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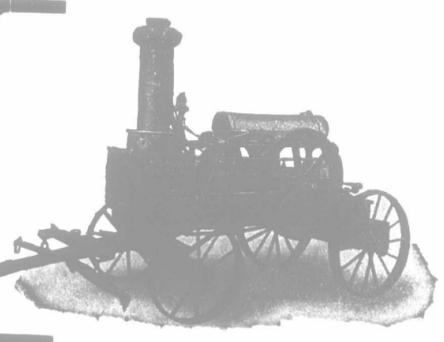
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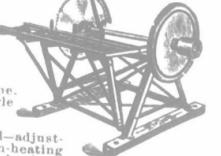
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The Farmer's Advocate

and Home Magazine

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Established 1866.

VOL. XLI.

LONDON, ONT., AND WINNIPEG, MAN., JANUARY 4, 1906.

No. 693

EDITORIAL.

"I Am Resolved What to Do."

It is with a measure of sadness that we bid good-bye to the year 1905. Most of us would gladly have had it linger a little longer. It has been a grand, good year, but with the certainty and swiftness of other years of the past, it is gone, and is now numbered with them. In 1906 we face again the new and unknown, and we may be excused if, at such a time, retrospect, introspect and prospect fill our minds, and in the emotion they induce, get somewhat mingled together and blurred. While thankfulness for the good the past year brought us wells up, we can distinctly see, on looking back and looking within, that we have lessened the measure of the mercies received by our own negligence, ignorance and weakness of purpose. The cry of past generations and our own cry in past new years has been, we must, we must do better. Let our resolves for this year of grace be more thoughtfully considered and more patiently and determinedly carried out than heretofore, and, whatever may come, this will be a better year to us than any that has gone before.

Moral questions which affect character and destiny, of course, should have first place in our plans for the future; but as farmers, whether of Canada or anywhere else, we have our farm operations to carry on, and it becomes us to reflect on past mistakes and successes in our work, and to determine that we shall profit by our experience, and in the coming year be better farmers than ever we have been before.

Let us take better care of the stock. Waste-fulness and niggardliness in feeding are both unprofitable. Many a bushel of good grain has, by being too lavishly fed, been thrown away; and, on the other hand, and much more frequently, many an animal has "eaten its head off" because it did not get enough of anything else to keep it growing, gaining or producing. A knowledge of the composition and effects of foods will greatly help us to feed without waste and to profit, but nothing that we may know or learn will amount to much without individual watchfulness and interest. Flesh and size are not all that should be looked to, especially in the case of young stock, but vigor of constitution and health should be promoted by exercise, ventilation and sunlight, in addition to abundant, wholesome food.

The resolve of every dairyman might well be, "I have done with guesswork. From this time I will know what my cows, each one, are doing." Following closely after this comes the weeding out of profitable or small-profit cows, the pruning process, without which the exact knowledge obtained by test and scales is of no practical benefit. Occasionally it requires some resolution to carry into effect what seems wise, but do not let us deceive ourselves into thinking that we are kind-hearted in sparing a worthless animal, when the trouble is indolence. The process of weeding out the poorest might well be applied to all classes of farm stock, down to the poultry. Many a small, well-selected flock of chickens gives greater returns at half the outlay than others twice the size. Let us cut out once and for all the use of scrub sires. To use such is to perpetuate the undesirable—the kind we ought to get rid of.

That low-lying piece of ground which last Spring delayed the seeding of a whole field for more than a week, and in that way lessened materially the yield of grain per acre, and on which the crop is seldom worth much, must be reclaimed by plowing. We will do it this season before work begins, making all preparations in good time. It will then be the best land in the field,

and the first to be ready for working." A good resolution, indeed. We commend, also, to our readers the following, the general adoption of which would, we believe, be good for the farmer himself, for the country, and for the world:

"I have noticed how weeds are increasing, and how they lessen yield and increase work, and I am determined to sow only clean seed. I have quite a few patches of noxious weeds as it is, but they shall not spread if I can help it; and I can, and I will go further, and enter on a war of extermination. What others have done I can do."

"I cannot make a seed to grow, nor have I any influence over the weather, but I can prepare the seed-bed carefully, and, by thorough tillage of cultivated crops, increase largely the annual returns from the soil, and I will."

"Discouraged, until this season, by the returns, apple culture has been neglected, but I cannot afford to be without a sufficient supply for home use, nor shall I again be so neglectful of the possibilities of profit in the orchard. Spraying may be disagreeable work, but I will do it, for it pays. Pears also, and plums, cherries and small fruits, which are so delicious, and of which so many farms are bare, shall be planted as needed, so that the supply may be kept up."

"Realizing more and more the value of manure, I shall take pains to apply it carefully and to prevent its waste in either liquid or gaseous form. To supplement manure as a fertilizing agent, clover shall be grown largely, as its value for such a purpose has of late years been repeatedly proven."

"These fellows that use their brains seem, somehow, to get the start of the others, and I am going to depend more on my own thinking than I have done, while, at the same time, be more open to receive hints from other sources. I will think more and think ahead, and aim at producing only THE BEST of everything, and in doing so, if I find out something worth knowing, I will make it public through the 'Farmer's Advocate,' that others may know it, too."

For Both Sexes.—"Confessing to failure in the past, I shall in future strive more to make the farm home attractive by trees, lawns, vegetable garden, general tidiness, paint, papers, books, music, sprightly and intelligent conversation, etc."

"My thoughts and interest shall not be limited to my farm and family—for that were, indeed, a poor way to live—but whatever is for the welfare of the country generally shall have my support and co-operation."

"I shall seek so to conduct myself that the profession of tilling the soil shall be raised to its proper place in general estimation, as conducive to thrift, honesty, pure living and intelligence."

These suggestions we leave to our kind readers, with the hope that the hints given may be far and away exceeded, and wishing for one and all a HAPPY, GOOD NEW YEAR.

Let us never forget that the cultivation of the earth is the most important labor of man. Man may be civilized in some degree without great progress in manufactures and with little commerce with his distant neighbors, but without the cultivation of the earth he is, in all countries, a savage. Until he gives up the chase and fixes himself in some place, and seeks a living from the earth, he is a roaming barbarian. When tillage begins other arts follow. The farmers, therefore, are the founders of civilization.—[Daniel Webster.

A Forward Policy at Guelph.

The multiplication of agricultural colleges in Canada, by the establishment of one now in operation at Truro, N. S., another expected to commence its work at Winnipeg next fall, and still another planned on a most elaborate scale, in course of erection at St. Anne de Bellevue, Que., should serve as the only stimulus necessary to induce a vigorous forward policy in the mother of these institutions, at Guelph, Ont., which, with the prestige it has attained, should spare no effort to maintain its position as the foremost agricultural university of America. To this end, it seems to us, a little introspection is in order just now, to determine whether there are any departments which need strengthening or more elaborate equipment. There is, to our mind, the need of more attention to horse-breeding and horse-judging. That some efficient work in the latter branch has been done, is evident from the high standing of the O. A. C. students at the Chicago International, where, among six American college teams, the Canadian boys who captured the trophy in cattle, sheep and swine, stood a good second in judging horses. At the same time, it is no secret that what has been done was accomplished in the face of difficulties, and, moreover, the competing team, drawn from the fourth year, during preparation was accorded privileges to visit various herds and studs, which the other students are deprived of, and the fact that they have done well is no argument that they are incapable of doing better. The truth is that, while male and female representatives of the leading breeds of cattle, sheep, swine and poultry are kept on the College farm for breeding, experimental and class-room purposes, there is not a single stallion, nor any mares or geldings, except those kept for working and driving purposes. The instructor in horse-judging, Dr. J. H. Reed, usually supplies some light horses from his own stables for the students to score and judge, but for the most part, the numbers and types of horses available to illustrate the several breeds and classes of horses are quite inadequate, one of the greatest drawbacks being the total lack of entire males. In a country where the horse is universally employed, where conditions as to inhabitants and climatic and soil conditions are so favorable to the development of an export-horse industry, where our own needs are so great, and where, of all places, on account of the winters of our northern climate, the horseless age is a chimera, it is astonishing that the matters of horse-breeding, horse-judging, and experimentation with this indispensable class of stock should have been so long neglected at this center of live-stock and agricultural research, and it is to be hoped the lack will be promptly supplied by the judicious purchase of males and females of the leading breeds, to be kept on the farm as cattle and other stock are now kept. With this innovation, we believe, might very well go an increased amount of time spent by the students in judging horses and studying horse-breeding problems. As indicative of the recognition of the importance of horse-breeding problems, we find the National Government of the United States inaugurating at and in conjunction with the Colorado Experiment Station an extended demonstration in the production of the Coach horse, as described recently in the "Farmer's Advocate." We know of nothing better calculated to increase the attendance of the O. A. C., or likely to be fraught with more benefit to the students and to the Province generally, than the inauguration of a strong, up-to-date horse department.

Very properly, the College is paying increased attention to forestry. The efforts will well re-

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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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JOHN WELD, MANAGER.

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It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.

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pay the Province. Statements have been given out that the Provincial Government purpose establishing a school of forestry, and hints dropped that its location would be in Toronto, in connection with the Provincial University—a very sure way to invite its failure. To get the right stamp of student material for future foresters and ensure success, it should be planted at the O. A. C.

There are other branches, also, that deserve attention. There is a feeling that the horticultural department is in need of more energetic administration, more thorough and comprehensive work in research, and improved instruction methods. Good work has been done, we believe, especially in vegetable gardening. The climate is, admittedly, a handicap in fruit culture, but still, considering the future possibilities of horticulture in the Province, we cannot afford to lie on our oars: every branch of the College should be pulsating with the present-day energy of Canadian growth and progress. There are other departments which have done and are doing good work, but which would be all the better for a little dynamiting. The stress of competition should be anticipated, not awaited.

We believe that the minister, Hon. Mr. Monteith, can count on the backing of the agricultural community in providing for a policy of expansion and improvement in the Guelph Institution.

There is a tendency in some quarters, it seems, to take things a trifle easy. Recreation is all right, and no one earns it better than the man who is carrying on pedagogic or investigative work, but we confess we would like to see a little more active earnestness in some quarters around the institution, and a little more of that spirit of intendment which binds a man to his work. Lawn tennis and football are all right enough, but they will never solve the problems of agriculture, and we have occasionally noted that, in proportion as a man's interest becomes focussed on the lawn and the playground, his value to the institution and to the country declines. The present moment at the O. A. C. is one for the dynamics of action.

"Fair Gaspin' for the F. A."

Dear Mr. Editor:

I have received the "Farmer's Advocate" for two years now, and I am very highly pleased with the information therein. All my friends, vots, and farmers, get a read of it, and as for myself, "Weel, I'm jist aye fair gaspin' to get a read o' it as soon as the postie fetches it. Noo, I want it anither year yet, sae you'll fin' the tocher enclosed, tae the amount o' sax shillings an' thripence."

GEORGE JACKSON.

Woodhead Farm, Garnkirk, Scotland.
Dec. 10, 1905.

HORSES.

An Act to Protect Horse-breeders of the Province of Manitoba.

We print below a copy of the essential clauses of a "Horse-breeders' Act," prepared by the Secretary and Executive of the Horse-breeders' Association of Manitoba, to take the place of the old Horse-breeders' Lien Act. It is proposed to present the revised Act to the Manitoba Legislature this winter for adoption, and it may in all probability be expected to become law in that Province. It embodies quite largely the Territorial Ordinance, which covers the same ground, and which has worked very satisfactorily. The proposed Act will be of interest to horse-breeders generally:

REGISTRATION OF STALLIONS.

3. Every person, firm or company, standing or travelling any stallion for profit or gain in Manitoba shall cause the name, description and pedigree of such stallion to be enrolled in the Department, and shall procure a certificate of such enrollment as hereafter provided.

4. Such owner, when the stallion is pure-bred, shall pay to the said Department for such enrollment and certificate the sum of two dollars; provided, that in the case of a sale or transfer of a stallion once so enrolled, the new owner, upon filing proof of such sale or transfer to him, and, if required, surrendering the original certificate, shall be entitled to a new certificate of enrollment upon payment of the sum of one dollar.

5. In order to obtain the Department's endorsement of soundness of the license certificate herein provided for, the owner of such pure-bred stallion shall make oath before a notary public that such stallion is, to the best of his knowledge, free from hereditary or transmissible unsoundness or disease, or in lieu thereof may file a certificate of freedom from hereditary disease or unsoundness, signed by a duly qualified veterinarian licensed in Manitoba, and shall forward this affidavit, or veterinarian's certificate, together with the other necessary papers relating to his breeding and ownership, to the Department.

6. The following diseases are considered hereditary unsoundness, disqualifying a stallion for breeding purposes: Bone spavin, cataract, contraction of the feet, curb, navicular disease, periodic ophthalmia, side-bones, ringbone, roaring, thick wind or whistling, bony exostoses, splints, etc.

7. In case of a stallion not being able to qualify for the Department's endorsement of stallions thus provided for, such endorsement shall be scored out on each and every certificate; provided always that such endorsement shall apply for one year only from the date of issue.

8. The owner of any stallion shall post up and keep affixed during the whole season, copies of the certificate of such stallion issued under the preceding section, in a conspicuous place, both within and upon the outside of the main door leading into every stable or building where the said stallion stands regularly for public service.

9. The certificate issued for a pure-bred stallion, registered in a studbook approved by the Department, shall be in Form A in the schedule hereto.

10. The certificate issued for a stallion whose sire and dam are pure-bred but not of the same breed shall be in Form B in the schedule hereto.

11. The certificate issued for a stallion that is not pure-bred shall be in Form C in the schedule hereto.

12. Every bill, poster or advertisement issued by the owner of any stallion enrolled under this Act, or used by him when advertising such stallion, shall contain a copy of its certificate of enrollment.

13. The production of any bill, poster or other printed or written matter advertising any stallion for public service shall be prima facie evidence that such bill, poster or other advertising material was used to advertise the stallion named and described therein by or with the consent of the owner or owners of the said stallion.

LIENS FOR SERVICES.

14. The owner of any stallion holding a certificate of enrollment for such stallion under Section 9 of this Act, or his agent, may file in the office of the clerk of the County Court of the judicial division in which the owner or person in charge of any mare upon which such stallion performs service resides, within 18 months after such service has been performed, a statutory declaration, setting forth:

- The amount of service fee.
- That the same is unpaid.
- The fact of service.
- A reasonable description of the mare.
- The name and residence of the owner of such mare.
- The County Court clerk shall file the said declaration upon the receipt of a fee of ten cents.

15. The owner of such stallion, upon filing such declaration, and complying with the provisions of this Act, shall have a lien to the amount of the said service fee and costs, as hereinafter provided, upon the colt or filly, the offspring of any such stallion from the service in respect of which the said declaration is filed, which lien shall take and have priority over any and all writs of execution, chattel mortgages, bills of sale, liens, claims and incumbrances whatever.

ENFORCEMENT OF LIEN.

16. If payment of the service fee is not made before the first day of January in the year following the year in which the colt or filly is born, the owner of the said stallion, or his duly appointed agent, may, at any time before the first day of May following, take possession of the colt or filly upon which he has such lien as aforesaid, wherever the same may be found, and may proceed to sell the same by public auction, after giving the person in whose possession the said colt or filly was when taken ten days' notice in writing of such intention to sell, which notice may be effectually given to such person by delivering the same to him personally, or by posting the notice up on the door of such person's last known place of residence in Manitoba.

17. The proceeds of such sale shall be applied, first, in payment of the reasonable expenses of the taking of possession, giving of notice and conduct of sale, not in all in any one case exceeding ten dollars; next, in payment of the said service fee; and the balance shall be paid, on demand by the owner of the stallion, to the person from whose possession such colt or filly was taken.

18. Violation of any of the provisions of this Act shall be an offence for which the offender shall be liable on summary conviction to a penalty not exceeding \$25.

SCHEDULE.

Form A.

Department of Agriculture for Manitoba, Canada.
Certificate of pure-bred stallion No.

The pedigree of the stallion, (Name)
described as follows: (color)
foaled in the year , has been examined in the Department, and I hereby certify that the stallion is pure-bred and is registered No. in Vol. of the Studbook, which is approved by the Department.

The owner of the above pure-bred stallion having complied with the requirements of Section 5 of this Act, the Department certifies the said horse to be free from hereditary disease, and therefore considers the horse sound at date of issue of this certificate.

Minister of Agriculture.

Form B.

Department of Agriculture for Manitoba, Canada.
Certificate of Cross-bred stallion No.

The breeding of the stallion (Name)
described as follows: (color)
foaled in the year , has been examined in the Department, and it is found that his sire is registered in the and his dam is the Such being the case, the said stallion is not pure-bred, nor eligible for registration in any studbook approved by the Department.

Minister of Agriculture.

Form C.

Department of Agriculture for Manitoba, Canada.
Certificate of Grade stallion No.

The breeding of the stallion (Name)
described as follows: (color)
foaled in the year , has been examined in the Department, and it is found that the said stallion is not pure-bred nor eligible for registration in any studbook approved by the Department.

Minister of Agriculture.

Care of Colts After Weaning.

To the Editor "Farmer's Advocate":

To be successful in horse-raising we must pay special attention to the care of the young ones. After the foal is separated from the dam it should be allowed to run in a loose, comfortable box stall, with always plenty of bedding. Where more than one are kept together, it is important that arrangements be made for tying them while grain is being fed, and turning loose as soon as they are through. Good hay may be fed liberally, but care should be taken not to overfeed with grain. Plenty of outdoor exercise is essential to the health and growth of the young animals. After breakfast turn out into a small field or yard where plenty of water is provided. Let in again for dinner, then turn out again till evening. Repeat this every day. Caring for them in this way will enable the feeder to feed more liberally without danger of harm to the young animals.

Boiled oats and bran, with a teaspoonful of salt, fed at night, or, as a substitute, carrots or potatoes in small quantities, will keep them in growing condition. Grooming is very often neglected in the case of young stock, but it is none the less essential to thriftiness. Colts are more liable to become lousy than working horses. They will never thrive if afflicted, no matter how fed. A little sulphur given in feed, care, too, being taken not to let them get wet, will prove beneficial.

Simcoe Co., Ont.

LIVE STOCK.

Want an Up-to-date Veterinary College.

The annual meeting of the Ontario Veterinary Medical Association was held in the Veterinary College, Toronto, on Friday, December 22nd, 1905. Five new members were received. Dr. C. H. Elliott, Chairman of the Veterinary Organization Committee, submitted the report of that Committee, in which he outlined their work, also the proposition which they had submitted to the Hon. Nelson Monteith, Minister of Agriculture, as follows:

(1) That this Committee is of opinion that, in view of the large live-stock interests of Ontario, not to speak of the rest of the Dominion, and of the importance to stock owners of the maintenance for the veterinary profession of a standard of education equally high in proportion as that demanded for the other branches of learning in this Province, the time has now arrived for the Provincial Government to take control of veterinary education, and to assume at least part of the expenditure required to put it on a satisfactory basis.

