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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED  
FOUNDED 1866

\* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.\*

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THE IMPORTED CLYDESDALE STALLION, PRINCE OF EASTFIELD (1884).  
 THE PROPERTY OF THE ARCTIC ICE COMPANY, WINNIPEG, MANITOBA

## EDITORIAL.

## An Unbeaten Record.

The Arctic Ice Co., like many of Winnipeg's most enterprising firms, have gone extensively into farming. Their farm, comprising 640 acres of excellent land, is situated east of the city of Winnipeg about four miles. Considering the short length of time, a little over a year, this farm has been occupied, much has been accomplished, and about 200 acres made ready for crops.

One of the most important features in connection with their farming operations, however, is their Clydesdale stallion Prince of Eastfield (6183), the subject of our frontispiece illustration. As will be seen, this horse is one of the massive sort, having lots of bone of that clean, flinty quality so essential in a first-class draft horse. He has a nice head and neck, grand quarters and a good middle; his legs are well feathered, and his feet and pasterns right.

Prince of Eastfield is a dark bay, with only a small white spot on face; foaled June, 1885. Bred by John L. Imrie, Maryhill; sired by Prince of Wales (673); dam Jess of Blackhill (5475), by Young Lorne (997); grand dam Flora (179), by Young Lofty (987)—a pedigree any horse might be well proud of. He was imported by Robert Ness, of Howick, P. Q., who has imported many of the best horses ever brought into Canada, and the fact of his having brought out the Prince should of itself be a sufficient guarantee of his superior individuality.

Prince of Eastfield has been exhibited many times both in Scotland and since his importation in 1891 in Canada, and has in every case won first place, never having been beaten. The following are his Canadian victories:—In 1891, first and sweepstakes at Canada Central (Ottawa), Huntington County and Sherbrooke fairs, and first in his class at Montreal. In 1892, he was first at Hochelaga Spring Stallion Show, and after being brought west captured first in his class at the Winnipeg Industrial, and also first in the Springfield fall fair. He is at present in only moderate flesh, and will be travelled east and west of the city.

The Company has one Clyde mare in foal to Prince. Besides a number of Clyde-bred mares, the Company keep a herd of upwards of eighty grade cattle, headed by the Shorthorn bull Captain = 4386 =, and also ten brood sows, upon which they are using a Chester White hog.

## Rape Growing.

Though until recently comparatively unknown in this country, rape has been grown as a food for fattening lambs in England for many years. This practice has been introduced in a number of places in Ontario, and especially in the county of Wellington, where it has long played an important part in the finishing of lambs for the Buffalo market. The fattening of lambs on rape has lately been brought prominently before the public by experiments conducted at the Ontario Experimental Station, Guelph. Still, the rape is practically an unknown plant to many farmers, and we would advise all to sow a small area as an experiment. In appearance the plant resembles the turnip, to which it is closely related. The main difference is that rape has no fleshy bulb-like root, but the condition and preparation of the soil are similar. The soil should be plowed in the fall and well worked in the spring. This plant gives good returns for all manure applied, and as it is considered one of the best cleaning crops, it will take the place of a summerfallow. The more work and cultivation given the land before sowing, the less will be required to keep the weeds down after the plants are up. Sow from the twelfth of June to the middle of July in drills as for turnips, twenty-seven or thirty inches apart, with about one and a-half to two pounds of seed per acre. Use a common turnip drill. The most satisfactory results are obtained from slightly raised drills, but one disadvantage in this system, which will not be found in flat cultivation, is that the lambs require careful watching, or they will be liable to get on their backs between the rows.

Do not leave the plants too thick in the row, as they require plenty of room. Start the scuffer as soon as the plants appear, and keep it going, not only to kill the weeds, but also to keep the surface loose and prevent evaporation. The rape should be ready for pasturing by the first of August, if sown about the middle of June, or before the 25th. An acre should carry ten to fifteen lambs from that date to the end of the season. Rape is acknowledged by all to be the best late fattening feed for sheep and lambs. Cattle can also be profitably fed on it, but they require more attention. Always feed stock well before turning on rape. If turned

on hungry, animals are liable to eat too much, and loss may occur. When buying lambs for feeding always get the best obtainable, well-bred ones if possible; poor, late culls are dear at any price. If at all possible, plow land used for this crop in the fall, for after the tramping of lambs in all kinds of weather it should be turned up to the mellowing influence of the winter's frosts. Great care is necessary when buying the seed; obtain it from some reliable seedsmen, and have him guarantee that it is the right kind. If this is done, and the seed does not turn out to be as represented, damages can be collected from the seedsmen. Last year, the rape on the Experimental Farm, Guelph, and also on the farms in that and other parts, was of an inferior variety, supposed to be a hybrid much larger than bird rape; but like it, ripens seed the first year, and thus was practically worthless for pasture. A variety called the Dwarf Essex, which does not seed the year it is sown, has given general satisfaction. Much seed resembling rape has been palmed off on farmers; among others a German rape, which is grown for bird food, and as it produces enormous quantities of seed, it can be sold much cheaper than the true rape for feeding. The true rape is known when the second leaf appears, it being smooth and glossy like the Swedish turnip, while the other varieties have a course, rough leaf like wild mustard. Test your seed before you sow; buy early, and sow a little in boxes.

## Corn Culture.

The great increase in the number of silos in Ontario during the last two or three years has increased the acreage of corn, and in each succeeding year farmers who have never grown corn for fodder before try it, to a greater or less extent, and those who have grown it for years are increasing their acreage. Corn requires a dry, warm, thoroughly prepared soil, and plenty of sunlight; for this reason it is better to plant in rows running north and south. A clover sod makes a good seed-bed for corn, but it must be thoroughly worked up.

If the land is stubble plow it deep in the fall, manure and either plow or cultivate thoroughly in the spring. Sow about the 24th of May, either earlier or later according to the location and season. It is not well to plant too soon. The seed is better in the barn than rotting in a cold, wet soil. In sowing use the common seed drill, and stop a number of the spouts so that the drills will be a suitable distance apart. Allow about half a bushel of seed to the acre. As soon as the corn is up give it a stroke with a light harrow; repeat two or three times until the plant grows so high that the harrow pulls the plants out by the roots. The harrow will kill a large number of weeds, pulverizes the soil, does the corn good, and is the cheapest method of cultivation. When too high to harrow start the horse hoe at work, and keep it going during the summer, not only as a weed cleaner, but also to loosen the soil so that it will retain the moisture. Do not let the soil crust after a rain. The cultivation should be shallow, so that the roots of the plant be not injured.

Each grower should plant the varieties which mature in his own district. If the corn is nearly ripe these will have no unnecessary delay in waiting for it to wilt before putting in the silo—the silage will be better in every respect.

The further north the shorter the season of growth, therefore a variety will be needed which will mature in less time than is required for warmer localities; as a rule, the large varieties are later in coming to maturity.

Mammoth Southern Sweet and Red Cob Ensilage will do well for the more southern portions of Ontario. Thoroughbred White Flint, Pearce's Prolific, Angel of Midnight, Smutnose and Longfellow are all favorites, requiring less time to complete the growth than the first named varieties. For farther north it is likely that a still earlier corn, such as Mammoth Cuban or Crompton's Early, would give better satisfaction. But the best advice to each grower is, sow the bulk of your crop of some variety which has been tried in your own neighborhood, either by yourself or some good farmer; also test the different varieties of newer sorts in small plots. In this way each farmer is always sure of what he is doing.

## Roots.

It is necessary for the stock-keeper to provide some succulent food for his animals. If he has a silo, he will find that corn is the cheapest and most convenient crop to grow for this purpose. If he has not a silo, he will have to use roots of some kind as a substitute. Turnips are doubtless the most important root; they are the mainstay of the British farmer. Cattle continually fed upon dry feed frequently "go off their feed." Turnips aid digestion and give a relish to the dry fodder. A larger acreage should be grown by nine-tenths of our farmers.

If you have not a silo already, why not build one this season?

Try an acre of the Robinson combination of corn and English horse beans. See page 123, April 1st issue.

Don't stop the grain feed all at once and depend on the pasture to keep the animals in good order. Get them used to the grass gradually.

Be sure and tag your sheep well before letting them out to grass. It will save you many pounds of wool, and perhaps prevent losing some of them.

See that the fences are all up before the animals are turned out in the spring, and they will never fall into bad habits. A farmer who has good fences never has breachy beasts.

Harrow the field that has not been plowed yet. It will keep the surface fine, prevent evaporation and baking, and therefore will be much easier to plow and harrow later on.

Sow rape or corn on the field that you are getting ready to summerfallow, and thus kill the weeds and get a good crop of feed. A farmer cannot afford to lose a season's crop from any field.

How many worthless dogs are kept in your neighborhood? Which are of the most use on a farm, dogs or sheep? If Ontario's Minister of Agriculture had his way, all the useless curs would go.

Go over the orchards carefully, if you have not already done so, and cut out all the black knot in the plum and cherry trees. Do not throw them down in the brush heap, but be sure to burn them.

Seeding will be well under way before this number reaches our readers, and in some places nearly over. Farmers will be thinking of roots, corn and potatoes. Are you going to try an acre or more of rape to fatten your lambs on this fall?

What varieties of the different root crops are you going to sow this spring? It will pay you to study carefully the letters on corn, roots and potatoes in the issue of March 15th. These notes are written by practical farmers from all parts of the province, and are short, pithy, and to the point.

This is the most critical time of the year for the stock breeder, just between winter and spring. Keep the animals in until the pastures are firm and the grass has made a good start. Stock of all kinds will be very restless now, and must have a more generous allowance of succulent food, as ensilage or roots, to bring them out in good order.

Chief Buchanan, of the World's Fair, will consult as far as possible the wishes of the exhibitors as regards the appointment of judges. Some associations have asked for single judges, others prefer the three judge system. Requests will all be honored as far as possible. If associations have judges to recommend, it will be well to send their names to Mr. Buchanan as soon as possible.

## The World's Fair Staff, Canadian Division.

The following are the names of the Canadian World's Fair officials, who will be under the direction of Mr. Larke, World's Fair Commissioner for Canada:—

Mr. W. D. Dimock, of Truro, N. S., is the secretary and accountant to the commissioner; Mr. T. G. Bell, Ottawa, press agent; L. H. Lafleur, Montreal, clerk; J. H. Tracey, Ottawa, secretary to the executive commissioner; Peter Hughes, Ottawa, George Parsons, Halifax, and S. Stanton, Bongards Corners, Ont., clerks; J. B. Samson, Ottawa, messenger.

In the department of manufactures, Mr. James Lobb, of Toronto, is superintendent; E. A. Charters, Sussex, N. B., assistant superintendent; Miss Barrett, Ottawa, in charge of ladies' work department.

Of the liberal arts department, Mr. Wilson Morton, Toronto, is superintendent.

In the agricultural department, R. S. Hodgins, of Lucan, Ont., is superintendent; O. Turcotte, Quebec, assistant superintendent; J. P. Redmond, Gamaoque, dairy assistant.

J. Lloyd Jones, of Brantford, is superintendent of the live stock department; J. Riecheldt, of Haldimand County, assistant in forestry; James Clarke, of Dundas, superintendent of the machinery department.

J. A. G. Goulet, of St. Eustache, is superintendent of agricultural machinery.

W. N. Andrews, of Montreal, superintendent of transportation; Roger Marion, St. Boniface, assistant superintendent.

L. Woolverton, of Grimsby, superintendent of horticulture, and M. Swanson, of Goderich, assistant superintendent.

Mr. J. S. Larke has at last been appointed executive commissioner for Canada at the World's Columbian Exhibition. He has been doing the work for some months—ever since Professor Saunders was compelled by ill-health to abandon it. It is but just that Mr. Larke should have the title since he is performing the duties of the office. With so excellent an administrator as Mr. Carling, with Mr. Larke as executive, and with Mr. Awrey to look after the affairs of Ontario, Canada's interests will certainly be in good hands.

Breeders will be surprised to learn that a monopoly of printing and selling the official catalogue of the World's Fair has been granted to a Chicago firm, and the agreement with the Exposition authorities require only that the name and number of the animal and the name of the exhibitor be given, and also provides that no other catalogue of any department of the exhibition can be sold or given away on the grounds. No detailed description will be given in this catalogue. Compare this with the official catalogue of the Toronto Industrial, where the color, number in class, number in the different herd books, date of birth, name of sire and dam, with the names of breeder and present owner, are all given. Such a catalogue adds much to the interest taken in the live stock, and also to the pleasure of visitors who are inspecting the same, for as soon as an animal is seen its pedigree can at once be turned up and all particulars learned. But the most outrageous piece of red tapeism is the rule that no circular, catalogue, or advertising cards, in which the exhibits are particularly described, will be allowed to be sold or given away. Chief Buchanan and his associates have done all in their power to oppose this resolution, and are bringing pressure to bear upon the authorities to allow a fuller description of stock to appear in the official catalogue. He has also authorized the statement that properly worded catalogues of all stock owned by the exhibitor may be given away at will. Doubtless many breeders are taking in the exhibition largely for the purpose of advertising their stock, and properly arranged catalogues will add much to their success in this particular. To be on the safe side, it will be necessary to send proofs of catalogues to Chief Buchanan for his approval. This matter should receive immediate attention, for it would be, to say the least, decidedly aggravating after having prepared a special catalogue for the purpose of advertising stock at the World's Fair, to learn, when too late, that just because some animal on exhibition is particularly described or identified, that the powers that rule forbid the distribution of this circular within the gates of the exhibition.

**Dogs.**

The following list of World's Fair judges has been announced:—St. Bernards and Newfoundland, Miss Anna H. Whitney. Mastiffs, Dr. R. H. Derby. Great Danes and Dachshunds, G. Muss-Arnolt. Deerhounds, Greyhounds, Russian Wolfhounds and Foxhounds, Mr. Roger D. Williams. Beagles and Basset Hounds, Mr. Pottinger Dorsey. Pointers, Mr. James L. Anthony. English Setters and Chesapeake Bay Dogs, Major J. M. Taylor. Irish Setters, Dr. Wm. Jarvis. Gordon Setters, Dr. H. Clay Glover. Field, Cocker and Clumber Spaniels, Mr. A. C. Wilmerding. Collies, Mr. Henry Jarrett. Fox and Bull Terriers, Mr. T. E. Bellin. Bull Dogs, Mr. John E. Thayer. Pugs, Toy Spaniels and Italian Greyhounds, Dr. M. H. Cryer. Bloodhounds, Poodles, Schipperkes, Harriers, all other Terriers and miscellaneous, Mr. R. F. Mayhew.

**Thornton's Circular.**

From the last number of this well-known periodical we take the following notes of the Shorthorn trade in Great Britain. During the past year some forty sales were held, and some 1,850 animals disposed of, the average price being a little over \$100—the top price of the season being \$5,000, paid for the bull "New Year's Gift" at the Queen's sale. The Queen's sale made the highest average for the year, thirty-six animals averaging over \$300.

Among the encouraging signs of the times, Mr. Thornton says:—"Breeding, which twenty years ago was sustained chiefly by line breeding, has of late years been carried on more by what may be called individual merit. In fact, the animal has been considered as well as the pedigree, with the result that Shorthorns have generally somewhat increased in size, and become stronger in constitution, and have also developed better milking and feeding properties. Our principal shows have borne evidence of this, and at those sales where breeders have combined the later system of breeding with a careful regard to pedigree the enhanced prices have proved the appreciation of the public.

**Tariff Reform.**

We learn from the latest reports that the Honorable Mr. Foster has prosecuted his tariff investigations in Montreal. He issued orders to the various interested bodies to appoint delegations to meet him and discuss the reconstruction of the tariff; thus we see importers consulted on all sides, but no apparent interest taken in the case of the agriculturists, nor will there be any, unless the farmers as a class raise their voices and let their wants be known in an unmistakable manner.

Many of the members who represent county constituencies have done the farmer's cause harm by asserting that "farmers are prosperous, that only Liberals are complaining, and that they have no cause to lament their condition."

The yeomanry will find no relief in speaking through their representatives on the floor of the House. If the views farmers express to the men they have helped to elect are in accordance with the party's views to which the said members belong, they (the members) proclaim them from the housetop. If not, such members qualify themselves, if possible, to oppose or refute the farmers' arguments. The advancement of the party and personal aggrandizement is the chief object for which nine-tenths of the members who sit at Ottawa strive; so we judge from the speeches made last session.

Farmers' Associations throughout Canada should meet, draw up and pass well-considered resolutions, and forward the same to Mr. Foster and insist that he shall consider their interests as well as those of others. In fact, agriculture should be the first considered; it directly supports seven-tenths of our people, and is the foundation on which the prosperity of all other classes depends.

Unless the farmers bestir themselves, they will continue to be as they are now—burdened, that a few manufacturers may be enriched.

Why should the mass of our people be taxed that a very few be made wealthy?

The Executive of the Central Farmers' Institute in Ontario and Manitoba should at once consider these questions, so also should the leaders of the Grange and the Patrons.

Now is the time for action. If farmers and dairymen wish their markets extended and their burdens lightened, the present is their opportunity to gain the ear of the governing body. Mr. Foster asked the members of the Conservative party to allow the Government time to investigate, and next session of Parliament would be devoted to a reconstruction of the tariff. If the leaders among the farmers do not take action now, when Parliament next meets it will be too late for them to wield any influence.

Not only should farmers discuss the tariff, but also the trade relationship existing between Canada and the U. S. A. If this can be improved to benefit the farmers, it should be done; the agriculturists have a right to demand that it shall. Heretofore the manufacturers have controlled Canada, legislation has been enacted for their benefit, members of the Government have sought their counsel; but when did they ever seek counsel from the farmers?

This state of affairs will not be improved until the farmers assert their rights. In Ontario and Manitoba a similar condition existed until representative farmers were elected to the Cabinets of these Provinces as Ministers of Agriculture. What Mr. Dryden and Mr. Greenway have done to advance agriculture in their respective Provinces a thoroughly practical man could do for Canada, if he conducted the portfolio of agriculture at Ottawa. Were the farmers of Canada consulted when Mr. Angers was appointed? Certainly not, or he never would have occupied his present position. We believe he has no interests in agriculture—does not know the requirements of the class he is supposed to represent in the Cabinet! What a farce to appoint such a man—what an insult to the farming population of Canada! As well appoint a farmer Minister of Justice. Practically Sir John Thompson told the farmers of Canada that among them there was no man able to fill the position as head of their own peculiar department. It was the farmers who demanded the appointment of the Hon. John Dryden in Ontario. He is a practical man, who knows their needs, understands their difficulties, and will not sacrifice them to serve party ends. Such a man we need at Ottawa.

Farmers cannot expect more from the one party than from the other; each is bidding for the popular support. The course for the yeomanry to pursue is to arise, unite, and demand their rights both by petition and delegation, and above all be prepared to vote as they talk.

**STOCK.**

**Sheep and Swine Men Convene.**

The Executive Committees of the Dominion Sheep Breeders' Association and the Canadian Swine Breeders' Association held a joint meeting in the Tecumseh House, London, Ont., April 10th, 1893.

Mr. John I. Hobson, Mossboro', Ont., was present as the representative of the Guelph Fat Stock Club.

This convention was one of the most influential and enthusiastic yet held by these progressive Associations. Among the prominent gentlemen present were the following:—James Russell, Richmond Hill; John Jackson, Abingdon; F. R. Shore, London; J. C. Snell, Edmonton; John Kelly, Shakespear; A. Simenton, Blackheath; R. Gibson, Delaware; Wm. Oliver, Avonbank; D. DeCoursey, Bornholm; J. E. Brethour, Burford; S. Coxworth, Claremont; R. Dorsey, Burnhamthorpe; R. H. Harding, Thorndale; J. J. Payne, Chatham; John R. Craig, Calgary, N.W.T.; F. W. Hodson, Secretary of Committee.

Mr. John I. Hobson was chosen chairman. The Secretary read the Financial Statement of the Dominion Swine Breeders' Association for the period ending April 7th, 1893.

**RECEIPTS.**

Cash on hand from previous year, as per last report.....	\$288 11
Members' fees.....	339 00
Legislative grant.....	300 00
<b>MISCELLANEOUS:</b>	
E. Jarvis, \$23.50—less 15 cents.....	23 35
	<b>\$950 46</b>

**EXPENDITURES.**

Cash paid for Prizes at Guelph Fat Stock Show.....	\$236 00
Expenses of regular meetings, papers, etc.....	45 00
Officers' salaries and Directors' fees.....	124 85
Postage, stationery and printing.....	49 65
Volumes of Record supplied members.....	248 20
Cost of reporting two last annual meetings.....	20 00
<b>MISCELLANEOUS:</b>	
Current expenses for 1888, 1889, 1890 and 1891, not previously paid, \$100; Legal advice, \$1.00; Affidavit, \$1.00; Mailing and Typewriting, \$7.50.....	109 50
	<b>\$833 20</b>

Balance in Treasurer's hands..... 117 26

Moved by J. C. Snell, seconded by J. J. Payne, that the report as read be adopted. The financial statement of the Sheep Breeders' Association was then read:—

**RECEIPTS.**

Cash on hand from previous year, as per last report.....	\$324 32
Members' fees.....	61 00
Legislative grant.....	300 00
	<b>\$685 32</b>

**EXPENDITURES.**

Prizes awarded at Guelph Fat Stock Show.....	\$435 00
Expenses of regular meetings, papers, etc.....	73 00
Officers' salaries and Directors' fees.....	39 50
Postage, stationery and printing.....	87 50
Cost of reporting last two annual meetings.....	20 00
<b>MISCELLANEOUS:</b>	
Affidavit, \$1.00; Mailing and Typewriting, \$7.50; Current expenses for 1891, not previously paid, \$50.00.....	58 50
	<b>\$733 50</b>

Balance due Secretary..... 48 18

James Russell—I think that the grant to each of the associations is too small. I do not think the Secretary-Treasurer's work can be done for \$50.00, and I hope to see the grant increased. I move the adoption of the report. Mr. Jackson seconded it. Carried.

The Secretary outlined what he considered to be the business before the meeting, asking those present to decide whether the associations shall give anything in prizes this year, and if they do, whether shall such awards take the shape of medals, or shall a larger grant be given to the Provincial Fat Stock Club. Last year, before our associations agreed to contribute to the prize list, it was agreed that the show be run on certain lines.

J. C. Snell said—Mr. Awrey asked that the terms this year be made satisfactory to the Board of the Agriculture and Arts Association. I think the Board was pretty well satisfied with the arrangements last year, and think if the same were made this year it would be satisfactory.

