage done, excepting in the more southerly districts. Reports of the growing crop in the States last week were favorable. The amount of winter wheat killed is much less than usual, though the weather just now is favorable for fly development. California reports, where the wheat has commenced heading, favor heavy crops of wheat and barley.

Quite a lot of Canadian wheat is being shipped via Portland and St. John. The market during the week has ruled quiet and easier. At Ontario points red and white has ruled at 66 to 67c., goose at 66½ to 67c., and spring wheat at 68 to 69c. east. On Toronto farmers' market red and white bring 69 to 70c.; spring 66, 70 to 72c., and goose wheat, 66½ to 67c. per bushel.

Oats and Barley.

The English market for Canadian oats is firmer and higher. The local markets keep steady with a slight advance in prices. Montreal quotations are 32½ to 33½c. in store. At Ontario points quotations are 29½ to 30c. On the farmers' market here oats bring 34 to 35½c. per bushel.

There has been some export demand for barley. Quotations here are 42 to 43½c. as to quality and place of shipment. On Toronto farmers' market barley brings 45½ to 46c. per bushel.

Peas and Corn.

The market for peas has ruled quiet with less export demand. Prices are steady here at 63 to 63½c. west 64 middle freights and 65c. east. On the farmers' market peas bring 66c. per bushel.

Country holders of corn in the United States are firm in their demands. Car lots of American mixed corn are quoted at Montreal at 49 to 49½c. per bushel on track. American yellow No. 3 is higher at 49c. Toronto. Canadian is firmer at 41½c. for yellow, and 41c. for mixed west.

Bran and Shorts.

Ontario bran is quoted at Montreal at \$17.50 to \$18 per ton in car lots on track, and shorts at \$18 to \$18.50. City mills here sell bran at \$16 and shorts at \$17 f.o.b. in car lots Toronto. At milling points west bran is quoted at \$14.50 to \$15, and shorts at \$15.50 to \$16 for car lots.

Eggs and Poultry.

The new egg season is now well opened up and supplies are increasing. Large buyers are now getting ready to commence picking as soon as prices are low enough. Last year they commenced buying at from 11 to 12½c., and put down large quantities at these figures,

The market is quiet. Ordinary car lots are quoted at Montreal at 37½ to 38c., but sound quality would bring more. Quotations here are unchanged. On farmers' market potatoes bring 30 to 40c. per bag.

Hay and Straw.

There has been a steady export trade in Canadian baled hay, and the outlook is steady for some time. Cable advices report an improved feeling owing to cold weather. Several large shipments have been made from country points east during the week at \$9 to \$9.50 f.o.b. for No. 2 quality. Sales have been made on Government account at \$10 to \$10.50 for No. 1. Montreal quotations are \$11 to \$11.50 for No. 1, \$10 to \$10.50 for No. 2, and \$8.50 to \$9 for clover in car lots. Prices here are \$10 to \$11.00 for No. 1, and \$9 to \$9.50 for car lots on track. On Toronto farmers' market hay brings \$13.50 to \$15, sheaf straw \$9 to \$10, and loose straw \$6 to

\$14 and timothy \$2.50 to \$3 per bushel. Trade here is nearly altogether from wholesalers who quote alike at \$6.50 to \$8.50 per bushel, red clover \$6.50 to \$7.80, and timothy \$2.25 to \$3.25 per bushel.

Maple Syrup.

The maple syrup season is now on. New syrup is selling at Montreal at about \$1 for imperial gallon and 80c. for small measure.

Cheese.

The cheese market does not improve. A

steadier feeling is reported in England but the low prices do not seem to stimulate the demand. Things are quiet at Montreal and prices are more or less nominal at 9½ to 9c. for finest colored and white respectively. Under grades bring 9 to 9½.

Butter.