(2) That this Committee would, therefore, respectfully recommend to the Provincial Government the advisability of establishing in connection with the University of Toronto a Faculty of Comparative Medicine, to be endowed from the funds of the Province to such extent as may be necessary, in conjunction with the fees chargeable to students, to carry on the work in a manner creditable to the Province, and on a standard equal to that obtaining elsewhere in British possessions.

(3) That the work of establishing and maintaining the Ontario Veterinary College, an institution which has been of the greatest benefit to the live-stock interests, not only of Ontario, but of the whole North American continent, having been hitherto carried on by the sole efforts and at the expense of one individual, Professor Andrew Smith, this Committee is of opinion that in the making of any new arrangements that gentleman's interests should be carefully conserved, and would suggest that he should be appointed Dean of the above proposed Faculty of Comparative Medicine; and, further, that the premises owned and occupied by him as the Ontario Veterinary College should be utilized by the University in the teaching of Comparative Medicine.

(4) That in the event of the suggestions contained in the foregoing clauses meeting with the approval of the Members of the Provincial Government, this Committee would be willing, as representing the veterinary professions of Ontario, to render any required assistance in arranging details, and especially in outlining the work of the proposed new faculty as regards matriculation, curriculum and final examination.

(5) That in order to put the recommendations outlined above into effect, it will be necessary to place the whole matter of veterinary education in Ontario under legislative control, and to that end this Committee would respectfully suggest the introduction by the Government of a measure providing for the maintenance of a standard of veterinary education in accordance therewith. In the preparation of this measure, also, this Committee would be willing to assist.

(Signed)
 CHAS. ELLIOTT, Chairman.
 C. HEATH SWEETAPPLE, Secretary.
 Ontario Organization Committee.
 W. LAWSON,
 J. F. QUINN,
 J. H. TENNENT,
 J. G. RUTHERFORD.

Professor A. Smith accompanied the delegation, and was strongly in favor of the proposed change. The Minister expressed himself as being in full sympathy

with the spirit of the memorandum, especially with the view of the fact. The delegates did not press upon too high a standard of matriculation, it being generally conceded that the examination for high school entrance would be sufficient.

Dr. Elliott's report was received, and hope expressed that the Committee would do all in their power to obtain that which they had asked for.

Valuable papers were read and discussed by Dr. Bowlby, of Tweed, on Phymosis and Paraphymosis; Dr. Short, of Erin, on Epizootic Allulitis; Dr. Duncombe, of Waterford, on Torsion of the Womb; Dr. Babe, of Shelburne, on Rupture of Stomach and Diaphragm; Dr. L. A. Wilson, of Aurora, on Lobelia Poisoning.

An interesting discussion took place about holding another summer meeting. It was decided to hold one next summer at Guelph, date and all arrangements being left in hands of executive and

Hutton, Welland; Dr. Davidson, Guelph; Dr. Babe, Shelburne; Dr. Tancock, London.

Delegates to Industrial Exhibition.—Prof. Smith, alternate, Col. Lloyd.

Delegates to Western Fair.—Drs. O'Neil and W. J. Wilson.

This brought to a close a very successful meeting.

Indigestion in Pigs.

Many of the ailments among pigs, says a writer in an English exchange, especially those that are being forced in their feeding, are brought about in the first place by indigestion, often the result of too much grain or corn meal in the diet, rendering it too heating and heavy. When off their food pigs come to a standstill as regards the process of fattening, because what little they eat does them no good. The food that fulfils the end desired is that which is thoroughly and properly assimilated; nothing else counts.

When a falling off in the appetite is noticed, steps should be taken at once to set matters right. Of course, the better plan would be to endeavor to prevent this sickness of the system occurring, but this cannot always be managed, although carefulness and attention will do much in warding it off. Pigs half way on in the fattening stage, or a little later — i. e., when the owner is weighing the bacon in his mind's eye — are mostly the sufferers. It is a very disappointing thing, indeed, to have a fine weighty bacon pig succumb through being "staked" — i. e., stoppage of the bowels — or "struck" — apoplexy.

The fat pig that is in a perfectly healthy condition will eat to repletion, no more, and be benefited thereby. It is a wrongly-chosen diet, with unsuitable ingredients, that causes mischief. Close confinement and heavy feeding on grain and meal, with an entire exclusion of vegetables from the rations, makes a great tax on the system and digestive powers. Also continuous feeding on one kind of food, or two at most, is not to be recommended, as it is liable to "stall" or sicken, and surfeit the animals; a mixed diet is by far the best, and one that includes some vegetable. Potatoes and artichokes are the cheapest and most suitable. They help the digestive apparatus and assist in the maintenance of health. A combination of three or even four good meals in correct proportion, forming a mixed diet, furthers the fattening process and keeps pigs in far better order than does one composed almost exclusively of wheat or corn meal. If a pig is being fed on the right kind of food his skin will be smooth and clear, not rough and blotched with red patches.



Burn Bellona (39996).

Pure-bred Aberdeen-Angus heifer; age, 2 years 10 months; weight, 1,821. Winner of grand championship as best beef animal, any breed or sex, Smithfield, England, Show, 1905.

Guelph veterinarians. The following practitioners agreed to perform the following operations:

Laryngotomy, by Dr. Mole, of Toronto; Castrating a Cryptorchid, by Dr. Quinn, Brampton, and Dr. Wende, Buffalo; Ovariotomy in Bitch, by Dr. Davidson, Guelph; Castration Standing, by Dr. Duncombe, Waterford.

The secretary was instructed to write and endeavor to have papers by Dr. Rudd, of Woodstock, on Castrating; Dr. Buchanan, of Florence, on Ovariotomy in the Pig and Heifer; Dr. W. J. R. Fowler, of Toronto, on some operation yet to be decided upon.

The following officers were elected for the ensuing year:

President.—Dr. L. A. Wilson, Aurora.
 1st Vice-President.—Dr. J. Orr, Stratford.
 2nd Vice-President.—Dr. Duncombe, Waterford.
 Sec.-Treas.—Dr. Sweetapple, Toronto.
 Ass't. Sec.—Dr. R. Barnes, London.
 Directors.—Dr. Nichols, Kingston; Dr. McFadyen, Collingwood; Dr. Brind, Woodstock; Dr.



Moss Side Laddie and Crimson Flower Belle.

Grand champion beef animal, first-prize pure-bred Shorthorn steer and heifer, and first-prize pair fat cattle, any age, breed, grade or cross, Ontario Winter Fair, 1905. Exhibited by James Rennie & Son, Blackwater, Ont.

es and breakings out. Irregularity in the times of feeding, resulting in the pigs getting greedily hungry, and, when their food comes, gorging themselves, sometimes brings on stoppage.

The plan of keeping a small heap of charcoal and ashes in a corner of the sty or yard is most advisable, and should always be followed.

The Four Great Beef Breeds.

IV.

SHORTHORNS.

This class of cattle was formerly known as the Durham breed, from the county in England in which it originated. The term Shorthorn was probably adopted to distinguish them from the Longhorn breed which prevailed in the same country early in the eighteenth century, and which is still preserved in its purity in England, although in very limited numbers and confined to few districts, while the Shorthorn has proved its right to the title "Cosmopolitan," having thriven and become popular in many countries and in all quarters of the world, owing largely to its dual-purpose character, the cows in its earlier history being generally good milkers as well as beef producers. The precise origin of the breed, as in the case of nearly all the other British breeds of cattle, is involved in much obscurity. It is but just to say here that for much of the information given in this article we are indebted to Sanders' excellent history of Shorthorn cattle, from which we freely quote.

The Romans, Saxons, Danes and Normans who conquered England, in turn brought cattle with them that were crossed on the native herds, and this, in part, accounts for the variety of these, while the modifying influences of climate, shelter and treatment doubtless had much to do with the origin of breeds. Thus it was that in the rich pastures of Durham and Yorkshire, and especially in the Valley of the River Tees, a comparatively large type of cattle existed several centuries ago—the ancestors of the modern Shorthorn. For a long time there were two independent strains of ancestry, the Teeswater and the Holderness, which were later blended through the indiscriminate crossing of their descendants. It is claimed that a Shorthorn type of cattle existed on the Yorkshire estates of Earls and Dukes of Northumberland in the sixteenth century. Between the years 1730 and 1780 many eminent breeders gave attention to the improvement of their cattle. Some of the bulls with English Herdbook numbers, appearing in the pedigrees of Shorthorns were born in the eighteenth century, the Studley Bull (620), for instance, one of the first great sires of the breed, having been calved in 1737. At this date it was not customary to preserve the name, or even a description of the cows from which sires in service were descended, the pedigree being traced through the bull line exclusively, and many of the most noted foundation sires were known by the names

of their breeder or owner, and so recorded, as, for example, James Brown's Red Bull (97), and William's Bull (51).

One of these foundation bulls was a yellow-red, with some white, and was bred by John Hunter, a brick-layer who kept one choice little cow, a good milker, and handsome, which ran in the lanes of the town of Hurworth, and was sold to George Snowden's Bull, also in Hurworth, the produce

being the bull Hubback, sold to a Mr. Fawcett living not far from Parlinton. Charles Colling, one of the principal early improvers of the breed, going into Darlington market weekly, noticed some excellent veal calves, and upon enquiry, learned that they were the progeny of a bull belonging to Mr. Fawcett, of Haughton Hill. This bull, then known as Fawcett's Bull, afterwards called Hubback, was at the time serving cows at a shilling each. Chas. Colling, on seeing the bull, was not particularly impressed with him, but later, his brother, Robert Colling, and his neighbor, Mr. Waistell, thought better of him, and bought him in April, 1873, for ten guineas (about \$50), when he was about seven years old, and used him in their herds one season. In the meantime, Chas. Colling, having changed his opinion of the merits of the bull, offered his owners eight guineas for him, and they sold him. Chas. Colling kept the bull two years, using them freely, and sold him in 1785, at ten years old, to a Mr. Hubback, who used him till he was fourteen years old. The bull had no name when Colling sold him, and he was then called Hubback's Bull. He was a small bull for a Shorthorn of that time, and his dam was small, but of fine symmetry, with a nice touch, and fine, long, mossy hair, all of which choice qualities Hubback took from her. As size was a meritorious point in Shorthorns at that time, it is probable the Collings discarded him for that lack more than any other. Yet, his reputation among the breeders was greater than that of any other bull of his time. It is said that his stock had

of his theory and practice, and in the following year bought in Darlington market a cow which he named Duchess that was the foundation dam of the noted family of that name that in the middle of last century became so popular that, at the dispersion of the Campbell herd, at New York Mills, in 1873, a cow was sold for \$40,600, two others for \$30,000 and \$35,000, respectively, and the whole herd of 109 head for an average of \$3,504. The original Duchess cow was described as a "massive, short-legged animal, of a beautiful yellow-red color, her breast near the ground, her back wide, and her handling quality superior."

In 1786 Chas. Colling purchased from Mr. Maynard, of Fryholme, for 28 guineas, the cow called Favourite, a roan, possessing the long horns of the old Teeswater type, and coming from a well-established tribe. The name of this cow was after changed by Mr. Colling to Lady Maynard, and she became the ancestress of several families and of bulls that practically created the improved Shorthorns. Robert Colling had, in the meantime, laid the foundation of a superior herd of Shorthorns, and is credited with judgment quite equal, if not superior, to that of his brother Charles, as evidenced in the purchase of Hubback, and there is no gainsaying the far-reaching influence of the blood of this bull in the improvement of the breed, some even crediting him with being the real fountain head of the breed. Thos. Bates, one of the most distinguished of those who followed the Collings, went so far as to say: "It was the opinion of good judges in my early days that had it not been for Hubback and his descendants, the old, valuable breed of Shorthorns would have been entirely lost, and that were Hubback's blood was wanting there was no real merit." We have dwelt upon the history and record of this bull, as we shall upon that of other noted sires of later date, because of the great importance which experience and observation has proved should be given to character in a bull, and especially to the handling quality of his skin and hair.

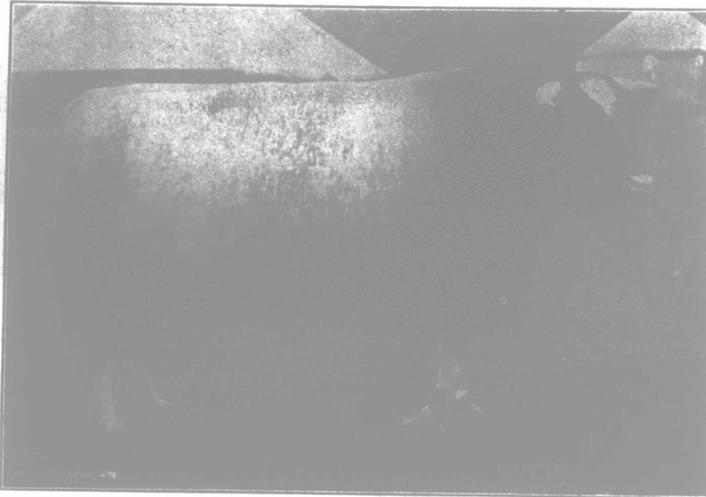
(To be continued.)

The Hog Question.

Allow me a little space in your paper regarding the present hog question. In a late issue of the "Farmer's Advocate," I noticed, when the Tariff Commission met in London, a deputation of farmers waited on that Commission, asking them to remove the duty off American hogs coming into Canada. I also noticed that Dr. Smale representing the Davies Packing Co., at Guelph, advocated the same thing. I can understand why the packing-houses would want the present duty removed, but why a deputation of farmers should talk such nonsense I fail to see. We all know that our bacon has a better reputation in the English market than the American product, which, owing to corn being their chief food, is soft. So, if our packing concerns cure the meat from these hogs and place it on the British market as Canadian, it will doubtless injure, in time, the sale of our bacon. Now, if the duty is removed and the bonding system continued, it should be branded American and sold as such. Dr. Smale said that sometimes they could not get enough hogs to keep their plants running. Let them pay a uniform price for hogs, so that farmers will know when they raise a bunch of hogs they will get a price that will pay them. The present condition of affairs are much like dealing in "stocks"—you never know when the market is going to be up or down. Those who have followed the trend of the British market the past few months know it has varied but very little, while the Toronto market has been up and down every three or four weeks. Wherever does the fault lie? It must be with the Canadian packers. Let packers pay a price that will enable the drovers to pay 6c. (or something near it) at country points the year round, and the packers will get all the hogs they can handle. I, for one, think it is high time something was done with the bonding system, as during the past seven months 50,000 live hogs have been bonded into Canada and killed here, on which the Government received 75 cents per hog of revenue (?). Oh, no; they received not one dollar. The present state of the hog business is not fair to the farmers of this country, and if we (the farmers) got half a show we would produce all the hogs our packers could handle.

GEO. DOWNEY.

Cardwell Co., Ont.
[Editor's Note.—The Tariff Commission were not asked for a removal of the duty on hogs, but were told that removing the duty on American pork would not affect the Canadian farmer prejudicially. We doubt the practicability of making a uniform year-round price for hogs. That would result in the market being flooded with hogs at the season when they could be most cheaply produced—summer or autumn—and the packer would not carry on business under such conditions.]



Alestair (78217.)

Shorthorn bull, calved in 1900; bred by Lord Lovat, Beaufort, Scotland; weight, 2,500 pounds.



Madeline.

Shorthorn heifer; age, 2 years 11 months; weight, 1,840 pounds; bred by and property of His Majesty the King, the Royal Farm, Windsor. Winner of the breed championship and reserve for the grand championship at Smithfield Fat-stock Show, 1905.

capacious chests, thick, mossy coats, mellow skins, with a great deal of fine flesh spread evenly all over the carcass, and his handling was superior to that of any other bull of his day, a quality which counts for very much in a sire to-day, as it evidently did in Hubback's time.

Charles Colling, who had heard of Bakewell and his wonderful success in the improvement of the breeds of Leicester sheep and Longhorn cattle, by in-and-in or close breeding, visited Dishley—the home of Robert Bakewell—made a careful study

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Cost of Raising Pigs.

The cost of raising pigs, said Prof. G. E. Day, of the Ontario Agricultural College, at one of the sessions of the Ontario Winter Fair, is one which has attracted a good deal of attention of late, and has been discussed at considerable length in certain agricultural papers. As it is a very important question, an attempt will be made to add a little to the sum of knowledge regarding the problem, by presenting and discussing a few figures from our experimental work.

Size of Litter.—The cost of producing young pigs depends largely upon the number in the litter, a small litter costing more per pig before weaning than a larger litter. In these calculations we wish to be on the safe side, and hence we are estimating only 6 pigs in a litter, or a total of 12 pigs per sow per year. This, we think, is a moderate estimate.

Valuation of a Sow.—A young grade sow about 8 months old can be bought at a very reasonable price, and after the farmer is through with her he can sell her for quite as much as he originally paid for her, provided she makes a reasonable growth, and is well cared for. For this reason, we are omitting the value of the sow from the calculation. We are assuming that the young sow has not been bred at the time of purchase.

Risk.—This is a factor which is very difficult to deal with, and because there are no means of arriving at a satisfactory basis for an estimate, and because the estimated number of pigs in a litter is rather below what may be reasonably expected, we are leaving the element of risk out of the calculation.

Cost of Maintenance of Sow.—This is a matter upon which there may be some controversy. We have figures representing the actual cost of feeding sows while suckling pigs, but the cost of maintaining sows between litters is rather difficult to arrive at, owing to the fact that pasture plays an important part in the maintenance, and many foods can be used that have very little market value. We think, however, we are making a liberal estimate when we place the cost of maintenance of a sow which is not suckling pigs at 75c. per month. Thus, if the sow raises two litters a year, and nurses each litter six weeks, it would leave about 9½ months of maintenance between litters, which, at 75c. per month, would amount to \$6.94.

Cost of Maintaining Sow and Young Pigs.—For this calculation we shall use five sows under experiment at the College. An accurate record was kept of what the sows and little pigs consumed before the pigs were weaned. The meal consumed by the sows was composed of bran, middlings and oats, and is valued at \$20.00 per ton. The sows nursed their pigs 43 days on an average, and the cost of the food consumed was as follows: Sow and litter No. 1, \$3.20; No. 2, \$3.18; No. 3, \$3.87; No. 4, \$3.79; No. 5, \$3.04. Total cost of five sows and their litters for 43 days, \$16.99, or an average of practically \$3.40 per sow.