John Jackson—I was well satisfied with last year's union with the Guelph Fat Stock Club, and I think the Agriculture and Arts Association will not ask us to run it on harder lines than last year. As our report shows a deficit, I think it would be well to have our grant increased, and think we should ask at least \$800 for each association.

James Russell—Mr. Awrey seems to think we have too much liberty and more privileges than we should have had. It seems to me both societies are clear of the Agriculture and Arts Association, and have other cards which they can play to advantage. The Industrial Exhibition, I think, will duplicate the flock prizes. This body has also granted a Canadian flock prize each for Cotswolds, Shropshires and Southdowns; more we could not insist on, but I expect next year the other breeds will be given similar prizes. I think our funds could be well spent here. I think it is a mistake to scatter the money in medals, as they amount to little; I would rather support the Guelph Fat Stock Show.

J. E. Brethour—I quite agree with Mr. Russell that it is to our interest to support the Guelph Fat Stock Club, yet I do not think we should be bound to submit to their rules. I think we treated them very fairly, and do not think we should be bound by any rules detrimental to our interests. I think the Agriculture and Arts Association were greatly benefitted last year by union with our associations.

It is to their interest to unite with us. Last year the Fat Stock Show was superior to anything I have ever seen, especially in the sheep and swine department.

R. H. Harding—I might say that I agree with the other speakers in favouring the holding of a joint Fat Stock Show with the Agriculture and Arts Association and the Fat Stock Club, if we can make suitable arrangements, and I think we should name a committee to meet with them and find out their terms.

Chairman—I might say that the Guelph Fat Stock Show will be a good one; even if we do not get the Provincial Fat Stock Show, we are bound to get up a good exhibition. We are all in dead earnest about it.

The chairman then read the agreement entered into last year between the Sheep and Swine Breeders' Associations and the Agriculture and Arts Association. Last year the local Fat Stock Club had three representatives, the Agriculture and Arts five, and the Sheep and Swine Breeders' Associations two each.

Moved by J. E. Brethour, seconded by R. H. Harding, that a committee be appointed to confer with the Fat Stock Club, the Agriculture and Arts Association, or other bodies with whom suitable terms can be made, to the end that a first-rate winter exhibition be again held sometime during the month of December, 1893. Carried.

James Russell—I desire that our Associations support the Guelph Fat Stock Club, even if they cannot go in with the Agriculture and Arts.

J. C. Snell—As a member of the Agriculture and Arts Association I am anxious that the Fat Stock Show should go to Guelph this year, and made a motion to that effect at a meeting of the Board of the Agriculture and Arts, but Mr. Awrey was anxious that the Hamilton people have the privilege of offering us a place in Hamilton. A committee was appointed to interview the Toronto and Hamilton people, but I was surprised to find that they had no suitable building in Hamilton, but offered us the use of the race-course. They were anxious that the city should undertake the erection of a building, but the officials would not consent to that. When we were at the meeting in Hamilton we met representatives of the corporation and the race-course association, and it was decided if the city council would undertake the management of the show the city would put up the building, but before doing that they would have to submit a by-law to the people, which could not be done before the first of May, so I do not think that Hamilton can give us a suitable building; the place mentioned is two miles from the city.

Chairman—I am much interested in the city of Guelph. We had a meeting, and think we were not very well used by the Agriculture and Arts Association, and after seeing what had taken place in Hamilton, we held the view that if the Agriculture and Arts Association could not hold a show anywhere else, then they would come to Guelph. We, the Fat Stock Club of Guelph, decided we would have one of the best shows that could be gotten up, and if the Agriculture and Arts Association do not come to Guelph we will have a good show with all the advantages of last year. We think, after what we have done, we have a certain claim on those in charge. If we have the show another year we will consider ourselves fairly well used, but if the Agriculture and Arts does not come to Guelph another year we will think we are not well used.

A. Simenton—We seem to be as one man regarding this question. I think the best thing would be to appoint a committee to make the best arrangements possible. I think we will make a mistake if we separate from the Agriculture and Arts.

J. C. Snell—The Guelph people have treated us well, given us the use of a building and treated us to a dinner, yet they have not given us any money toward the prizes, and the members of the Guelph Fat Stock Club have been admitted for 25 cents, while the membership is \$1.00 per year, so all we get from them is the use of the building. We pay our own expenses and let them in for 25 cents.

R. Gibson—I think it would be well to spend the money where it will be appreciated. I think Guelph has given us the best satisfaction of any place, and it is a central point; the butchers of Toronto have come to consider it a good point at which to buy fat stock. If we change this point and go to some other place, I think it behooves us as a distinct organization not to go to another place where the stock interest is not recognized. I do not think it would be wise for us to co-operate if the Agriculture and Arts Association see fit to change from Guelph to a place where there is a lake on one side and not much on the other. I do not think it would be wise to spend our money in such a place. If the show does not go to Guelph I would ask that it come to London, as we are situated in the best agricultural country. I am with you if the fees of these Associations are to be given to a fat stock show in an agricultural district, but if you wish to send it to a town that does not recognize agriculture outside of a few grapes, then I am not with you.

J. E. Brethour—I think the ground is all covered. I do not think there is a man on the board but holds views similar to Mr. Gibson, and it will rest with our committee to decide whether they think it desirable or not to unite with any association that would go to a fishing pond.

Moved by R. Gibson, seconded by W. H. Beattie, and carried, that John Jackson and James Russell be the exhibition committee for the Dominion Sheep Breeders' Association, with power to co-operate with other associations in order to hold a union Fat Stock Show, and that they be given full power to act for this association.

Moved by F. W. Hodson, seconded by R. H. Harding, and carried, that J. E. Brethour and S. Coxworth be a committee to represent the Canadian Swine Breeders' Association.

J. E. Brethour moved that F. W. Hodson's name be added as a member of each committee, seconded by R. Gibson, and carried.

John R. Craig, Calgary, N. W. T., was then introduced by Mr. Gibson, and was asked to take a chair in the room.

F. W. Hodson—There were several men who did not show last year because one clause stated that all animals should be sold to the butcher, I think this should be erased. By motion, the exhibition committee were instructed to have this clause struck out.

A resolution was carried declaring that each exhibitor in the pure-bred classes must be a member either of the Dominion Sheep Breeders' Association or the Canadian Swine Breeders' Association, or both, according as he exhibits.

R. H. Harding—I think about the only thing left for us to do is to name the amount of money we will allow our committees to spend in prizes. If we could get a grant of \$300 for each of our societies, we could then give in prizes \$500 from each association. Unless we give good prizes good animals will not be sent to compete; we want a good show. I think it will be necessary to appoint a deputation to get an increased grant. We may try to get it by letter, but if we cannot get it in that way, we will have to go in a body to see the Minister. We may have some difficulty getting the grant increased; we will have to appoint a strong committee of influential men, not to convince the Minister, but his colleagues.

Moved by R. H. Harding, seconded by R. Gibson, and carried, that our exhibition committee be empowered to spend in prizes as much money as last year, but not to exceed \$500 from each association.

Moved by J. E. Brethour, seconded by J. C. Snell, and carried, that all animals shown in pure-bred classes be recorded in some recognized record, and that certificates be produced at the time of entry. That the rules referring to the slaughter of animals shown shall not apply to pure-bred sheep and swine.

Moved by J. Jackson and carried, that R. Gibson, F. W. Hodson, J. I. Hobson, James Russell, J. C. Snell, J. E. Brethour and the mover, be a committee to wait on the government with a view of having the annual grant given to each association increased to \$800 per annum.

John Jackson—I have heard it reported that the Columbian Exhibition Directors wish to select one judge from Canada, one from the United States, and one from England, but so far no one knows positively.

Mr. Gibson—All I know is this, they have what they call a Board of Jurors who select the judges. They applied to the Shorthorn Breeders' Association for a list of five names to be placed on the paper in rotation as preferred. They applied to the Shropshire Breeders' Association for seven names, two from England, two from Canada, and three from the United States. The different stock organizations of the United States have been applied to for a certain number of names. It was understood at the Shropshire Breeders' Association, where Mr. Garland attended, who has charge of the sheep department at the Columbian Exhibition, that they would take one from Canada, one from England, and one from the United States, but in case the three recommended could not act it would be advisable to recommend two other Canadians, two English, and three Americans, and the Board of Jurors would select three. Now the question arose before these Board of Jurors, in the first place, what would they pay judges, and after a good deal of consideration they decided upon paying the judges from abroad \$1,000 each, the American and Canadian judges \$600, each to pay his own expenses. After discovering the number of judges they would have to employ, that is, if they have three judges for each class, they said they would pay that amount if they could get a grant from Congress for that purpose. At the present time they do not know what they will do. The Shropshire Breeders' said, "you choose one judge; you may select that judge, and give us the privilege of naming two others and we will pay their expenses." I now see they have decided on one judge in each class and pay him liberally, so as to secure a good man. I think it would be wise for us to submit a list of names.

The following gentlemen were named as competent judges, and the secretary was instructed to forward their names to Mr. Buchanan and the Canadian Commissioners:—

- SHEEP.
  - Cotswolds—J. C. Snell, Edmonton, and James Russell, Richmond Hill.
  - Lincolns—J. C. Snell, Edmonton, and R. Gibson, Delaware.
  - Leicesters—J. C. Snell, Edmonton, and James Peddie, Hensall.
  - Southdowns—A. Simenton, Blackheath, and Thos. Wilkinson, Hamilton.
  - Shropshires—W. H. Beattie, Wilton Grove, and F. R. Shore, White Oak.
  - Oxfords—James Tolton, Walkerton, and Herbert Wright, Guelph.

Dorset-Horns—W. H. Beattie, Wilton Grove, and John Jackson, Abingdon.

Chester Whites—James Anderson, Guelph, and John Jackson, Glenallen.

Poland-Chinas—J. J. Payne, Chatham, and D. DeCoursey, Bornholm.

Suffolks—Sharpe Butterfield, Sandwich, and R. Dorsey, Burnhamthorpe.

Berkshires—J. C. Snell, Edmonton, and S. Coxworth, Claremont.

Tanworths—John Bell, Amber.

Yorkshires—R. Gibson, Delaware, and Sharpe Butterfield, Sandwich.

Essex—Sharpe Butterfield, James Anderson.

Moved by R. Gibson, seconded by D. DeCoursey, and carried, that the judges who acted last year at the Fat Stock Show be re-appointed, James Main being named as first judge, and Sharpe Butterfield as reserve judge.

Messrs. J. C. Snell, John Jackson and Richard Gibson were appointed to draft a petition to Hon. W. I. Buchanan, Chief Department of Agriculture, World's Columbian Exhibition, requesting that Canadian records be recognized at Chicago. The following is a copy of said petition:—

The undersigned committee, appointed by a joint meeting of the Executive Committees of the Dominion Sheep Breeders' Association and the Canadian Swine Breeders' Association, have been instructed to call your attention to the fact that Canadian records of sheep and swine are not recognized in the published list of premiums for the Columbian Exhibition. That the standard of Canadian records is equally as high as those recognized, and that these associations respectfully request that the directors, even at this late date, take into consideration the advisability of recognizing our Canadian records, as we find great difficulty in getting our breeders to make entries for the exhibition on account of the extra expense entailed in recording ancestors in the American records to complete the pedigrees.

The Secretary was instructed to forward a copy of the above to Mr. Buchanan and the Canadian Commissioners.

Studs, Herds and Flocks. MOUNT PLEASANT COTSWOLDS.

Three miles north of Uxbridge station, on the Midland branch of the G. T. R., is situated Mount Pleasant Stock Farm, the proprietor of which is Mr. Wm. Thompson, Uxbridge, Ont., whose name has become familiar in connection with high-class Cotswold sheep. Of winners at the Toronto Industrial and other leading shows the Mount Pleasant flock has furnished its full quota. An inspection of the animals reveals the fact that only the best specimens are kept in the breeding pen.

Such has been the demand for sheep that the original flock has been entirely sold out, and in order to recoup the ranks thinned by frequent sales, importations have been made from England; only specimens from the most noted ram flocks have been selected.

The two-shear ram, Knight, which is at present at the head of the flock, was imported last season. He was bred by Mr. Chas. Gillette, and won first at all the leading Canadian shows last season. If taken from either a breeding standpoint or for show-yard excellence, he is one of the best individuals we have ever seen. He has remarkable character, dense, lustrous fleece with just the proper curl, together with an evenness and depth of flesh, thickness of body, shortness of leg and abundance of bone so desirable.

The three-shear ram, Chancellor, bred by Mr. Robt. Jacobs, which won first in the aged class at Toronto in 1892, has lately been added to the flock. He is in as good form as when he appeared last season, and is likely to give an account of himself again during the coming show season.

Among the shearlings that were imported last season as lambs, we noticed a remarkably good one, also of Mr. Chas. Gillette's breeding. He has plenty of size, good bone, and, like those previously mentioned, has a capital fleece. Another that took first in England last season is also still in the flock.

Mr. Thompson is preparing a number of wonderfully good two and three-year-old ewes, which are to be exhibited at the Columbian World's Fair, Chicago. These, we understand, were bred by Mr. Geo. Bagnall. The two-year-old ewe won first at the Royal Show of England, held at Warwick.

Some very promising shearing ewes have been wintered. These were purchased from Mr. Chas. Gillette, and are from the first prize pen at the Royal Show. Besides these, some twenty yearling rams were wintered with a view of supplying customers, and a goodly number of Canadian-bred ewes of the same age are also on hand.

Having gained an enviable reputation for keeping the best individuals, together with fair dealing, Mr. Thompson has developed a very promising trade. He has recently shipped no less than five carloads to breeders in the Western States, besides a number sold to Canadian buyers.

Mr. Thompson has already made arrangements for a new importation, and we hope soon to report their safe arrival.

COTSWOLD RIDGE FARM is owned by Mr. Joseph Ward, Greenbank, Ont., who has long been in the front ranks as a breeder of Cotswold sheep. The farm on which this and other lines of farming are carried on contains something over four hundred acres of land, not unlike

MAY THE THE JOHN V 1. 7 fifteen It is hands on the mo farmers in Cana 2. Tern arre or 3. Adv trac 4. Disc noti pap you find is gi 5. The a recei mus 6. The resp orde 7. Remi Regi risk. 8. Alway is sen this i 9. The D tion i 10. Subs regul 11. We l We s such printe Impr or Ve ments and a furnis our co of pos 12. Repli offic 13. No ar 14. Lette side of 15. All co with th any in Address EDITORIAL 161—III ing; Corn Staff, Car Tariff Ref STOCK: 163 and and Flocks Breeders' Grey Faces FARM:— 166—Ro Wheat and The Cultiv GARDEN AN 168—Es with Pear cultural No DAIRY:— 169—Sor Good, Pure POULTRY:— 170—Pon To Prevent VETERINAR 171—Ve APRIARY:— 171—Sor FAMILY CH QUIET HOU MINNIE MA UNCLE TOM ADVERTISE NOTICES:— STOCK GOSS CAN We regr Barley was sent in new give any c subscribers that all wh us will rep harvested, valuable n anxious to to the perso wages.

**THE FARMER'S ADVOCATE & HOME MAGAZINE**

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY  
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**CONTENTS.**

EDITORIAL:—

161—Illustration. 162—An Unbeaten Record; Rape Growing; Corn Culture; Roots; Editorial Notes; The World's Fair Staff, Canadian Division. 163—Dogs; Thornton's Circular; Tariff Reform.

STOCKS:—

163 and 164—Sheep and Swine Men Convene; Studs, Herds and Flocks. 165—Our Monthly Prize Essays; Southdown Sheep Breeders' Association of Great Britain, Incorporated. 166—Grey Faces in Cotswold Sheep; Chatty Letter from the States.

FARM:—

166—Roots and the Place they Should Occupy on the Farm; Wheat and Oats Together. 167—Does Wheat Turn to Chess? The Cultivation of Field Roots.

GARDEN AND ORCHARD:—

168—Essentials to Successful Grape Culture; Experience with Pear Culture; Experience in Fruit Growing. 169—Horticultural Notes.

DAIRY:—

169—Some Notes on the Babcock Test. 170—Importance of Good, Pure Milk for Cheese Factories and Creameries.

POULTRY:—

170—Poultry on the Farm; How Many Eggs to the Pound; To Prevent Hens Eating Eggs.

VETERINARY:—

171—Veterinary Questions.

APIARY:—

171—Some Data for Those Who Keep Bees.

FAMILY CIRCLE:—172.

QUIET HOUR:—173.

MINNIE MAY'S DEPARTMENT:—173.

UNCLE TOM'S DEPARTMENT:—174.

ADVERTISEMENTS:—175 to 180.

NOTICES:—177.

STOCK GOSSIP:—178.

**CANADIAN THORPE BARLEY.**

We regret to say that our supply of Canadian Thorpe Barley was not equal to the demand. Several parties who sent in new names could not be supplied. To these we will give any other premium offered for the same number of subscribers, either now or at any future date. We trust that all who have received packages of Thorpe barley from us will report the results obtained as soon as the crop is harvested. We will be prepared next season to offer some valuable new grains as subscription prizes. We are anxious to obtain the services of ten first-class canvassers; to the persons we will give constant employment and good wages.

the Cotswold Hills of Gloucester, England, which are the home of the Cotswold sheep. The extensive range that Mr. Ward has at his command, together with a soil so well adapted for this industry, has enabled him to get together one of the largest, if not the largest, breeding flock of this sort in the Dominion. With a view of extending as well as improving his flock, Mr. Ward visited England in 1891 and selected a large number of the best sheep from the most famous ram breeding flocks of England. Those who have seen these sheep, specimens of which Mr. Ward exhibited at the Toronto Industrial that season, must have been impressed with the high order of merit that alone could satisfy him when making the selection. Two exceedingly good rams were purchased, one from Mr. Robt. Jacobs, Gloucester, England, and the other from Mr. Gillette, Gloucester, while a grand lot of store ewes were selected from the flocks of Mr. Robt. Jacobs, Burford, and Mr. Chas. Bagnall, Oxfordshire, England.

We were particularly impressed with the excellence of this season's crop of lambs, which are got by an exceedingly good ram bred by Mr. Gillette. So highly does Mr. Ward value this sheep as a sire that he refuses to put a price on him. At the time of our visit the breeding ewes were in good breeding condition. After supplying the demands of last season's trade nearly fifty ewe lambs were reserved; these have done well and are now awaiting customers. The sales of last season were more severe in depleting the ranks of the ram lambs, yet there are still a goodly number of shearlings on hand, while the prospect for superior show lambs for this season's trade is very good. At the time of our visit there were some sixty on hand, and a promising lot they were.

Mr. Ward carries a very heavy stock of cattle and sheep. About two carloads of fat cattle have been fed this year, yet he has much grain and hay still on hand. The condition of his farm is an object lesson to those "grain-growing farmers," who usually at this season of the year go hunting around for hay to feed their working teams.

Mr. Ward finds room for a few useful Shorthorn cows, from which he yearly has some good young bulls to sell; also Berkshires of good type and breeding are always kept, so that variety may be counted as another feature in the management of this farm.

**LITTLE FARNUM STOCK FARM.**

The proprietor of this establishment is Mr. Henry Arkell, Arkell, Ont., whose name has long been known in connection with sheep breeding. The farm is most conveniently situated for railway communication, as all trains stop at Arkell, a station on the Guelph division of the C. P. R., within three minutes' walk of the farm buildings. This farm contains three hundred acres of land that can hardly be surpassed for producing any of the grains known in Ontario, while for roots and other field crops it is equal to any. The property is divided by a wide, well-kept lane that runs its entire length, on each side of which are large, well-cultivated and well-fenced fields. The soil is of such a texture that it becomes quickly fit to work after wet weather.

Formerly a flock of Cotswolds were kept here, but in 1881 these were disposed of to give place to Oxford-Downs, which have been bred ever since. At the above date the first importation of Oxfords was made from selections from the flocks of Mr. Wm. Arkell, Heythrop, Fairfield, Gloucestershire, and Mr. Chas. Hobbs, Maisey Hampton, Oxfordshire, England. Of these importations five were winners at the Royal Show of England, held that year at Reading, Berkshire. The next season sixty-five head were imported; these were chiefly from the flocks of Mr. Chas. Hobbs and Mr. Robert Hobbs, Kelmscott, Gloucestershire. Again in 1887 a number of rams were purchased from Mr. John Jacobs, Burford, England.

In 1891 another importation of sixteen was made from the following flocks, viz.:—Messrs. Evans and Albert Brassey, Chipping Norton, Geo. Adams, Farrington, Berks., and J. A. Miles, Swindon, Wilts.; and in 1892 six were brought over, which were purchased from Messrs. J. W. Jeffrey, Bris Norton, and A. Brassey.

Mr. Arkell has also at different times purchased Messrs. Adams' and Brassey's sheep, as well as the sheep bred by other English breeders. Through careful dealing with American breeders he has worked up a most flourishing trade, which he has turned to good account. Thus Mr. Arkell has sold in many instances breeding stock to Canadian customers, and again bought from them the produce. By this means he has not only obtained a large number of well-bred sheep, but at the same time he benefited his customers by buying from them their surplus stock.

As might be expected, we found Mr. Arkell in active preparation for the coming World's Fair at Chicago. Of the dozen or more specimens being fed for this purpose all were in superb condition, made the more apparent at the time of our visit, April 18th, as the sheep had just been closely sheared. We shall be disappointed, with the care and attention he is personally bestowing upon them, if they do not give an account of themselves which will be a surprise to owners of English-fitted sheep.

In addition to the above, two flocks are being fed, one of which is destined to be shown in Ohio, the other in Indiana. Another lot of twenty rams is being fed for a breeder in Wisconsin; these

were contracted for some months ago. Specimens are also being prepared for the Canadian shows.

Among the few animals of which we took individual notice was the three-shear ram, British Wonder, bred by Mr. John Jacobs, Burford, England, and a two-shear ram, Doncaster Royal, which was one of the pen of lambs which won first in England in 1891; this sheep was bred by Mr. A. Brassey, and imported as a lamb. Another good stock ram used in the flock was bred by Mr. Geo. Adams; he was also a prize winner at the English Royal in 1891.

Among the ewes is the now famous Minnie Miles, a three-shear winner of the silver cup over all breeds at the Detroit show; she also won first in her class at that show, and was one of the pair which won first at Toronto.

The yearlings are of equal merit. A few head of Shorthorns are kept. At the head of the herd is Ottawa Chief, bred by J. and W. Russell, Richmond Hill, Ont.; he is the sire of some very promising calves.

We were also shown some good specimens of Berkshire pigs, which is the breed favored here.

**SHORTHORNS, BERKSHIRES AND YORKSHIRES AT MR. H. J. DAVIS', WOODSTOCK, ONT.**

With the push and energy that has marked the course of so many of our successful stockmen, Mr. Davis has established a business that not only keeps him pretty closely tied at home, but has the encouraging feature of having become profitable.