The English market is firmer, and holders are able to ask one shilling more money. The receipts at Montreal during the past two weeks have been three times more than during the corresponding period of last year, which is causing holders of old stock to get rid of their supplies as quickly as possible. This has caused a considerable decline in price, except for strictly choice quality. Choice creamery is quoted at Montreal at 20 to 21c. and seconds at 17 to 19c. Creamery keeps steady here at 21 to 23c. for print and 19 to 20c. in packages and boxes. There is plenty of dairy. Pound rolls are quoted at 16 to 17c. and large rolls at 16c. On the farmers' market pound rolls bring 18 to 20c. and large rolls 16 to 18c. per lb.

Cattle.

Cattle markets have ruled firmer and more active during the week, with export buying at American markets. Good to prime steers are quoted at Chicago at \$5 to \$6.05. Cable reports at the end of the week were steady. There has been some active buying at Montreal during the week, prime Easter beef selling as high as \$6.25 to \$6.50 per cwt., while the regular quality brought only \$4.87½ to \$5.

There was a very large run on Toronto cattle market on Friday consisting of 1,700 cattle, 1,242 hogs, 750 sheep and lambs, and about 35 calves. This was the largest run of the season. The quality offered was good, though no better than should be coming forward at this season of the year. Trade in fat cattle was fair, and though there was a large run of cattle earlier in the week prices were well maintained. There was a large number of outside buyers present looking for Easter supplies, which helped to strengthen values. There was a keen demand for choice veal calves. Some brought fancy prices, selling as high as \$16 each, but these were specially prepared and purchased for the Easter trade. Stockers and feeders are in good demand at quotations.

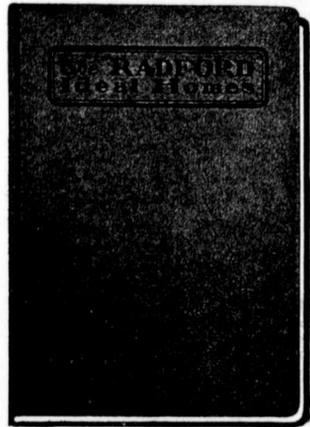
Plans of Ideal Homes

Are you interested in moderate-priced cozy homes? Get "Ideal Homes," containing 56 plans of medium prices, besides plans of four good, sensible barns, one store building, and two church plans; 31 of these houses range in cost from \$500.00 to \$1,500.00, the others from \$1,500.00 up. This cloth bound book of 72 pages, 8½x10½ inches in size, sells for 50 cents; but we have made special arrangements with the publishers so that we can furnish this book of House Plans free to anyone sending us one new subscription to THE FARMING WORLD. Any present subscriber, not in arrears, may have a copy for 50 cents. You cannot afford to miss this opportunity to save money when you are ready to build.

In remitting, send post office or express order to—

THE FARMING WORLD

Confederation Life Building, Toronto



ALVA FARM
GUERNSEYS



THE
TYPICAL
DAIRY
BREED.

Good Animals of both Sexes for Sale.

Sydney Fisher,
KNOWLTON, QUEB.

OXFORD DOWN SHEEP



Durham Cattle, "Milk-
ing Strains"; York-
shire Pigs; Plymouth
Rock Poultry.
John Cousins & Sons,
Harrison, Ont.

AYRSHIRES AND YORKSHIRES FOR SALE.

SIX PURE-BRED AYRSHIRE BULLS coming 1 year old, fit for service, and one coming 2 years old next August. All sired by "White Prince" (Imp.) except the one coming 2 years old. As I am about renting my farm these bulls will be sold cheap if taken at once. Also a number of fine pure-bred Yorkshire Sows from one to four years old.

JOHN H. DOUGLAS,
WARRKORTH, Ont.



RIPPLEY'S COOKERS.

Sell from \$10.00 to \$40.00. Made of boiler steel. No fire to rust or leak. Can't blow up. Guaranteed to cook to die. Feed in 2 hours, and to heat water in stock tanks 300 feet away. Will heat dairy rooms. Call Rippley and prices mailed free.
RIPPLEY HARDWARE CO., Box 218
100 Spadina Street, U.S.A. London, Ont.



Wide-Tire Wheels
Made to fit any axle.

They are lighter, stronger and much cheaper than wooden wheels.

Wrought Iron Wheels with Wide Tires

should be used by every farmer, in fact by everyone who has a wagon.