Cost of Raising Young Pigs until Six Weeks Old.—Two of the five sows mentioned in the previous paragraph raised very small litters, and the five litters totalled only 32 young pigs, which, however, is a slightly higher average than the number of pigs to a litter upon which we decided to base our calculations, namely, six. We shall count the cost per pig, however, on the basis of 6 pigs per litter, which makes the cost a little higher than it really was. Assuming, therefore, that a sow will produce 12 pigs during a year (two litters), that the original cost of a young grade sow is offset by her value when through breeding, and neglecting the element of risk, we have the following items of cost entering into the raising of young pigs until six weeks old:

2 service fees, at \$1.00 each	\$ 2 00
9½ months' maintenance of sow, at 75c. per month	6 94
2 six weeks' periods of nursing, at \$3.40	6 80
Total cost of 12 pigs	\$15 74
Average cost of 1 pig	1 31

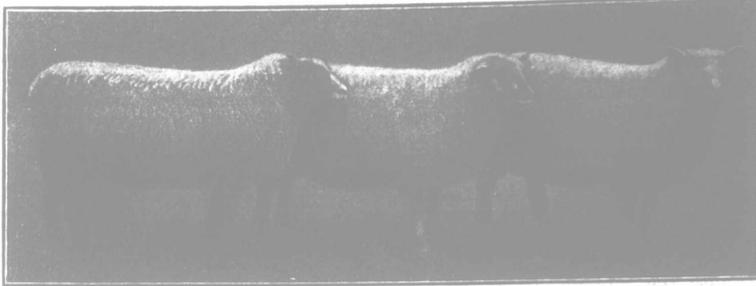
Cost of Finishing for Market.—Unfortunately, none of the young pigs mentioned above are yet ready for market, so that we shall refer to 30 pigs which were used in an experiment with blood meal, tankage and skim milk. These pigs were all purchased, and we have always found that pigs of our own raising give more satisfactory results than those we buy. Moreover, the nature of the experiment was such as to make the cost rather high on the average, though we have omitted one group which was fed exclusively upon meal as a check group. We think, therefore, that, by using these pigs in our calculation, we are making use of a rather extreme case of cost. If we assume that we raised these pigs, and the cost until six weeks old was \$1.31 each; that meal is worth \$20 per ton, blood meal \$55 per ton, tankage \$33 per ton, and skim milk 15c. per cwt., the financial statement for these 30 pigs would be as follows:

30 pigs, 6 weeks old, at \$1.31 each.....	\$ 39 30
Cost of food after weaning	201 57

Total cost **\$240 87**

Total weight of hogs	5,332 lbs.
Total cost per 100 lbs., nearly.....	\$ 4 52

On selling these hogs, therefore, whatever was received above \$4.52 per cwt., plus the manure, would represent the farmer's interest on capital and recompense for labor. If, however, these pigs were bought at \$2.50 each, the cost would be nearly \$5.20 per cwt. These figures show a striking advantage in favor of the farmer who breeds his own pigs.



Southdown Yearling Wethers.

Winners of grand championship over all breeds at Smithfield Club Show, 1905. The property of His Majesty the King, Sandringham.

As previously intimated, we think the figures above represent an extreme case, and below we offer some more encouraging figures.

Another Instance of Cost.—This case deals with 15 pure-bred Yorkshires, which were upon experiment, and were sold at our public sale. When we closed the experiment, on account of the sale, they weighed a small fraction over 149 pounds each. The cost of feeding these hogs, therefore, can be accurately estimated only until they reached the weight specified above. The cost of raising the pigs while on the sow was not ascertained, so that we shall use the figures obtained from the average of five litters, namely, \$1.31 per pig. The account against these pigs stands as follows:

15 pigs, 6 weeks old, at \$1.31.....	\$19 65
Cost of food after weaning	65 68

Total cost **\$85 33**

Weight of 15 pigs	2,238 lbs.
Cost per 100 lbs.	\$ 3 86



Berkshire Sow

Winner of first prize in class under six months, Ontario Winter Fair, Guelph, 1905. Exhibited by Douglas Thomson, Woodstock, Ont., and sold to Geo. Green, Fairview.

Of course, these pigs were not up to market weights, and the cost increases as the pig gains in weight. If we assume that it would cost 5 cents per pound to put another 40 pounds on each of these pigs, the total cost would become \$116.33, and their total weight would be 2,838 pounds, representing a cost of nearly \$4.10 per 100 pounds. This is certainly a much better showing than the one previously presented, and shows the possibilities of healthy, growthy pigs. It may be that this group of Yorkshires represent an extreme case of cheap production, in which case the normal cost per cwt. would be somewhere between \$4.10 and \$4.52.

It must be remembered that these figures are not regarded as conclusive, but are offered merely as a contribution towards present knowledge of the subject. Before the close of another year we hope to have considerably more data, which may modify the calculations contained herein.

THE FARM.

Agricultural Investigation and Education

The agricultural college, said President E. B. Voorhees, before the Association of Agricultural Colleges and Experiment Stations, at Washington, in November, is responsible for the education of the whole mass of farmers within the State. The report of the office of experiment stations shows that 57,909 students have been graduated from these institutions, or practically one for each of the 5,739,657 farmers in this country. Had all these been graduated from the agricultural courses and all engaged in farming, only one per cent. of the

farmers would have thus been influenced. The progress in agriculture has, therefore, been due to the inheritance of natural resources, of which there has been a woeful waste, rather than to scientific knowledge of farming. Other agencies than the college are at work, yet the farmers' institutes, with all their efficiency, reach only five per cent. of those living on farms, rarely reaching those who are most in need. This education of which we speak is as broad as

the land, because in an agricultural country the soil becomes the true capital stock of the people, and the development of that interest has, therefore, true fundamental and material significance. Our farm practice has been wasteful in the past, and unless we are constrained to check it we shall soon be confronted with the problem of feeding our people.

There is, I admit, no immediate danger of crop shortage, nor is there any danger of a dissemination of knowledge that will radically change farm practice. It is a common saying that farming depends more upon the individual than upon the conditions. If followed to a final conclusion it will be found that the cause was due to an education secured in some way. Take the question of labor. There is no reason why it should be more of a problem on the farm than elsewhere if economic conditions were fairly and evenly adjusted. Neither would there be ground for complaint concerning the values of farm produce if they were fixed by the law of supply and demand; but the fact remains that they are often fixed by those possessing exceptional opportunities by way of intelligence and capital.

When the college has attained its full usefulness as an educator, and we have come to recognize what sound education is in our secondary and elementary schools, there will be less call upon the stations for educational effort, and, consequently, more time for investigation.

The farmer does not see the value of prolonged investigation, but there must be investigation to balance all of our forces and provide agricultural teachers with proper and useful material. We daily witness large areas lying idle because we do not know what to do with them. We appreciate the importance of applying right kinds of plant food, yet we are unable to be of service in making available essential constituents. Stupendous losses of live stock occur annually because we have no remedy. Insects prey upon our plants and cause farmers to groan because we cannot suggest remedies.

I cite these facts not in a spirit of criticism, but rather that we may be incited to greater activity.

Limit the Length of Institute Meetings.

At this season, when many Farmers' Institute and similar meetings are being held, we would suggest to secretaries the desirability of limiting the duration of the meetings, with a view to curtailing the verbosity of some of the platformers, allowing more opportunity for discussion—the vital part of such meetings—and winding things up at a more convenient hour than is sometimes the case. Short, crisp meetings are the ideal, and when they come to be the rule in a locality they draw the largest crowd and do the most good. As a means of securing such we would suggest the observance of a few rules:

1. Start at the hour advertised, whether there are more than half a dozen on hand or not.

2. Limit the time of each speaker, giving him five or ten minutes' notice before his time is up. This is the only way to handle some of the windy fellows.

3. Limit the discussion on each subject. This has the effect of getting them down to their nut more promptly.

4. Close the meeting in ample time for the people to get home to supper.

Most people want to get their money's worth, and hear all there is to be heard, and they ought to be able to do it without inconveniencing the women folks at home.

Farmers' organizations should take a lesson from the bad example of Parliament, and shut

off the wind by shortening the sessions. The man who is allowed to speak after 5 o'clock p. m. should have something very important to say.

One other point we might add is: follow the programme advertised. We remember one meeting where half a dozen people who had come long distances to hear a talk on silos, went away disappointed because the local president, who didn't believe in silos, switched the speaker off onto an alternative subject. This sort of thing is bad policy; give the people what you promise every time.

The Credit System.

To the Editor "Farmer's Advocate":

Re your most timely article on "Buying on Credit," I want to say "thank you" for bringing so forcibly to our notice what is, I think, the most formidable leak in the whole round of farming operations. How many thousands of Ontario farmers have had their brains racked, their energies weakened, their business curtailed and their achievements lessened by the continual struggle to meet the maturing implement note which, in a great many cases was a debt that would not have been incurred if cash had been the basis. However, farmers, for the most part, do not buy on credit for the reason of inability to pay cash, but largely because the lure of long-deferred payment is dangled before them by the shrewd-witted agent. I am satisfied that millions of dollars' worth of farm implements that were wholly unnecessary, or at least not immediately so, have been bought and the inevitable maturing note given therefor, for no other reason but that they, the buyers, were first approached by the salesman, and finally succumbed to the far-off vision of long-deferred payment. The cure will not be easy, and you need not count on the co-operation of the manufacturers. Why? The half of them might shut up their shops, because there would be a tremendously diminished demand for their goods, for, if it were not for the agent and the long-credit system, not one-half of the present implement output would be needed. But there is a cure. For years I have made it a practice not to allow an agent as an agent on my place. I know when I want anything and what I want, and when I'm ready go and buy it. Preach that doctrine; it's the remedy, and the only one.

Simcoe Co.

WM. PRATT.

How May Our Institute Meetings be Improved?

Farmers' Institutes are now on, and though the dates are yet somewhat distant, it might be well to discuss here and now some methods by which we might stimulate a greater interest in these useful meetings.

I believe that the surest method of arousing local interest is the employment of local men. Let the management get a number of the most progressive farmers of the community to prepare essays or addresses on subjects of local agricultural importance, and let there be plenty of time allowed on the programme for the discussion after the speeches or essays are delivered, for the discussions are invariably the most valuable part. Let just as much weight attach to these papers as to the regular institute lectures, and little difficulty will be met in increasing the attendance at the meetings. Such procedure would not only give opportunities to local men, but often they are capable of discussing local subjects more intelligently than experts from a distance.

Or if it is found impossible to enlist the services of local men, it is an excellent plan to offer prizes for essays, these essays to be read at a certain hour during the meeting and thoroughly discussed. The subject of these essays should be assigned by the officers, their length should be limited to, say, fifteen minutes, and they should occupy a definite position on the programme. This plan has been followed with much success in some Eastern Ontario Institutes, the contestants being limited to boys under eighteen years of age, and we think it might be advantageously introduced elsewhere. The subject of the essays should be carefully chosen, and should be of particular interest in the neighborhood. If beef production is a specialty of the district, then some topic pertaining to this subject should be selected; if dairying is extensively practiced, topics related to it would be in order; or if mixed farming is followed, subjects on general agriculture may be introduced.

Then, too, local institutes should specialize. Every district is adapted to some particular phase of agriculture. It may be so situated in respect to climate and market that poultry raising would be a profitable industry. It may be peculiarly adapted to the production of beef; it may be a dairy section; or its soil may be fitted to the growth of some particular crop. Whatever its special capabilities may be, the officers of the local institute should determine, and having reached a definite determination they should provide their meetings with the very best lecturers on this particular branch that may be obtained.

This is an age of specialties and of co-operations. It is an age when whole communities must co-operate and specialize in one particular thing if they are to produce that thing most economically, and dispose of it to the best advantage. A breeder of pure-bred stock,

in a section where practically every farmer is a breeder of that particular breed, can find readier sale for his animals because his neighbors are engaged in the same business. Buyers can obtain a choicer lot of stock at less expense, and the whole trade is benefited by the fact that that whole community is making a specialty of one particular thing, and have learned to produce that one thing better than the average. It is much better to breed one class of horses, cattle, sheep and swine in a district than to have a dozen different sorts. Because whole communities have specialized, the live stock of Great Britain has become famous. In Herefordshire you will find little else but Herefords; in Shropshire, little else but Shrops; in the Scottish dairy districts, little else but Ayrshires, and so on throughout Great Britain. The benefits of this plan are many.

In this district we are so situated that the raising of draft horses might be made a more remunerative business than it is at present. We have the right class of mares, and if more farmers had an intelligent understanding of the demands of the present-day heavy-horse market, and were taught to mate their mares with sires that would produce the proper type, they would be able to raise animals worth from a quarter to half as much again as those now raised. If they knew definitely just what is desired in heavy horses they could produce them more uniformly. The function of the institute and the duty of its officers is to provide for districts such as this men who are capable of teaching and of demonstrating exactly what a high class, modern, marketable heavy horse should be. The meetings should be made just as practical as the local conditions will permit. The lecturers should be men of initiative, men who are capable of appreciating and summing up local conditions, and of determining just what particular stamp of sire should be used, and would produce the best results. And so on, whatever particular phase of agriculture the community was adapted to. We believe in this district specialism, and we believe that the institutes should, in as great a measure as possible, foster and direct its development.

Lambton Co.

H. B. S.

Received the Harmonica in good condition that you sent me for obtaining a new subscriber to the "Farmer's Advocate," for which please accept my thanks. It is a very nice one, and the little folks appreciate it very highly. Wishing you all a prosperous New Year.

Carleton Place, Que.

JOHN RITCHIE, Jr.

THE DAIRY.

Re Moisture and Overrun in Butter-making.

If the cream that has been received be sweet, of clean flavor, and properly ripened, and then allowed, through ignorance or carelessness, to be overchurned, or the buttermilk drawn before it has properly gathered, this will mean a great deal of loss in the yield and quality of butter. Instead of grading high, it may be very low. The object of churning is to cause the minute fat globules to break through the caseous coating that surrounds them and unite, forming larger ones, until the desired size is obtained. If small, or about the size of wheat, the buttermilk is more readily removed, and each granule surrounded by a thin film of water when washed, so that the greater number of granules the more moisture the mass will contain. If the right temperatures are observed in churning, to have the granules the right size and shape, the temperature and amount of wash-water such that will give us a good even quality day after day, we will have accomplished a good deal in the art of butter-making.

During the Dairy School term of 1904-05, at Strathroy, we paid special attention to this matter, trying to follow instructions given by Prof. McKay, of Ames, Iowa, which revealed to us in our everyday work that, by properly manipulating the churn at the right time, and having control of the temperatures of cream and wash-water, we could have our butter so dry that no more than an 8 per cent overrun was given, or we could incorporate moisture to the extent of a 35 per cent overrun. One thing was certain, after applying certain rules in our work—different from what we had been doing—our butter, manufactured from the same amount of cream and milk, was increased from 5 to 10 per cent without injuring the quality, quite often improving the butter. I adopted the new method as instructor among the creameries of Western Ontario during the past season, and spent a good deal of my time at some of the creameries, putting into practice under factory conditions what we had done at the Dairy School. Some of the creameries and makers, I am sorry to say, were not in a position to carry out instructions given, but a blunder in the same old way. In nearly every case where this was done a lower price was received for the butter manufactured, and patrons received from 2 to 7 cents less per pound for fat delivered at the creamery. In figuring out an overrun under factory conditions, a good many still believe that it cannot be increased, except where the tests and

weights are cut. This has been true in the past to a certain extent, but we are realizing to-day that greater differences can be made where weights and tests are honestly and accurately made in the hands of an intelligent and capable maker. To bring this in a practicable and forcible manner before you, it is my intention to give you as an example the results and methods of two creameries in my district this season, that were but a short distance one from the other, with nearly the same amount of fat produced by the patrons for one month.

No. 1 received 62,500 pounds of cream, testing on an average 22 per cent fat, which equalled 13,750 pounds of fat; from this, 15,125 pounds of butter was manufactured, or an overrun of 10 per cent. The patrons received 15.5 cents per pound for butter and 17 cents per pound for fat, or a total of \$2,337.50. The method of churning and washing was similar to that used by many who call themselves buttermakers. The churn was filled about two-thirds full of cream, at a temperature anywhere from 56 degrees to 61 degrees, and allowed to churn until ready to draw off the buttermilk. No particular attention was given to time; it might be ten minutes, or it might be two or three hours. As to having an exhaustive churning, he never knew what his buttermilk tested, nor the size of his granules—whether it was all in one lump or the size of clover seed. On account of the high temperature at which the cream was churned, two or three washings were necessary to remove the buttermilk and have the butter in a fit condition to work. The granules, being subjected to so much cold water, assumed a dead color, and were chilled on the outside, making it impossible to properly incorporate either salt or moisture. The buttermilk, when tested, showed a loss of fat of two per cent. This, multiplied by 47,375 pounds of buttermilk, equalled 947.5 pounds of fat. At 17 cents per pound, this made a total loss of \$161.07. This method, practiced in our creameries, has the tendency to make the patrons dissatisfied, makes proprietors keep down makers' wages, and spend as little money as possible toward improving and equipping their creameries.

Creamery No. 2 has a different aspect the moment you come in sight. Everything is neat and tidy inside and out, with up-to-date machinery in good working order. The maker is ready to change ideas, and uses good judgment in an intelligent way in everything he does. He keeps a daily record of all temperatures and acidity, takes an average sample of the cream, and weighs all cream delivered from wagons each day, thus finding out just where he is. The amount of cream received for month, comparing with No. 1, was 45,000 pounds, or 17,500 pounds less, testing 30 per cent, equaling 13,500 pounds fat, manufacturing 16,200 pounds of butter, or an overrun of 20 per cent. The patrons received 20 cents per pound for butter, and 24 cents per pound for fat, or a total of \$3,240, a difference of \$902.50 for 250 pounds less fat than No. 1. The method followed by No. 2 for churning was to have his cream between 45 and 55 per cent of acid, controlled by a good culture, the temperature being between 50 and 54 degrees. The churn was filled from one-third to one-half full, so that an exhaustive churning was completed in from 30 to 40 minutes. The agitation was such that the churn was revolved just fast enough to give a continual drop, not too fast or too slow. When the first signs of breaking were shown, two or three gallons of water the temperature of cream was added, along with a handful of salt, which helps to prolong the gathering, firms and evens the granules, and gives a better separation of the buttermilk from the butter. The churning is then continued until the granules are the size of large wheat or small peas, and should not be over five or ten minutes from the first signs of breaking. The buttermilk is now drawn off and a sample taken. When fairly drained, rinse by spraying with cold water until the water runs away clear, adding water for washing at a temperature of 54 to 58 degrees—just enough to float the butter. The box-churn is revolved thirty or forty revolutions, the combined, without rolls on fast gear twelve to fifteen revolutions, and with rolls on slow gear, five or six revolutions. When the water has nearly drained off apply one-half or one per cent, more salt than usual and work for two minutes, then rest for fifteen or twenty minutes before finishing working, which will only require about one-half as much as when the butter is dry, the salt dissolving very quickly in the moist butter. When this plan was followed the flavor was clean, the grain firm, waxy and pliant, and palatable. The loss of fat in the buttermilk averaged two-tenths of one per cent, which loss is about equal to 45,000 pounds cream, less 16,200 pounds butter, 28,800 pounds of buttermilk multiplied by 2 tenths, equals 57.6 pounds of fat. This, at 24 cents, gives a total loss of only \$13.82, or a saving over No. 1 of \$147.15 in fat from buttermilk alone.