The prices that farmers have obtained for pork during the past winter, together with the prospect that high prices will rule for some time to come, has had the effect of vastly stimulating the demand for breeding swine. In these Mr. Davis has endeavored to supply the demand by breeding two sorts, viz., Improved Large Berkshires and Large White Yorkshires; both have found an equal footing—they are kept in about equal numbers. Of the many good ones in the herd, one that is doing good service is Mistress Fourth, a typical Yorkshire sow, imported in dam and bred by Walker Jones. She was suckling a litter of nine as nice pigs as one would wish to see, which is what might be expected, as she is a sow of superior merit herself, being of the pattern that is now sought after. She has great length and depth of side and well-let-down hams.

Country Lass, by Sultan, is a yearling Yorkshire sow that presents a good appearance. She has already raised a good appearance. She has already raised a litter of pigs farrowed in November, and is again due, so that she has lost no time in becoming a profitable breeder, and yet she has made a good growth. There are now in these pens a number of Yorkshire boars and sows that are of a suitable age for coupling, and are well worth inspecting, should readers require anything in this line.

In Berkshires, the boar Bakerfield has been principally used in the herd, and by the appearance of the young pigs he has proved an impressive sire.

Among the Berkshire sows that drew our attention was Royal Duchess 2nd. She is a daughter of that beautiful sow Royal Duchess, by Imp. This is Him, which Mr. Davis sold to the Experimental Farm, Ottawa, two years ago. Royal Duchess 2nd was suckling a litter of twelve wonderfully even, promising pigs, thus proving that Berkshires give large litters of good pigs as well as other sorts.

The sow Violet 2nd, out of Imp. Violet, is a really good one that has already one litter to her credit.

The Shorthorn herd has the Kinellar bull, Invincible, at its head. He is sired by the Sittyton bull, Vermont, and is leaving some very nice calves that are full of promise.

Altogether Mr. Davis has a nicely chosen stock of the different lines.

**Southdown Sheep Breeders' Association of Great Britain, Incorporated.**

BY-LAWS FOR 1893.

1.—For the present the following shall be the respective amounts due from Members under the terms of ninth Article of Association:—

	£	s.	d.
Entrance fee	1	1	0
Annual subscription	1	1	0
Life composition in lieu of annual subscription	15	15	0

2.—In the case of a firm one subscription will be deemed sufficient to entitle the partners therein to the joint rights and privileges of one individual membership, and either partner shall be entitled (subject to Article 26 of the Articles of Association), on behalf of the firm, to exercise such rights and enjoy such privileges.

**COUNCIL.**

3.—Meeting of the Council shall be held each year during the Show of the Smithfield Club in London, and at such other times and places as the Council shall from time to time appoint.

4.—The Council, at its first Meeting after the Annual General Meeting, shall appoint from among its Members an Editing Committee, a Finance Committee, and an Inspection Committee.

**FLOCK BOOK.**

5.—The Flock Book shall be published annually by the first day of July, and shall contain a register of Southdown Sheep (for this purpose each breeder shall make a complete return of his flock on or be-

fore the 30th of April in each year on a form supplied, a statement results of the principal shows and sales during the year, and any other information which, in the opinion of this Council, shall be of interest to breeders. The Editing Committee shall be responsible to the Council for the publication in the Flock Book. No sheep shall be eligible for entry in the Flock Book except such as shall be proved to the satisfaction of the Committee to be pure-bred Southdowns.

6.—The price of the Flock Book to non-members shall be not less than 10s. 6d.

7.—The charge for entering sheep—male and female—in the Flock Book shall be as follows, and subject to the after-mentioned conditions of entry:—

	£	s.	d.
For each individual sheep.....	0	2	6
For the Ewe Flock <i>en bloc</i> (1st year)	2	2	0
For the replenishment of ewes per flock each year. Minimum charge for hundred or part of hundred.	0	10	6
And the cost of inspection and tattooing.			

CONDITIONS OF ENTRY.

1.—That every sheep be tattooed with the Society's trade mark, and owner's flock number in the left ear, and that all rams or ram lambs sold, let, or used for breeding purposes, be entered individually in the Flock Book, and that the Secretary will, at the request of the breeder, issue a certificate to the purchaser, if so desired, called a transfer certificate, certifying the ram's flock number, at a fee of 6d.

2.—That the left ear of every sheep born after 1891 is the property of the Association for its trade mark.

3.—That all sires used in the flock in the year of entry, and any subsequent year, must be entered individually in the Flock Book.

FOREIGN SALES AND CERTIFICATES.

1.—That every sheep sold to go abroad, with the sire and dam thereof, must be entered individually in the current or previous number of the Flock Book.

2.—That every sheep so entered must have, in addition to its trade mark and flock number in its left ear, either (a) its owner's private number in its right ear, or (b) its Flock Book number in its right ear.

3.—That all applications for foreign certificates must be made upon a proper form, to be obtained from the Society's Office, and be signed by the seller, giving his own and the purchaser's name and full postal address, and that the Secretary's certificate must accompany the sheep on leaving this country.

4.—The fees for granting the foregoing certificates shall be as follows:—

For every ram or ram lamb.....	2s.	6d.	each.
For every ewe or ewe lamb up to and including five in number	2s.	6d.	each.
For every ewe or ewe lamb over five in number and under ten	2s.	0d.	each.
For every ewe or ewe lamb over ten in number.....	1s.	0d.	each.

provided always that all the ewes or ewe lambs are the property of the applicant, and sold at one time to the same person.

INSPECTION COMMITTEE.

8.—The Inspection Committee shall appoint at least one member of the Inspection Committee and the Secretary to inspect all flocks or any sheep they may deem necessary before entering in the flock book. Three to form a quorum.

FINANCE COMMITTEE.

9.—All payments on behalf of the Association shall be made by draft on the Association's bankers, signed by two members thereof, and countersigned by the Secretary. Three to form a quorum.

EDITING COMMITTEE.

10.—Shall be responsible to the Council for the publication of the Flock Book. Two to form a quorum.

STANDING COMMITTEES.

11.—Meetings of committees shall be summoned at such times and places as the chairman of each committee shall appoint.

W. W. CHAPMAN, Secretary,  
27 Baker Street, London, W.

EDWIN ELLIS, President.

Grey Faces in Cotswold Sheep.

BY JAMES RIDDLE.

At the last Winnipeg Industrial Exhibition, held in Winnipeg, there was shown a superior flock of Cotswold sheep from Regina, a number of them having grey faces. Amongst breeders and others present a difference of opinion was expressed whether the grey face was a mark of impurity or not. The majority seemed to favor the former. I also had the idea that it was a cross at some time or another from the Shropshire, or some of the other black-faced breeds. Being desirous of deciding this point in the pure Cotswold breed, I have since been corresponding with acknowledged judges who have bred and raised some of the most valuable Cotswolds in England. It might be of interest to your readers to have the correspondence, so I give it for publication.

Mr. Brown, of Norfolkshire, writes as follows:—When I began to breed Cotswold sheep, upwards of thirty years ago, I (like you now) was inclined to think that grey faces were a sign of impurity, but Messrs. R. & W. Garne, R. & W. Lane, and all the leading breeders, agreed in that there had been grey faces in almost every pure-bred flock for time immemorial.

In 1862 I bought a grey-faced shearling ram at Mr. Lane's sale for 101 guineas. The first year he did not get a grey-faced lamb; the next year all grey faces. In 1867 I gained (amongst other prizes) first prize at the meeting of the Royal Agricultural Society of England with a grey-faced shearling ram, and could give many other instances, but will only further observe on that point that the highest price given last season for a Cotswold ram was a grey face, and that at my annual letting last July the highest price made was for a grey-faced shearling ram hired by Mr. R. Garne.

The only cross of which there is any record is "a judicious infusion during the latter part of the last and beginning of the present centuries of blood from the Leicester breed, for which Mr. Bakewell did so much about a hundred years ago." Certainly there has been no cross of Oxford or Hampshire Downs, or of any other short-wooled breed, and it is a well-known fact that the Oxford-Down originated (in the memory of very many now living) from a crop of Cotswold rams with Hampshire-Down ewes. I myself recollect the principal breeders of Oxford-Downs using Cotswold rams. I have not thought it necessary to get another authority, because I have merely stated undoubted and undisputed facts.

Mr. W. S. Harmer, of Cirencester, writes as follows:—I have delayed in answering your letter on the subject of grey faces in Cotswold sheep until I could consult Mr. Robt. Garne, of Aldworth, in this county (Gloucestershire), the first president of the Cotswold Sheep Society, a foremost and most successful breeder, and a frequent judge at the shows of the Royal Agricultural Society of England, and of the Bath and West of England Society, etc. You will therefore please take the following as having the sanction of Mr. Garne's authority:—

There is some grey in all the old Cotswold flocks, but it is difficult to define by letter to what extent grey should be allowed. A five minutes' object lesson would be much more satisfactory. There are sheep which some people call grey, but which are really black, and these should decidedly be objected to; sheep, for instance, which have speckled or mottled faces and legs—that is, their faces and perhaps their legs are marked with patches of black hair of a greater or less size, say from half a score of black hairs to patches to the size of a shilling, and also with black hairs in the hollows above the eyebrows, or on the top of the heads. The grey which is not considered objectionable is when pale grey hairs are intermixed with the white above the nostrils and up the front of the face. But after all white faces greatly predominate in the Cotswold breed, and it would be safer to exclude greys altogether than admit such "greys" or rather "blacks" as are sometimes called Cotswold sheep in England.

I fear that this somewhat vague communication will not help you much, but you will see that the nature of the case forbids the laying down of a definite rule in precise language.

Chatty Letter from the States.

Chicago, April 22, 1893.

There is considerable speculation regarding the future prices for hogs, some dealers talking that they will have to go to \$6, while others are positive they will sell above \$8, and a few even talk \$9 before the end of next summer. Best porkers sold today at \$7.75, or \$1 higher than the low time this month, and \$1 below the high time this year.

Among the recent visitors at the Chicago Stock Yards was F. D. Fearman, son of F. W. Fearman, the Hamilton, Ont., pork packer. He reports that the Canadian hog crop is only about 40 per cent. of what it was last year. He said the packers were lately forced to quit on account of high prices, and that lately prices have gone down. The order of the British Government preventing Canadian packers from slaughtering American hogs in bond was working a hardship to the Dominion packers, as Canadian hog raisers do not produce an all-the-year-round supply. It seems that Canadian packers will be required to slaughter American hogs in special houses, and Messrs. Wm. Davies & Co., and possibly other packers, contemplate building for that purpose.

John Moran, of St. Joseph, Missouri, says:—“After we get the run of hogs which follows the cattle, which will be next month, I should not be surprised to see hogs advance to 9c. So far as I can find, the hogs are not in the country.”

Light bacon hogs, averaging 160 to 190 lbs., closed today at \$7.60 to \$7.70, while 250 to 350-lb. hogs closed at \$7.50 to \$7.65. It has been almost a year since light weights have commanded a premium over heavy weights, but at present there is an unusually active demand for hogs averaging less than 200 lbs., and it is expected the range will widen still more in favor of light weights.

The past week Chicago received the largest week's receipts of sheep ever recorded here, the number being 58,800. The immensity of the sheep receipts, and the upward course of values, has been a surprise to the trade. Receipts for April will reach about 230,000, the largest month's receipts on record. During the past two months about 450,000 were received, but present prices, even in the face of such receipts, show an advance of 30c. to 40c. compared with the first of the present month, and 60c. to 90c. advance compared with prices current two months ago. Best lambs are now selling at \$6.70 to \$6.90, best sheep at \$6.00 to \$6.30, and the bulk of muttons at \$5.25 to \$6.

Receipts of cattle throughout the west this week were comparatively small—103,500 at Chicago, Kansas City, Omaha and St. Louis, and the tendency of values was upward. Desirable beef cattle, averaging 1,000 to 1,400 lbs., advanced 10c. to 30c., the handy steers showing the greatest amount of strength. Native cows and other grades of butcher's stock also ruled higher. Steers sold largely at \$4.50 to \$5.25, and cows principally at \$2.75 to \$3.50. The outlook for cattle during the next month or two is generally considered good; in fact, most of the trade confidently expect higher prices. Some choice beefs sold this week at \$6.

Monday, April 25th, 1892, just a year ago, Chicago received the largest day's receipts of cattle on record—32,677, and prices that day declined 20c to 45c., top beefs selling at \$4.00, or \$1.40 below present prices. This year seems to be different, as far as receipts are concerned. Receipts for next Monday, (April 24) are estimated at 17,000, or half as many as arrived a year ago.

Chicago thus far this month received 163,200 cattle, 272,300 hogs, and 172,700 sheep, showing a decrease of 6,200 cattle and 130,000 hogs, and an increase of 41,000 sheep, compared with the corresponding period of April, 1892. Receipts from January 1 to date, 931,500 cattle, 1,671,800 hogs, and 820,600 sheep, showing a decrease of 63,000 cattle, and 1,017,000 hogs, and an increase of 174,000 sheep, compared with the same period of 1892, and an increase of 43,000 cattle and 79,000 sheep, and a decrease of 1,333,000 hogs, compared with the corresponding period of 1891.

FARM.

Roots and the Place they Should Occupy on the Farm.

BY CHAS. F. FORD.

Roots are a cheap and wholesome food for all kinds of stock. Sheep, pigs, cattle and horses do well if fed a few daily as a part of their ration; they tone up the system, and keep the animal in good health. Many farmers overlook this fact, because they do not know their value. I have fed roots (turnips and carrots principally), for many years, and they have always given the best satisfaction. Give horses a few carrots twice a day, and see how sleek and clean they will become. Give a milk cow half a bushel, say twice a day, and note the increase in the flow of milk. Give ewes about lambing time, and until grass comes, carrots regularly, and you will see a change in both lambs and ewes. I would advise stock breeders who have never given roots a trial to do so, and I will venture to say that they will be pleased with the experiment. I believe that roots are the cheapest feed. Silos are a great expense to begin with, and it takes a large piece of ground in corn to fill a medium-sized silo; and if the season be wet or cold there will not be sufficient corn to feed through the winter, while a smaller piece of land in roots will with the same care and attention yield a larger crop. I believe that stock fed on roots are better prepared to turn out on pasture in the spring. I have fattened cattle every year, and have had three-year-old steers fed on turnips, carrots, and a small amount of grain about three or four weeks previous to shipping, weigh 1450 lbs. Roots leave the ground in a good condition for the following crop, and the necessary cultivation will kill all obnoxious weeds, while the growth of the turnip plant is so rapid that the ground is soon covered and the weeds and thistles are smothered. [Those who have had experience with ensilage are invited to give their experience through our columns.—Ed.]

Wheat and Oats Together.

In many parts of the States oats and wheat are sown together for feed, it being claimed that the yield is heavier than if only one kind of grain is sown, that the wheat straw helps to prevent the oats lodging, and that the mixed grain makes a capital feed ration.

We quote the following from an Iowa writer in the Breeder's Gazette:—“Sowing oats and wheat together is a practice more of the farmers should follow. It gives excellent results. A good proportion to sow is one-half bushel of wheat to two bushels of oats. This, with proper attention, will give excellent results. The objects in sowing wheat with oats are many. First, the wheat straw being stronger than oat straw, keeps the grain erect and greatly lessens the tendency to lodge. It also increases the yield by increasing the weight, as you are using a bushel weighing sixty pounds to make one weigh thirty-two pounds. Again, we have found by experience it makes No. 1 feed for stock. Wheat and oats sowed in the proportion given will not rob each other of that particular element held by the soil that each one requires to maintain life and continue growth. In this locality especially this method of sowing is followed by many, and all will join me in saying that by this way you obtain your wheat gratis—very acceptable, indeed. An average yield is eight to ten bushels of wheat, and thirty-five to forty bushels of oats. Suppose those interested sow five acres as an experiment and carefully note the results. It will pay.”

## Does Wheat Turn to Chess?

BY JAMES FLETCHER, OTTAWA.

There is perhaps no question in connection with farming which is so fertile a source of discussion, and concerning which such positive opinions are held on both sides, as the relation which is by some supposed to exist between chess and fall wheat. The mistaken idea that fall wheat under various adverse circumstances can change into chess, is certainly held by many farmers throughout the country. Such a view has no foundation whatever in fact: *Under no circumstances can fall wheat be changed to chess, nor chess to fall wheat.* A. A. Crozier, in his charming little book "Errors about Plants," says:—"The causes assigned for the alleged transmutation of wheat to chess are numerous and varied: sowing shrunken wheat; sowing in a certain time of the moon; injury by Hessian Fly; eating off of the plants by stock or by fowls; trampling by animals, or injury by passing vehicles; drowning or freezing out during winter; cutting off the 'tap-root' in imitation of heaving during winter." In different parts of Canada all of the above views are held by some, and in addition there is a widespread belief that chess will not reproduce itself from its own seed. What seems very strange to the writer is, that more do not prove the truth or fallacy of these views by actual experiment; for, even if the information gained has not much value in advancing the agriculture of the country, at least it may prevent the waste of much valuable time at farmers' institute meetings, as has been too often the case.

During the last summer some thousands of visitors to the Central Experimental Farm at Ottawa had the opportunity of seeing with their own eyes the experiment of which I now give the details.

In my annual report of 1891, as botanist to the Dominion Experimental Farms, I stated that, at the request of one of my correspondents, I had planted 100 grains each of chess and fall wheat, with the purpose of proving that:—

1. Chess will come true from seed and produce seed from which chess and nothing else can be grown.

2. No adverse treatment can produce a plant of chess from a grain of fall wheat.

On 21st of September, 1891, one hundred grains each of chess and fall wheat were sown, and each grain was marked with a small picket. An assistant was present and watched carefully while taking a record of the whole operation, so that no mistake could be made. In addition to the 100 grains, a single row of each kind of seed, eight feet long and two inches wide, was sown on the same plot.

**Chess.**—The chess seed all germinated and appeared above the ground in the autumn of 1891. In the spring of 1892 it grew rapidly, as soon as the surface water which lay on it for a fortnight after the snow melted had soaked away. On May 2nd it was three inches high; on May 15th, six to eight inches high; on May 27th it was from sixteen to eighteen inches, and had speared; on June 24th many of the stems were still in flower, thirty inches high. On July 8th the seed was fully formed, and was ripe by the end of July.

**Fall Wheat.**—Most of the seed germinated and came up in the autumn of 1891. During the winter the snow was shovelled off half of the bed three times, so as to expose the young plants to the effects of the weather. In the spring of 1892, surface water lay on part of this plot for a fortnight after the snow melted. In April half of the single row was stamped down into the ground with the heel of my boot, and certainly no fall wheat was ever more injured by cattle trampling on it in spring. At the same time the other half of the same row was cut off close to the ground with shears, and later, half of this cut portion was again cut off.

## RESULTS.

**Chess.**—Nearly every one of the 100 grains grew and produced a strong plant of chess with many stems, which bore an abundance of chess seeds. Of the single row, all of the chess apparently grew and produced a heavy crop of flowering stems. These were cut down when in flower, and later bore again a lighter crop of flowering stems.

**Fall Wheat.**—More than half of the plants from the 100 grains were drowned out by the water lying on them in the spring; forty-two, however, grew, and all produced fall wheat. Of the single row, the plants which were stamped into the muddy soil, as well as those which were cut down, grew equally well with those left undisturbed, and all produced fall wheat.

In view of the above experiment, I must repeat what I have often insisted upon, that there is only one remedy for chess in fall wheat, and that is, to sow clean seed wheat in clean land. If this be done, there will be no trouble with chess.

An illustration of the absurdity of the contention which one frequently hears, that "Chess is a bastard grain, and therefore cannot produce seed,"

## The Cultivation of Field Roots.

BY ELMER LICK.

By field roots I wish to be understood as meaning turnips (swedes), mangels and carrots. The first thought in connection with the subject should be, What position shall these hold in the rotation of crops? In nearly all cases it will be found the best practice for turnips to be the last crop previous to seeding to clover and timothy. Such a course may lead to more work in cleaning the land than if the crop was placed earlier in the rotation, but even this will depend on the length of the rotation. In the older settled portions of the province a four or five years' rotation will soon become a necessity in order that success may be the lot of the farmer—a rotation somewhat like this: clover followed by peas or oats, then a hoe crop (roots or corn) followed by barley or wheat, seeded to clover with timothy added, so that in case clover should fail then previous year's seeding could remain another year. Such a rotation as the above would clean the land, give a minimum amount of work on the hoe crop, increase the fertility of the soil, especially in nitrogen, and ensure a good "catch" of clover. Someone will say, That is all right, but I have very dirty land full of foul weeds; I cannot secure a "catch" of seeds except in favorable seasons. To such the best advice is, put on the hoe crop, manure liberally and cultivate thoroughly, then by following some such course as above indicated ultimate success is reasonably sure. It is a better practice in this section to grow hoe crop than to summerfallow, which is probably true in nearly all sections. A good crop of roots is an expensive one to raise, nevertheless a very valuable one considering its feeding value. There are several things to consider when deciding which to grow—mangels, turnips or carrots.

The first would be, For what purpose is the crop to be used? For making butter turnips, except white and greystone varieties, are very objectionable, whereas mangels and carrots do not injure the quality of the product.

For beefing cattle, sheep and young cattle turnips are generally accepted as being superior in quality for feeding purposes. Many contend that they can feed turnips successfully without noticing the taste in milk or butter. Where one can do it ninety-nine fail. Another consideration that would have an influence in guiding us is the quality of the soil. Turnips do not do well on heavy clay, but are fond of a loamy soil, while mangels do very well on clay except in wet or dry seasons. Climatic influences also vary the prospect of success in various localities. The carrot is not adapted to growth on a large scale, owing to work of thinning plants and also labor in harvesting. The mangel will not stand heavy frosts and requires early harvesting—scarcely safe to leave them out after October 10th to 15th. A mangel crop will usually produce more to the acre than turnips. Carrots should be placed on soil free from weeds. The preparation of the soil should begin in the fall as soon as the previous crop is removed. The usual practice is to plow thoroughly once and leave until spring. If possible, and particularly if weeds are abundant, one plowing early and another late would be preferable. This is not always possible, owing to pressure of fall work. I find particular difficulty in securing the late plowing, owing to apple picking coming in October. If the field should be infested with Canada thistles, this fall work will be found of very great advantage, in at least weakening the plants and thus making their destruction more readily accomplished and more certain. Under favorable circumstances many weeds will sprout during the fall cultivation.