Dominion Wrought Iron Wheel Co.
9 and 11 Brock Ave.
DEPT. A. TORONTO, ONT.

Wilson's High Glass Scales

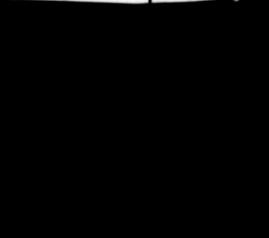
Special Offer for April
2000 lb. Scale Drop Lever.
Every Scale Tested.

This offer is for FARMING WORLD readers only.

Diamond Steel Bearings
Get Prices now

C. WILSON & SON

50 Esplanade Street E., TORONTO.



BULL-STRONG!

....PIG-TIGHT....

An Illinois farmer said that after harvest he had fully 300 bushels of loose oats on the ground that he could not secure any benefit from, because the fence around the field would not turn hogs. Figure the loss for yourself. He also said, all this would have been saved if he had used the Kitzelman Woven Wire Coiled Spring Fence, and the value would have gone a long way towards paying cost of the fence.

With the Duplex Machine any farmer can make it himself at the actual cost of the wire. Catalogue free for the asking.
C. C. DAVIS & CO.
Box 5-115 Freman, Ont.

AGENTS WANTED

Ideal Steam Cookers lead the World, and are recognized everywhere as the best. Housekeepers and cooking experts say its many advantages over all others are unquestioned. Cooks a whole meal over one burner, on gasoline, oil, gas, electric, coal or wood stove. Reduces fuel bills fifty per cent. Meats and poultry, no matter how tough, are made tender and palatable. No steam in the house. No offensive odors. Burning impossible. Whistle blows when cooker needs more water. Send for illustrated circulars. We pay express.



The U.S. SPECIALTY CO.
Adelaide Street East - TORONTO, ONT.

CANADIAN PACIFIC RY.

Easter Rates

Round Trip Tickets will be issued as follows:

GENERAL PUBLIC

Single First Class Fare

Going April 4th to 8th, inclusive, returning up to and including April 9th, 1901.

TERRITORY—Between all stations in Canada, Port Arthur, Sault Ste Marie, Mich., Detroit Mich., and East, and to but not from Buffalo, N.Y., Black Rock, N.Y., and Suspension Bridge, N.Y.

TEACHERS AND STUDENTS

Single First Class Fare and One-Third

Between stations in Canada west of Montreal to Port Arthur and Windsor. Single First Class Fare and One third to Montreal, added to Single First Class Fare Montreal to destinations.

From stations west of Montreal to Quebec, Que., and New Brunswick and Nova Scotia points.

Going March 29th to April 6th, inclusive, good to return until April 16th, 1901.

A. H. NOTMAN
Assistant General Passenger Agent
1 King St. East, TORONTO

Sheep and Lambs.

London and Liverpool cable quotations on Friday were 13 to 14c. for sheep and 15c. per lb. for lambs. There continues to be a fairly active demand at Buffalo where choice lambs bring \$6 and choice to extra sheep \$5.25 to \$5.40 per cwt. Yearling lambs of good quality are in good demand at Toronto and prices are higher. Spring lambs are beginning to come forward in large numbers and are worth from \$4 to \$6 each. Sheep are firm at \$3 to \$3.60 per cwt. for ewes and \$2.50 to \$3.25 for bucks. Grain-fed yearling lambs sold at \$4.75 to \$5.25, and barnyards at \$3.75 to \$4.50 per cwt.

Hogs.

As we indicated last week hogs took a turn upwards and prices for selects advanced fully 50c. per cwt. On Friday these sold at \$6.75 per cwt. light fats at \$6.25 and thick fats at \$6 per cwt.

At Montreal selects ruled at \$6.25 to \$6.50 per cwt. The Trade Bulletin's London cable of March 28 re Canadian bacon reads thus: "The market is firmer and 2s. higher, and at the advance a good business has been done. No. 1 Canadian is quoted at 55s. to 60s.

Horses.