In conclusion I realize that there is a great field opening up for us for investigation and practical work along these lines. Every maker has,

or should have, a reputation to protect, and should not lose it by being too greedy, and spoil it for the sake of a few extra pounds of butter. Reputation, like character, is hard to get, but once lost, is harder to regain. Therefore, we should ever bear in mind that quality comes first and the rest is a secondary consideration. I believe that a legitimate amount of moisture in the making up of the overrun is necessary from the patrons' and makers' standpoint, and the nearer that legitimate amount the maker can get without interfering with quality or law, the better man he is, and worth more money to the patrons, proprietor, and country generally. What every buttermaker should do is to obtain more knowledge on this subject, and train his judgment so that he may know just how far to go, for we realize that this, like every other good thing, can be carried too far; but we want to be sure that it is a move in the right direction and then we can go ahead.

FRED DEAN, Instructor.

Dairy Cow Rations.

How much digestible nutrients, according to Wolff-Lehmann standard, are required for the following cows, according to their weight and milk yield:

Live weight.	Yield per day	
	Lbs.	Lbs.
900	30	30
900	35	35
900	40	40
900	50	50
1,000	40	40
1,200	50	50
1,200	60	60

These cows are all fresh.
 1. Would you recommend the following foods for the cows yielding a large flow of milk, the cow giving 60 pounds per day. I am feeding her corn silage 40 pounds, hay which is half clover and timothy 10 pounds, brewers' grains 30 pounds, wheat bran 8 pounds, ruta-bagas 60 pounds, chop 18 pounds (which is 1/2 oats, 1-6 wheat, peas and barley). Is this enough for that cow?

2. At the prices grains are now, would it be advisable to sell the grains and buy bran and shorts for milk production?

3. With brewers' grains at 5c. a bushel, and bran at 80c. cwt., which would it be better to feed?

4. In summing up the digestible nutrients, should there be any allowance made for breed and size?
 C. M. L.

Simcoe Co., Ont.

Ans.—Regarding the working out of digestible nutrients required for the various cows of his herd, I scarcely think your correspondent realizes the amount of work this involves and the little use it would be to him after it is finished. As a matter of fact, feeding standards are merely approximations of the truth, and there is little doubt that they are not nearly so reliable as many people imagine. While it is all well enough to attempt to follow a standard approximately, it is often out of the question and unprofitable to attempt to do it accurately. I think, therefore, it would not be advisable to attempt to work out the standards which he requests.

As to the ration for his cow giving 60 pounds of milk per day, I think surely your correspondent must be mistaken. If there is any cow weighing 1,200 pounds which can consume the amount of food which he states, I would like to see her. The amount of bulky fodder is very large, and, in addition to this, as I read his statement, he is feeding 8 pounds of bran and 18 pounds of mixed meal, making a total of 26 pounds of concentrates. There are very few cows that will consume this amount of meal, leaving out the 30 pounds of brewers' grains and 60 pounds of turnips. If a man is feeding a cow for a record, of course, he will attempt to feed her all she will take and to force her to the utmost, but such feeding is not profitable from the standpoint of production alone. There are comparatively few cows that will pay for more than 8 or 10 pounds of concentrates per day. By concentrates I mean all kinds of ground grain, as well as bran and shorts. When feeding over 10 pounds of meal per day to a cow, the feeder should make a very careful study of the cost of production. There is a very great difference in cows, and no fixed rule can be laid down governing the feeding of any class of animals.

Unfortunately, your correspondent does not quote the prices prevailing for grain and shorts in his district. Here, again there is no definite way of comparing the relative feeding values of different foods. As he intimates in another question that bran is worth \$16 a ton, I should consider it rather better value than most of the grains at the prices prevailing in this neighborhood. At the same time, in order to give variety, I believe it would pay the feeder to mix at least a little grain with the bran and middlings, even though the grain might be more expensive than the bran.

I believe that brewers' grains at 5c. a bushel are slightly better value than bran at 80c. per cwt., provided the grains have not to be hauled a long distance and that conditions are favorable to secure the best results from them. As mentioned in the previous question, however, I believe that the brewers' grains would be improved by feeding a certain amount of dry concentrates with them, and bran would do very well for this purpose. In feeding brewers' grains, a little precaution is necessary. Mangers should be water-tight, and special pains should be taken to keep them perfectly sweet and clean. The juices from brewers' grains are apt to penetrate cracks and ferment, causing unsanitary conditions in the stable. Where due precautions are taken, a limited amount of brewers' grains can be fed to very good advantage. Thirty pounds of brewers' grains a day, as stated in a previous question, is a fairly liberal allowance for a cow.

The breed to which a cow belongs is not taken into consideration in feeding standards.
 O. A. C., Guelph. G. E. DAY.

Management of Dairy Heifers.

Early breeding is a most effectual means of developing the inherent milking capacity of dairy cattle, an in order to obtain the fullest possible development of the milk-yielding qualities of heifers which are intended for dairy purposes, it is necessary to breed from them at a comparatively early age. In a young heifer, says a writer in the Live-stock Journal, the organs connected with the secretion of milk are in an undeveloped and plastic condition, and their development is,



Annie Laurie of Norwich (17837).

First-prize Ayrshire cow and reserve champion in milking test, Ontario Winter Fair, 1905. Property of H. & J. McKee, Norwich, Ont.

therefore, greatly promoted by bringing the milk-secreting function into early play through the heifer being put in calf. Late breeding is certainly a mistake in the case of dairy cattle, as the milk-producing apparatus does not attain its full development in a heifer that is put to the bull comparatively late.

The fact of carrying a calf, of course, entails a very considerable drain upon the system of an immature heifer. In order that they may meet this drain, and at the same time make satisfactory and proper growth, immature in-calf heifers require plenty of nourishing food. Good feeding must always accompany early breeding, if the growth of the heifers is not to be checked. This is a most important matter to bear in mind. Early breeding is sometimes objected to on the ground that it tends to stunt the growth and development of immature heifers, but this objection does not hold good if they are supplied with a sufficiency of nourishing food throughout the time that they are in calf. When the heifers are badly kept and do not obtain a sufficient supply of nourishing food, then the fact of their being bred at a comparatively early age decidedly operates as a check to their development, and stunts their growth. But if the heifers are kept well, early breeding does not interfere with their growth to any appreciable extent.

It is most important that young heifers should be in a sufficiently forward condition when they are put to the bull. A backward heifer should not be bred from at an early age; in her case,

pregnancy is pretty certain to have a stunting effect, and may spoil her for good. Some discretion must certainly be exercised by the breeder in deciding when to put a young heifer to the bull, and in coming to a decision on this matter, the heifer's development and condition require to be taken into consideration. If a young heifer is insufficiently developed and backward in condition, she should be given more time to make growth and to come on before she is put to the bull. In order that young dairy stock may be in a sufficiently forward condition to allow of its being bred from at an early age, the breeder must keep his heifer calves and yearling cattle growing and thriving all the time by doing them well. Young dairy stock must not, of course, be forced along in its growth by high feeding. A forcing diet of rich food is bound to spoil the future usefulness of growing dairy stock, and must therefore be strictly avoided. The food must be nourishing and adequate in quantity, but nothing more. The young dairy stock must never be allowed to become at all fat or too fleshy in condition, that being detrimental to the development of the milk-producing qualities.

In order to ensure a good supply of milk from a heifer coming into profit, she must be liberally fed right up to the time of calving, without, of course, letting her get fat. As the occurrence of milk fever need not be apprehended in the case of calving heifers, there is no reason to keep them on short commons before they calve, as is generally done in the case of older dairy cows. It is of much importance to stimulate the flow of milk as much as possible in young cows during their first lactation period, as the more milk they yield then, the more does the milk-producing apparatus develop.

The first lactation period of young cows usually tends to be rather short, but it is highly advisable to keep them in milk as long as possible—within reason, of course—as this helps to develop the milk-yielding capacity to a considerable extent. Even when the flow of milk has shrunk so greatly that it seems hardly worth while to continue to milk the young cow, the milking operation should be continued, so that the secretion of milk may be stimulated to the utmost. It is a bad plan to allow young dairy cows to dry off too early, not only during the first lactation period, but also during the second, and perhaps the third one. An early drying off of a young dairy cow adversely affects her future milk-producing capacity.

It is very often found that when the first lactation period of a young cow is very short, her lactation periods later on also prove to be rather short. Hence much importance attaches to this matter of prolonging first lactation period as much as is practicable.

Considering the great drain imposed upon the in-calf heifer, owing to her having to carry a calf whilst she is still immature, it is not advisable to put her to the bull again after calving quite as soon as is done in the case of older cows. In her case, the space of time intervening between the arrival of the first and of the second calf should be somewhat longer than the average time, so as to give her time to recuperate.

Allow me to call your attention to an error in your report of dairy test at the Maritime Winter Fair. In the Dec. 21st number, on page 1826, your reporter says H. S. Pipes & Sons won first for Jersey and Guernsey cows with Ethel Tucker; yield 65.9 pounds milk, test 5 per cent.

The first prize was won by our Jersey cow, Dot's Ruby, who gave 77.9 pounds milk; total points, 102.2, giving her second place among 23 competitors, Ethel Tucker taking second prize and fifth place.

Our Jersey heifers took first and second prizes in their class, with 52.8 pounds milk, total points 75.1; and 54.7 pounds milk, total points 73.1, respectively. Will enclose result of dairy test in tabulated form.

H. S. PIPES & SONS.
 Amherst, Nova Scotia.

GARDEN  ORCHARD.

Nova Scotia Fruit-growers.

The forty-second annual meeting of the Nova Scotia Fruit-growers' Association was held in Annapolis Royal on the 13th, 14th and 15th of December. The gathering was large and enthusiastic, and much interest was manifested in all the questions discussed. The President, Ralph S. Eaton, of Kentville, in the opening address, said that perhaps the crop of fruit for the second year in succession was disappointing, and possibly the Association had not come together with quite the elation of spirits over our work that had been manifested in former years; yet, if we would study the conditions carefully, we would find much that was encouraging. The average return of about \$3.00 per barrel for apples, under the heavy shipments that have gone forward from this continent to England, speaks volumes for the stability of that market. Not before have so many persons felt satisfied of their ability to thoroughly control our worst enemy, the black spot. Not before has there been such marked evidence of the efficiency of Bordeaux when applied early and thoroughly. This feeling of certainty regarding this scourge will bring about a more general application of the fungicide. We are not likely to have again for many years such unfavorable weather when the pollen of the apple blossoms is in its most sensitive condition. Then, again, our trees have had a rest, which should count in the income of 1906. The ocean transportation question, which was so serious for many years, seems free from criticism. The competition and difficulties in almost every line of business are increasing yearly, and we cannot expect ours to be an exception. More study is necessary to enable us to fight our enemies, and only the fighter really knows the solid satisfaction of overcoming obstacles and standing up against disappointments.

Prof. F. C. Sears, of the N. S. Agricultural College, followed with an address on "Pruning." The professor illustrated this practical talk with trees and limbs brought to the platform. A decided change in the methods of pruning has been brought about in the past five years. Instead of long bare arms reaching far into the air, devoid of fruit spurs and bearing-wood, the tendency now is toward low-headed, well-developed trees, well set with fruit spurs—in fact, a business tree, rather than ornamental.

The growing of nursery stock was also under discussion at this time, and, incidentally, the advantage and importance of using more home-grown trees, rather than patronizing so largely foreign nurserymen. Our present immunity from the San Jose scale was a very important point in our favor, and should not be jeopardized by importations from scale-infested sections.

Co-operation in shipping and marketing received much attention at this meeting. The question was introduced by J. H. Tupper, of Annapolis, who pointed out very forcibly the saving in expenses and advantages of a more uniform system of packing that would be ensured by a system of co-operation. Mr. Tupper claimed that a saving of from ten to twenty cents per barrel could be made in the various charges to which we are now subjected, and a larger quantity of apples, uniformly packed, would induce buyers to come to the warehouses to look for good fruit, rather than trusting to the commission houses.

As usual, at this annual meeting, spraying for insects and fungi came in for a lengthy discussion. Much interest was exhibited in the description of the work of the power sprayers for the past season. W. M. Black, of Wolfville, gave a very interesting description of the outfit owned and operated by him this season. Mr. Black has given the matter of power spraying much attention, and is now in a position to afford much valuable information. Fruit-inspector Vroom, who has had charge of the Dominion Government power outfit, operating this season in Annapolis County, also gave much information. It was generally conceded that very satisfactory results have been obtained from the use of both power and hand outfits during the season of 1905. While the spot is very prevalent throughout the Valley, yet sprayed orchards are comparatively, and in many instances, absolutely clean.

The question of a uniform apple barrel for Canada, again came before the Association. Nova Scotia uses the minimum standard barrel, holding ninety-six quarts, as opposed to the barrel used in Ontario, holding some one hundred and twelve quarts. It is felt by our people that we are being discriminated against in many markets to a greater extent than the difference in size of barrel justifies. The Association maintain that our barrel is plenty large enough to carry so tender a product as the apple to best advantage, and will ask the Government to establish a standard barrel of the minimum size, and make it universal throughout Canada.

The following resolution was passed: Resolved, that this Association petition the Dominion Government for a uniform barrel for dry measure throughout the Dominion, said barrel to

contain a specified number of pecks or quarts, making it a standard of measurement and holding a definite quantity.

THE FRUIT MARKS ACT.

Inspectors Vroom and Fitch were present at the meeting, and discussed the several phases of the Fruit Marks Act. Mr. Vroom spoke particularly of the great improvement in methods of packing and marking in the five years since he had been connected with the Department. He said that there were but few instances of deliberate fraud coming to his notice. The bulk of the apple shipments are well packed, and the marking usually complied with the law. It was necessary, in the interests of the trade, to define a No. 2 apple. At present many shippers were putting up culls and marking them as No. 2's. If they were not too highly faced, this was no infraction on the law, but in the interests of all concerned, a No. 2 apple should be defined as a No. 1 already is, while culls, if the market de-



S. C. Parker, Berwick, N. S.

Secretary Nova Scotia Fruit-growers' Association.

mands such, should be so specified. This question was discussed at length by the Association, and a resolution was passed asking the Department to amend the Act, defining what a No. 2 apple must be.

"Up-to-date Orchard Practice," was the topic assigned to Prof. Macoun, of Ottawa. Mr. Macoun went fully into the most approved methods of handling the orchard, speaking particularly of thorough cultivation, cover crops, spraying and fertilization, advising all fruit-growers to look carefully to these as the requisites of success.

The proposed Federal Convention of Fruit-growers, to be held at Ottawa under the auspices of the Department of Agriculture, is looked forward to by the Association with much interest. It is hoped that many questions on which the various Provinces are divided may be then finally settled to the satisfaction of all. The following members were appointed as delegates: R. S. Eaton, R. W. Starr, Secretary Parker, G. C. Miller and W. H. Sangster.

The officers for the ensuing year are as follows: President.—John Donaldson, Port Williams. Vice-Pres.—G. C. Miller, Middleton. Secretary.—S. C. Parker, Berwick. Executive Committee.—President, Donaldson, Vice-President, Miller, Secretary Parker, J. H. Cox, S. Spurr, E. E. Archibald, A. C. Starr.

The Original McIntosh Red Tree.

(Ottawa correspondence.)

It will be of interest to many readers of the "Farmer's Advocate" to learn that the tree upon which the first McIntosh Red apples grew is still alive. It stands upon the farm of Mr. John McIntosh, at Dundela, in Stormont County, Ont., and has an authentic history of over one hundred years. It can only be a matter of a short time, however, before this tree disappears, as a large portion of it is now dead. Its trunk is over ten inches in diameter, and the tree, when in its prime, was a magnificent specimen of its variety. The McIntosh Red is one of the most luscious apples grown, and has increased very rapidly in favor during the past few years. All trees of this variety, wherever grown, trace their origin to the time-honored specimen on Mr. McIntosh's farm.

This year is the celebration of our 40th anniversary. We want our circulation increased by 20,000. How many are you going to send us?

P. E. Island Fruit-growers Meet.

The tenth annual meeting of the P. E. Island Fruit-growers' Association was held in the "Market Hall," Charlottetown, on the 19th and 20th of December. Rev. Father Burke presided. The meeting was fairly representative of the fruit interests of the Province. The programme contained exceedingly practical subjects. The discussions were of a practical nature, and covered about all matters connected with the growing, packing and marketing of apples. Demonstrations of packing apples in both barrels and boxes were given each day.

Prof. W. T. Macoun, Horticulturist of the Experimental Farm, Ottawa, and Prof. F. C. Sears, Horticulturist at the new Agricultural College at Truro, were present at the meeting, and added very much to the interest, by answering questions and delivering addresses. One question that was emphasized more than any other was the necessity of selecting a small number of the best commercial varieties of apples for growing on the Island, to give up testing or experimenting with new kinds, and produce in quantity a select number that have proved suitable to our conditions.

The top-grafting of early and unsuitable kinds with scions from commercial varieties was advised as the best way to quickly turn unprofitable trees into profitable ones. Senator Ferguson read a very optimistic paper on "The Commercial Outlook." He thought it was bright, as the Islanders were putting much more intelligence and skill into fruit-growing than formerly. There was no question now about this Island being able to produce as good fruit as can be grown anywhere. A practical address was given by Prof. Macoun on "Horticulture," in which he gave valuable information about the growing of clean, sound fruit. Prof. Sears gave an excellent talk and a demonstration of how a young tree should be pruned so as to get a proper head on it. The show of fruit was not so large as last year, but the samples were excellent. Gravensteins were shown in quantities sound and firm, showing that this excellent dessert apple is about its best in the latter part of December on the Island. Here it may be classed among the early winter varieties, and is a very profitable apple to grow, but succeeds best top-grafted on hardy stocks, as it is liable to sunscald on its own stock. The specimens of Kings, Starks, Ribstons, Manns and Ben Davis were of first quality.

The public meeting at night was largely attended, and was addressed by Mayor Kelly, who welcomed the association to the city, and spoke very encouraging words to the fruit-growers. Lieutenant-Governor McKinnon, Senator Ferguson, Alexander Martin, M.P., and Hon. F. Haszard, of the Local Government, all spoke encouragingly and hopefully of the fruit-growing industry, which they believed was destined to be one of the leading lines of the farmers' business in the near future. Profs. Macoun and Sears also delivered excellent, practical addresses. All were agreed that apple-growing had passed the experimental stage here, and what we needed now was practical horticultural education in the matter of growing the right varieties and combating all of the many enemies of the apple tree. A prominent feature of the second day's meeting was an address from Mr. Walter Jones, Principal of the Macdonald Consolidated School. The subject was "The Beginnings of horticulture at the Consolidated School." Mr. Jones told of the great interest that was developing among the pupils in horticulture and school gardening. While he was speaking we were thinking what an effect this nature study and school gardening was going to have in giving us more intelligent farmers and more skillful horticulturists in the future. The apples shown in boxes were pronounced by the visiting experts to be as good as they ever saw, and artistically packed. One box, shown by George Auld, Covehead, was pronounced perfect, both as to quality and packing.