Root crops have a short season of growth, and require a thoroughly manured soil, and one well prepared in every possible way. Farmyard manure liberally used, say 20 to 25 loads per acre, would furnish plant food, provided such manure were from well-fed cattle, horses or pigs. It must not be too strawy, otherwise difficulty will be found in working the soil. As corn likes strawy manure, all such had better be kept for that crop, and only well-rotted manure used. The quantity of manure required will vary according to the fertility of the soil. If a person has manure left over from spring, have it applied in the fall and plowed under for carrots and mangels, as these crops require early sowing. For carrots and mangels I have tried for some years to have the land manured and ridged in the fall, but so far have failed to find time for the work, my intention being to simply split the drills in spring and thus sow very early. Having the land plowed in the fall, when spring comes cultivate with spring-tooth cultivator or similar implement, harrow, and if time permits roll as early as other work will allow. The object of this is to encourage the germination of as many weeds as possible. About two weeks later apply the manure, unless such has been done in the fall, plow under, harrow thoroughly, and roll. If this has been done by the 20th of May or 1st of June, about two weeks later a light gang-plowing or thorough cultivating will bring more weed seed near the surface and encourage sprouting. Every possible means should be used to destroy weeds, as it makes the subsequent hoeing easier, and also the freeing of the land from weeds more complete. For mangels and carrots, unless the land has been manured and prepared as previously indicated, apply the manure and plow under as early as possible. Mangels and carrots should be sown early in May—the earlier the better. Often good crops will be secured even if they are not sown



A ROOT OF CHESS.

is that it is now largely grown in Oregon and Washington States as a hay grass, and it is claimed to have a special value from the fact that it will grow upon land impregnated with alkali and unfit for the cultivation of many other grasses. Mr. W. Tasker, of Ladner's Landing, B. C., writes:—"Chess is harder than fall wheat. I had some last winter which was covered eight inches deep with salt water for three days, and yet came through all right."

Kirkpatrick and Cookson, produce commission merchants, of Montreal, state that their Liverpool correspondents, referring to the oat trade, write as follows: "White oats are much more saleable than the mixed. Try and get the dealers to encourage the cultivation of whites more than mixed or blacks. It is, of course, well known that the oatmeal men also much prefer the white, and in this connection we would just say again that the American Banner oat gives almost universal satisfaction in Manitoba and the N. W. T."

until May 20th; however, the prospects of success are not as good as when sown earlier. Turnips are sown usually from June 15th to 25th, the object being to escape the turnip fly, or more properly beetle. The land for either of these crops, when prepared, should be ridged in drills from 25 to 30 inches apart, depending somewhat on the freedom of the soil from weeds, a wider space between the rows making weed destruction easier. To drill the land use a double-mouldboard plow; if you have none, the single plow will answer the purpose, only makes more work in marking out lands. Sow the seed with a drill, using in the case of mangels from 2 to 6 lbs. per acre; carrots, 1 to 3 lbs.; and turnips, 1 to 3 lbs. per acre. On clean soil, with good seed, the lesser quantities are sufficient, but if the conditions are otherwise larger quantities should be used. Too much seed makes more work in thinning; too little causes skips, and the plants do not start as readily and thrifty as where more seed is used. Cultivate with a good scuffer as soon as plants can be seen in the row, and as closely as possible. As soon as plants are easily seen, in the case of mangels, hoe and thin to about 6 or 8 inches apart, and keep thoroughly clean by use of hand hoe and cultivator. With carrots trim the sides off with the hoe, leaving a row of plants in the centre of row; and when these get about the size of a pen stock, either thin with a carrot hoe to 4 inches apart or thin on hands and knees, straddling row, using old bags tied about knees. I find it easier to keep the carrot standing when about size indicated than when thinned smaller. After the turnips have come through, in case the beetles attack them, use a mixture of ashes, plaster and salt, scattered over the plants; this is about the best cure I have tried or seen tried. I expect, however, that in the near future we shall find it profitable to spray the young plants with Paris green. After the plants have attained the rough leaf they should be closely cultivated and hand-hoed to from 10 to 15 inches in the row, and kept clean by use of hand hoe and cultivator; usually only two hand-hoeings are required in case of turnips. The more the cultivator is used judiciously the better for either of the above crops. I have not mentioned commercial fertilizers in connection with root crops, having very little practical experience with them, but am satisfied that it will pay better to use such on root crops than on any other crop which the farmer grows. Salt, especially on mangels, applied at the rate of two or three hundred pounds per acre, gives good results.

As to varieties, I use Mammoth Long Red Mangel, Short White Carrot, and Bangholm and Jumbo Turnips.

## GARDEN AND ORCHARD.

### Essentials to Successful Grape Culture.

BY JOHN CRAIG, HORTICULTURIST, EXPERIMENTAL FARM, OTTAWA.

I will refer to a few essentials towards successful cultivation in the Province of Quebec and northern Ontario:—

1. Select a warm, loamy, well-drained soil, with a southern exposure.
2. Plant well-rooted two-year-old vines in holes 15 to 18 inches deep, filling up as growth takes place.
3. Train on the two-arm or fan system, preferably the former, in each case starting the branches near the ground, for the purpose of easy winter protection.
4. Make provision for holding the snow on the ground, as well as covering in the soil, till the vines have become well established.
5. Judicious fall and summer pruning, together with liberal applications of potash and phosphoric acid, which can be probably most cheaply obtained in the form of wood ashes, largely aid in obtaining satisfactory returns. A careful selection of varieties is of prime importance in this district of limited summer heat. In our trial vineyard at Ottawa there fruited last year more than 120 varieties. For home use, I would recommend to the attention of amateurs grapes as follows, beginning with black sorts in order of ripening:—Florence, Cottage, Morse's Early, and Herbert or Worden. Red, Moyer, Delaware, Lindley, Norwood, and Salem or Agawam. White, Jessica Hayes, Lady, El Dorado, Rogers 34, Kensington. These, with the exception of Agawam, Salem and Kensington, are sure to ripen, and are while they may not yield with Champions and Concord in the main, grapes of good quality.

In regard to the methods of training, the system which a man finds the easiest is generally the best, as long as it contains the requisite demands of the grape. The two-arm system and the fan system are both satisfactory, and each have their advocates. I think for localities where vines are covered annually the two-arm system is usually to be found more satisfactory. In this locality summer pruning is very advantageous, so as to hasten the ripening process. In order to keep up the vigour of the vine it is necessary to manure the ground very considerably, and in doing so a rampant growth is induced. This has to be pinched back, so that the fruit will ripen. I may add that in the Experimental Farm vineyard here, we have two systems: one, the French or the pole system; the other, the ordinary trellis plan. The pole system, I find, does not give satisfaction here with vines at this distance and in this locality, planted 1 foot apart and trained to a single stake. They have not sufficient light and heat to allow the fruit to mature properly; but

on the trellises they get more sunshine and heat, which tends to bring about an earlier maturity.

A few varieties deserve special mention. One of these is the El Dorado. I think that is the finest flavoured grape that can be grown in this vicinity. I notice that in the Ontario fruit list it is not rated of very high quality, although I cannot understand it, because last year and this year it was not only my own opinion, but the verdict of every body who visited the vineyard at the Experimental Farm, that the fruit was the finest variety in the whole vineyard, and I wish to recommend it, unqualifiedly, for home use.

### Experience with Pear Culture.

[A paper read before the last Meeting of the Fruit Growers' Association, by Samuel Hunter, Scotland Ontario.]

I think that of all the fruits we grow in this climate the pear is the most capricious and intricate, ever determined to grow its own way. Some one has written, "bend the twig and bend the tree." That man had little experience in growing pear trees, unless it might be Winter Nelles and a few of that class. They would suit the farmer who planted his potatoes in the moon and wanted to get up there to hoe them. I would add a note of caution to the person who takes to pear growing for what money there is in it, unless he has a love for the pursuit for its own sake. When planting my orchard I did not heed the warning against too many varieties, a rock on which a goodly number have grated.

**Location.**—While it is well to select a suitable location when a choice is possible, still in most cases we have no choice, and if the soil is lacking in any important quality, we must stuppy it as far as we can. Such as drainage, shelter, or even qualities lacking in the soil, may be to a great extent made up. Our land is a sandy loam, with limestone, gravel and clay subsoil, naturally drained, with southern exposure.

**Shelter.**—I plant both evergreens and deciduous trees. Our native Hemlock is a favorite with me, although of slower growth than many others. Our orchard is sheltered on three sides—north, east and west.

**Preparation of Soil.**—When time permitted I manured and fall plowed, but for the most part I planted the trees and prepared the land afterwards, which answered quite as well, often saving a year's growth in the trees.

**Choice of Trees.**—When possible I select good sized, thrifty young trees, the wood well ripened. I prefer those grown south of where they are intended to grow; they are not so likely to be black-hearted. I get them either in spring or fall, with a preference for the fall; heel in, but in no case planted in the fall. I can then plant in the spring just as soon as frost is out, which is much earlier than we can get them from the nursery.

**Varieties.**—The choice of varieties depends so much upon what disposition the grower is going to make of the fruit, as well as the location, that I will say very little about this consideration, especially as there is such a good list of pears given in last year's annual report of this association, and although I have in cultivation about fifty named varieties, I would not like to discard any with two exceptions—that is the Bell and Kieffer. To illustrate—when I tried to sell a few of the last named variety to Mr. Foster, a well-known fruit dealer of this city, he said, "No, for I tell you when they come to be any good they are good for nothing," and that is more than can be said of Kieffer, for it never does come to be any good at all. I have tried it both here and in the State of Delaware, where it ought to grow to perfection, if anywhere.

**Planting.**—I only take up a few trees at a time, and keep them covered from sun and air with a horse blanket, and dig the hole larger than will receive the roots and a little deeper; throw two spadefuls of surface soil in the bottom, leaving it a little crowning in the centre; on this let the roots radiate with a downward tendency (after having cut off all broken ends with a sharp knife), and only a little deeper than it stood in the nursery. Most trees are planted too deep. Put in a little fine soil and firm well among the roots; then fill level and pack firm, holding the top a little to westward; head in a little, cutting off all broken and crushed twigs. Trees are usually sufficiently pruned before leaving the nursery to suit me.

**Cultivation.**—I make a point of keeping the ground well stirred around all young trees for the first two years at least, if situated where I can reach them with a cultivator; if not, I keep a radius of at least three feet from the trunk of the tree hoed until the last of August. I prefer keeping the ground well stirred to mulching—in fact I do not mulch at all; I think it does more harm than good.

**Manuring.** Give the land a liberal manuring broadcast, the trees will find it. Well-rotted barnyard manure, wood ashes, broken or crushed bone, and if the land is sandy or gravelly, a mixture of swamp muck is good for leaf and wood growth. I have also used considerable horse hoof parings, which I think beneficial. I grow a hoed crop as long as there is room. Corn is a favorite, on account of the shade it offers during the hot weather.

**Pruning.** In the matter of pruning I find myself in direct opposition to most of the advice given in the Horticulturist. I cannot help it. I would not prune any tree that I wished to live and grow, out of the growing season. I would not prune a scrub oak in winter unless I wished to make it more

scrubby. Why just look at those once beautiful shade trees in the parks and streets of this city; the scars of last winter's pruning will not be healed over in the next ten years. I find the best time to prune is when fruit is setting, or a little later, both for growth and fruitfulness, as well as quick healing. To prune in this climate in winter or early spring, whether hard frozen, little frozen, or not frozen at all, is, to say the least, very injurious. I have noticed wounds made from winter pruning to bleed for three years in succession, causing sap rot and attracting borers; and that, too, after the application of a coat of paint. Winter pruning came from across the Atlantic, and although not so injurious there, it is better done in the growing season. I like the pyramidal form of the pear tree with branches coming close to the ground; head in, to keep them from growing too rapidly skyward, and only remove the lower branches gradually. I am fully aware it requires more hand labor to work under them, but you cannot get pears to do well with a tall, bare trunk, like some of the long-legged apple trees you see standing all about with a tuft of branches resembling a broom on the end of a pole. Mine were so treated during my absence, and to this, more than to anything else, I attribute the loss of so many of the most thrifty trees. Better prune none at all than too much or out of season. I was much interested last summer to watch the fight for life with some trees that had been so mutilated; a part of the branches grew straight up and part downwards, forming a sort of cloak to shield the body from the burning sun. They spoke to me in an unmistakable language, as though they felt the pain, and said, "Never allow me to be stripped in that way again." Those that had not vigor enough to thus shield themselves gave up the contest, and I have grubbed out already over one hundred.

**Thinning.**—I regard this as a very important operation. The pear, like the plum, is apt to overbear, and both for the life of the tree and the quality of the fruit should be carefully thinned.

### Experience in Fruit Growing.

BY C. W. BEAVEN, PRESCOTT.

I have been growing small fruits on a small scale for three or four years, and perhaps my experience, though only that of a beginner, may be useful, more especially as I have tried a number of varieties of strawberries for the purpose of finding out what kinds suit my soil best. My experience with some of them has been rather different from that of other writers.

My soil is a dry sand, and the almost constant rain of last summer had not much bad effect on the fruit, except that it made it much softer than usual. I had two-thirds of an acre in strawberries, composed of about 500 plants each of Burt, Capt. Jack, Crescent, Wilson and Bubach. My experience with these was rather different from that of Mr. Hilborn, as given in the *Advocate*, since the four old varieties were superior in every respect to the Bubach. The latter has several very bad points. It was so soft that a large proportion of the fruit was decayed before it was ripe enough to pick. The fruit stem is short and too weak to hold up the large fruit, and, though in a dry season it is sweet and rich, last year the flavor seemed to be completely washed out of it, and we all pronounced it the poorest berry we had ever tasted. The Burt did the best of the lot; it is of good size and color, very firm, rather acid, like the Wilson, and outyielded even the Crescent—in fact, had all my plants been Burt, the yield would have been doubled. The Capt. Jack was the best in quality, and it bears well. I am told, however, that in some markets the dark color is objected to. The Crescent is generally said to be average in size, and so it is on an average soil, but put it on rich clay loam, as one of my neighbors has done, and it will average well with the Ontario, and outyield any of the large varieties.

Besides the above kinds I have small quantities of several other varieties, which turned out as follows:—Jessie is no good; a few large berries and then a few small ones. Cumberland is good while it lasts, but it gives out too soon. Pineapple and Eureka are late, in the sense that they started when the others were half done, but Burt gave a good picking after they stopped. Gipsy was a failure; what few berries were on the vines were small and very acid. Boynton, which was advertised as something extra, I consider a fraud; it is small, and a quart of them would sour a barrel of molasses. Vineland is of good quality and productive. But I think the best of the new kinds is the Shyster, or Shuster's Gem, for I believe both names belong to the same plant. It is large, good color and productive. The Agricultural College at Columbia, Missouri, puts it at the top of the list for productiveness, and also in its list of ten best varieties. Manchester and Cloud failed to stand the drought of 1891, and I did not have them last year. Manchester rusted badly.

As far as can be judged by my experience of last year, I should recommend the following varieties, in the order I give them, for planting on sand:—Burt, Crescent, Wilson, Capt. Jack and Shyster. Another year might alter this list considerably. I have several other kinds for fruiting this year, but I doubt if any of them will be worth adding to the above list.



## Horticultural Notes.

BY W. W. HILBORN, LEAMINGTON.

Plant a grape vine, if you have not already done so.

Concord, Worden and Wilder are among the best black varieties.

Lindley, Brighton and Delaware are perhaps the best red sorts.

Niagara, Moore's Diamond and Green Mountain are very fine white kinds.

Fight the weeds now—do not let them get the start of you; one hour now will save several later on.

In selecting soil for raspberries take, if possible, a clay loam for all black or cap varieties, and a sandy loam for the red or suckering kinds.

When plowing your orchard, do not plow more than two or three inches deep near the trees. Many an orchard has been either killed or so badly injured by deep plowing that it is almost worthless.

Marlboro is a good, large, early red raspberry for a rich, clay loam, but does poorly on light or sandy soil. A good, early, productive, hardy, large red raspberry that will succeed on all soils has not yet been found.

Parker Earle is one of the best strawberries to plant, if you want one that will make a large plant and few runners; it will give a large crop of large fruit of good quality; well adapted to garden culture, blossoms perfect. Woolyerton and Saunders are both strong growers, and produce large berries and many of them. They are Canadian seedlings of merit. Try them.

The time is fast approaching when war will begin with insect enemies, many of which are easily kept in check if taken in time. The striped cucumber beetle is, perhaps, one of the most troublesome; it can, however, be easily driven away by simply using land plaster and coal oil. Put just enough of the oil on the plaster to moisten it a little when thoroughly mixed, but not enough to prevent it from spreading freely when sown by hand on the plants. A handful to each hill of melons, squash, pumpkin and cucumbers will in a few minutes drive away the striped beetle, also those large squash bugs; this may require to be repeated in a week or ten days. I have always found one or two applications sufficient to save the crop perfectly. The onion maggot, also the radish maggot, can be kept in check in the same way by starting early, or before they have got into the roots of them.

Evergreens should be more largely planted for windbreaks. The forests are being cleared away more every year, and the wind has a greater chance at the buildings, fences and fruit trees. The grain crops also suffer at times from the high winds. Much of this could be prevented by judicious planting of evergreen trees. Norway Spruce, White or Silver Spruce, Scotch, Austrian, White and Norway Pine are, perhaps, the best trees for this purpose. Many farmers are deterred from planting on account of the high price that has to be paid for evergreens large enough to plant out for windbreaks. On account of the high price asked, some have attempted to grow evergreens from seed; this, however, will nearly always result in failure. The seed grows readily, but the difficulty is in caring for the young seedlings after they come up; they must be shaded, or the hot sun will kill them. If they get too much water they damp off, and if they do not get enough they die; they must be grown in sufficient quantities to keep a man looking after their wants continually. The better and cheapest way to get the trees is to send to Robert Douglas & Son, Waukegan, Ill., U. S., and buy small seedlings, six to ten inches high; these can be had for about five to ten dollars per thousand. Plant out in nursery row, give good care, and transplant every two years until they are large enough to be placed where they are to remain. By growing your own trees you can keep them in nursery row until they are quite large trees, say four or five feet high, if you transplant every second year, thus saving the trouble of working around the trees a year or two longer in the fields. There is no risk in transplanting trees thus grown. In fact I would advise every one who buys evergreen trees from any nursery or agent to plant in nursery row one or two years, then if there are any failures it will be in the nursery row instead of the field. Scotch Pine makes a very fine windbreak, as it carries its size up well toward the top and grows rapidly. More care, however, is required in transplanting pine than spruce, and if the pine has not been frequently transplanted, as recommended above, they are not apt to grow sufficiently to ever make a strong, vigorous tree. Great care should be taken that the roots of all evergreens are kept well protected while out of the ground. Ten minutes' exposure of the roots to a drying wind and hot sun is sufficient to destroy the life of any evergreen. Perhaps more trees die annually from having their roots exposed too long while out of the ground than from all other causes combined.

A good shelter belt of evergreens around the barnyard will make it several degrees warmer in winter, and often save stock much suffering.

## DAIRY.

## Some Notes on the Babcock Test.

BY W. J. PALMER, O. A. C., GUELPH.

As the Babcock Test is becoming very generally used in cheese and butter factories in Canada, a few points relating to its management may prove of value to those who are at present using it, or who intend to do so in the near future.

It must certainly be encouraging to those who are interested in the progress of dairying in Ontario, to see the great change for the better that has taken place since this test was introduced. In only two or three cheese factories last season was milk paid for according to its quality, but this season at least fifty factories will be operated under this plan. Several of the students who attended the dairy school in February and March signified their intention of conducting the business in this way in the future. When the milk is paid for according to the amount of fat contained, patrons of factories will have their eyes opened to many facts that have hitherto escaped their notice. They will find it to their advantage to weed out the poor cows, keeping only those that produce the largest quantity of fat in the year at the smallest cost; also to air and stir the milk well before taking to the factory, so that a representative sample can be taken.

In order to fully understand this test it will be necessary to refer briefly to all the points in connection with it.

1. *The Machine.*—All of the modern machines on the market have swinging pockets. These are much preferable to the old style in which the pockets were fixed stationary, as it is much easier to add the hot water, and the fat stands straighter in the neck of the bottles. The number of revolutions per minute depends, of course, on the size of the machine. With one having a revolving table less than 12 inches in diameter, it is well to whirl the bottles at least 6,000 times to obtain the best results. If this can be revolved 1,000 times to the minute, the work can be accomplished in 6 minutes, by whirling for 4 minutes the first time, and for 2 minutes after adding the hot water.

In large machines, such as those holding twenty bottles and over, the separating force exerted will be greater, and hence a fewer number of revolutions will suffice.

The steam tester recently introduced is one of the best machines for use in factories that have yet been put on the market. The power is obtained by means of a steam jet, which causes the table to revolve and at the same time keeps the bottles hot and the fat liquid. An eighteen-bottle steam tester in use at the Experimental Dairy at the present time gives very satisfactory results. In a machine of this kind, the handle should be left on, or there should be some speed indicator, so that the number of revolutions per minute can be determined.

Of the machines worked by hand, those with cog wheels are the best, as those geared to run by friction are either very heavy to turn or are apt to slip. Belt power is not as good as steam, because of the danger of slipping and the lack of heat.

The cheapest tester in the market at the present time costs about \$9.00, with one gallon acid and all the necessary appliances. For factory use, one holding twenty bottles or more is the best, as a large one saves time and labor. Canadian manufacturers now make this tester fully as good as those made in the United States, and as a rule they sell them cheaper.

*Test Bottles.*—These should be obtained from a reliable firm, for if carelessly graduated the part of the necks may vary, and hence the results will not be accurate. The bottles sold by the leading Canadian firms, so far as I have tested them, are accurate enough for all practical purposes. In purchasing bottles, the buyer should always be careful to order only such as have been tested before sending out.

The graduated necks of these test bottles should hold 2 c. c. of fat, which, at a temperature of 150°, weighs 1.8 grams. The amount of milk taken is 17.5 c. c. (capacity), or 18 grams (weight). So if the graduated part of the neck is full of fat, its weight is just 1-10 of the weight of milk taken, or 10 lbs. fat to the 100 lbs. milk.

*The Measures.*—A 17.6 c. c. pipette is used, but owing to the milk sticking to the inside, it only delivers 17.44 c. c., or 18 grams by weight, of milk. When using acid of the right strength, 17.5 c. c. are taken.

*Acid.*—Commercial sulphuric acid or oil of vitriol is used with the test. It should be about 90° pure. The most important facts relating to this acid are as follows:—

Weight—18.2 lbs. to the gallon; cost (by the carboy)—3 cts. per pound (plus the freight); cost per gallon—54 cts. Number tests to one gallon—250.