Another dull week has ruled at Montreal, the only sales reported being a few driving and saddle horses. The demand for heavy drafts has been slow. They are quoted all the way from \$150 to \$250 each. A nice chestnut driving and saddle horse 5 years old, 15.2 hands high sold at \$130. A pair of light carriage horses (bays) sold at \$375. Regular drivers and saddlers sold at from \$100 to \$175 each.

A large number of good horses were sold at Grand's Repository, Toronto, last week. Prices were rather low for the class of horses offered. Quotations are about the same as those given last issue, only a better quality of horses were sold for the same money. Generally speaking, horses are not selling quite as well as last year at this time.

IF PEOPLE ONLY KNEW THE ADVANTAGES OF USING OUR "SAFE LOCK" METAL SHINGLE

for roofing houses, churches, barns, etc., they would not consider wooden shingles or any other style of roofing. "Safe Lock" shingles are very durable, have no parts to get out of order, and make a fire and lightning proof roof, very ornamental in appearance. We mail free model samples, catalogue and estimates.

THE METAL SHINGLE AND SIDING CO.,
PRESTON, ONT. LIMITED.

More Home Knitters Wanted



Machine weighs 17 pounds. It is more wonderful than a sewing machine, just as durable, and higher speed.

THE HOME MONEY MAKER

To Work at Their Homes Under the Direction of A Pair in 30 Minutes

THE PEOPLES KNITTING SYNDICATE, LIMITED.

MCKINNON BLDG. TORONTO.

To Fill Large Contracts—Good Wages Easily Earned.

We want a few more workers in this locality, at once, and in order to secure your co-operation without the delay of correspondence, we herewith explain our full plan in this advertisement. The work is simple, and the Machine is easily operated, and with the Guide, requires no teacher. If you wish to join our staff of Workers let us hear from you promptly with the Contract, order form, and remittance, as a guarantee, and we will send machine and outfit to begin work at once.



OUR METHOD OF DOING BUSINESS

We wish to secure the services of families to do knitting for us in their homes. Our method is the same as adopted in England. We are the introducers of this plan and the largest knitting concern in Canada.

After long experience, we have been able to produce an Automatic Machine by which all kinds of seamless knit-ting is now done by our Family Machine, thereby enabling anyone of ordinary intelligence to quickly learn to do the work from the Instruction Guide. All we require is that you use the machine according to directions. The Machine being made expressly for this purpose, and the operation so simple, it cannot possibly make a mistake in its work.

The great demand now is for Bicycle Stockings, Woodmen's Socks, and Motormen's Mittens, and as we are unable to supply the demand, have taken this method of advertising for more help.

The large export trade to the North-west Territories, British Columbia, and the British Colonies, furnishes an unlimited demand for our goods, and, with the combined operation of the many families we are employing, together with the large amount of knitting we are able to turn out, by which we save rents, insurance, interest on capital, etc., enables us to undersell any manufacturers of this class of goods, and we have sale for all the knitting we can have turned out.

The price we pay for finished bicycle stockings is \$10.00 per hundred, or at the rate of 10c per pair; woodmen's socks, 5c, and motormen's mittens, 12c a pair. All other work in proportion to size.

The machine can be operated by any one of a family, and at our prices an energetic family should be able to sustain themselves comfortably, and in time be a source of independent comfort.

Our plan is to send out each machine to beginners with a sock or stocking partially knitted, and remaining in the machine ready to be continued, and also enough yarn to knit one pair of sample socks or stockings and a simple and complete Instruction Guide, showing how the work is done. When the samples have been finished and returned to us satisfactory, we send a quantity of yarn, which you knit and return likewise when finished. We prepay charges on all work one way, and our workers pay return charges. The work, as we have stated, is simple and rapidly done, the machine having a capacity of ten thousand stitches a minute. We have many persons now in our employ who can knit from twenty-five to thirty pairs of socks or stockings a day, and where the work of a family is devoted to the work, you can readily see that \$15.00 or \$20.00 per week can be easily earned.