Rev. A. E. Burke was again elected President by acclamation. The other officers are: D. J. Stewart-Montague, Vice-President; A. E. Dewar, Secretary. Our Fruit Inspector, Richard Burke, showed a plate of the most trashy apples imaginable, which he came across in inspecting a 240-barrel lot of Spies, that were shipped here from Nova Scotia as No. 1's. Mr. Burke found that more than half of the barrels he inspected contained 75% of this trash in the center, but faced with good fruit at each end. A successful prosecution followed, which we hope will have the effect of keeping shippers from dumping their truck on this market.

Beats the Garden of Eden.

A box of the fruit which took the first prize in the collections of winter fruit at the Ontario Horticultural Exhibition, held in Toronto in November, was shipped at the suggestion of Col. J. B. McLean, of Toronto, to Lord Glenesk, proprietor of the "Morning Post," London, Eng. Mr. A. McNeill, as President of the Ontario Fruit-growers' Association, received the following acknowledgment from Lord Glenesk:

"Did such fruit ever grow out of the Garden of Eden! Surely mortals and angels might well be excused for yielding to such baits. Canada needs little other inducement to immigration. I must thank you over and over again for this proof that Canada, which can supply all that is necessary, can also supply all that is beautiful. If Chamberlain comes in, there simply must be a bounty on your lovely fruit."

ers Meet.

E. Island Fruit Market Hall, of December. Rev. was fairly representative of the Province. The subjects. The and covered growing, packing of packing given each day. of the Experi. Sears, Horticultural Truro, were much to the in- vering addresses. than any other number of the growing on the cutting with new ct number that

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1905 Shipments of Tender Fruits to the West.

In the "Farmer's Advocate" report of the Ontario Fruit-growers' convention, November 23rd issue, reference was made to the season's shipments of fruit to Winnipeg and other western markets by a number of members of the St. Catharines Cold Storage and Forwarding Co., who had met early this spring and agreed to co-operate to see if some arrangement could not be made looking to the finding of a market for their tender fruits in the West. The trials were to supplement the efforts commenced in 1904 under Prof. Reynolds, of the Ontario Agricultural College. It was realized some sacrifices would have to be made the first season to enable us to secure a foothold and overcome the prejudices against Ontario fruits and packers, many of which complaints were unfounded, and caused by dealers handling Western and American fruits. Arrangements were finally made with the Ottawa Fruit & Produce Co., of Winnipeg, to handle the goods on commission. The first car left on August 18th. Some twenty-five or more of our shippers by this time were anxious to join and ship some of their produce. A committee had been appointed to assist the directors of the company in the management and handling of the details, and it was felt that to refuse these shipments would cause hard feelings and possibly incur the ill-will of some, and as it was for the best interests of our other co-operative work that no cause for any disagreements should be given, no restrictions were placed as to the varieties of fruit and quantity of each to be placed in the cars by each individual shipper, provided he notified those in charge a reasonable time in advance of his intentions; neither were any restrictions placed as to the style of package and packing, provided it were honest. As a result, all makes of baskets and variety of packages were brought to the cars, and great difficulty was experienced in stowing the cars snugly and safely. This was overcome after the first two cars, by dividing the car into three compartments, by first filling, say, one-third at each end, with packages nearly alike, and then putting up two solid partitions or bulkheads; after this little or no trouble arose from packages being damaged in transit. Another serious difficulty confronted us by thus allowing every shipper to use his own judgment as to what he placed in each car; for instance, the first few cars contained from seven to eight hundred packages of tomatoes, and only four to five hundred of all other varieties of fruits. As a consequence, tomatoes sold for little above cost of package and freight and commission, and later on some other variety of fruit would be overdone at times. When the first returns came in, and those shippers who had placed tomatoes exclusively in the cars dropped out, we were confronted with the fact that unless something were done the shipments would have to be discontinued, as two of the cars had gone out with only about eight tons of fruit in each, and freight on such was very high. Two or three of the committee agreed to place all of their fruit going on commission in these cars, and if necessary buy enough to enable the cars to go forward as agreed. From this time to the end of the season no car went out light. It is true we had to place in the cars some baskets possibly not well filled that we had to buy, and at times, to fill up, we had to take baskets of pears and apples intended for other near-by markets, and even pretty ripe tomatoes to make weight.

Early in the season the Dominion Government, through Mr. Moore, Chief of the Markets Division, Ottawa, placed thermographs in about half of the cars. Their records are very interesting to study, and from the results obtained we feel that we will ask to have them continued next season. We are greatly indebted also to Mr. Ruddleick, who personally took an active interest in our work, and was present on one or two occasions when we were loading our cars.

RESULTS AND CONCLUSIONS.

From our experience we have reached several conclusions. First, it is not wise for a number of shippers, unless belonging to a co-operative association, and having a storage in connection, to undertake to place cars in the West, as the kind of package to be used, and the quantity of each variety of fruit to go in each car, must be named by the committee in charge, and there must be a sufficiency of fruit to fill each car on date of shipment.

Few shippers are prepared to take the extra trouble in getting ready for long-distance shipments. Packing in boxes and fancy packages without skilled and steady help is useless, as the results of our first efforts at box-packing show. But the packing in boxes was kept up by two shippers, and the results are very gratifying. Box pears, wrapped, which sold at first for from \$1.35 to \$1.60 per box, advanced steadily, and sold later from \$2 to \$3.40 per box. A difficulty we encountered was in gauging just what degree of ripeness to have our fruit, as if the car should go forward and reach Winnipeg in five days or less, and be placed on the market next day, the fruit would probably be green, whereas if the car were delayed and took eight days in transit, and the stuff happened not to be sold for two or three days longer, it would be spoiled, though placed in the car only half ripe.

To summarize shipments: The first car left St. Catharines August 18th, the last October 30th. Twenty-seven cars of fruit were sent, of which twenty-two went to the above company, three to another wholesale house in Winnipeg, and two sold to a firm in Calgary. We

also shipped one car of vegetables. Total shipments comprised:

3,300 baskets of tomatoes.
3,100 trays of tomatoes.
300 baskets of crab apples.
1,300 baskets of crab apples.
70 boxes of crab apples.
5,300 baskets of pears.
1,140 boxes of pears.
915 packages of peaches.
38,643 baskets of grapes.
610 packages of plums.
262 baskets of quinces.
8 boxes of quinces.
24 baskets of peppers.

The above stuff sold for \$17,800, besides which were the returns on the one car of vegetables. Forty-two shippers sent fruit, but only six had fruit in more than half of the cars. Those who continued right through got the best average returns, and are the most sanguine as to the future of this Western trade, as they have learned by experience the needs and requirements of the market, and will be enabled to avoid the mistakes of the past season. The work during the next year will have to be confined to a few growers, who have the experience to enable them to put up and grade the fruit uniformly, and to use the same packages throughout. We believe the fact of regular shipments being placed on this market during one fruit season by our company, and the fact that we are ready to make arrangements another season with any reliable firm there to sell any stated number of cars, and that the firms and dealers in Winnipeg are anxious to enter into such arrangements, mark a new era in the small-fruit trade of Ontario.

ROBT. THOMPSON,
President St. Catharines Cold Storage & Forwarding Company.

"Procastation" has spelled "Ruin" for many a man. Don't put it off any longer; send in your renewal at once.

Fruit Marks Act in Maritime Provinces.

It is very difficult to determine the actual results of the Fruit Marks Act in the Provinces down by the sea, they are so far-reaching in their character.

With the Act came the Fruit Division, and from the Fruit Division has emanated very many things which have resulted either directly or indirectly in a vast amount of good, and will be of lasting benefit to the whole country at large. Horticultural meetings have been held under the auspices of the Division in all the newer fruit-growing districts in all three of the Maritime Provinces, where instructions have been given in general orchard practice, including planting, pruning, grafting, spraying, and soil cultivation. Every wide-awake fruit-grower in these Provinces down by the sea, realizing that he must grow better fruit, has unconsciously helped to beautify the country and increase the value of real estate by cultivating and cleaning up his orchards. And to-day a noble emulation exists among fruit-growers of who best can work or best agree.

In the summer of 1901 the Fruit Marks Act was put in operation by the appointment of the staff of officers to carry it into effect. The first season very many copies of the Act were distributed by the inspectors personally and through the mail, and nearly every newspaper in the Maritime Provinces had something to say in the matter. In fact, the Act was published in nearly all the papers in the fruit districts. In addition to this, inspectors visited orchards and storehouses, giving instructions in the proper methods of packing and marking. In this fashion the good work went on. I may say that the whole seasons of 1901 and 1902 were spent in educational work, and during this time a thorough inspection of fruit was going on. In the first place, the marking was very faulty and incomplete, and it took a great amount of time and patience to remedy this evil which was so very prevalent among fruit growers and packers. The fact is that prior to 1901 it was the exception and not the rule to find a lot of apples going on board any steamship, at any Maritime port, with England as their destination, which were properly marked. I well remember my first official visit to the deep-water terminus at Halifax. I stood in the shed and watched a carload of apples rolled across the floor to the ship, and the barrels were not sufficiently marked to tell what part of the Province they came from, and I went to the office and found out who the shipper was and where the car was shipped from.

In striking contrast with those days is the fact that it is the exception to see a box or barrel going on board a steamer at Halifax improperly marked, and fully ninety-nine per cent. of all the packages shipped are nicely stencilled.

This important state of things is directly traceable to the Fruit Marks Act. If a package of fruit is properly marked in a neat manner, with the name and address of the packer, also the variety and grade of fruit, it inspires confidence in the dealer, and in the majority of cases is

taken as a guarantee of the quality of fruit contained in the package.

I can safely say, also, that there has been a very marked improvement in the packing, and, notwithstanding the fact that only a percentage of the fruit-growers understood the proper methods, the educational work done through the medium of the Fruit Marks Act has been far-reaching, and the result is a great improvement in the fruit-packing among the rank and file of fruit-growers. This is true of the Province of New Brunswick, and Prince Edward Island, as well as Nova Scotia. There are very many things which can be said to be direct good results of the Fruit Marks Act. Take, if you please, the handling of fruit at shipping points. The steamship companies have been educated along these lines, and instead of rough and improper handling, the barrels or boxes are carefully handled by the men at work, and instead of having a lot of broken packages, as was the case sometimes in the old days, it is the exception to see a properly-coopered barrel broken open while it is being put on board the steamer. In justice to the steamship people, I must say I have always found them anxious to do what they could to have the fruit put on board their ships in the best possible condition. More care is taken in stowing, and the ships are better ventilated than in former years. Instead of barrels being piled in ten or eleven tiers high in the hold as before, temporary decks are constructed with deal, and only five tiers of barrels are piled one on top of the other. This has been brought about by careful attention to the fruit-shipment business by both the steamship companies and the officers of the Fruit Division.

I might continue to enumerate the good results of the Fruit Marks Act in the Maritime Provinces, but will not weary the readers of the "Farmer's Advocate" further than to state that the reports coming from London this year show a very marked improvement in the condition of the fruit when opened up in the market.

G. H. VROOM, Fruit Inspector.

APIARY.

National Beekeepers' Association.

During the time the students of the Ontario Agricultural College were at the International Fat-stock Show taking the trophy for the best judging of live stock, and while Canadian stockmen were distinguishing themselves in their various lines, the National Beekeepers' Convention were holding their sessions in Brunt Hall, Chicago. Canadian honey has likewise distinguished itself wherever shown. To secure incorporation, the Beekeepers called it National, yet it includes Canada. The Canadians present were: Morley Pettit, chairman of committee on exhibits; R. F. Holtermann, who was on the programme for an address; J. F. Miller, vice-president of the Ontario Beekeepers' Association; and Wm. McEvoy, one of the directors of the National. The convention was presided over by C. T. Dadant, Hamilton, Illinois, U. S.

One of the most important subjects in connection with the practical management of bees was that of the "Control of Increase, and the Prevention of Swarming." The drift of opinion is certainly towards larger hives for this purpose, and, as several beekeepers stated, the small-hive men were few indeed, and did not express themselves very strongly. The first subject taken up was "Control of Increase," by L. Stachelhausen, Converse, Texas, who stated that swarming was the natural method of increase, but that the beekeeper desired or should desire to control increase. The best method to delay swarming was to use larger hives—hives with plenty of comb space. In a small hive, by means of manipulation, often dangerous, brood could be increased, but in large hives the bees build up faster if they have plenty of honey, and do so without the dangerous manipulation. Large hives check, but do not always prevent swarming. Twenty-four years ago he had adopted a hive larger than the ten-frame Langstroth, and found that with such a hive the number of swarms had decreased from year to year. With the eight-frame Langstroth hive there was altogether too much swarming. He did not believe in any system for the prevention of swarming which meant the caging or removing of the queen for a time. In an apiary of only eight- or ten-frame Langstroth hives, there was so much time taken up with chasing swarms that one man could scarcely manage an apiary of 100 colonies. If increase was desired, artificial means was the better, from nuclei building up full colonies. If 2,500 square inches comb surface was found with brood, the bees would be likely to want to swarm shortly. If colonies were found preparing to swarm, he took two Langstroth combs of brood, putting them in the super and replacing the brood combs from one brood-chamber by two frames with foundation. Two or three hours after it would be found that the combs of brood in the super were covered largely with young bees—bees very desirable for making nuclei,

as these bees, unlike the old bees, remained where put. Several of these sets of combs were put together and a queen or mature cell given them to form a colony. Supers were added as needed, and swarming controlled in this way. Other well-known methods, such as "shaking" the bees, were given.

R. F. Holtermann, Brantford, Ont., stated that he used a twelve-frame Langstroth hive, that he found the bees required plenty of entrance ventilation, and to keep the bees content in the supers, super ventilators were adopted by him. These ventilators were not used by the bees unless the queen got in the super and a brood chamber was made of it. Then, plenty of super room, giving a large storage capacity in proportion to the brood-chamber, was important. He had as many as four extracting supers on one hive, and less than two for each hive should not be thought of.

L. A. Aspinwill, Jackson, Mich., in his address on "The Non-swarming Hive," endorsed what Mr. Holtermann said, but stated that he was after not management to prevent swarming, but a hive, and thought he nearly had it. The main idea was to use a fifteen-frame Langstroth brood-chamber, and when the flow began, to put slatted dummies on outside of brood-chamber, and interchange every second comb with these dummies, selecting the best combs of brood to put between the dummies.

The question of tinkering the tariff on comb honey to exclude foreign honey was of some interest to Canadians, but it was decided not to make any effort in that direction.

Mr. A. Gill, Longmont, Colo., U. S., under "Short-cuts in Beekeeping," gave some excellent advice, particularly applicable to the beekeeper who is also a general farmer. He said, have appliances of most modern kind, have uniformity in frames, etc. Destroy poor colonies in the fall; do not lose them during the winter or spring.

"The Dietetic and Hygienic Value of Honey," by Dr. Eaton, Chicago, Illinois, almost created a more than warm discussion, by the Doctor, in reply to a question, giving its food value by chemical analysis compared with glucose, but harmony was restored by a further explanation along the lines of digestibility, etc., a difference which is now known by every well-posted feeder of stock.

The convention was also staggered by a statement from Dr. E. F. Philips, who is employed by the Government at Washington, D. C.. He stated that, contrary to the investigations of Cheshire, Cowan, and others, in Europe, and that of MacKenzie and Harrison in Canada, and Howard in the United States, no bacillus alvei had been found in specimens of the disease, foul brood, and the germ of this disease had yet to be found. It may be here stated that, aside from various State Experimental Stations, the Federal Government has organized a department at Washington for apicultural investigation. He stated there were plenty of unknown things in beekeeping, not only in the management, but the natural history. Comparison was made as to the work carried on in the dairy and poultry industries for their advancement, and how little for beekeeping. Mr. Frank Benton was on a trip to Europe and Asia to get new varieties of bees. A main apiary was established at Washington; a queen-breeding apiary was at Arlington, near Washington; one to experiment with diseases six miles from Washington; a sub-station had been established in California, and bees sent for testing purposes to Alaska, where they were doing well.

R. F. Holtermann, Brantford, gave an address, demonstrating with his hive, the subject being "Migratory Beekeeping." He condemned strongly a statement going the rounds of the U. S. bee journals that bees could be moved on wagons without closing the hives. While it might be done, it was never safe.

The Ontario Department of Agriculture received an encouraging notice in the following resolution, passed unanimously:

Resolved, that this convention recognize the great help which Federal, State and Provincial Government can be by bringing before the public the value of honey as a food, and the method of utilizing and keeping the same, and in connection therewith we would heartily approve of the issue of such bulletins as No. 146, "Uses of Fruit, Vegetables and Honey," issued by the Department of Agriculture for Ontario, Canada. That a vote of thanks and appreciation be tendered Hon. Nelson Monteith, Minister of Agriculture for Ontario, chief of the Department, and that a copy of this resolution be sent to him.

The National Beekeepers Association embraces upwards of 3,000 members. The officers are elected by ballot, sent through the mail, annually. They protect their members against spiteful persecution, and they guard against adulteration of honey. The officers are: C. P. Dadant, Hamilton, Ills., President; Hon. Geo. E. Hilton, Freeborn, Mich., Vice-Pres.; W. Z. Hutchison, Flint, Mich., Secretary; N. E. France, Plattville, Wis., Gen. Manager.

Don't put it off any longer. Renew your subscription, to-day.

POULTRY.

Pure Blood in Poultry Raising.

Not long ago we entered a barnyard in which that well-known type, the mongrel fowl, predominated. We asked the farmer the breeding of the motley collection, and were told that there was a touch of Rock, a little Black Spanish, some Orpington, and now he thought to improve the laying qualities of the flock by introducing a top cross of Leghorn blood. Talk about mixing drinks—that man had a mixture there that would kill a poultryman's chances of success at forty rods! What did he hope to make from the combination? In his own mind he thought he would produce a general-purpose fowl; really, he was getting with each succeeding year a further cross between "no good" and "good for nothing." The value of pure blood in poultry depends on the ability of such stock to reproduce its kind along fixed lines of type and conformation, subject, of course, to such variations as take place along any line of breeding. Select birds that are pure-bred. If you want chickens for market watch for the cockerel standing straight and firm on short legs set well apart, and possessing a well-developed breast and a good long keel. A pure-bred bird, having inherited this conformation from a long line of ancestry, will, if he is of good sound constitution, tend to reproduce that type, but from a mongrel cross-bred we can hope for nothing but disappointment and failure.

If the egg yield is the object of your desire,



Bronze Turkey Hen.