Taking above figures, it will be found that the acid for one test cost about 1-5 of a cent. In smaller quantities it is more expensive.

The acid should be kept from exposure to the air, as it absorbs moisture very rapidly and loses strength. It is never wise to dilute it with water, or an explosion may result.

A bottle of ammonia should always be kept at hand, for if applied immediately it prevents the acid, if dropped on the clothes, from eating the cloth.

If any is spilt on the fingers, water applied at once will prevent injury. If by chance any acid gets into the mouth, milk, cream or any oily liquid is the best thing to use.

*Handling the Test.* All the bottles should be filled with acid, then shaken and whirled im-

mediately. It is never wise to allow them to stand long after shaking before whirling, as the mixture should be over 200° when whirled.

When the acid is shaken up with the milk it has a threefold effect:—1. Churns or burns the milk sugar. 2. Dissolves the curd. 3. Sets the fat free. If it be too strong, black curdy matter will come up with the fat and spoil the reading, or the fat itself may be blackened. If this happens, less acid should be used the next time. If there is much black curdy matter mixed with the fat, the bottles should be set in a cold place until the fat has hardened, then set in hot water; by this means a comparatively clear reading can be obtained. If it be too weak, white curdy matter will be mixed with the fat. In this case use more acid the second time. The fat should be read when at a temperature of 150° to 170°. It is always advisable when a large number of tests are made to stand the bottles in water at above temperature before reading. Have the water high enough in the necks to cover the fat and keep it liquid. To aid in reading accurately, a fine pair of compasses or calipers are very useful. They should always be changed, however, to suit the graduations in each bottle.

The bottles should be kept clean, or the readings will not be clear. It will generally be found sufficient to rinse twice with hot water, using a small brush in the necks at the same time. An occasional washing with strong soda water will keep the glass clear. A large wooden pail, with a loose perforated cover, is a very convenient affair to empty bottles into.

*The "Composite Test."*—It is not desirable in any case to test each patron's milk every day. By using the composite test, this can be avoided, and still the result will be just as reliable. This test can be managed in three ways:—

1. By taking  $\frac{1}{4}$  of required amount of milk every morning and testing at end of 6 days. The most convenient way to accomplish this is to use a 2.95 c. c. pipette and the ordinary Babcock test bottles.

Place a row of test bottles on a rack, one for each patron. Every morning a sample should be taken from each patron's milk, (after it has been well mixed,) with this small pipette, and transferred to the test bottles in the rack. At the end of the week there will be a full measure of milk in each bottle and the test can be made in the usual way, but a little less acid should be used, or the fat will be blackened, owing to the evaporation of water from the samples. No preservative is needed to keep the milk sweet in this case, nor is it necessary to keep the test bottles corked. The main objection to this method is, that it is very difficult to take an accurate sample at the weigh can, especially with such a small pipette. Unless managed by an experienced hand, it would not be reliable. In accuracy, however, we found, at the Dairy School, that it was just as reliable as the other methods mentioned below.

2. By taking  $\frac{1}{4}$  of required amount of milk every morning and testing every three days, or twice a week. This is operated in substantially the same way as in (1), except that a 5.9 c. c. pipette is used to measure out the milk. It is also open to the same objection.

3. By using sealer jars or wide-necked bottles, one for each patron, and putting a certain measure of milk in each morning, a sample is then taken from each jar at the end of one or two weeks, and the test made in the usual way. This is the most convenient and practical method of any of the three. It also gives just the same results as if daily tests were made. Pint sealer jars will be found quite large enough to hold the samples, if a small amount of milk be taken each morning. A small tin cup, holding one ounce (2 inches high by  $\frac{1}{4}$  inches in diameter), with a long handle, makes a convenient measure. It would be better, perhaps, to take a measure of milk each morning proportionate to the amount delivered by each patron; but it is a difficult matter to manage this, and it is not found necessary in practical work.

Bichromate of potash, as recommended by Prof. Shutt, is an excellent preservative to keep the composite samples from souring. If from ten to twenty grains of this chemical be put in each jar on Monday morning, and if the jars be shaken a little every time fresh milk is added, the milk will be quite thin at the end of the week, and on being shaken a sample can be taken from each jar and tested as usual. The milk is allowed to thicken in some cases, and then concentrated potash lye is added at the rate of about half a teaspoonful to each jar, in small quantities at a time, until the mixture has the consistency of cream; it can then be readily drawn into the pipette. The bichromate of potash is preferable to this, however. The jars should always be kept tightly covered, to prevent evaporation of water from the milk. The samples each morning can either be taken from the weigh can, or by having a small hole in the conductor pipe and catching the thin stream as the milk runs into the vat.

It would certainly pay the dairy farmer to invest in a small tester and make a careful test of all his cows, using the scales at the same time to ascertain the quantity of milk given by each cow. By this means he can get an idea of the producing power of the different cows he keeps. He can then gradually weed the poor ones out of the herd, and knowing the best cows he can keep only the calves from them, using, of course, a thoroughbred sire of a milking strain. It is thus by a careful system of selection that all improvement has been made in our domestic animals, and the sooner the owners of dairy cattle realize this the better for their own pockets. As the years go by we may expect to see a very great improvement in this direction.

### Importance of Good, Pure Milk for Cheese Factories and Creameries.

BY PROF. H. H. DEAN, O. A. C., GUELPH.

New competitors from Australia, New Zealand and Africa, to which latter place a travelling dairy has recently been sent from Great Britain, will make it all the more difficult to sell Canadian dairy goods at a profit. Australian grass-fed butter comes into direct competition with Canadian fodder butter, and as a result large quantities of creamery make have been returned from British ports and sold in Halifax and Montreal. A large exporter told me yesterday that about 4000 packages of Canadian butter had been returned this season. This butter, he said, if sold in the foreign market would not have netted more than 16 or 17 cents per pound, while it brought from 19 to 21 cents in the Canadian market. What does this teach? Two things, at least. First, that we have been seeking a market a long way off, while we have a better one at home, and will continue to have, for fresh creamery, for some years yet to come. Canadian people want good butter, and are willing and able to pay for it. Butter has brought from 25 to 30 cents per pound most of the winter in our larger towns and cities. Second lesson—All export butter should be of the finest quality; none other should be sent across the water.

At the present time where do we need to direct the improvement forces, that fine cheese and fine butter may be made in Ontario, both for the home and export trade? I say, without hesitation, towards the place where the milk is produced, and at the persons who are responsible for the milk sent to be manufactured. Our cheese and butter makers, as a class, are well up in their professions. As a rule they are live, energetic men and women, and were every other class who have to do with the dairy industry as well posted and practised, there would be a marked improvement before long. Do not understand me to consider them perfect (for who is so?), but the means now in use, and which are being brought into use, are quite sufficient to educate this class. Why not educate the producer, and have the procession all move together?

#### WHAT THEN NEEDS TO BE DONE?

1. The dairymen of this country need to be impressed with the fact that a cow which produces less than 6,000 pounds of milk or 250 pounds of butter in a year is not worth wasting food and labor on her carcass.

2. Every feeder of cattle should know what foods are cheapest and best for milk production. For summer feeding nothing will equal good grass, with as great a variety as possible. Too many pasture fields lack a variety, and consequently we do not get those fine flavors produced on natural pastures. In addition to this the following might be fed: Bran, cottonseed meal (not over two pounds a day to a cow), green peas and oats, tares and oats, and clovers, and in early autumn green corn. Winter feed should be cheap and succulent. During the past winter we have fed ground wheat with good results. Bran, the oil meals, peas and oats, corn, clover hay, corn ensilage, mangels, sugar beets and carrots may be profitably fed. It will be noticed that turnips and rape are left out of the list. While not willing to condemn these last two without further trial, I am almost ready to say that turnips must not be fed if we wish to produce fine butter. Various schemes for avoiding turnip flavor have been suggested, but my impression is that with the average feeder, no matter how the milk or cream is treated, an expert judge will be able to detect it. I hope to be able to retract this harsh judgment, but speaking from this winter's experience with milk from farmers in different parts, we are all led to exclaim, "What can be done to this milk, that buyers will not say, 'rooty'?" The probabilities are that next year we shall have to refuse all milk from parties who will feed turnips.

3. It will pay every owner of a factory to send some one around to the patrons at the beginning, the middle and the end of the season, and instruct them how to care for milk. We had to do this, and it would possibly have made us several dollars, have added to our reputation, and saved a great deal of worry and trouble, if we had done this sooner. A marked improvement in the quality of the milk, cream, butter and cheese was noticed after this was done. There are plenty of people who have a very faint idea of how to care for milk properly, and are willing to learn from those who do know. There are some, however, who will not be taught anything in reference to this, and they and their milk should be let alone. Let every owner of a factory send some one to instruct the patrons how to care for milk. (Greater care should be exercised in the selection of this person than in selecting a cow.) Failing this, have a copy of "Hints on the care of milk for cheese factories," which is being published by the Department of Agriculture, Toronto, along with other matter prepared by the dairy students of the O. A. C., sent to each patron of the factory at least twice during the season. It will not cost more than two or three dollars to get these printed, and it may be worth several dollars before the season is over. In the meantime it would be well to emphasize the need of:

1. Food for the cows that has no bad flavor.
  2. Water that is pure enough for your hired men to drink.
  3. Straining and aerating the milk as soon as drawn from the cows. A simple pouring or dipping of the milk will effectually aerate it if continued long enough. If a patent aerator is used, be sure that it is kept absolutely clean. Look around the cracks and odd crevices to see that nothing lurks there. Morning's milk needs aerating as well as the evening's.
  4. Keeping the milk where there are no bad smells.
  5. Leaving the milk at the temperature of the atmosphere, except in very hot weather; then it may be cooled slightly.
  6. Emptying and washing the can as soon as it returns home. Drivers should put a pail of cold water in each can before leaving the factory. This is better than whey.
  7. Of rinsing pails, cans and all milk utensils, first with cold or lukewarm water; second, wash with hot water, and finally scald, allowing the utensils to dry themselves in a pure atmosphere. Never wipe a can or pail. It gives a dish-cloth flavor.
- If patrons of factories would observe these few rules during the year 1903, there would be better cheese and butter made this year than during any year since the industry started.

### POULTRY.

#### Poultry on the Farm.

BY MRS. IDA E. TILSON.

March and April chicks lay early the following winter, when eggs command holiday high prices. Those hatched in June begin at January, and continue through spring and summer. May is a good hatching month for farmers. Grass, upon which chicks half live, is still tender, our weather is generally quite settled, and such birds, if well tended, will, as I know by experience, oftentimes lay in December. Raise your own fowls, unless you can buy of an experienced person. Last year I purchased some large, fat Plymouth Rock pullets of an amateur. At the same time and price, from a veteran poultry woman, I obtained other less plump or showy birds. Every month has emphasized their difference. The first lot were corn-fed, hence soft, easily run down. They were used to roosting in trees, where summer's thunder showers had dropped seeds of chills and bowel complaint, which I must constantly meet and destroy by care in feeding. The second lot, more muscular, laid early, and have continued right on merrily as everyday, working, business hens. A greenhorn is defined by Webster as a raw youth. But greenhorns are really of any age under a hundred, and found in every pursuit, poultry culture included; therefore, beware of them. If experimenting must be, you can do it for yourself cheaper.

I always have a few extra or substitute cluckers, so if I find a setter like the "Heathen Chinese," with "tricks that are dark and ways that are vain," I can, by my system of movable nest boxes, transfer the whole "plant." Generally speaking, however, my biddies are faithful to me if I am to them. Even when a separate sitting-room was used I superintended the daily exercise of its inmates, because some showed short memories, and would fight for or occupy another's nest. Now that my cluckers are set in the hen-house itself, I must, when they come off, and until the very moment of their return, keep their nests closed from the investigation of my numerous White Leghorns—mischievous like all non-setting birds and idle persons. Excited by a nest full of eggs, the whereabouts of which they always discover, these spry Leghorns will, in a jiffy, kick eggs around, probably break one, scratch the nests to pieces, and scud off out of punishment's reach, singing, "I knew it, they're my own eggs." Some setters instead of stepping into their nests fly upon them, and may thus crush an egg. These suggest ways in which hens learn to break and eat eggs. If a clucker is disposed to exercise twice a day I encourage her, because she thus keeps in better order, and it really makes little or no difference with her eggs, as her stays are shorter than when she comes off but once. If eggs were fresh when set they will be hatching the twentieth day. Our fings do ache to feel under biddy and find how many chicks she has, but all experienced poulterers agree in a "vigorous letting alone." Biddy has her own way of working chicks to the centre, and likewise shells to the edges. If these accumulated shells are in sight or nearly so, I remove them. The hen will be offered a little food by hand or dish, but do not provide chicks anything for at least twenty-four hours. The very last part of an egg to become chicken is the yolk absorbed into the little creature's bowels, thus constructed by Providence, and insured against want of food till strong enough for foraging. Newly hatched chicks can digest nothing additional. Don't be in a hurry to see them eat. The chicks will "see you later," and fully satisfy you about their eating capacity before half grown. Two broods hatching April fifth this year were actually left undisturbed till noon, April seventh, when the

weather was still cold and rainy, but off they must come then; actions said as loud as words could. Their coops were put in a warm stable. Fine, dry June grass for bedding was taken in a basket to the house and warmed by the fire. The little flat-bottomed, hay-lined basket in which these chicks would be moved was also warmed, and a woolen cloth to lay over them while on their way. Being hurried, I actually took off my own cape for their covering, which equals what a Scotchman, in an old song, pledges his sweetheart:

"O, wert thou in the cauld, cauld wind,  
On yonder lea,  
My plaidie fra the angry blast  
I'd shelter thee."

And really one must love his animals as truly as his friends, if he would see and keep their best qualities. In taking off a hen I reach over her, grasp the upper portion of each leg, and swing her to a safe position under my left arm, which pinions both wings, so I can then hold her by my left hand alone. She is placed in her destined coop, the basket of chicks gently turned on its side before her, so the little creatures can themselves answer their anxious mother's invitation, and run under her protecting wings.

Feed as early and late as possible; breakfast in the middle of the forenoon and supper middle of afternoon make such short days that chickie has hardly time to grow. Feed little and often, say five times a day for a month. If the chicks leave some food, brush it away before soiled and a cause of sickness. One woman, talking with me, declared she neither could nor would feed her little chicks over three times a day, which must do them. In a short time I learned forty of them got along without any meals at all, since they were dead and buried. I was telling another woman how difficult it was to get my poultry articles done, when hens and chicks themselves take so much of my time, and she innocently replied, "Why not throw out something, and let them go while you are writing?" But I informed her I would soon have on that plan no chickens to write about. The toughening process so often recommended for both children and animals kills off all but the very hardiest. It is a modern "survival of the fittest." I have lately heard of a poulterer who cannot feed his little chicks bread and milk; but I think their diarrhoea may have come from chills, or he has found some peculiar kind of milk. I often see boiled milk recommended, but no feeder has thought to state how long he boils it. Any one who raises pigs or calves soon learns scalded milk is a sort of liquid leather or young cheese very constipating and dangerous. Milk simmered twenty minutes or more, and really cooked, as in custards and puddings, is wholesome for people, and such dishes are good for chicks. I give them sweet skim-milk to drink, or reduce new milk with a little warm water, and find either is safe without heating.

#### How Many Eggs to the Pound.

I see you invite criticisms on your publications, and what I have to say is more of a correction than a criticism. Ida Tilson, in her article on poultry for February 15th., says that "it takes a dozen large eggs to make a pound, some kinds would fall below." Such a statement is misleading, to say the least, as we always calculate eight ordinary eggs to the pound, but, on reading the article, we tried our eggs. Seven of our ordinary Plymouth Rock eggs exactly weighed a pound, and twelve eggs weighed one pound eleven and a-half ounces. One is apt to discredit people's statements after finding one error.

CECIL SWALE.

#### To Prevent Hens Eating Eggs.

Dear Editor,—I noticed in the ADVOCATE several enquiries re prevention of hens eating their eggs. I have found that boiling a little lime in feed for a few weeks is a good plan. My plan to prevent hens eating their eggs is to save all the shells during the summer and feed them to hens in winter. I know there are some who will say that it teaches the hens to eat the eggs, but I do not believe it. When my hens get all the shells they want to eat, they never bother the eggs.

PRACTICAL.

To stop hens from egg eating, get three or four china eggs, place one in the nest, and put the others on the floor for the hens to pick; they soon tire and give up in disgust. This is also sure. I have had occasion to use them more than once, and always proved successful. Yours respectfully,

R. W. CASWELL.

#### The "Advocate" Is Appreciated.

I think my subscription ran out a few months ago; enclosed you will find another year's subscription. I have been a subscriber to the ADVOCATE for about twenty years. I have a pile of ADVOCATES, some dated 1872, up to the present time. I am very sorry I did not get them bound. I like to look over them yet, and compare times then and now. What a difference in prices for grain and thoroughbred stock; just a short time ago, I came across the sale of Senator Cohen and Mr. Craig, in Toronto, where cattle went up into the thousands; one heifer, twenty-three thousand. Our children growing up like to look over the old papers and make enquiries, and think they would like such times to come again. I am pleased to see you are publishing twice a month. Hoping you may still keep it as an independent journal, in the interest of the farmers and country at large.

ARNOLD DUNN, Mount Albert P. O., Ont.

## VETERINARY.

## Veterinary Questions.

ANSWERED BY W. A. DUNBAR, V.S., PRESIDENT OF THE MANITOBA VETERINARY ASSOCIATION, WINNIPEG.

I have a colt which has started to knuckle over on one front foot. When I first noticed it I thought it was going over on the knees. It has been well fed all winter. It seems as if it was a little tender on the front feet.

SUBSCRIBER, Shoal Lake.

Probably the colt has been standing on a plank floor all winter, and it is just possible that it has been *too well* fed, and has not had sufficient exercise. If the feet are feverish (which you can find out from the abnormal heat and hardness of the hoofs), apply linseed meal or bran poultices for four or five days, changing the poultice twice a day. If there is a weakness about the fetlock joint or apparent shortening of the back tendon, apply the following liniment once a day, by rubbing it well in with the hand:—tincture of cantharides and tincture of camphor, of each one and a-half ounces; turpentine and liquid ammonia, of each one ounce; olive oil three ounces. As soon as the skin becomes quite sore, stop applying the liniment; but as soon as the scab, which will form, becomes dry and easily rubbed off, repeat the application of the liniment if necessary.

1. I have a registered Shire Stallion rising three years old. When tied up anywhere or when spoken to in the stable, will lift his right foot outward and slightly backward and then set it down again; at the same time he stiffens his tail and raises it for a second, as if in pain. He repeats these movements every few minutes; he occasionally rests left leg right on the toe. Can see nothing wrong when walking or trotting, except he breaks a little heavy on this foot. He is nervous, will rush in and out of stable door, and will shake all over when led near ice hole or strange place to drink; passes a few small worms occasionally. Is slightly drawn up in the belly, skin is tight and is in fair condition only. Eats well, is fed 3 quarts oats three times a day, 1/2 a pail potatoes, and hay and straw. Have only had him two months.

2. Also, what are the conditions necessary for the successful castrating of a full-grown horse?

"KATEPWA."

1. The motions which you describe are indicative of irritation or pain, but from the symptoms you have mentioned I am not able to determine the seat of the trouble; there is, however, considerable constitutional disturbance, and I would advise the following general treatment:—Raw linseed oil, one pint; turpentine, one ounce; fluid extract of belladonna, two drachms; mix, and give on an empty stomach. Feed exclusively on bran mash until the above dose has operated, and then give morning and night for a week: bicarbonate of potash, two drachms; gentian pulv., one drachm; nux vomica, half a drachm. The above may be given in the morning in usual food, but should be given at night in a bran mash, made by boiling a teacupful of flaxseed in sufficient water to scald four quarts of bran; give moderate and regular outdoor exercise.

2. A full-grown horse when castrated should be in fair condition as regards flesh, and in the best of health; if the animal is in a plethoric state, it will be necessary to feed exclusively on a laxative and cooling diet for at least ten days before this operation, and a dose of purgative medicine is sometimes advisable. Regular work or exercise should also constitute part of the necessary preparation. The animal should not be given much food or water for twelve hours before he is castrated. One very important condition is the proper performance of the operation.

We have a five-year-old mare; there is a lump growing on her shoulder, started last fall, but of late it seems to be enlarging considerably; at present it is larger than a goose egg; the outer end of it is close to windpipe, the inner end seems to be attached to or imbedded in the flesh between shoulder and windpipe; does not seem to be painful, as she does not flinch when handling it. What would you recommend to effect a cure?

JAS. H. DUNLOP, Langvale.

The lump is probably a tumor of a fibrous nature, and, if so, the best treatment will be to have it cut out by a qualified person. If there is no veterinary surgeon within your reach you may try the following:—Bismuthide of mercury and cantharides pulv., of each one drachm; vaseline or lard, one ounce; mix well. After removing the hair from the part, rub the above ointment well in with fingers; at the end of forty-eight hours wash off and apply lard or vaseline to the blistered surface. Repeat three or four times, allowing two weeks to elapse between each application.

An aged mare that has had no foal for three or four years is troubled with a discharge of "whites," a thick, white liquid, which is continually discharging. She ran in pasture last fall with an entire colt, and after service made bag, and after this went back: the discharge of white matter became worse and she has become weaker, although her appetite is good; her feed consists of whole oats, hay and boiled feed. Please give me a cure for this case.

ESQUIRER, Killarney, Man.

Your mare's ailment is *leucorrhœa*—"whites," and consists of a chronic inflammation of the mucous coat of the vagina, and probably that of the womb. The animal being aged, the disease is likely to be of an obstinate nature, if not incurable. The treatment to be pursued is both local and constitutional. The womb or vagina, (passage from external opening to womb) or both, if affected, should be thoroughly washed out morning and evening with tepid soft water, which should be injected with a suitable syringe or pump until it is discharged quite clear. The following solution should then be injected:—Sulphate of zinc, three drachms; carbolic acid, two drachms; tincture of opium, four drachms; water, one pint. Give internally:—Iodide of iron, one drachm, morning and night for ten days, and then reduce to one drachm once a day, which may be continued, if necessary, for two or three weeks. The medicine may be given in mash, or dissolved in one pint of water and administered as a drench. The local treatment should be continued twice a day until the white discharge becomes less copious and less frequent, and then once a day until it ceases.

I brought a four-year-old mare twenty miles about four weeks ago; the road being high, she kept sliding off. Ever since, when she moves she trembles at shoulders and thighs. Do you think the bad roads were the cause, and what would be best to do? Kindly advise through ADVOCATE.

GEORGE WEST, Blake, Man.