We furnish our workers all the materials, yarn, etc., free, and everything that is necessary for the work. We are furnishing the machines only for the exclusive use of those desiring to take employment with us, who must, in order to become a member, send us this Contract Order Form, procured, signed by them, and at least one good reference, and remittance accordingly, to give us the necessary assurance that the quantities of valuable yarn we may send from time to time will not be wasted or misappropriated. Our interests are mutual, and this confidence must be established if we are to succeed. We guarantee fair dealing and prompt payment for work, so do not ask us to deviate from our terms, as we cannot make a distinction with one and not another; besides, we are doing an extensive business, and must be governed by business principles.

The manufactured price of the machine is \$15, and positively will not be sold to any others than those who will agree to do knitting for us. If at any time after you commence you wish to discontinue, we will take back machine and refund the amount paid for same, after deducting cost of our expense only.

There is a Large Demand by the Trade for this class of work. Our workers can depend upon it year after year, and if you engage with us (whole or spare time) we will keep you supplied with work as long as you do it satisfactorily for us and return it promptly. We entrust our workers with large quantities of valuable yarn, and as we give references as to our honesty and integrity, we must ask

you to do the same, in order that we may know with whom we are dealing.

We have, in as brief a manner as possible, endeavored to show you what our work is, and we simply say as to the machine, it is just what we represent it to be, and will positively do everything we claim for it, or refund the money. Each machine, securely packed with an outfit, is set up for work, thoroughly tested, and a sock or stocking partially knitted before boxing and shipping. Should you decide to engage with us, it will be necessary to send us Cash Contract Order Form, properly signed by you, and at least one good reference, together with the remittance, accordingly, upon receipt of which we will forward machine and outfit ready to commence. Respectfully yours,

THE PEOPLES KNITTING SYNDICATE LIMITED, MCKINNON BLDG. TORONTO.

Our References—Express Companies, Banks, or Toronto Business Houses.

If you wish to examine the machine and see the material before undertaking the work, you can do so by sending \$3.00 as a guarantee of good faith, and to defray expense of shipping, and we will send everything to your nearest express company, leaving a balance of twelve dollars to pay the agent and 25 cents for the return charges on the money to us.

We are so frequently and unnecessarily asked if one can learn to knit without a teacher. We say, Yes; it requires no teacher; any person of ordinary intelligence who can read the Instruction Guide can learn to knit at once.

ORDER FORM

\$15.00 Cash Contract Order Form.

To The People's Knitting Syndicate, Limited, McKinnon Building, Toronto:

Gentlemen—I desire to do the work as described in this advertisement, and enclose \$15 to pay for one Automatic Knitting Machine, together with material, instructions, and everything necessary for the work, the same to be sent to me by Express, CHARGES PREPAID.

It is understood and agreed that any time I wish to discontinue, that the People's Knitting Syndicate, Limited, will take back the machine and outfit, and after deducting their expense, refund me the amount paid for same.

Sender or head of family (if possible) must sign here:

Full name

P. O. Street

County

Nearest Express Office is at

For reference I name the following person:

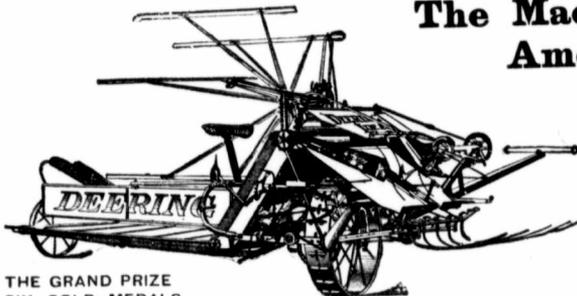
.....

Be sure to use this form when sending your remittance for the machine and outfit, which you must fill in and have signed by at least one good reference in the proper place. Tear off and return to us, and also state here how much time you can devote to the work; also how you wish to be paid, weekly, monthly, or as you send in the work.

.....

Send your remittance by Express, Money Order, Registered Letter, or Post-Office Money Order, and we will promptly forward machine, outfit, and simple guide for doing the work. This is the best offer ever made for the benefit of Canadians who want to work and make money at home.

The Machines That Made America Famous.