First and special, Ontario Winter Fair, 1905. First at this fair the past four years. First at Dominion Industrial, 1903, and second at Pan-American Exhibition. Property of W. J. Bell, Angus Ont.

then it is important that, in addition to breed, you take particular care to secure a laying strain. In any breed there are families that have been bred with greater care than others, and there is frequently more variation between different strains of the same breed than between the different breeds. Above all, in the selection of laying stock, as in the production of birds for market, fix in your mind a definite object and go straight for the mark, and remember that you are never likely to attain that object by the promiscuous crossing of breeds, so common on many of our farms.

Dressing Turkeys.

We have celebrated so many Thanksgiving and Christmas days by now, that it would appear there is little to learn in regard to preparing these popular birds for the feast. But at the same time, it is so common to see fine young poulters ruined in the dressing that it is as well to learn the right way before any more are spoiled. A strong nail should be driven into the wall, the turkey caught and its wings locked or tied together. A stout cord should be fastened round the legs, and the bird should be hung head downwards. The jugular vein should be cut with a sharp penknife across the outside of its throat, and afterwards the knife should be driven into the brain to cause it to loosen the feathers. Those who cannot successfully accomplish this feat may dislocate the neck first. The bird

should be hung up immediately and picked rapidly towards the tail, as a downward pull to the feathers towards the head may tear the delicate skin. On no account must the birds be scalded. When all the feathers are removed the turkeys should be lightly singed, the head cut off just by the ears, the neck-bone cut off close to the junction, leaving the long piece of skin intact, as the beauty of its whole appearance will be greatly enhanced if the breast skin is unbroken. The feet should be cut off and scalded. They, with the neck and half the gizzard, liver and heart, will make excellent gravy. A deep incision should be made between the left thigh and the body. The gizzard can then be grasped and drawn out with the intestines. When the bird is entirely emptied the carcass should be wiped out with a damp, clean cloth, but it should not be washed, as this removes part of the juiciness of the flesh. The lower half of the trunk should be filled with sausage meat or chestnut stuffing, if liked. The crop is filled with bread-crumbs, parsley, lemon thyme and thyme seasonings. A skewer should be run behind the wings and one behind the legs, but not anywhere through the flesh, and the whole carcass pressed together compactly and tied with stout cord. A heavy weight should be placed on the breast-bone to flatten and plump it. All turkeys should be cooked breast downwards, or the breast meat will be dry and tasteless.

Ganges, B. C. (MRS.) OCTAVIUS ALLEN.

NEWS OF THE DAY.

Canadian.

The assessment of the City of Toronto shows an increase of \$20,000,000 for the year.

According to the report of the Provincial Bureau of Mines, Ontario, in 1901, produced minerals to the value of \$11,572,647.

The net earnings of the Temiscaming Railway for the past eleven months amounted to \$100,000.

One hundred archaeological specimens from the Imperial Museum of Tokio are on their way to the Provincial Museum in Toronto.

Mr. C. M. Hays announces that a section of the Grand Trunk Pacific, between the Touchwood Hills, the western end of Macdonald & McMillan's contract, and Edmonton, will be placed under contract within two months.

British and Foreign.

Charles Yerkes, the famous American capitalist, is dead.

Viscount Aoki has been appointed First Ambassador from Japan to the United States.

The political independence of Finland guaranteed by Alexander I. of Russia has been restored.

Official returns of the recent New York mayoralty contest show McClellan elected by a majority of 3,463 votes.

On December 28th, after riots of almost unparalleled fury, in which the number of casualties amounted to 15,000, the Moscow strikers gave up the struggle. Concessions will, however, be granted as a result of the uprising.

THE FARM BULLETIN.

ON THE FIRST PAGE OF THE HOME MAGAZINE DEPARTMENT OF THIS ISSUE WILL BE FOUND A UNIQUE LITERARY PROPOSAL. READ IT, AND ACT AT ONCE.

Look at the label on this paper. When does your subscription expire? See to it at once.

"The Farmer's Advocate" is a welcome visitor at our home. It is becoming a more up-to-date journal every week. R. AUSTIN, Simcoe Co., Ont.

In the publishers' standing announcement in a leading American exchange appears the phrase: "To all points in the United States, Canada, the British Northwest and Mexico." Query—Where is that portion of the continent designated "the British Northwest?" The management of our esteemed contemporary should post itself regarding modern geography.

The January 1st issue of the Canadian Epworth Era (Toronto, Ont.) is a beauty, and even better than it looks when the contents are examined. It is a special "Canadian" number, and is packed full of facts, useful and entertaining, about our great country. We do not wonder that the Era is popular in its constituency. It deserves success, and 1906 ought to be its best year.

South Waterloo.

For some time after the ground freezes up work on the farm seems to move rather slowly, and time slips by without very much apparently being accomplished. There are various odds and ends about the buildings and elsewhere to be attended to, which have been allowed to accumulate in the hurry of getting the field work finished in time. There is the care and feeding of the housed stock to get accustomed to, until it can be done expeditiously; and so between choring, and, perhaps, marketing of wheat and other farm products, the time flies, and perhaps not so unprofitably after all. It is also becoming more and more a general practice to haul manure to the fields during the frozen months of the year, thus relieving the pressure of work in the spring. The almost entire absence of snow thus far has been favorable for cleaning up in the bush. The majority of farms still possess at least some wooded area, but as a rule the bush work consists merely of removing the dead and fallen timber as fuel and sawlogs. Most owners of wood-lots are learning to appreciate the value of this part of the farm as a permanent asset. At the same time there are still those in a few localities who will clear off their woods, or sell to persons who buy with the avowed object of removing everything which can be profitably utilized for logs, poles, or wood.

Those people who have had faith in poultry, and have proven their faith by their attention to their flocks, are now being justified in their course. It is true the mortality among incubator-hatched chicks has been high the past season, but as most hatch with hens, and as the prices for both poultry and eggs have been exceptionally high, it must be regarded as an encouraging year for poultrymen. Chickens are sold in the local markets at about seven cents per pound, and eggs at 30 cents a dozen. A hopeful sign for the poultry industry is the fact that more are keeping hens for the profits to be derived from the marketing of chickens and eggs; whereas, until a few years ago, a poultryman was one who kept several breeds of fowls, with a view to disposing of eggs for hatching at more or less of an advance on market prices—a scheme which usually ended in failure. As a rule, this kind of interest in poultry finally resulted in the production of a red-white-black-and-yellow kind of hens, which would give anyone a longing to return to the good old-fashioned Plymouth Rocks.

H. GROH.

Oxford County Farm Notes.

We are having rather a remarkable winter, if it can be called a winter, but the roads have been beautiful, many places just like asphalt, and a team can draw almost as much as a wagon can carry. It is a good time to work in the woods, and the opportunity to clean up down timber and tops should not be lost. Wood is getting scarce and dear, and the farmer should go out into his bush and cut up everything that is going to waste. Of course very many farmers are now burning coal; but a little wood is needed occasionally and for threshing time, but the threshers will soon have to prepare themselves to use soft coal in their engines. I think that the threshing is all completed here, and the engines have been sawing wood with the circular saw, chopping and cutting feed for the farmers, who have not wind-power; there are not nearly so many horse-powers used nowadays as there were a few years ago.

Fattening cattle often get very itchy and rub a good deal more than is good for their best development. We are trying the washing of them off along the back and neck with a scrub-brush and soap and water, and then applying sheep-dip; the latter then is more effective than if the washing had not been done. Some years ago I noticed by experiments at the college that cattle that were curried made a gain of seven per cent. more than those that were not. But the currying is not quite enough to realize the best results. I saw a very nice fat heifer being delivered to one of our local butchers the other day, weight 1,100 lbs., at \$4.10. Good Xmas beef sold well. Our fattening cattle are making fairly good gains. Although there was a good rainfall in the early part of the autumn, yet there has been lately a considerable period in which there has been no rain, and some farmers are beginning to complain of their wells drying up. Many wells that 20 years ago gave an abundant supply of water are now very easily pumped out, which goes to show that from some cause the supply of water in the bowels of Mother Earth is not so plentiful as formerly. Some say this shortness of supply is caused by the cutting down of so much timber; but by drilling down from two to three hundred feet the supply seems to be for the present inexhaustible.

Our cheese factory is still running, but only two days a week, but many factories have closed down until spring. The cows, as a rule, must have two or three months' holidays. Our October milk realized a little over \$1.09 per 100 lbs.; at this rate it does not pay to make butter. Our factory will close at the beginning of the year. The last of our Novembers have not yet been shipped, but we expect the price to be about 12 cents.

JONAS.

Oliver Ha Lea.

ON THE FIRST PAGE OF THE HOME MAGAZINE DEPARTMENT OF THIS ISSUE WILL BE FOUND A UNIQUE LITERARY PROBLEM. READ IT, AND ACT AT ONCE.

Have you sent us your renewal for 1906?

Beet Sugar and the Tariff Commission.

Following is the memorandum submitted by a large delegation of farmers to the Dominion Tariff Commission at Berlin, Ont., recently:

To the Members of the Tariff Commission:

Gentlemen,—You have listened, we are aware, at several of your sittings in Toronto, in London, and other places, to statements of the farmer's life, his work, his returns, and his relation to the building of the common industries and wealth of the country. He has been pictured to you as a man of severe toil, of close economy, and of small returns for his labor. We have the feeling that you may have received the impression from such evidence that farming to-day is unprofitable, that the farmer's lot is exceptionally unfortunate, and the crops he cultivates to-day, even the sugar-beet crop, do not fairly remunerate him for his efforts.

Honorable Gentlemen of the Tariff Commission, we, who compose this deputation before you to-day, are farmers who are assembled from eighteen fertile counties of this Province to represent the agricultural side of Canada's new industry, the beet-sugar industry, the success of which means an opportunity for renewed and greater prosperity for us on our farms. We are practical beet-growers, every one of us, whose representations before you are not for ourselves only, but for our fellow farmers and beet-growers distributed widely over this Province, and numbering many thousands. We do not come before you representing any political body or party element, but we are in deep sympathy with the out-of-date farmer in his mental misery, and would like to help to lead him to understand how to make his life more prosperous, that he may really grasp the meaning of the words of a much respected Canadian statesman, who says: 'The feeling is that as far as possible the manufactory and the farm should grow together, side by side, one helping the other, one reacting upon the other, one finding the food and the other finding the market, and each together building proportionately the common industries and wealth of the country.'

We do not find, as has been told you in other places, that farming to-day is unprofitable; and we ridicule the evidence given you at certain of your sittings that beet-growing is unprofitable. It is highly profitable to us in this and other counties, and there are among us numerous representatives from seventeen other counties, who are prepared to speak from practical experience of the profits of beet-growing. Those of us specially within driving distances of Berlin, Waterloo, Galt, Preston and other manufacturing towns of this county are enjoying good home markets for every form of product the farm produces. What is it that gives these home markets, these good prices at our doors for the products of our farms? It is the growing population of these industrial towns prospering in our midst. These towns about us, especially Berlin, are prospering to-day as they never did before, and with their increasing prosperity our local markets have substantially improved. There is no strife between us who produce the food and our artisans who create our market. Together we prefer to toil in confidence for the general prosperity of Canada. We, the farmers before you to-day, simply calling ourselves beet-growers, friends of this new Canadian industry, agree with former representations made to you by representatives

of farmers' organizations and associations, that the agriculturist is an important element in Canadian prosperity. This fact no one will dispute. But we feel convinced, through the development of our splendid local markets in this and other surrounding and industrial towns, that in like manner Canada's greatest prosperity is coming when the farm and manufactory join hands, grow up together, the one finding the food, the other finding the market.

You, with all true Canadians who wish to build up Canada, firmly believe that the resources planted by nature in the Laurentian Hills should not lie dormant, but be developed by Canadian industry into iron, steel, and other valuable and necessary finished products. How can anyone who desires the greatest national prosperity tolerate rivalry between the farmer and the artisan, recognize natural resources in our country, yet refuse to encourage their development? There lie dormant in Canadian soil and Canadian sunshine the elements out of which, by the application of the Canadian industry of the farmer and the artisan, toiling together, can be produced her entire supply of sugar.

Is this industry, that is destined to become one of great magnitude in Canada, that will create a never-satisfied market for such an enormous quantity of raw material out of which our sugar can be produced, not one of vital importance to us, the farmers, who possess the soil and are willing to produce out of it the raw material, which is a product indeed highly profitable to us? It has been told you by other deputations that it was a mistake to bonus this industry. We, who are the producers of its raw material, do not think so. It is a peculiar industry, the beginning of which is surrounded with great and exceptional difficulties, all of which to overcome necessitate the expenditure of enormous sums of money. Once established, however, it means for us, the farmer, a good and splendid market for one crop our soil is adapted to produce, and the profits from which exceed the profits from any other crop we can cultivate. More than this, owing to its widespread influence along other lines of industry, trade and traffic, it will in time become national in its influence.

Further, as an evidence of its relation to agriculture, we desire to inform you that the sugar beet, after the extraction of sugar, is an entirely satisfactory and profitable stock food, hundreds of carloads of which are shipped back to our farms to feed our stock.

We herewith beg to attach to these representations a statement of cash returns that we are receiving from this industry for the beets we cultivate for it, and we further beg to attach a map, showing the eighteen counties that are producing beets for this one factory alone, namely, Berlin, to which beets are shipped distances of one hundred miles and more, from as many as 140 different shipping points.

In conclusion, we would again remind you that our deputation is representative of a body of beet-growers numbering nearly 2,000 farmers, who have practical experience, and, therefore, understand the full meaning of these sentences in which we have discussed before you the merits of the beet-sugar industry."

Have you read our special offer for clubs? If not, look it up at once and send us in some names.



Blackrock.

Grade-Angus two-year-old steer; winner of grand championship award as best beef animal in fat-stock classes, International Exhibition, Chicago, 1905.

East Prince, P. E. I.

On December 4th we had the first sleighing of the season, followed by a week of fine, mild weather. The 10th brought another storm, with nearly a foot of snow, and it looks now as if winter has come to stay. This is somewhat earlier than usual, but with this thick coating of snow, without any ice, there is a guarantee of a full crop next season. Many wells throughout the Island have been dry, or nearly so, during the past two months. The fall rains so far have scarcely been sufficient to replenish the water supply in some of the deep wells; under those circumstances some would like to see another big rain before winter sets in to stay.

The great Winter Fair of Eastern Canada, which was held at Amherst, Nova Scotia, December 4th to 8th, inclusive, was, in every respect, a decided success. This was the writer's first opportunity of visiting a fair of this kind, and I was indeed highly pleased. A very marked improvement is reported in the quality of nearly all the exhibits over other years. The cattle, sheep and pigs were of good quality, and the show of poultry on the second floor was simply immense, and the man who could not select a cockerel good enough to head his flock with was pretty hard to please. The good old Barred Plymouth Rocks were the most numerous of the many different breeds shown. The Buff Orpingtons were also very numerous. It was a sight worth seeing. In another room was the dressed poultry, dressed in a manner which brought the highest price when placed on the market. The birds are well fasted before killing; the mode of killing is by breaking the neck, and allowing the blood to settle in the throat; the head and feet are left on, and they are not drawn; the feathers are left on the lower part of neck and on the wings. It is claimed that poultry dressed in this way keep better, and the meat is sweeter. The show of dairy cows was excellent. A Holstein cow of typical dairy type scored 117.9 points. This cow, with another of the same herd, with a record of 72 lbs. of milk a day, were sold for \$86 each, which was very cheap, quality considered. Some good individuals of the other breeds were shown. A Jersey cow scored 102 points. Each evening the large auditorium was packed from top to bottom. Dr. Reid, in delivering his address, said that the Amherst Fair was a credit to Eastern Canada, and that even the Guelph auditorium was not as large, "and if it were," said he, "we could not fill it with the numbers assembled in the Amherst building."

A good number of P. E. Island farmers were present at the Fair, an evidence that our people are becoming more interested in a show of this kind, which is purely agricultural—no side-shows, horse trot or balloon ascension. The exhibits from the Island Province were not numerous, but the quality was most excellent. We can scarcely compete with cattle, especially beef breeds, with our friends over the Straits, but when it comes to sheep our Island breeders are generally successful in carrying off the lion's share of the ribbons. The same will apply to our horses, which are far-famed for their excellence.

This is certainly a banner year for our farmers—a good crop of everything, and a good price for almost everything we have to sell. Pork has kept up wonderfully all fall, and at the present writing 8 cents per pound is the price paid for a good article; oats are 35c. and 36c. for white and black; hay, loose, \$8 per ton; pressed, \$9; flour (roller), \$2 per cwt.; potatoes, 20c.; apples very scarce, at \$1 per bushel. Poultry is very high, turkeys, 19c.; geese, 15c. to 16c.; chickens, 10c. to 12c. per pound; ducks, 14c. to 16c., dressed. Factory butter is worth 24c. to 25c.; many butter factories will run all winter, which is a good sign of prosperity. Eggs are 20c., and will likely go higher.

C. C. CRAIG.

Graduates Ontario Veterinary College.

The Christmas examinations of the Ontario Veterinary College were held in the College buildings on December 21st. The following gentlemen, after passing a stringent examination by the usual Board of Examiners, were awarded diplomas: Thomas H. Boyd, London; William Brice, Macdonald Hills, Sask.; Carl E. Call, Roachdale, Ind., U. S.; Irvine Christian, Drayton; John A. Cordick, Tara; Samuel E. Cottrill, New London, Wis., U. S.; Peter A. Dewar, Bowood; Ben. T. Gibson, Merriton; William R. Hawke, Medicine Hat, Alta.; William R. Hunter, Warsaw, N. Y., U. S.; William H. James, Leamington; Stephen Knight, Winnipeg, Man.; P. B. Labrosse, St. Eugene; Truman L. McConnell, Warsaw, N. Y., U. S.; William H. Mahon, Pittsfield, Mass., U. S.; Fred Morphy, Rochelle, France; Charles H. Newton, Barrie; Fred C. Pearce, Petrolia; Gerald C. Pinhorn, Oak River, Man.; Wm. A. Shearer, Glasgow, Scotland; W. H. Sweeney, Dubuque, Iowa, U. S.; James Whyte, Eglinton.

Primary Examinations.—The following gentlemen passed in anatomy: E. Beverley Cowan, Thomas J. Kain, William G. Moore.

A Good Report.

I like your paper better all the time. I did like your report of the Fruit-growers at Toronto—it made me feel as if I was there,—as I belong to the Chatham Association.

Kent Co., Ont. ARCH. CAMERON.

Every time you put it off it becomes harder to do. Renew your subscription now, while you are thinking about it.

Improvement of Seed.

Samples of seed grains and potatoes secured mainly from the crops grown at the branch Experimental Farms at Indian Head, Sask., and at Brandon, Man., will be distributed this spring from the Central Farm, Ottawa, consisting of oats, spring wheat, barley, Indian corn (for ensilage only) and potatoes. The quantity of oats to be sent this year will be 4 lbs., and of wheat or barley 5 lbs., sufficient in each case to sow one-twentieth of an acre. The samples of Indian corn and potatoes will weigh 3 lbs., as heretofore. The varieties are as follows:

Oats.—Banner, Wide-awake, Abundance, Thousand Dollar, Improved Ligowo, Goldfinder and Waverley.