The over-exertion of muscular power consequent upon the journey was, no doubt, the cause of the subsequent trembling. Feed your mare exclusively on bran mash for sixteen hours, and then give purgative: barbadoes aloes, six drachms; calomel, one drachm; ginger pulv., two drachms; syrup on soap, sufficient to form a ball. Keep on mash diet until the purgative has ceased to operate, and then give morning and evening in usual food, for one week: sulphate of iron, one drachm; nitrate of potash, one drachm; nux vomica, one drachm. If the mare is pregnant, do not give purgative, but may give other medicine as directed.

SIR,—I have lots of lambs coming this spring, with large lumps in their throats; and they die nearly as soon as born. Please give cause and remedy.

WM. RINGROSE, Pleasant Forks, Assa.

This pre-natal disease has been ascribed to various causes, such as the feeding of swamp grass or hay to the dams during pregnancy, a lack of salt, and drinking of water too strongly impregnated with alkali. A scrofulous condition of the ram has also been adduced as a cause of this disease. Nothing can be done in the way of a cure, but avoidance of the causes mentioned may prevent it.

ANSWERED BY DR. MOLE, M. R. C. V. S., TORONTO, ONT.

## LYMPHANGITIS OR WEED.

We have a mare five years old, can you advise us as to treatment? She has a swollen leg twice its normal size. We have also a valuable brood mare, with contracted front feet, the outside is very brittle and breaks off around the bottom. What treatment would you advise? Jos. N. REDD, Brisbane P. O., Ont.

We fear it is entirely beyond our power to advise a cure for the state that your mare is in from chronic lymphangitis, as the leg is no doubt in that form known as elephantitis. Try the following treatment and report progress:—Take resin powdered, four ounces; nitrate of potash, two ounces; colchicine powder, two ounces; gentian powder, two ounces; ginger powder, two ounces; aniseed powder, four ounces. Mix and give a tablespoonful twice a day. For the discharge, apply charcoal and boracic acid mixed, equal parts, dust on and bandage until swelling subsides. For the mare's contracted feet, poultice with bran and flaxseed meal, pare off loose portions of horn, apply a smart blister to coronets, say one part of bismuthide of mercury to eight parts of lard.

## DISEASES OF SHEEP.

Will you kindly inform me through the ADVOCATE the cause of a disease that has started amongst the sheep here. They first cough, and then in a short time refuse food, and die in about three days. I opened one or two and found the lungs mortified, and its gall very large.

T. H. THOMPSON, Gore Bay, Manatoulin.

From the description we are inclined to think the disease must be due to parasites or worms gaining access to the bronchial tubes and intestines by the nostrils, as we find that most of these parasites are due to water infection. In your next communication please notice on post mortem whether there is not some dirty brown liquid in the fourth or true stomach, as this would confirm the diagnosis and account for the derangement of the digestive system. The treatment should consist of:—Oil of turpentine, one ounce; milk, warmed, one pint. Give a full-grown sheep two tablespoonfuls, and the following powders to the whole of the flock: Common salt, two drachms; sulphate of iron, one scruple; araca nut, one drachm; resin powder, one drachm

(dose for one sheep.) Mix and give with a little oatmeal in their food. A top dressing of salt to the land is to be recommended as a preventative.

## UMBILICAL HERNIA OR NAVEL RUPTURE.

Can you inform me through the FARMER'S ADVOCATE the best way to remove a navel rupture, and a remedy for frogs of horses' feet affected with thrush?

A SUBSCRIBER, Malton.

Regarding the umbilical hernia, it will greatly depend on the size as to the method of removal. If the size of a pigeon's egg, a ligature will be all that is necessary; if larger, a pair of clams. It may be due to any severe muscular exertion, as when the foal or calf runs or jumps very actively, or being kept isolated from its parent, rushes about and cries energetically. After returning the bowel pass a ligature tightly around the part, and then pass one or two pins through the sack to retain the ligature in position, which should be tightened every other day, and in about eight to ten days the parts will slough off; then bandage the parts until sealed; dress with carbolic oil, one part to ten.

## THRUSH IN HORSES' FEET.

A good domestic remedy is air-slacked lime dusted on every day, or use the liniment of sulphate of copper, made by taking one part of sulphate of copper and four parts treacle; boil until the mass assumes a brown color. Apply every day.

## APIARY.

## Some Data for Those Who Keep Bees.

BY G. W. FERGUSON, LAMBETH.

The aim of the apiarist at this season will be to build up his colonies as rapidly as possible, so as to have an abundance of busy workers in readiness to take advantage of the honey harvest when it arrives; in order to accomplish this, two things are necessary—warmth and plenty of stores. If bees have been wintered out of doors, do not be in a hurry unpacking them; there may still be frosty nights that will chill the brood and discourage the bees, especially if colonies are weak. Even when bees are wintered in the cellar they are better to be in double-walled hives, otherwise they are liable to suffer when taken out in the spring; but if they are in single-walled hives, then contract the brood chamber, removing some of the frames, leaving only as many as the bees can cover. With weak colonies, two brood frames, with two containing honey, one on each side of them, will be sufficient, then outside of these place two closely-fitting division boards, one on each side, with chaff cushion on top, and they will be snug. But if you contract, be sure you don't forget to add combs as they grow stronger, or loss will result. Examine all colonies; the strongest may be on the point of starvation. If short of stores they must be fed; if you have surplus combs containing honey and pollen, this is undoubtedly the best; if not, then a syrup made from granulated sugar may be used. For winter stores, this is made in the proportion of one pint of water to two pounds of sugar, but in spring, when bees are flying, it may be made much thinner. The trouble with feeding liquid food is, that it stimulates the bees to flying, and this is the cause of spring dwindling. It is natural for bees to gather their food from the flowers, and when they find the stores coming into the hive in this form, they think there must be flowers somewhere, and off they go in search of them, flying long distances, wearing themselves out, and perishing from cold and fatigue. It is true it stimulates the queen to laying, but if there are no bees to hatch the eggs or nurse the brood, her laying will not amount to much.

Mr. A. I. Root says, in his A. B. C. of Bee Culture, that he has frequently lost colonies in the spring, after he has commenced feeding, and attributes it to the escape of heat when opening the hives in order to feed them, but perhaps it might be mainly attributed to its causing them to fly in cold and windy weather, when they ought to have been in the hive. Therefore, when it is necessary to feed liquid food in the spring, it should be done only on warm days, and then in considerable quantities, so that if three or four days, or a week of cold weather should follow, it will not be necessary to disturb them until it is over. With weak colonies the aim should be to keep the bees within the hive as much as possible. Supplying them with combs containing honey and pollen gives them sufficient encouragement to go on with brood raising, and having all they require close at hand they are retained within the hive, where their presence is so much needed to keep up the heat, in order to hatch the eggs and nurse the brood. For this reason, I like a good large brood chamber, not less than ten frames of the capacity of the Langstroth, so that I can have plenty of surplus combs well sealed. I do not extract from the brood chamber, but take all the surplus from the top.

Those who practice clipping the queen's wing will find this the best time to do it, as she can be found more easily now than when the hive is full of bees. Of course it is not claimed for this method that it prevents swarming, as some of its opponents assume, but it will prevent first swarms from absconding (and no apiarist need have second swarms) and wonderfully facilitate the hiving process.

(TO BE CONTINUED.)



THE QUIET HOUR.

Between the Lights.

A little pause in life—while daylight lingers  
Between the sunset and the pale moonrise,  
When daily labor slips from weary fingers,  
And calm, gray shadows veil the aching eyes.  
Old perfumes wander back from fields of clover,  
Seen in the light of stars that long have set;  
Beloved ones, whose earthly toil is over,  
Draw near as if they lived among us yet.  
Old voices call me—through the dusk returning  
I hear the echo of departing feet;  
And then I ask with vain and troubled yearning,  
"What is the charm which makes old things so sweet?"  
"Must the old joys be evermore witholden?  
Even their memory keeps me pure and true;  
And yet from our Jerusalem the golden  
God speaketh, saying, 'I make all things new.'  
"Father," I cry, "the old must still be nearer,  
Stifle my love or give me back the past;  
Give me the fair old fields, whose paths are dearer  
Than all Thy shining streets and mansions vast."  
Peace! peace! the Lord of earth and Heaven knoweth  
The human soul in all its heat and strife;  
Out of His throne no stream of Lethe floweth,  
But the pure river of eternal life.  
He giveth life, aye, life in all its sweetness;  
Old loves, old sunny scenes will He restore;  
Only the curse of sin and incompleteness  
Shall vex thy soul and taint thine earth no more.  
Serve Him in daily toil and holy living,  
And Faith shall lift thee to His sunlit heights;  
Then shall a psalm of gladness and thanksgiving  
Fill the calm hour that comes between the lights.  
—AUTHOR UNKNOWN.

In the time of the French Revolution, when a number of workmen had met together in a club, talking about politics and religion very noisily and angrily, a *chasseur*, Brucker, who knew the character of the French people well, and the good effect which a few sharp, bold words often had upon them, mounted the tribune and made a bold confession of the Christian faith. Instead of making any apparent impression for good upon his audience, however, he was heaped with mockery, sarcasms and sneers, and at last retired to a corner, fully believing he had wasted his breath. To add to his discomfort, another orator ascended the tribune who tried his best to insult poor Brucker. "He has just been making a great parade of his faith," said this man. "What is that to us? Are we not all Christians? Undoubtedly, but we have no need to imitate all their follies. For my part, I am a Christian, but not in practice." At these words Brucker rose and asked the orator: "Citizen, what is your trade?" "I am a shoemaker, citizen," was the reply. "But not in practice?" rejoined Brucker. There was a burst of cries and bravos. Brucker's success was complete, and the shoemaker orator was obliged to descend from the tribune, and reserve his eloquence for another occasion.

It is in the evening quiet, when the children of our love and care are sleeping, their innocent dear little faces, with closed lids, appeal to the very best a mother's heart has to give. Why does that little worn shoe, and the string and the stick, and the tin covers, make the tears come as we sit alone and look at them? We have time to think now, and somehow life looks differently when seen thus than it does in the midst of works and care and rush, and we wonder how long we will be spared to be with them, how long they will be spared us, what and how their life journey will be—success or failure, happy or otherwise, and how much responsibility of their future rests on us. We are the better of thinking thus. All the great things of life are gained by *thought* and study, and without thought life becomes empty and useless. It would be well if we could all say with one who wrote:—

"I love to steal an hour away  
From every cumbering care,  
And spend the hours of closing day  
In grateful, earnest prayer."  
K. R. M.

Live for Something.

Thousand of men and women breathe, move, and live, pass off the stage of life and are heard of no more. Why? None were blessed by them, none could point to them as their means of redemption; not a line they wrote, not a word they spoke, could be recalled, and so they perished; their light went out in darkness, and they were not remembered more than the insects of yesterday. Will you live thus and die? O man, live for something! Do good and leave behind you a monument of virtue that the storms of time can never destroy.  
—Dr. Chubbuck.

We must never be disheartened or cast down about our work, even if we see things go wrong; for remember the work is God's, not ours, and surely we can trust Him to look after it far better than we can do.

MINNIE MAY'S DEPARTMENT.

Address to the Woodlark.

"Oh, stay, sweet warbling woodlark, stay,  
Nor quit for me the trembling spray;  
A hopeless lover courts thy lay,  
Thy soothing, fond complaining.  
Again, again that tender part,  
That I may catch thy melting art;  
For surely that would touch her heart  
Who kills me w' disdaining.  
Say, was thy little mate unkind,  
And heard thee as the careless wind?  
Oh, no! but love and sorrow joined  
Sis notes o' woe could waken.  
Thou tells o' never-ending care,  
O' speechless grief and dark despair;  
For pity's sake, sweet bird, nae mair!  
Or my poor heart is broken."  
—ROBERT BURNS.

Our Irish Letter.

DEAR CANADIAN SISTERS AND BROTHERS:  
I am afraid this letter will not be interesting as I wished my others to be. There is literally nothing absorbing us but the one thing. If you would put yourselves in our place you would see the impossibility of feeling much interest in any other,



THE WOODLARK.

just for a little while at least. When the second reading of the Home Rule is well over, which it will be to-morrow, there will be a slight lull, and we outsiders will get some chance of seeing what the neighbors in other places are doing. They all appear to me to spend their time going to meetings just now; how their daily work goes on is best known to themselves; I fear the wives and children suffer—but enough. I see to-day that the perpetrators of that diabolical dynamite outrage last Christmas Eve, at the Exchange Court (where poor Inspector Cullen lost his life), are well-known and well-watched. I sincerely hope so, but I cannot see why something is not done beyond this deep knowledge and scientific watching. I like matter-of-fact "doing," but, then, I am only a woman, so not supposed to understand such things, perhaps neither I do; but I do know, that if I could put my hand upon the perpetrator of a horrible crime, and so saddle it upon the right shoulders, I should do it as surely as I hold my pen, and not be one scrap afraid either. It is a sin and shame to go to sleep swathed in "cautious" blankets, while we allow our "working" fellows (and this murdered constable in particular) to run into danger unprotected, and into death unavenged.  
Easter Monday was a great day "intoirly" in dear dirty Dublin. Races here, races there, races

everywhere, and lots of "water" to drink. Don't you know the source of my parody? "Water, water, everywhere, but never a drop to drink." I think at the Leaperdstown races, which are held in this neighborhood, there was rather a scarcity of the water ingredient, to judge by the voices and singing on the cars as the holiday-makers returned in the evening. I saw a race once (at a good distance from the crowd we had our trap), and I thought it the very prettiest out-of-door amusement I had ever seen.

A very sad death took place in Dublin a few days ago. A lawyer, well known and respected, had had an operation (Tracheotomy) performed some years ago and a silver tube inserted; this tube, owing to a bad cough, collapsed, and he died at once and alone.

A petition has gone to London from Derry and the Northwest of Ireland, signed by 20,000 women, praying for the continuance of the union between Great Britain and Ireland. The document is 350 yards long. It was presented by the Marchioness of Londonderry in person to Her Majesty. Anent this document, I candidly say, I should not like to be the unfortunate statesman whose business it may be to read it to Queen Victoria. Perhaps she wades through these horrors herself as a rule, but I doubt her ability to do 350 yards of one.

It is lovely to "hear" summer coming in the shape of birds of song. A lady friend in Arklow writes me of having seen the chiff-chaff, and heard it singing about her home a few days ago, and a "wheat ears" has appeared on the sands close to the house also. What a cruel fashion it is wearing birds as ornaments. Even in my young and giddy days I did not like it. My daughter now is a member of a league got up in England by a cousin of hers—an anti-wing-wearing one—its real name is surprisingly clever one to judge by its sound, but having a way of my own I have christened it this.

Thank God, I see that the report of cholera having been in Canada was a false one. The scare came here, and there were huts put up on Kingstown pier for the reception of patients from the sea, and are there still empty. We are a healthy people, our brains may be scant, as certainly our purses are, but we are wiry and able for much; but one thing I am not able for and that is, to make head or tail of the word "Kosmos;" and I am both too proud and independent to ask, because, you know, I ought to know, but I don't. It is the grandiloquent name for a monster bazaar which is to be held in Dublin shortly, in aid of the children's hospital. A new wing is wanted, and endowment for many more beds, hence "Kosmos." Tennis is coming again to the front. My young people are indignant at a new rule which has passed here, viz., one day each week, no ladies to play; the nobler sex to have it all to themselves. I think myself it is mean; they would not like to be shunted off their cricket field one play day each week, to give way to "ladies only." I think we should have tea on the ground that day and only that day, and not give one of them a cup of it, not one. Men love tea in Ireland.

Lady Fitzgerald held a splendid reception at the Vice-Regal Lodge yesterday, and afterwards there was a concert. One young girl delighted everyone with a violin solo, and Madame Melba sang. We had a people's concert in the Leinster Hall in the evening. I think the name people used in this sense very silly. Are not we all people? But I am a woman of very, very broad views on this subject. The old law of "handsome is that handsome does," always satisfies me. There was also a wonderful day for the people on Easter Monday, at Ball's Bridge. Those not "off to Leaperdstown early in the morning" went on to Ball's Bridge later in the day, and saw cycling, bicycling and tricycling, to their heart's content.

I read of a lady the other day climbing up to kiss the Blarney Stone. Now, I did the same when I was as young as my daughter is now, and it was never published. Was it not a shame that my exploit was as nothing in the eyes of the beholders? Better late than never, so I tell it now, and of how I won a wager of six pairs of gloves for doing it.

To-day I had a visit from a friend, a champion chess player a lady. She wins everything she goes in for from everybody. Imagine me having the audacity to ask her to play with me on Monday, and she is coming here to do so. I shall be proud to be beaten by her, and hope to learn a great deal in the process. Good-bye, dear friends, until next month.  
Your sincere friend,  
S. M. STUDDERT KENNEDY.

The popular superstition of overturning the salt being unlucky, originated from Leonardo da Vinci's picture of the "Last Supper," in which Judas Iscariot is represented as overturning the salt.

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES:—

There is a poetic strand braided in with our make-up in most of us, and perhaps there is no time like May to bring the fact to remembrance. The icy chains are breaking, and "the rills and rivers sing with pride the anthem of the free." After being ice-bound so long all nature takes a sudden bound, and lo, everything is changed and changing. Poets of all time have felt the inspiring influences of these balmy spring days, and even as old a writer as Aristotle found out that "one swallow does not make spring, nor yet one fine day."

Longfellow says in Hiawatha:—
" Came the spring with all its splendor,
All its birds and all its blossoms,
All its flowers and leaves and grasses,"
and Mrs. Hemans has put her thoughts in words as follows:

" I come, I come! ye have called me long,
I come o'er the mountain with light and song;
Ye may trace my step o'er the wakening earth,
By the winds which tell of the violet's birth,
By the primrose stars in the shadowy grass,
By the green leaves, opening as I pass."

while many young lovers and more dejected ones know Tennyson's words:

" In the spring a fuller crimson comes upon the robin's breast;
In the spring the wanton lapwing gets himself another crest;
In the spring a livelier iris changes on the burnished dove;
In the spring a young man's fancy lightly turns to thoughts of love."

We might quote much more, as each poetic nature has given us his or her thoughts, and even you, my young nephews and nieces, are not devoid of it, and I am sure the sparkling, dancing waters in the swollen mill-race, the freshness and beauty of spring at this May time, are calling forth such thoughts as the long winter did not arouse, and so it is that different circumstances of life call out the different parts of our character, and it is well to rub against others in the battle of life. It is begun now, it began even before that first day at school when you met so many boys and girls whose faces were strange to you. It will go on till life is done. A true story may show you what I mean. A young man fond of poetry, beauty and art, and possessing a strong character, chose as his profession that of a physician. He enjoyed his work and excelled in it. An unlooked-for turn of affairs caused him to become a banker, and although he had previously no love of business he found there was lying in him, dormant till then, great business capacity.

Although I started out by quoting poetry, it was fully my intention to give some of my young friends a talk about more practical things. It is very right, and I rejoice to see you take such an interest in your Christian Endeavor Society and your Band of Hope. I am glad to see you fill your place there so creditably, but I wonder sometimes if that coal you put on before leaving home burnt up, or did you dump it in on the ashes in answer to mother's request, deeming it too much trouble for you to see that it burnt well. Was the baby cold and crying from its absence when father came in? You must know Uncle Tom expects an active member in either society to put in his or her work. Is the dusting left undone or carelessly done, causing somebody ruffled feelings? Are the books and toys left lying around for somebody else to pick up? Does thoughtfulness to see what there is to be done around the house or barn, or in the garden, characterize you? "O, Uncle Tom!" I hear you say, "you're too hard on us; we don't think yet about these things." Well, it's time you did; "I forgot" may almost always be rendered "I don't care", and "I didn't think" as a bad form of selfishness, for somebody has to think and do, and too often young folk leave that for others.

Brains have been given you to use, and thinking thus will not wear them out, but will serve to make them of better quality by accustoming them to constant use. A great secret of life success lies in this: the thoughtful person is wanted everywhere, the thoughtless one but seldom. By it you make yourself so useful you cannot be done without, and in that way are soon able and wanted to fill positions of trust and honor.

Arbor Day comes this month, and I hope each of you will use it to plant a tree somewhere, at home, or school, or on the road—ornamental, or fruit, or from the woods. When you are far away, or laid quietly to rest, that tree may prove a cool resting-place for the tired traveller, may help to stay the wind, it may gladden with its verdure weary eyes, be a thing of beauty, a resting-place for singing birds, it may scent the air in spring-time with its blossoms, and call to it the bee in search of sweets, or the delicate, dainty humming-bird. One tree each Arbor Day, and in a long life how many marks that we have lived will remain, tributes of thoughtfulness for others. UNCLE TOM.

POETS' CORNER.

Prize for Selected Poetry.

F. COLLIER, ORANGEVILLE, ONT.
Rev. Charles Kingsley was born in 1819, and died in 1875. He was an eminent English clergyman, Rector of Eversley, and Canon of Westminster. For some time he was Professor of Modern History at Cambridge. He has written many essays, novels and poems; all valuable contributions to his country's literature. His novels are very instructive, dealing largely with social problems, and evincing the man's deep sympathy with the laborer. Among his finest novels are Westward Ho and Hypatia, both excellent books. His poems are beautiful and original, his metaphors especially expressive and fresh; even his subjects are individual, and a clear purity of thought and lofty principle permeates his verses. His lines "Showers soft and steaming," "Crisp the lazy dyke," "Shattering down the snow-flakes off the curdled sky," I think especially striking, and original in thought and expression.

Ode to the North-East Wind.

Welcome, wild North-Easter!
Shame it is to see
Odes to every zephyr;
N'er a verse to thee.

Welcome, black North-Easter!
O'er the German foam;
O'er the Danish moorlands,
From thy frozen home.

Tired we are of summer,
Tired of gaudy glare,
Showers soft and steaming,
Hot and breathless air.

Tired of listless dreaming
Through the lazy day;
Jovial wind of winter
Turns us out to play!

Sweep the golden reed-beds;
Crisp the lazy dyke;
Hunger into madness,
Every plunging pike.

Fill the lake with wild-fowl;
Fill the marsh with snipe;
While on dreary moorlands
Lonely curlew pipe.

Through the black fir forest
Thunder harsh and dry,
Shattering down the snow-flakes
Off the curdled sky.

Hark! the brave North-Easter!
Breast-high lies the scent,
On by hill and headland
Over heath and pent.

Chime, ye dappled darlings,
Through the sleet and snow,
Who can over-ride you?
Let the horses go!

Chime, ye dappled darlings,
Down the roaring blast;
You shall see a fox die
Ere an hour be past.