DEERING IDEAL BINDER

6, 8, 7, and 8 Ft. Cut

HONORS AT PARIS EXPOSITION OF 1900.

FOUR HIGH DECORATIONS FROM THE FRENCH GOVERNMENT.

SPECIAL CERTIFICATE OF HONOR.

THE GRAND PRIZE
SIX GOLD MEDALS
SIX SILVER MEDALS
ELEVEN BRONZE MEDALS.

HONORS ENOUGH FOR A WHOLE NATION.

DEERING HARVESTER COMPANY,

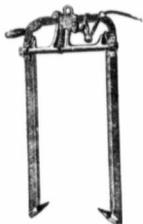
Main Office and Factory:
CHICAGO, U.S.A.

Canadian Branch Houses:
TORONTO, LONDON, MONTREAL, WINNIPEG

Provan's Patent
REVERSIBLE

Carriers, Fork and Slings

For Round Iron, Wood, or Angle Steel Tracks



Have now become a Standard of Excellence with the Farmers of Canada and the United States. At the World's Fair, Chicago, 1893, the only medal and Diploma given on Hay Carriers, Forks and Slings, was awarded to us on these Implements. Following is a copy of the Judges AWARD: "For open trip hook to receive the sling; ingenious design of stop block, which enables perfect control of carriage; no spring return of fork which can be tripped in any position; the car is reversible and of double action; for novelty, ingenuity and usefulness, excellence of material and construction." Manufactured by

James W. Provan, Oshawa, Ont., Canada.
Special Discount for Cash. Correspondence Solicited.

Milk Tickets

EVERY PATRON OF
EVERY FACTORY

Should insist on receiving a monthly statement of the milk delivered from his farm.

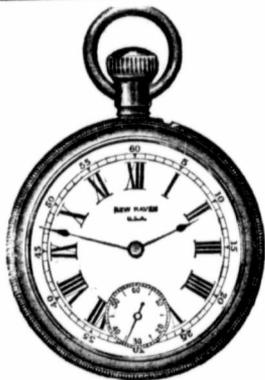
Our Ideal Milk Ticket is used by all the best factories. 25c. a hundred, \$2.00 a thousand.

Sample Card Free

Address—

THE FARMING WORLD

Confederation Life Building,
Toronto



No Matter

Whether you are training for a race or racing for a train, this watch will keep you right. It is honest, reliable and looks well. It is a man's watch, and every man should carry one. Every school-boy can earn one easily. Read our offer below:

Five Good Points

- FIRST**—It is made by one of the best manufacturers in the world. Every one is guaranteed.
- SECOND**—It is a good timekeeper—in fact so good that many railway conductors rely on it.
- THIRD**—It is strong, and will stand the rough and tumble, the dust and damp of every-day wear.
- FOURTH**—The case is nickel-finished, and looks just as well as solid silver. With ordinary wear it will keep its color for two or three years—much longer with care. The works will last ten or fifteen years.
- FIFTH**—It has a stem-wind and a stem-set. No key to lose; no key hole to let in dust.

Address

THE
Farming World,
Confederation Life Building,
TORONTO.

Any one sending us six new subscribers to THE FARMING WORLD will receive one of these fine Watches, carefully packed in wooden box, post-paid, Free. Or we will send the Watch for three new subscribers and one dollar in cash. Or any subscriber whose subscription is paid up may have one for \$2.00. Your money back if you are not satisfied.

The Farming World is published every week, only \$1.00 per year.

You can earn one of these watches in one afternoon.

BRANTFORD STEEL WIND MILLS

19TH CENTURY

20TH CENTURY

GAUZZIER ROLLER BEARINGS

OH! HEAR! HEAR! FORTIFUL, THOSE BOYS ARE

MY! WHAT A COMFORT THAT BRANTFORD MILL IS

POWER AND PUMPING MILLS
STEEL TOWERS AND FLAG
STAFFS, IRON AND WOOD
PUMPS, MAPLE LEAF GRAIN
GRINDERS, BEE SUPPLIES

OLD SHAPLEY MUIR BRANTFORD CAN