Wheat.—Preston, Red Fife, Percy, Stanley, Huron, Laurel and White Fife.

Barley.—Six-rowed—Mensury, Odessa, Mansfield, Claude and Royal. Two-rowed—Standwell, Invincible, Canadian Thorpe and Sidney.

Indian Corn (for ensilage).—Early sorts, Angel of Midnight, Compton's Early and Longfellow; later varieties, Selected Leaming, Early Mastodon and White Cap Yellow Dent.

Potatoes.—Carman No. 1, Early White Prize, Rochester Rose, Uncle Sam, American Wonder, Bovee, Early Andes and Late Puritan.

Only one sample can be sent to each applicant, hence if an individual receives a sample of oats he cannot also receive one of wheat, barley or potatoes. Lists of names from one individual, or applications for more than one sample for one household cannot be entertained. These samples will be sent free of charge through the mail.

Applications should be addressed to the Director (Dr. Wm. Saunders) of Experimental Farms, Ottawa, and may be sent in any time before the 1st of March, after which the lists will be closed, so that all the samples asked for may be sent out in good time for sowing. Parties writing should mention the sort or variety they would prefer, with a second sort as an alternative, and should the available stock of both these varieties be exhausted, some other good sort will be sent instead. Those applying for Indian corn or potatoes will please bear in mind that the corn is not available for distribution until March or April, and that potatoes cannot be mailed from here until danger from frost in transit is over. No postage is required on mail matter addressed to the Central Experimental Farm, Ottawa.

Outdoor Treatment for Tuberculosis.

As our readers are aware, last summer the herd of cattle at the Experimental Farm, Nappan, N.S., was found to be tuberculous. So as to make perfectly sure of the exact condition of affairs, the animals were held for a second test. It has now been found out that, out of seventy head, about sixty are tuberculous. It has been decided to ascertain whether there is any possibility of cure for animals from this disease, and to have the same system tried as is now thought to be successfully applied to human beings. With this object in view, some forty head are picked out—about ten healthy and thirty diseased—to be kept this winter as much as possible in the open air, with only an open shed for shelter; to be fed reasonably well and to be watched carefully and tested from time to time later on, to see what the results may be. The rest of the animals are being destroyed. It is hoped that this course of treatment will result in the disclosure of information that will be of very great value to stockmen, not only in Canada, but throughout the world.

P. E. Island.

We have now got to the shortest days, and are having fine weather, with excellent sleighing. There is a fine covering of snow on the fields, and the clover plants will have a good start toward getting through the winter successfully. Farmers are having an excellent time to get the winter's fuel; that is those who still have bush lots to draw from—many have not. Considerable of the farmer's produce goes to buy coal now, and is quite a tax, as the price of coal has increased to nearly double it was ten years ago. Soft coal from Pictou or Sydney Mines costs us here at outports about \$5 per ton, of 2,000 lbs. Happy is the farmer who was wise enough to save a good block of hardwood. It is his best asset to-day.

We will soon have to go into forestry. Our Island is pretty well denuded of trees, especially in the older-settled parts, and in many sections of our country we notice land that was once covered with heavy growth of birch, beech and maple, and has been cleared, and the soil so exhausted that it does not pay to cultivate it, that if planted again with forest trees it would become valuable to another generation. Our climate is undoubtedly drier than it was half a century ago, and the fields being so wind swept in winter makes it more difficult to get clover to succeed.

We have no public lands here of any account, and, consequently, the system of forestry we will have to follow would be to get each farmer to plant and care for a bush lot on his farm. At the rate that lumber is advancing in price, we will soon see the necessity of conserving what we still have and also planting for the future. The common white spruce grows quite fast here, and makes good rough boards and scantling. The fir and white pine also grow quite rapidly. Among the deciduous trees the soft maple and white birch are rapid growers, and soon attain size enough for stove wood. The question of forestry is only beginning to be discussed here, and we have as yet no organization to

push it. There has been no planting done, but many who have still some bush on their farm are realizing the value of it, and are doing their best to protect it from fires. We hope in the near future to see a move begun toward reforesting some of our bleak, bare hillsides that at present are not returning much revenue from agriculture.

W. S.

Christmas in Sweden.

ONE DAY WHEN THERE ARE NEITHER RICH NOR POOR.

If you were in Sweden on Christmas eve you would hear the church bells begin to ring at five o'clock, for everybody stops work then, and the festivities begin in great earnest everywhere in the kingdom. Class distinctions are forgotten, and servants are allowed to sit at table with the family. After supper comes the universal Christmas tree, for Sweden is one of the early homes of this beautiful custom.

On Christmas morning at 6 o'clock, while it is still dark, you would go to church, for everybody goes, unless you stayed at home to mind the lights in the house, for every home in the kingdom is illuminated. There is almost sure to be a deep snow, and you would go to church in a sleigh. Behind every sleigh you would see two boys standing on the runners and holding pine torches—a beautiful spectacle as a long procession of sleighs glide over the snow on a forest road. These torches are stuck up in a circle around the church. A whole week is given to good cheer and hospitality.

Even were it not for its celebration as the birthday of the Saviour, Dec. 25 would rank as quite a notable date in the year, for the number of eminent persons whose natal day it is. Curiously enough, however, we seldom think of the day as the beginning of the career of any one on earth, other than He to whom custom has assigned it. We know that historical events of all sorts—battles, sieges, and so forth—have occurred on Christmas, for articles almost without end dealing with this interesting side of the history of the day have been written, but of its biographical side little has been said, the more odd this because the fact that many notables have been born on the day cannot fail to prove of interest. The biographical index of Christmas is comparatively long, and includes such names as Sir Isaac Newton, William Collins, the lyric poet; P. S. Gilmore, the musician and bandmaster; Richard Porson, the greatest classical scholar England ever produced; Johann Jacob Reiske, the celebrated German Orientalist; Clara Barton, Admiral S. C. Rohan, and a number of others. Unhappy little shavers they must have been in their childhood, with their birthday and their Christmas rejoicings all merged into one.

Death of William Miller.

The death of Mr. Wm. Miller, of Storm Lake, Iowa, in his 71st year is announced. He was the youngest brother of the late John Miller, of Thistle Ha, Brougham, Ontario, and of Robert Miller, of Pickering. He was a native of Dumfriesshire, Scotland, and emigrated to Canada about the year 1840 with his parents, who settled on a farm in Pickering township, Ontario, where he resided for a good many years before going to Iowa, where he bred Shorthorn and, later, Aberdeen-Angus cattle. Mr. Miller was a bright and cheerful man, possessed of a rich vein of wit and humor. He was also a ready writer, and on more than one occasion contributed interesting articles to the Christmas Number of "The Farmer's Advocate." He will be remembered kindly by many of the old guard of pioneer stock-breeders in Canada, whose number is yearly growing less. His funeral took place from Thistle Ha, Brougham, on December 26th.

Let Something Good Be Said.

When over the fair fame of friend or foe
The shadow of disgrace shall fall, instead
Of words of blame or proof of thus and so
Let something good be said.

Forget not that no fellow being yet
May fall so low but love may lift his head;
Even the cheek of shame with tears is wet
If something good be said.

No generous heart may vainly turn aside
In ways of sympathy; no soul so dead
But may awaken strong and glorified
If something good be said.

And so I charge ye, by the thorny crown,
And by the cross on which the Saviour bled,
And by your own soul's hope of fair renown,
Let something good be said!

—James Whitcomb Riley.

I enclose \$3.00, subscription to "The Farmer's Advocate" for myself and one new subscriber for 1906. I have taken your excellent paper for nearly forty years, and find it a valuable guide in all things connected with the farm.

Welland Co.

CHARLES MURRAY.

How about your renewal?

You Become Rich

not by what you earn so much as by what you save.

SOVEREIGN BANK OF CANADA

Deposits of \$1.00 and upwards received.

Interest paid 4 times a year.

53 Branches Throughout the Dominion

MARKETS.

Toronto.

LIVE STOCK.

Export Cattle—\$4 to \$4.70; export bulls, \$3.60 to \$4.37 1/2 per cwt.

BREADSTUFFS.

Wheat—Ontario—No. 2 white, 78c.; red and mixed, 77c.; goose and spring, 74c. to 75c.

COUNTRY PRODUCE.

Butter—Steady to firm, with the demand good for all lines.

FARMERS' MARKET.

Dressed hogs, light, cwt., \$8.50; do, heavy, \$8; butter, 25c. to 27c.; eggs, 45c. to 50c.

hind quarters, 6 1/2c. to 7 1/2c.; do, fore quarters, 4 1/2c. to 5 1/2c.

HORSES.

Trade in the local horse market during the past week reflected holiday dullness.

Roadsters, 15 to 16 hands, \$120 to \$160; Cobs and carriage horses, 15 to 16.1 hands, 125 to 170.

Montreal.

Turkeys, 14c. to 16c. per lb.; geese, 9c. to 11c.; ducks, 11c. to 13 1/2c.

Potatoes—60c. to 65c., according to quality, per 90 lbs., on track, and 70c. to 75c. in broken lots, in store.

Onions—\$2.85 per bbl. for reds or yellows, and \$1.15 per bag.

Cheese—Holders of finest Ontarios are now demanding in some cases more than 13 1/2c. per lb.

Eggs—Cold-storage stock, 22c. to 23c.; select fall-laid eggs are ranging from 26c. to 30c. per dozen.

Hay—Prices are steady, at \$5.50 to \$6 per ton, on track, carloads, for clover.

Hayseed—\$6.25 to \$7 per bushel, of 60 lbs., for red clover; \$4 to \$6.50 for alskike.

Horses—Sound heavy working horses, weighing 1,500 to 1,600 lbs., sold at from \$500 to \$600 a team.

Live Stock—The supply of live stock at the different markets in the city was light after the plethora of the week before Christmas.

5c., according to quality; hogs being 6 1/2c. to 6 3/4c. for selects.

Grain—Oats continue steady, at 37c. for No. 4, 38c. for No. 3, and 39c. for No. 2.

Buffalo. Cattle—Prime steers, \$5.25 to \$5.70; shipping steers, \$4.75 to \$5.25.

Sheep and Lambs—Lambs, \$6.25 to \$7.90, few \$8; yearlings, \$6.50 to \$7; wethers, \$5.50 to \$6; ewes, \$5.25 to \$5.50.

Detroit Bean Market. H. E. Botsford & Co. report: The bean market is quiet but firm.

Chicago. Cattle—Choice to common steers, \$3.20 to \$6; yearlings, \$4 to \$5.65; cows, \$2.80 to \$4; bulls, \$2.40 to \$3.75.

British Cattle Market. London.—Cattle are quoted at 10c. to 11c. per pound; refrigerator, 8 1/2c.

QUESTIONS AND ANSWERS. Miscellaneous. ARGENTINE AGRICULTURAL JOURNAL.

1. Please give me the name of some agricultural journal printed in Argentine, if there are any.

2. Also some direct steamship line from New York to Buenos Ayres, S. A.

Ans.—1. Boletin de Agricultura y Ganaderia (Bulletin of Agriculture and Live Stock), Buenos Ayres.

2. Lamport & Holt Steamship Line, New York City.

MISREPRESENTED MARE. A buys a mare, advertised to be in foal, at B's sale.

1. If mare is not in foal, can A get any damages?

2. If B represents mare to be sound, wind and limb, and she has the heaves, could A collect damages?

Ans.—1. Yes. 2. He probably can, if he acted on the misrepresentation when buying.

AUCTIONEER'S LICENSES. 1. Can I conduct a sale without getting license if I make no charge for selling?

2. If not, where can I purchase license? 3. What would it cost?

4. How are they sold? 5. Can I purchase them for township of Hope and Hamilton? I live in Durham and Northumberland.

Ans.—1. Probably not. It depends upon whether there is a local municipal

by-law on the subject, and the provisions of such by-law, if any.

2 and 4. Apply to the County Clerk. 3. The sum to be paid would also be fixed by county by-law.

5. The license would probably be for the united counties mentioned, which would, of course, include the townships named.

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Life, Literature and Education.

The Farmer's Advocate and Home Magazine Literary Society.

AN ESTEEMED CORRESPONDENT ASKS US, FOR REASONS GIVEN BELOW, TO CONDUCT A LITERARY SOCIETY THROUGH THE COLUMNS OF "THE FARMER'S ADVOCATE AND HOME MAGAZINE." WE HAVE DECIDED TO DO SO, AND WE COUNT ON OUR READERS, WHO WILL CONSTITUTE THE MEMBERSHIP, TO MAKE IT A SUCCESS.

The practical value of a Literary Society in a community requires no proof. It may not always be so named, but under any name, the society or club which brings people together for the purpose of cultivating and exercising their mental faculties, is of great benefit—directly to the people who thus meet together, and indirectly through them to the whole country, and this statement is borne out by the experience of those who have formed and carried on successful societies throughout the Dominion.

But in many sections of Canada, outside the towns and cities, a thoroughly progressive and interest-breeding literary society is an impossibility. Distances are great, roads are often poor, time always limited; and yet, scattered over our farming districts are many who would appreciate to the full the opportunity to exchange original ideas or opinions upon the productions of others, with some kindred spirit. The teacher in the country must keep out of the rut into which he or she would surely get if her mental processes were confined entirely to the work of the schoolroom. The younger men and women who have received educational advantages, and have wisely gone back to the farm, need some mental polishing to keep the rust spots from the mind's bright surface. And the men and women who have been compelled by circumstances to stick closely to the work of the home, would find in such a society a well of interesting and helpful information, and a place in which to present the ideas and thoughts that have been fermenting in their minds, perhaps for years, with no opportunity of giving them out to others. There is nothing more broadening and uplifting for a man or woman than to mentally rub up against someone else; as "iron sharpeneth iron," so does each receive benefit in seeing things through another's eyes and from another's point of view. Yet, too often, for the reasons given at

the beginning of this article, or for other reasons, this gathering together is not possible, and, as a consequence, many bright minds go hungry for a companionship that is necessary to their mental nourishment.

That many readers of this paper are in this position of comparative isolation, and that they feel it keenly, is evidenced by the letters frequently received at this office, in which the writers lament their inability to form and carry on a society for their mutual mental improvement.

To meet this widespread desire, "The Farmer's Advocate and Home Magazine" has, therefore, considered a plan by which the largest, most far-reaching and most interesting literary society in Canada may be made a reality. Why should not the readers of this journal bind themselves into one great society, with the columns of this paper for the meeting-place of ideas? We see no just cause or impediment why such a club should not prove an abounding success with the material which the members are abundantly able to supply. One thought more by way of introduction: Many people suppose that the art of expressing one's self in spoken or written language is the product of natural-born genius. To some extent it is, but it is chiefly a product of downright hard work. We learn to do by doing.

Now, without wasting time on vexatious preliminaries or a complicated constitution, suppose we christen it the "F. A. and H. M. L. S." All agreed?

Who may become a member? Well, any reader of "The Farmer's Advocate" not under sixteen years of age, who sends in a request to that effect, with the full name and P. O. address, will be enrolled in a book kept for the purpose. The proceedings will be conducted by correspondence. Prizes in the form of books will be awarded the successful competitors in debates or papers.

A correspondent writing us in favor of such a society, proposed a small membership fee to cover expenses, but for the sake of simplicity, and to save time, we do not consider that necessary. We will cheerfully assume that and do our share of the work if the members will do the rest.

The winter is passing. Let us settle down to business.

Two prizes are offered for the best essays, not exceeding 500 words, on the following seasonable topic:

Which do you consider the most important event in the year 1905, in (a) your Province, (b) in Canada, (c) in Great Britain, (d) in the United States, (e) in the world, with reasons for your answers?

All contributions for this competition must reach this office not later than Jan. 20th, 1906. The prize-winning essays will be published.

The applications to be enrolled as a member and the contributions may come in the same letter. Contributions to be written on one side of the paper only, with full name and P. O. on back. Literary merit will, in all cases, be considered.

[Editor's Note.—Suggestions for the future conduct of the "F. A. & H. M. L. S., with subjects for papers or debates, will be gladly received.]

Church Union in Canada.

The joint committee on Church Union, composed of representatives of the Canadian Methodist, Presbyterian and Congregational Churches, has prepared a report from the points submitted by the various sub-committees, which will serve as a framework for the proposed union of these three denominations, and which will be brought before each of them in their conferences next summer.

In this report are formulated the doctrines held in common by the three churches; the lines along which a united church would be possible; the settlement and transfer of ministers, and their preparation for the ministry; and the relations of a minister to the doctrines of the church, that, as a candidate for ordination he must believe himself a child of God, truly called to the ministry, must hold the Holy Scriptures as containing sufficiently all doctrines necessary to salvation, and be resolved to teach nothing not in conformity with them.

The report on the doctrine suggested by the sub-committee, as a basis of possible union, contained nineteen articles, covering the beliefs held in common by the three churches; the power, immutability, love and goodness of God as revealed in nature, in history, in the heart of man, and in the Holy Scriptures; the divinity of Christ and the power of His atonement, as also His intercession in Heaven for human beings; the influence of the Holy Spirit; of the redemption, justification and regeneration of those who believe. The law of God as shown in the ten commandments and in the words of Christ when on earth, is given as the standard for the conduct of mankind; the Church to be one holy catholic body united, with Christ as its head; the sacraments to be two—baptism and the Lord's Supper.

The sub-committee on Ministry, in its report, advised that the pastoral service be without a time limit, ministers being able at the end of any one year to seek a change, by application to the Settlement Committee, which shall have authority to fill vacant pulpits with ministers temporarily, and to initiate correspondence between ministers and charges. It shall be the policy of the church that every congregation shall have a pastorate without interruption, and every effective minister a charge.

"Canada led the way in the matter of denominational reunions. Presbyterianism, divided by the secessions and disruptions in Scotland, was reunited in 1875. Methodism, beginning with the divisions in England

and the United States, was reunited in 1884. And now it would seem that once again Canada is to be first in the healing of those wider breaches which the controversies of the centuries have made in the Protestantism of the world."

It is a historic pronouncement, and the result is most gratifying. A marked feature of the findings is the substantial unity and essential harmony existing between these three great denominations. Neither in doctrine, policy, nor in institutions, was there disclosed any insuperable objection to organic union, which even conservative publicists admit is now, in sight. It may take some time, but the logic of events is leading these bodies into one with a common name and common creed and a common purpose. The statement of doctrine is a truly remarkable statement of essentials in Christian belief. As a tentative basis of union, what has been happily agreed upon will next go before the great assemblies of the three Churches concerned during the approaching year. The strength of the union sentiment among the masses of the people, and particularly throughout the West, was one of the features very strongly emphasized at the union conference which was held at Toronto.

Training to Think.

"I may lay too much stress on the importance of a young man's working at some manual or mental money-making pursuit while he is at school, but it does seem rather foolish to graduate Bachelors of Arts into the primary grade of the working world."