Go! and rest to-morrow,
Hunting in your dreams,
While our skates are ringing
O'er the frozen streams.

Let the fuscious South-wind
Breathe in lover's sighs,
While the lazy gallants
Bask in ladies' eyes.

What does he but soften
Heart alike and pen?
'Tis the hard grey weather
Breeds hard Englishmen.

What's the soft South-Wester?
'Tis the ladies' breeze
Bringing home their true loves
Out of all the seas.

But the black North-Easter
Through the snow-storm hurled
Drives our English hearts of oak
Seaward round the world.

Come, as came our fathers,
Heralded by thee,
Conquering from the Eastward,
Lords by land and sea.

Come and strong within us
Stir the Viking's blood
Bracing brain and sinew;
Blow, thou wind of God!

Song of the River.

Clear and cool, clear and cool,
By laughing, shallow and dreaming pool;
Cool and clear, cool and clear,
By shining shingle and foaming weir;

Under the crag where the osprey sings,
And the wild wall where the church bell rings,
Undelled for the undelled;
Play by me, bathe in me, mother and child.

Dank and foul, dank and foul,
By the smoky town in its murky cowl;
Foul and dank, foul and dank,
By wharf and sewer, and shiny bank;

Darker and darker the farther I go,
Baser and baser the richer I grow,
Who dares sport with the sin defiled?
Shrink from me, turn from me, mother and child.

Strong and free, strong and free,
The flood gates are open away to the sea;
Free and strong, free and strong,
Cleaning my streams as I hurry along;

To the golden sands, and the leaping bar,
And the tainless tide that awaits me afar,
As I lose myself in the infinite main,
Like a soul that has sinned and is pardoned again,

Undelled for the undelled;
Play by me, bathe in me, mother and child.

Puzzles.

1-CHARADE.

We hail with joy another puzzler,
A TOTAL helps to form the chain
That shall weigh the anchor when we reach
Our destination o'er the main.

We must not FIRST our important stations
In the canoe so great and strong,
But Fair Brother's place must too be there,
Else we couldn't get along.

And he must have the power to choose
What station he'd like best;
Whatever then his choice may be
Is free from all contest.

A SECOND, too, we ought to have
Lest anything give way,
A similar fate might perhaps be ours,
To the THIRD of a ship too gay.

So while our ocean voyage lasts,
We must have a pleasant time;
Friend Devitt must be on our programme too,
And we'll have lots of rhyme.

LILY DAY.

2-ANAGRAM.

Among the merry "puzzlers"
Who are in your happy band,
I have made bold to enter,
And to all extend my hand,
Among the pleasures near us
Which often we have sought,
There lies a seeming paradox
Beneath "Rob, I return not,"
As "Longfellow's" and "Tennyson's"
Among us are but few,
Don't wonder at my verses
From one evidently "new."
ADA SMITHSON.

3-CHARADE.

Lieutenant Charles Edwards is back again,
May he never leave the "Doom" any more;
But ever be SECOND and willing to help
By sending FIRST puzzles more and more.

Amos Howkins is in the race,
I'm sure TOTAL he'll not be,
And Miss Edith F. is a good puzzler,
May we her name often, quite often see.

'Tis thus our ship goes sailing along,
Increasing its crew day by day;
And when once you get to know our crew,
You'll find it impossible to keep away.
H. REEVE.

4-CHARADE.

Dear old home, 'mid all its pleasure,
In Ontario I left behind;
For to seek a western treasure,
'Twas "the ideal of my mind."

Yes, I left my native village,
Oh, the day, 'twas sad to part;
Father, mother, sisters, brother,
Sweetest memories of my heart.

'Midst the rocks, the hills and valleys,
In a first-class railway car;
For three days and nights they took me
O'er the world-famed C. P. R.

Oh, the scenery was delightful,
All along Superior's shore;
Yes, the views were most transcendent
In their beauty, o'er and o'er.

When at last my journey ended,
The prairies met my gaze;
Ah, the sight was most enchanting,
And it did my spirits raise.

'Twas the "Land of milk and honey,"
Ah, alas! I wish 'twere so;
But I found I was deluded,
And destined to meet with woe.

For I'm seeking, seeking, seeking,
Not "the ideal of my mind";
For I've found that priceless treasure,
'Tis a spirit true and kind.

But I'm seeking for a mansion,
Where in future LAST to come;
I may take my bride, this spirit,
And with God may dwell as one.

Still I think of home and mother,
Father, sisters, brother, too;
And PRIME day I hope to meet them,
If not in this world, in the new.

Now, kind friends, you've heard my story
Just a word and then I'm done;
EXTIRE you may be transported,
To this land of the setting sun.
FAIR BROTHER.

5-ENIGMA.

My first is admired and aimed at
By old, young, rich and poor;
My second a word of two letters,
If you're smart you'll see it here sure;

My third always comes with winter,
Much fun it affords us too;
Total is skill which puzzlers need
If good work they mean to do.
ADA ARMAND.

6-RIDDLE.

My first is to provide food for a party large or small;
My second oft adorns a church and sometimes, too, a hall;
The two combined may oft be seen crawling on a wall.
ADA ARMAND.

7-METAGRAM.

I am the fruit of the "great palm tree,"
Change my head and I am "destiny,"
Now change again "a kind of door" you see,
Again "to dislike greatly" this will be;

Change once more and I am "lardy slow";
Again, and I "a companion" show,
Once more and "the top of the head" I ween,
Again, and "a settled allowance" is seen.
EDITH FAIR BROTHER.

8-STAR.

1-A consonant, 2-A, 3-A crown, 4-A beginner, 5-A Jewish month, 6-A genus of leguminous trees and shrubs, usually with thorns and pinnate leaves, and of an airy, elegant appearance, 7-An emollient, 8-An article, 9-A consonant.
FAIR BROTHER.

Answers to 1st April Puzzles.

- 1 Easter Sunday, 2 Innocent, 3 Nothing, sea, 4 There, here, ere, 5 Upon, 6 Felony, 7 Lily Day.

Names of Those Who Have Sent Correct Answers to April 1st Puzzles.

Henry Reeve, L. Irvine Devitt, Oliver Smider, Addison Smider, Fred Hall, Henry Bobber, Lizzo Miller, Ed. A. Fair Brother, "Gipsy Queen," A. R. Borrowman, Josie Sheehan, Lily Day, Edith Fair Brother, Agatha Prudhomme, Geo. W. Blyth, Ada Smithson, Mary Morrison.

**W. C. EDWARDS AND CO'Y**  
 IMPORTERS AND BREEDERS.

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 CLARENCE, ONT.

**SCOTCH SHORTHORNS.** Shorthorns, Shropshires and Berkshires

The imported Cruickshank bull Grandeur is at the head of this herd of Imported and Home-bred Cows and Heifers of the most approved Scotch families.

ALEX. NORRIE, Manager.

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 Ayrshires, Jerseys and Berkshires.

Imported Emperor at the head of a grand lot of Imported and Canadian-bred Ayrshires; also St. Lambert Jerseys and Imported Berkshires. **GEORGE CARSON, Manager.** 316-1-y

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ALSO **YOUNG YORKSHIRE PIGS**

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The largest breeding flock of pure-bred Cotswold Sheep in Ontario. Shearling Rams and Ewes from imported sires and dams. A grand lot of Ram and Ewe Lambs also from imported sires & dams. Sheep are either bred or imported by myself. I also breed Durham Cattle and Berkshire Swine. Can supply pairs not akin of my own breeding. **JOSEPH WARD, Marsh Hill P. O., Uxbridge Station.** 333-1-y-om

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LAMBS AND SHEARLINGS of both sexes always for sale.

Our last importation was made direct from the flock of Hy. Dudding, Esq., of Great Grimby, and comprises the pick of a flock numbering 1700 head.

If you want a ram or a few ewes send along your orders.

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**W. WALKER, Ilderton, Ont.**  
 319-1-y-om on London, Huron and Bruce R

**J. C. SNELL, Edmonton, Ontario.**

Most of our best sows now have fine litters of young pigs sired by first class imported boars. Three imported boars were used, so we can supply pairs and trios not akin. We have a few young sows in farrow to come due in April and May. Also young boars of fall litters now fit for service, and young sows of same age not akin. We are now looking orders for spring pigs. Jersey Cows, Heifers and Calves for sale at reasonable prices. Stock shipped to order. Satisfaction guaranteed. Write for prices. 332-y-om

**IMPROVED LARGE YORKSHIRE PIGS.**

Pedigreed young stock for sale at reasonable prices. **WM. C. WILSON, East Oro, Ont.** 333-a-om

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I have on hand the best young GYVESDAL Horses and Mares on this continent. Bred from the well-known sires, Prince of Wales, Darnley, Macgregor, Energy, Lord Montrose, The Ruler, Carruchan Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere. Terms reasonable. 322-1-y-om

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The choicest stud of Hackneys and Clydesdales will be found at the stables of **R. BEITH & CO., Bowmanville,** including the 1st prize and sweepstakes Hackney stallion, Ottawa, and 1st prize winner in Aged Class, Jubilee Chief. The Stud also includes a number of prize-winning Clydesdale horses and mares.

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The choicest collection of young Clydesdale Stallions, fit for service the coming season, to be found in Canada; good breeding and high-class quality considered; prize winners, and sons of prize winners, including the first prize three-year-old and second prize two-year-old (imported) class, and winner of gold medal as best Dominion-bred Clydesdale stallion any age at Ottawa last year. Prices reasonable.

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PRICE, \$35.00.

This is a great bargain. I have no use for him. One year old, solid fawn, black tongue and switch, large and in good condition. A beauty. Breeding fit to head any herd. Some fine young Road Horses for sale cheap. **H. B. SOMERVILLE, Fitzroy Harbor, Ont.** 333-a-om

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AT REASONABLE PRICES.

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FOR PRICES ON

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One choice young Bull sired by a Sussex bull, by Dryden's Imp. Sussex; dam Crimson Flower, by Imp. Royal Barnington. The accompanying cut is a half sister bred by me. Also a few fancy show Heifers of the same breeding bred to young Indian Chief bull. Some fine Road Horses for sale.

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**W. S. HAWKSHAW, Glanworth Post Office.** 326-y-om

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The undersigned offer for sale this month a few sows to farrow in June; also a few boars fit for service this spring; also a number of young pigs about ready to wean. Pairs supplied not akin. Terms reasonable. Apply to WM. GOODGER & SONS, Woodstock, Ont. 327-1-e-om



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Thirty-five choice Breeding Sows from the best English breeders. Young stock of all ages. Stock supplied for exhibition purposes, registered and guaranteed to be as described. Personal inspection solicited. J. E. BRETHOUR, Burford, Brant Co., Ont. 327-y-om



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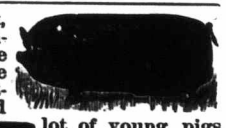
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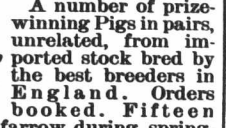
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Of Registered Poland-Chinas - A choice lot of young pigs for sale. Elected - 48 - the great ribbon winner at the head of herd, assisted by Rht's Chief, who weighs 1,000 pounds. Correspondence or inspection of herd solicited. J. J. PAYNE, Chatham, Ont. 332-2-y-om



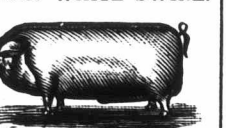
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Our herd won 21 firsts, 17 seconds, 11 third prizes, including grand sweepstakes at Toronto, Montreal and Ottawa fall fairs of 1892. Now is your time to leave your orders for spring pigs. Pairs or trios furnished not akin. Special attention given to parties wishing show stock. Pedigrees furnished. Reduced rates by express. Give us a call. Address H. GEORGE & SONS, Crampton, Ont. 329-1-y-om



IMPROVED CHESTER WHITE SWINE

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Write for particulars, or call and inspect the stock. Visitors welcome.

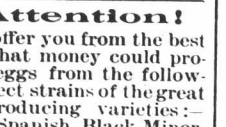
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Duroc Jersey Swine

are the best all-round hog known. No squealing; quiet disposition; good grazers; defeated the Berks and P. C. on all points at Mich. Agl. Coll. test. Pigs for sale. Address PETER LAMARSH, Wheatley, Ont. 329-1-f-om

Farmers, Attention!

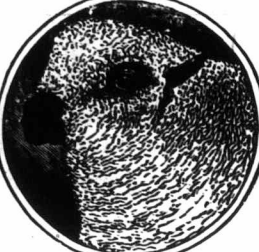
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Foreign buyers are invited to visit the Wolf's Head Flock, as there is always a good selection of ewes and rams for sale, and we handle none but the best, and can supply select specimens for breeding or exhibition purposes, and residing in the centre of the Shropshire Sheep Breeding District buyers are assisted in selecting from other flocks. Write for prices or visit us before going elsewhere. Visitors met by appointment at Baschurch Station, G. W. R. Address - J. & T. THONGER, Wolf's Head Farm, Nesscliff, Baschurch, Shropshire, Eng. Telegram: Thonger, Nesscliff. 322-1-y-om



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For the destruction of Ticks, Lice, Mange and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc. Removes Scurf, Roughness and Irritation of the skin, making the coat soft, glossy and healthy. The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock: "MAPLE SHADE" HERDS AND FLOCKS. BROOKLIN, ONT., Sept. 4th, 1890. DEAR SIR, - I cannot afford to be without your "Little's Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested. I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders. JOHN DRYDEN. Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in large tins at \$1.00. Special terms to Breeders, Ranchmen and others requiring large quantities. Ask your nearest druggist to obtain it for you; or write for it, with pamphlets, etc., to ROBERT WICHTMAN, DRUGGIST, OWEN SOUND, Ont. Sole Agent for the Dominion. 330-2-y-om

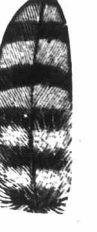
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131 birds scoring 20 to 96. B. and Wh. P. Rocks, Wh. and S. Wyandottes, Wh. and Br. Leg-horns, and Brouse Turkeys. 500 selected birds, pairs, trios and pens, mated for best results. 300 Toms and Hens sired by 44 and 47 lb. Toms. 25 years a breeder. Valuable illustrations circular, free. F. M. MUMGER, DeKalb, Ill. Editor of the "Poultry Chum," 25 cts. per year. 327-1-y-om

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To the unanimous approval of the Coiled Spring Fence. The objectors never tried it, but they will not be withdrawn. We have the consolation of knowing that all who use or buy ours are more than satisfied. PAGE WIRE FENCE CO. OF ONTARIO, LTD., WALKERVILLE, ONT. 325-y-om

IF WE WERE TO USE

SHANNON Letter and Bill Files. KEEP PAPERS SECURE. MADE BY Office Specialty Mfg. Co. 118 Bay Street, TORONTO, - ONTARIO. Office Desks, Cabinets, Chairs, Book Cases, School Furniture, Metal Roller Shelves - all labor-saving office devices. No. 4 A File, - \$2.00 Book Racks, - 1.25 Sold by all stationers. 332-c-om

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If you want the best value for your money. If you want an article that will never disappoint you. If you want thoroughly good and healthy Baking Powder, into which no injurious ingredient is ever permitted to enter. BUY ONLY THE GENUINE COOK'S FRIEND BAKING POWDER. REMEMBER THAT McLAREN'S COOK'S FRIEND IS THE ONLY GENUINE. The Best Grocers Sell It. 331-1-y-om

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Good SEED CORNS are not plentiful, and many will be disappointed in the seed they may get, unless they buy from reliable and responsible dealers. The germinating properties of a great deal of Seed Corns are very low, some not 50 per cent. Our stock of good Seed Corns, both for ensilage and planting, is limited, therefore ORDER EARLY. A full line of MANGEL, TURNIP and CARROT Seed. The best that money can buy. Send for SEED CATALOGUE. Every man who has 10, 15, 20 or 25 cows, and is making butter, if only half the year, should have one of our ALEXANDRA HAND SEPARATORS. Simple and easy to operate, easy to turn, perfect work, will do all we claim for them. Largest capacity and cheapest and best Separator in the world. Never handled anything that has given such UNIVERSAL SATISFACTION. You should also have our Improved Butter Mould and Parchment Paper, the nicest thing you ever saw; Butterworker, Butter Shipping Boxes, Etc. You are sure to want something that we have. Send for DAIRY CATALOGUE. Address, JOHN S. PEARCE & CO., LONDON, ONTARIO. 332-

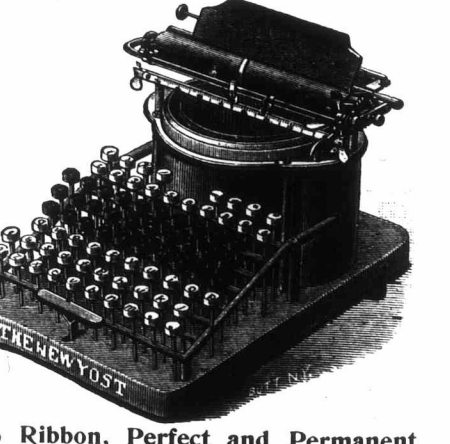
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AND HOW TO ATTAIN IT. A Medical Work that Tells the Causes, Describes the Effects, Points the Remedy. Scientifically the most valuable, artistically the most beautiful medical book ever published; 96 pages, every page bearing a half-tone illustration in tints. Subjects treated: Nervous Debility, Sterility, Impotency, Development, Varicocele, The Husband, Those Intending Marriage, etc. Every man who would know the Grand Truths, the Plain Facts, the Old Secrets and New Discoveries of Medical Science as applied to Married Life, who would atone for past follies and avoid future pitfalls, should write for this WONDERFUL LITTLE BOOK. It will be sent free, under seal, while the edition lasts. Address the publishers, ERIE MEDICAL CO., Buffalo, N. Y. 333-y-om

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FOR FATTER SHEEP AND MORE WOOL. BENEFITS THE FLOCK. ERADICATES INSECTS AND DISEASE. Standard English Remedy. 100-gal. pkt., \$2; 25-gal. pkt., 50c. GEORGE J. THORP, Wool Dealer, Guelph. 333-1-e-o

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No Ribbon, Perfect and Permanent Alignment, Beautiful Work, Heavy Manifold, Durability Guaranteed. Machines sent on approval. Old Typewriters taken as part payment. Several second-hand Remingtons and Calligraphs for sale cheap. NEWSOME & CO., General Agents, 333-1-c-om 46 and 48 Adelaide St. E., Toronto.



### \$2,700.--A SPLENDID FARM OF 240 ACRES,

two miles from Stonewall Station. The improvements are, a frame dwelling house (which has never been occupied), prettily situated near a grove of poplar. The size of the house is 18x24, with lean to addition 12x18; good stout foundation and cellar; a good artesian well--excellent water; frame stable. Fifty acres fenced and about thirty acres cultivated ready for seeding. TERMS: \$700 cash, balance on time, with interest at 7 per cent.

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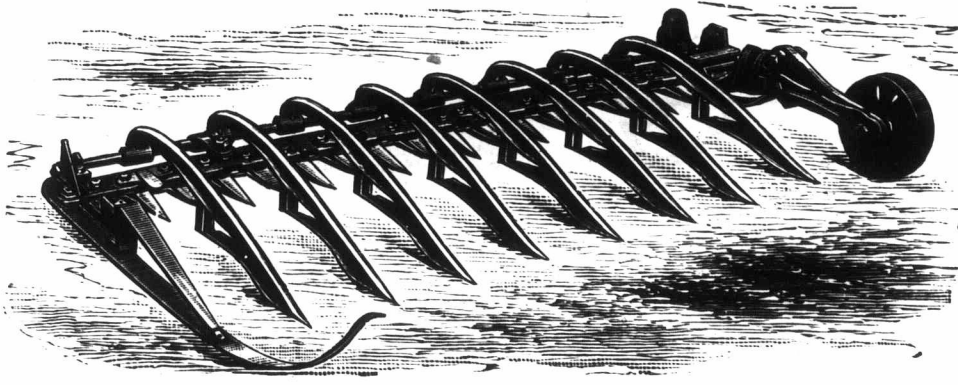
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THE MONARCH OF THE PEA FIELD.

Thousands of them now in use in Ontario in the hands of the leading farmers, who endorse it as being highly satisfactory. This Pea Harvester pays, and is one of the greatest labor-saving machines in use--harvesting from eight to ten acres per day in the most complete manner. It is endorsed by all first-class farmers who have this Harvester to be as useful in the pea field as the mower is in the hay field. It can be attached to any mowing bar, and has the only Vertically Acting Lifter, having a practically successful movement to suit the unevenness of the land, of which we are the Sole Manufacturers and Patentees. Send for circular with prices and instructions. Order early and secure one.

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The JOHN ABELL ENGINES, PORTABLE, TRACTION AND SEMI-PORTABLE, are unequalled for excellence in the Dominion, and have won thirteen gold medals.

THE "VICTOR" CLOVER HULLER. The other machines aren't in it with this one. "DUPLIX" FEED MILLS IN FOUR SIZES. Send for a Handbook for Farmers and Feeders. TREAD POWER THRESHERS, HAY PRESSES, TREAD POWERS, MANURE SPREADERS, PORTABLE SAW MILLS, ROLLER MILLS, STATIONARY ENGINES, BOILERS.

Write to us for a Catalogue, and please mention the Farmer's Advocate.

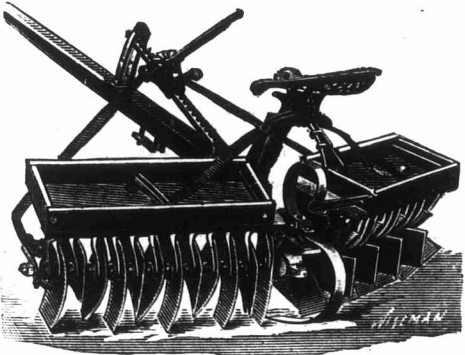
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THIRTEEN GOLD MEDALS.

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## THE WORTMAN & WARD MANFG. CO.'S SPADE HARROW

The Best Pulverizer! The Best Cultivator! And The Best Harrow Ever Made.



It has no equal for pulverizing hard clay lumps. It is beyond question the best machine for making a seed bed on inverted sod. For preparing fall plowing for spring seeding, especially in heavy clay soil, where the land is baked or become hard and difficult to move. For cutting up and pulverizing any kind of stubble land, either for the purpose of starting foul seeds or fitting for seeding. It is unquestionably far superior to anything in the market for cultivating any kind of land that is very difficult to subdue. Where every other tool has failed the Spade Harrow will be found to be just the machine needed. We also manufacture the "Daisy" Barrel Churn, Cistern, Well, Force and Wind Mill Pumps, Horse Hay Forks, McKay's Patent Combination Sling. Prices and terms given on application. Address--

**THE WORTMAN & WARD MFG. CO.,**  
LONDON, ONTARIO.

322 d-om

### "For Years,"

Says **CARRIE E. STOCKWELL**, of Chesterfield, N. H., "I was afflicted with an extremely severe pain in the lower part of the chest. The feeling was as if a ton



weight was laid on a spot the size of my hand. During the attacks, the perspiration would stand in drops on my face, and it was agony for me to make sufficient effort even to whisper. They came suddenly, at any hour of the day or night, lasting from thirty minutes to half a day, leaving as suddenly; but, for several days after, I was quite prostrated and sore. Sometimes the attacks were almost daily, then less frequent. After about four years of this suffering, I was taken down with bilious typhoid fever, and when I began to recover, I had the worst attack of my old trouble I ever experienced. At the first of the fever, my mother gave me **Ayer's Pills**, my doctor recommending them as being better than anything he could prepare. I continued taking these Pills, and so great was the benefit derived that during nearly thirty years I have had but one attack of my former trouble, which yielded readily to the same remedy."

**AYER'S PILLS**  
Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.

Every Dose Effective

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DIRECT FROM THE MANUFACTURER FOR

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### BOOTS AND SHOES

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**WHITE ENAMEL LETTERS, ALL STYLES.**

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### GRAND'S REPOSITORY



47, 49, 51 and 53 Adelaide St., Toronto.

SPECIAL SALE WILL TAKE PLACE ON TUESDAY, 23rd OF MAY, 1893.

### 3-3 H-O-R-S-E-S

We have received instructions from Messrs. Mossom, Boyd & Co., of Bobcaygeon, (to close a partnership) to offer for sale the following valuable stock of 30 head of thoroughly reliable and well-broken horses, viz.:

Six head Mares and Geldings, rising 3, by imported Hackney stallion Brilliant [1434]; one Mare, rising 3, by imp. Hackney stallion Young Noblemen; one Mare, rising 3, by imp. thoroughbred stallion Mikado; three head, two Mares, one Gelding, rising 4, by imp. Yorkshire coach stallion Cleveland Swell; one Mare, rising 4, by imp. coach stallion Shining Light; one Mare, rising 4, by thoroughbred stallion Superior; one Mare, rising 5, by trotting stallion Valentine; two head Ponies, matched pair.

HEAVY DRAUGHT HORSES.—One Suffolk Punch Stallion, rising 3, pure-bred; one Suffolk Punch Stallion, 6 years, imported; one Suffolk Punch Stallion, 3 years, pure-bred; one Suffolk Punch Mare, rising 5, pure-bred; one Suffolk Punch Mare, rising 4, pure-bred; three Suffolk Punch Fillies, rising 2, pure-bred; three Percheron Fillies, rising 4, pure-bred; one Clydesdale Stallion, rising 4, pure-bred; one Clydesdale Mare, pure-bred; three Clydesdale Mares, pure-bred; one Clydesdale Mare, rising two, pure-bred.

The above horses will be on view for trial and inspection at the Repository, Monday previous to sale. Sale sharp at 10.30. 333-a-om

**COBBOLD & SHADWELL, Proprietors & Auctioneers**

SHIRE HORSES.—A grand young imp. stallion for sale at a low figure.

IMPROVED YORKSHIRES.—Young stock of all ages at farmers' prices.

WHITE HOLLAND and BRONZE TURKEYS.—Orders booked for young birds for fall delivery. Correspondence solicited. Prices on application. 318-2-y-om **WM. MULLEN, Hillsburg, Ont.**

### NOTICES.

ACTIONS SPEAK PLAINLY.

I take great pleasure in stating to you that I have given your Caustic Balsam a thorough trial with very satisfactory results. As a vesicant it supercedes anything I have ever seen used. I deem it also an excellent external application in all throat affections.

W. SHEPPARD, M.R.C.V.S.

Mr. Sheppard is ex-veterinarian for Dunton's Spirit of the Turf, and now a resident of Sheepshead Bay, Long Island, and bought 8 dozen bottles Caustic Balsam during 1892 for use in his practice.

In this issue Mr. Robert Foster, Thornbury Ont., offers custom-made harness at wholesale rates. See his advertisement and write him for his catalogue.

The now justly famous Tolton Pea Harvester has been further improved for 1893. This machine has been one of the most effective and useful implements which has lightened harvesting operations. With the improvements made in binders and reapers for cutting standing grain, the harvesting of peas by hand appeared so slow and difficult in comparison, that the cultivation of this grain was neglected in many localities until the Tolton Pea Harvester came to the rescue. By the use of this machine pea growing is again coming into general practice. The Harvester is not only used for the ordinary field peas, but also for the finer varieties of garden peas when grown in field and in sections where peas are grown largely for canning purposes, with the improved attachment most effective work can be performed. This season a slipper has been fitted to the cutter-bar which prevents the end guards from shelling over-ripe peas, as happened occasionally with the old harvester. With the present attachments the machine does as nearly perfect work as could be expected, and is an implement that a farmer who grows peas to any extent cannot afford to be without.

LOCKED WIRE FENCE CO., INGERSOLL, ONT.

In our advertising columns is the cut of a panel of fencing to which we desire to draw the attention of our readers. The Locked Wire Fence is no doubt the best and cheapest stock barrier offered Canadian buyers. It is safe, durable, slightly efficient, and has many qualities to recommend it. It is the strongest Wire Fence now on the market, the longitudinal wires are larger than those used in any other fence. The manner of bracing and staying is very superior; it forms a barrier, no animal can break down. A great weight may be placed on any part of it without injuring it in the slightest degree. Animals cannot injure themselves on it, it is perfectly safe in this particular. It makes a suitable fence for the farm, garden or lawn, as it can be built any height desired, and over the roughest or smoothest land; the tools used in its construction are light and as easily carried as a hammer, and very inexpensive. We advise our readers to examine it before buying elsewhere.

Messrs. Cobbald & Shadwell, successors to W. D. Grand, will sell Tuesday, May 23, 1893, at Grand's Repository, Toronto, Ont., 33 horses, the property of Messrs. Mossom, Boyd & Co., Bobcaygeon, Ont.: The lot consists of 14 geldings and mares, the get of such stallions as Brilliant 1434 (Hackney), Young Nobleman (Hackney), Mikado and Superior (Thoroughbreds), Cleveland Swell (Yorkshire Coach) and Valentine (Trotter), also two head of matched ponies. Among the heavy horses to be sold are three imported Suffolk Punch stallions, and five mares and fillies of this breed; three Percheron fillies, two Clydesdale stallions and four mares. See advertisement in this issue. Interested parties will do well to attend this sale.

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

E. B. Eddy, the paper manufacturer of Hull, Que., has purchased the Clydesdale stallion Arbitrator (7430) of Graham Bros., Claremont. He also bought a Jersey bull of Capt. Rolph.

The annual meeting of the American Berkshire Association will be held in Springfield, Illinois, January 13, 1893. This was the first Association that undertook the registry of the smaller animals, and its success has led to the formation of Associations for the registry of nearly all classes of domestic animals. This Association is offering very liberal premiums for Berkshires at the World's Columbian Exposition.

William Grainger, Esq., Londesboro, reports the following sales: To David Ritchie, Teeswater, the young bull British Hero, got by Britannia Duke 10th = 9776 =, a grandson of the fourth Duke of Clarence; to Thomas Welsh, Lurgan, a bull calf, Lord Stanley, got by Waterloo Duke 24th = 14280 =, and from Busy Bee = 17918 = a fine young dairy cow; and to Wm. Young, of Colborne, the bull calf Wilfrid Laurier, got by Waterloo Duke 24th = 14280 =, and from 2nd Fair Maid of Hullett = 9047 =, now on her way to Chicago to take part in the Dairy Test. He has sold all his bulls and now offers for sale a few young heifers and cows of the best milking strains of Shorthorns.

A. & G. Rice, Curries P. O., Oxford County, report the demand for Holsteins has never been better. They have sold in six days the following: To R. E. Rice, Esq., Russel P. O., Man., the yearling bull Duke Pieterje. He is of the famous Pieterje strain on his sire's side. To P. De Guerre, Esq., Queensville, Lady Jewel, two years old; she was first prize heifer at our county shows last fall, and is a descendant of the famous show cow Jewel. To A. W. Toll, Esq., Ridgetown, Maid of Netherland, a very large cow, now seven years old, and her heifer calf from our Jewel Netherland stock bull, and Combination Pieterje, two years old, 1st prize at Ottawa and Montreal last fall in his class. He traces twice to the Great Pieterje 2nd, with the world's milk record for one year. Mr. Toll also got a young bull.

The Southdown Sheep Breeders in this country, as well as in England, are encouraged by the continual addition of new members. The American Southdown Association has recently added to its membership the names of R. M. Fisher, Danville, Ky.; D. H. Dale, Glendale, Ont., Can.; L. A. Armstrong, Paducah, Ky.; J. R. Harvey, Tunstun, Neb.; W. D. Irvine, Danville, Ky.; Geo. Kuder & Son, Tomogony, Ohio; D. E. Lawell, Rabbit Hash, Ky.; Mrs. Sarah A. Hewitt, Ringwood, N. J.; Isaac Kellogg & Son, Reading, Mich.; and the Massachusetts College, Amherst, Mass.

The English Association has received among the later additions to membership, the well-known names of Mr. Henry Webb, Mr. A. Heasman and Mr. C. T. Lucas.

H. Bollert, of the Maple Grove Stock Farm, reports a very active demand for high-class Holsteins. He lately sold to Mr. Jas. Turner, of Appleton, a pair of very superior heifers bred to his noted stock bulls; also a yearling heifer out of Heimke (the cow that tested the richest milk of any pure-bred Holstein at the New York Experimental Station) to Mr. Jas. F. Hindmarch, Cannington Manor, N. W. T.; also a very richly-bred and superior bull to Mr. S. R. Beck, South Cayuga, to head his fine herd of pure-breds, and Maple Grove Prince to Mr. James Elliot, of Bluevale, at the head of his herd. In him Mr. Elliot has secured a prize, as he is a grand individual, and for rich breeding cannot be surpassed in America. There have lately been made some valuable additions to Maple Grove through the purchase of Aalie Pasch 4th, a 3-year-old; she produced 11 1/2 lbs. butter in 7 days, 5 months after calving, as a two-year-old. She is now bred to Colanthus Abbekerk. Inka 7th Pieterje Pette, a yearling, has been secured from Mr. H. Stevens, of the Brookside Stock Farm; this heifer is to be bred to DeKal 2nd Netherland, one of the richest butter-bred bulls in the world, before she goes to quarantine. And Double Bonnie Queen from Mr. E. Pearson, an in-bred Bonnie Queen, as the name indicates; the development of this heifer will be watched with the greatest interest. The enquiries for stock have never been so strong as at the present time.

In answer to a call, the Berkshire breeders met at Piquet, Ohio, on March 1st, 1893, to discuss the advisability of forming a new Berkshire record. O. P. Wolcott, Conover, Ohio, was selected president. He called on the breeders to express themselves, and the general feeling was that the best thing they could do would be to organize a new association right there and then. The feeling was especially strong after the letters from Berkshire breeders from all parts of the United States had been read. There were fifty letters, and only one out of the fifty was opposed to the move. The following committee was appointed to draft the constitution and by-laws: E. N. Barker, Thorntown, Ind.; Ike M. Wolcott, Conover, Ohio; A. J. Ross, Jamestown, Ind. The committee reported and the report was adopted section at a time. The new Association was called the National Berkshire Record Association, with the following officers: President, O. P. Wolcott, Conover, Ohio; Vice-Presidents, I. N. Barker, Thorntown, Ind.; Levi Wentz, Delaware, Ohio; B. N. Cooley, Coldwater, Mich.; Geo. C. Hardy, Bronaugh, Mo. Secretary and Treasurer, E. K. Morris, Indianapolis, Ind. Executive Committee: H. L. Nowlen, Lawrenceburg, Ind.; A. J. Ross, Jamestown, Ind.; J. Willis Fulton, Newark, Ohio; Ike M. Wolcott, Conover, O. Board of Directors, J. R. Baxter, Hillsdale, Mich.; Emmet V. Rhoads, St. Paris, O.; S. C. Roush, Warren, Ind.; L. C. Peterson, Spring Valley, O.; Cott Barnett, Logansport, Ind.; Geo. A. McColl, Waldron, Ind.; D. Kizer, Troy, O. The capital stock will be \$1,000, divided into 100 shares, at \$10.00 each, and no breeder can hold more than two shares of stock. The rates for recording, etc., were placed as follows, and they cannot be changed: Recording pedigree, to stockholders, 75 cents; recording pedigree, to non-stock holders, \$1.00; volumes not to be over \$2.50 each; pedigree blanks, books of fifty, 50 cents; books of 100, \$1.00; transfer blanks, books of 100, 50 cents; all transfers to be published free.

HOW SHE MADE HER MONEY.

Mrs. E. M. Jones' New Book, "DAIRYING FOR PROFIT," Tells the Whole Story.

So anyone reading it can do the same, and secure a comfortable independence. 60,000 COPIES SOLD ALREADY! Orders still pouring in. Price, 30c. by mail; four copies to one address by mail, \$1. ROBT. Y. BROWN, Agent, Box 324, BROCKVILLE, ONTARIO, CANADA.

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Fully Guaranteed Superior to any other Separators in the World.

SEND FOR CATALOGUES, TESTIMONIALS, ETC. FRANK WILSON, 38 St. Peter St., MONTREAL.

CORBIN PATENT TEMPERED DISK. Every Slicer Disk in the Corbin Harrow and the Corbin Drill is stamped exactly like the words in the circle surrounding this. If not so stamped, it is not genuine and is not tempered. The Ball Bearings and Tempered Disks in the Corbin Harrow make it capable of cultivating TEN THOUSAND ACRES (10,000). None other will bear one-half this work. The Corbin Patent Tempered Disk is hardened on the cutting edge and is soft-centered. J. S. CORBIN, Prescott, Ont.

THE LOCKED WIRE FENCE CO. (Ltd.), Ingersoll, Ont.

BRANCH OFFICE: 141 KING STREET, LONDON, ONT. THE BEST FENCE MADE FOR FARMS AND RAILROADS. Send for Circulars and Particulars. This Cut represents one rod (16 1/2 feet), 7 wires, 4 strays. The crimp in the wire in combination with steel clamp when locked acts as a spring, adjusting the fence to heat or cold. Perfectly safe, stronger, better and cheaper than any other fence.



LARGEST AND BEST EQUIPPED BUSINESS COLLEGES IN CANADA. Toronto & Stratford. Special Courses for FARMERS' SONS. A BUSINESS EDUCATION IS A SAFE INVESTMENT. Students may enter at any time. Satisfaction guaranteed. Write for catalogues and mention this paper. SHAW & ELLIOTT, Principals.

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FENCE! FENCE! FENCE!

The best, cheapest and most durable fence in the market. It will turn horses, cattle, sheep, hogs, dogs and poultry. Prices within the reach of all, viz., from 45c. to 75c. per rod (16 1/2 feet). Also manufacturers of Woven Wire Fencing. Send for our list.

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SEEDS

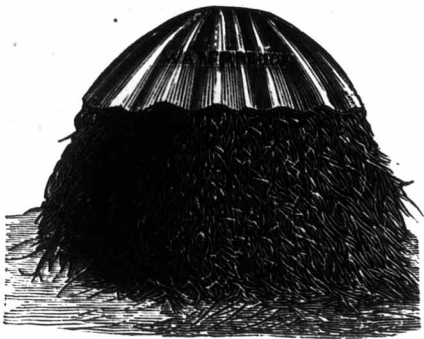
WILLIAM EVANS, Seedsman to the Council of Agriculture for the Province of Quebec, importer and grower of Field, Garden, Flower Seeds, AGRICULTURAL IMPLEMENTS, Guano, Superphosphate and other Fertilizers. WAREHOUSES: Nos. 89, 91 and 93 McGill St.; Nos. 104, 106 and 108 Foundling St., and 42 Normant Street. MONTREAL. Orders respectfully solicited. French and English catalogues on application. 332-d-om

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**THE SYMMES HAY AND GRAIN CAP.**



The most practical, cheap and efficient Hay and Grain Cap yet introduced. For particulars, send for circular.

**THE SYMMES VEGETABLE AND FLOWER COVER.**



Thoroughly waterproof, tough and durable. Size, 11 1/2 inches high and 12 inches diameter at bottom. Valuable for covering transplanted plants and flowers, protecting them from sun and frost. Manufactured by THE SYMMES HAY CAP CO., Sawyerville, P. Q. 331-c-o

**\$2.00**

per acre will buy a few farms within six miles of the great

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shipping town of

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Other choice properties in town and vicinity cheap and on easy terms. Correspond with

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Real Estate, Loan and Collecting Agency, Sask. Ave., Portage la Prairie, P. O. Box 133. 42-y-om

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near Gainsboro, Carnduff, Oxbow, Estevan. Having resided for ten years in the Souris district, and being thoroughly acquainted therewith as a practical farmer, I am in a position to locate farms for parties who wish to take up homesteads, and will furnish full instructions of how they may be obtained and save all travelling expenses. Improved and unimproved farms also for sale.—J. W. Connell, Carnduff, Man. 41-y-om

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Scotch Glazed Drain Pipes, Chimney Tops, Vent Linings, Flue Covers, Fire Bricks, Fire Clay, Portland Cement, Roman Cement, Canada Cement, Water Lime, Whiting, Plaster of Paris, Borax, China Clay, etc., etc.

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**SOFA, - CHAIR - AND - BED - SPRINGS**  
A LARGE STOCK ALWAYS ON HAND.  
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the wheels for Canadians. Light, Strong, unbreakable. Unexcelled for easy running qualities. Manufactured by the Wanderer Cycle Company, 22 and 24 Lombard St., Toronto. Send for Catalogue. 328-f-om

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**MAKE MONEY**  
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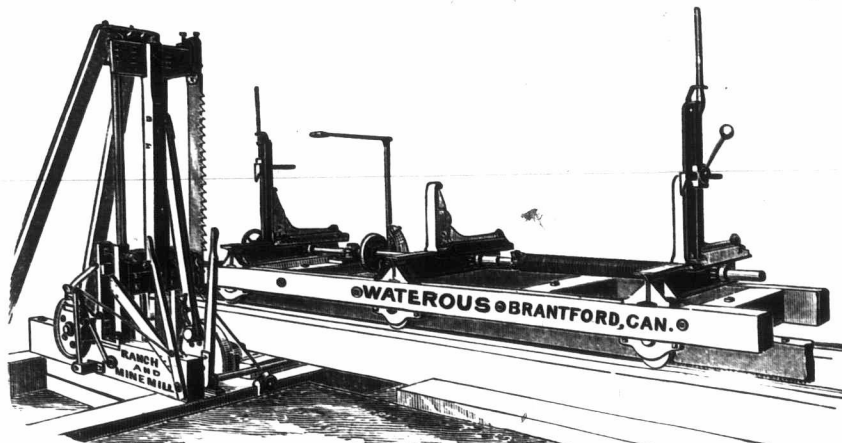
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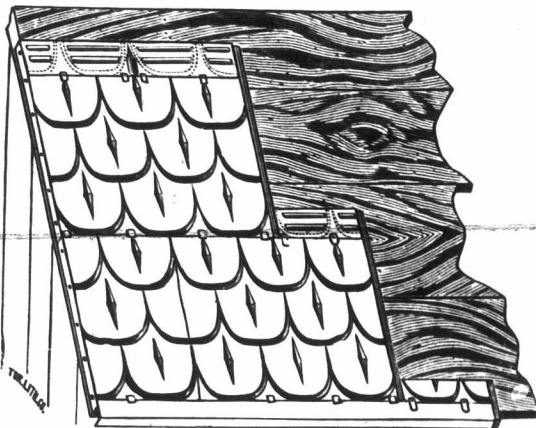
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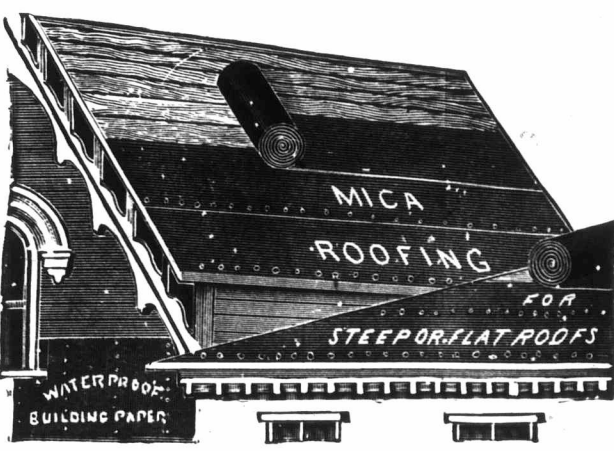
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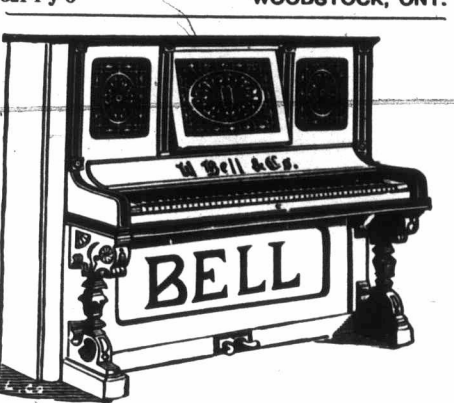
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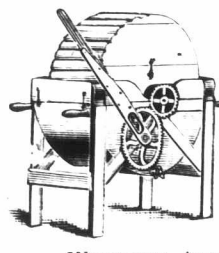
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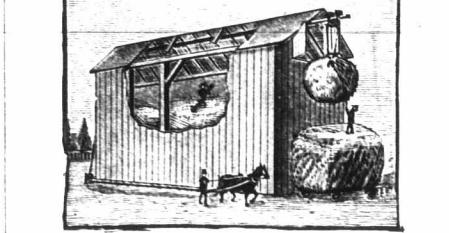
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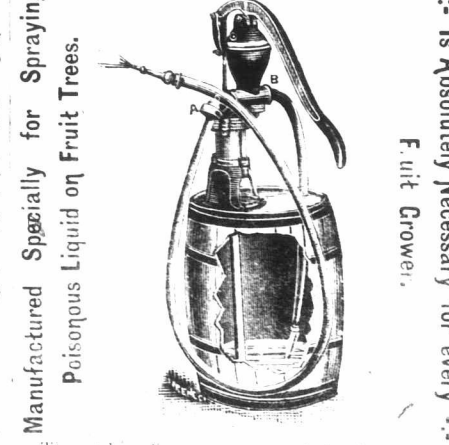
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