There is in our own schools and universities far too much of the very type of "cultured scholar" referred to in the above quotation from a recent magazine article. Men graduate from our schools and universities into the A B C of the workaday world. We claim that credit is due to the man that fights his way through school and earns his bread while attending college, but in the majority of cases success is due to the very fact that in the daily effort to earn his way, he has prepared himself for graduation into the school of success in the business or professional world.

The students who graduate from agricultural colleges are usually successful in after life, even if they do not remain with their chosen profession of agriculture. Why? Because, in their work at college they have been trained to think and work for themselves, and the power of thought, of individual initiative is what lifts the genius above the clods. As a nation, we should guard against reading too much and thinking too little, and our schools with a long line of subjects calculated to place a premium on cramming, tend to accentuate this difficulty.

All hail, then, to the man who thinks! The problems of Canadian national life and the problems of the Canadian farmer will be solved by the thinking men; and thoughtful men will come from the schools and colleges of our land where men are trained to think and work, and not from places where dead languages sing a requiem over bright minds in process of decay.

"The Lesson of the Loom."

A midnight reverie, vision, or dream? Which name can one give to the mental pictures which, as a phantasmagoria, come and go before the eyes of those who lie wakeful upon their beds whilst others sleep, and who scarce can tell when they have passed at last from the borderland of dreamy wakefulness into the veritable sleep-land which they have in vain been so eagerly trying to reach?

The year was just dying out, and the sounds of the big church bells, giving their glad welcome to the new year on the big world's threshold, mingled with the wind amongst the trees, and perhaps brought with them those other sounds which so blended with those of my vision that they became as one. Clang! clang! jingle! jingle! ding! dong! What are they saying? Voices like a refrain seemed to sing, "Come all ye faithful, come! Come! watch! work! pray!" and then, in happy chorus, followed:

"Every day is a fresh beginning,
Every morn is the world made new;
You, who are weary of sorrow and sin-
ning,
Here is a beautiful hope for you—
A hope for me, and a hope for you.

"All the past things are past and over;
The tasks are done, and tears are
shed;
Yesterday's errors, let yesterday cover;
Yesterday's wounds, which smarted
and bled,
Are healed with the healing which
night has shed."

"Listen, my soul! to the glad refrain,
Take heart with the day, and begin
again."

Were these comforting words really the message of the joybells to me, or were they but the memory of Susan Coolidge's beautiful little poem, which had helped myself and others so often before?—helped us all to the blessed self-appropriation of those other words, which have always healed so many broken and contrite hearts: "Your sins and iniquities will I remember no more?" Clang! clang! went the bells, and a murmur of voices, and what seemed like a whirring of machinery followed in their wake. My dream-world was peopled for me, and I was amongst a throng of busy workers, all eager to take up their allotted task, and to stand at their post, at the bidding of the Master. At least, all looked eager, but it was easy to pick out the loiterers from those others who either went readily to their work or who sought to elude it altogether.

WHAT THE PATTERN WAS LIKE.

"Listen, my people, and while ye look, learn once again the good old 'Lesson of the Loom.'" Thus the Master spoke, as, for a space, upon our own especial section of that mighty Loom before us stood out in bold relief the fabric we last year had wrought. Above, with Heaven's own beautiful light illumined, appeared the pattern of what, alas! it should have been, but was not! but which we were again permitted to gaze upon, that we, "forgetting those things that are behind," might still "reach unto those things which are before, pressing towards the mark for the prize of the high calling of God, in Christ Jesus."

WHAT OUR WORK WAS LIKE.

And what of our work? so botched and tangled, so ill-performed and unsymmetrical, so wholly unlike the Pattern set us when, what seemed so short a while ago, another year of grace had been granted to us? Of the many-colored threads then given to us, each had had its given task to do, no one thread to stand out apart or independent of another, but all to be so interwoven and commingled, so influencing and influenced that the dropping of one thread here and one there, and their consequent careless knotting up together as they fell beneath the loom, would involve

the whole in a confusion so inextricable that no hand but that of the Master Himself could restore its beauty. And what had been the result? As we gazed, eyes were dimmed with tears of bitter remorse or of tender sorrow, of hopeful expectancy or of hopeless dependency, whilst here and there appeared a face testifying to a dogged resistance to all bidding and an obstinate determination to work its own will, regardless of consequences. Here would stand one stricken, as it were, with a wilful blindness—one who would not look up, would not see the Pattern, and recognize how the very thread committed to him had lost its place continuously, and would have been dropped out of the piece altogether but that, by the law of the Master, whilst the shuttle flew, no thread could get beyond its reach, and so, for good or evil, must

in hue and stronger in consistency as the fabric neared its completion, but they had, by their constant looking up, so reflected the Pattern which they had striven to imitate, that such threads which had intermingled with theirs partook of their loveliness, and gained courage and strength from their contact and example; and yet, withal, upon their face shone no self-satisfied look, as of those who "thanked God that they were not as other men are," but only the gladness of those servants who wait for their Lord, and who know that all things, even apparent failures, must "work together for good to those who love Him."

THREADS SEVERED FROM EARTH BUT USED IN HEAVEN.

And what of the tiny threads which here and there appeared among

God?), even though we know it not. But we do know that they have left us by the memory of their beautiful lives, by their undying trust in the efficacy of the "Blood shed for the remission of all sin, and able to save to the uttermost,"—such an example of patient endurance and untiring zeal, that we can, at the beginning of our New Year, take heart of courage to begin our work anew, and drinking from the Fountain at which they drank when weary and athirst, we may, indeed, "forgetting those things which are behind, press forward towards the work of the prize of the high calling of God in Christ Jesus."

Was this a vision, or just an old story retold? Nay, rather, is it not "the story without an end?" Is not the Loom, upon which creation's mighty scheme is growing into its wider and wider proportions, ever at work? Can one single thread snarl or twist or drop out altogether without the knowledge of the Master Weaver Himself? Nay, even if it will keep adrift from the shuttle, and will make choice of its own part of the fabric, may it not be again and again gathered back into its place, and never wholly given up to its own devices? And so, for a while—always hopefully, never despairingly, let us ponder upon the simple but endless "Lesson of the Loom."
H. A. B.

"The Enchanted Forest."

The artist who has given us this expression of a poetic imagination is Sydney Strickland Tully, R. C. A., one of our Canadian artists whose pictures have hung in the Paris Salon and in the London Royal Academy. "The Enchanted Forest" is a purely fanciful subject, showing in clear yet delicate form the artist's delicate mental picture. The original painting is a pastel, the color scheme being iridescent, varying from deep purples to pale yellows and greenish blues. The wings of the beautiful being who dwells in the enchanted forest are of the color of the Luna moth.

The Food Experiments.

One result of the recent experiments carried on by the Department of Agriculture in order to determine the dietary value of different foods, has been to emphasize the value of fruits and nuts as food materials. The subjects of the experiments were two women, three children, two elderly men, and two students. The only animal food allowed them were cottage cheese and eggs, and these were supplied in limited quantities only. Upon this diet the subjects, although performing hard manual work, retained their full health and strength, some of them even showing a decided improvement. The peanut and the bean in particular were shown to be great value as foods. Either of them it was proved would supply protein and energy at a lesser cost than either bread or any of the animal foods.—[Youth.

The Charm of the Kitchen.

There is a kind of sentiment about the kitchen in New England—a kind of sentiment not provoked by other rooms. Here the farmer drops in to spend a few minutes when he comes back from the barn or field on an errand. Here, in the great, clean, sweet, comfortable place, the busy housewife lives, sometimes rocking the cradle, sometimes opening and shutting the oven door, sometimes stirring the pot, darning stockings, paring vegetables, or mixing goodies in a yellow bowl. The children sit on the steps, stringing beans, shelling peas, or hulling berries; the cat sleeps on the floor near the wood-box, and the visitor feels exiled if he stays in sitting-room or parlor, for here, where the mother is always busy, is the heart of the farmhouse.—[The Century Magazine for May.



From a painting by S.S. Tully. "The Enchanted Forest."

become a part of the whole. Some, as Heaven's own radiance fell upon both the Pattern above and its poor, base imitation below, were shown how their own thread had begun so well, keeping side by side and in sweetest harmony with those lesser ones committed to their guardianship, and then—oh! why had it been so?—allured and tempted, weak and self-indulgent, not only had they let their own promising, bright-hued thread become faded and frayed, but those which should have been sustained and strengthened by it, had fallen with it—a long way from, but, thank God! not wholly out of reach of the Master-Weaver's restoring hand.

OF THOSE WHO HAD DONE WELL.

Some seemed to have done the Master's will so promptly, so unremittingly and so obediently, that they had not only grown brighter

the fibres of more enduring strength, interwoven for a while, and then snapped in twain by some rougher contact, or by some jarring of the machinery? What, too, of those strong, tested cords, bright as silver and burnished as gold, which had endured to the end, and then, their task done on earth, had, as it were, "fallen on sleep," and their "place knew them no more?" Why, though not with us, they were of us needed for the higher section of the Master's Loom. Those frail and tiny upon earth being tenderly guided upwards to lead with them, hearts linked to theirs by a love which can never die. Those "long-tested" strands of gold and silver—they, too, had only gone upward, still working for the Master whilst waiting for us whose tasks below are still to finish, and who may be watching us, and who may be helping us (for who can limit the tender mercies of our

Answers to Transcontinental Train Conundrum.

In our issue of Oct. 14th, page 1798, we offered prizes for the first two correct answers to the "Transcontinental Train Conundrum," for particulars and conditions of which offer, turn up the above number. From Monday, 18th, to Saturday, 23rd, the mails bulked large with answers. One hundred and fifty-three were received the first two days, and by Saturday, Dec. 30th, nearly four hundred answers were in hand. Of the many received after that date no account has been taken. The interest has greatly exceeded our expectations, all classes of people having sent in replies—from school children to college professors.

Two or three have volunteered other conundrums. One of these, we fear, is too widely-known. The other may be printed later.

There has been some money spent on postage stamps, but this will not be regretted if the increased volume of business results in a lowering of the postal rates or an improved service to country districts.

There are three answers which may be taken as evidence of correct

reasoning—13, 14, and 15. It was stated that there is a daily train service each way, thus implying plainly enough that the service has been going on for some time. Consequently, a man starting out from one end, will meet all the trains that started the week before he did and also all that start during the seven days he is in making the trip. We give below the reason of one who answered 13:

1.	The train that left Vancouver	144	hours	before	he	left	Halifax.
2	"	120	"	"	"	"	"
3	"	96	"	"	"	"	"
4	"	72	"	"	"	"	"
5	"	48	"	"	"	"	"
6	"	24	"	"	"	"	"
7	"		"	"	"	"	"
8	"		"	"	"	"	"
9	"		"	"	"	"	"
10	"		"	"	"	"	"
11	"		"	"	"	"	"
12	"		"	"	"	"	"
13	"		"	"	"	"	"

The train that left Vancouver 168 hours before he left Halifax would be in Halifax at exactly the time he started, and the one to leave 168 hours after he left Halifax would start just as he reached Vancouver, so he could not correctly be said to meet either."

The only exception we take to this answer is that it does not include the train which leaves Vancouver the instant our passenger arrives. The point may be raised whether this train should be counted, since it is not in motion when the Halifax train comes to it, but inasmuch as a meaning of the word "meet" is to come upon by approach from an opposite direction, and seeing that our passenger comes to and passes the head

of this train standing ready to leave, we think it quite fair to include this train, thus making up 14, or an exact multiple of two per day. As the above-quoted correspondent points out, there will be one train arriving at Halifax the moment our passenger's train leaves, but since

his train does not leave till the other stops, and since, by a fair assumption, the two trains will be fully alongside when the Halifax train leaves, he cannot, in our opinion, be said to meet this train. Having regard, therefore, to the precise meaning of the word "meet," we award the prizes to those who said 14.

Monday forenoon's mail brought four correct answers, for all of which equal prizes will be given. The names of the successful contestants are: A. E. Smillie, Huron Co., Ont.; Louis B. Kenyon, Brant Co., Ont.; Geo. Easton, Brant Co., Ont.; and R. L. Dryden, Bruce Co., Ont.

It is interesting to analyze the returns. Of the 282 persons who sent replies up to December 23rd, 3 guessed three as the number of trains, 27 guessed four, 5 guessed five, 34 guessed six, 42 guessed seven, 24 guessed eight, 1 guessed nine, 1 guessed ten, 1 guessed eleven, 5 guessed twelve, 87 gave that unlucky number, thirteen, 29 said fourteen, 22 fifteen, and 1 guessed sixteen.

The things of sense are only dreams—
A world that seems;
Who reaches up to the Ideal
Achieves the Real.
—Susie M. Best.

GLENGARRY SCHOOL DAYS.

A STORY OF EARLY DAYS IN GLENGARRY.

By Ralph Connor—Rev. C. W. Gordon.

Chapter V.—Continued.

"Now, James, come here!" said the master, turning to Jimmie. "You see what happens when a boy is insubordinate." Jimmie came trembling. "Hold out your hand!" Out came Jimmie's hand at once. Whack! fell the strap.

"The other!"

"Stop it!" roared Thomas. "I took his thrashing."

"The other!" said the master, ignoring Thomas.

With a curious, savage snarl Thomas sprang at him. The master, however, was on the alert, and swinging round, met him with a straight facer between the eyes, and Thomas went to the floor.

"Aha! my boy! I'll teach you something you have yet to learn."

For answer came another cry, "Come on, boys!" It was Ranald Macdonald, coming over the seats, followed by Don Cameron, Billy Ross and some smaller boys. The master turned to meet them.

"Come along!" he said, backing up to his desk. "But I warn you it's not a strap or a rawhide I shall use."

Ranald paid no attention to his words, but came straight toward him, and when at arm's length, sprang at him with the cry, "Horo, boys!"

But before he could lay hands upon the master, he received a blow straight on the bridge of the nose that staggered him back, stunned and bleeding. By this time Thomas was up again, and rushing in was received in a like manner, and fell back over a bench.

"How do you like it, boys?" smiled the master. "Come right along."

The boys obeyed his invitation, approaching him, but more warily, and awaiting their chance to rush. Suddenly Thomas, with a savage snarl, put his head down and rushed in beneath the master's guard, paid no attention to the heavy blow he received on the head, and locking his arms round the master's middle, buried his head close into his chest.

At once Ranald and Billy Ross threw themselves upon the struggling pair and carried them to the floor, the master underneath. There was a few moments of fierce struggling, and then the master lay still, with the four boys holding him down for dear life.

It was Thomas who assumed command.

"Don't choke him so, Ranald," he said. "And clear out of the way all you girls and little chaps."

"What are you going to do, Thomas?" asked Don, acknowledging Thomas's new-born leadership.

"Tie him up," said Thomas. "Get me a sash."

At once two or three little boys rushed to the hooks and brought one or two of the knitted sashes that hung there, and Thomas proceeded to tie the master's legs.

While he was thus busily engaged a shadow darkened the door, and a voice exclaimed, "What is all this about?" It was the minister, who had been driving past and had come upon the terrified, weeping children rushing home.

"Is that you, Thomas? And you, Don?"

The boys let go their hold and stood up, shamed but defiant.

Immediately the master was on his feet, and with a swift, fierce blow, caught Thomas on the chin. Thomas, taken off his guard, fell with a thud on the floor.

"Stop that, young man!" said the minister, catching his arm.

"That's a coward's blow!"

"Hands off!" said the master, shaking himself free and squaring up to him.

"Ye would, would ye?" said the minister, gripping him by the neck and shaking him as he might a child.

"Lift ye're hand to me, would ye? I'll break ye're back to ye, and that I will. So saying, the minister seized him by the arms and held him absolutely helpless. The master ceased to struggle, and put down his hands.

"Ay, ye'd better, my man," said the minister, giving him a fling backward.

Meantime Don had been holding snow to Thomas's head, and had brought him round.

"Now, then," said the minister to the boys, what does all this mean?"

The boys were all silent, but the master spoke.

"It is a case of rank and impudent insubordination, sir, and I demand the expulsion of those impudent rascals."

"Well, sir," said the minister, "be sure there will be a thorough investigation, and I greatly misjudge the case if there are not faults on both sides. And for one thing, the man who can strike such a cowardly blow as you did a moment ago would not be unlikely to be guilty of injustice and cruelty."

"It is none of your business," said the master, insolently.

"You will find that I shall make it my business," said the minister.

"And now, boys, be off to your

homes, and be here Monday morning at nine o'clock, when this matter shall be gone into."

CHAPTER VI.

"One that Ruleth Well His Own House."

The news of the school trouble ran through the section like fire through a brule. The younger generation, when they heard that Thomas Finch had dared the master, raised him at once to the rank of a hero, but the heads of families received the news doubtfully, and wondered what the rising generation was coming to.

The next day Billy Jack heard the story in the Twentieth store, and with some anxiety waited for the news to reach his father's ears, for to tell the truth, Billy Jack, man though he was, held his father in dread.

"How did you come to do it?" he asked Thomas. "Why didn't you let Don begin? It was surely Don's business."

"I don't know. It slipped out," replied Thomas. "I couldn't stand Jimmie's yelling any longer. I didn't know I said anything till I found myself standing up, and after that I didn't seem to care for anything."

"Man! it was fine, though," said Billy Jack. "I didn't think it was in you." And Thomas felt more than repaid for all his cruel beating. It was something to win the approval of Billy Jack in an affair of this kind.

It was at church on the Sabbath day that Donald Finch heard about his son's doings in the school the week before. The minister, in his sermon, thought fit to dwell upon the tendency of the rising generation to revolt against authority in all things, and solemnly laid upon parents the duty and responsibility of seeing to it that they ruled their households well.

It was not just the advice Donald Finch stood specially in need of, but he was highly pleased with the sermon, and was enlarging upon it in the churchyard where the people gathered between the services, when Peter McRae, thinking that old Donald was hardly taking the minister's advice to himself as he ought, and not knowing that the old man was ignorant of all that had happened in the school, answered him somewhat severely.

"It is good to be approving the sermon, but I would rather be seeing you make a practical application of it."

"Indeed, that is true," replied Donald, "and it would not be amiss for more than me to make application of it."

"Indeed, then, if all reports be true," replied Peter, "it would be well for you to begin at home."

"Mr. McRae," said Donald earnestly, "it is myself that knows well enough my shortcomings, but if there is any special reason for your remark, I am not aware of it."

This light treatment of what to Peter had seemed a grievous offense against all authority incensed the old dominie beyond all endurance.

"And do you not think that the conduct of your son last week calls for any reproof? And it is you that will stand up and defend it in the face of the minister and his sermon upon it this day?"

Donald gazed at him a few moments as if he had gone mad. At length he replied, slowly, "I do not wish to forget that you are a member of the church, Mr. McRae, and I will not be charging you with telling lies on me and my family—"

"Tut, tut, man," broke in Long John Cameron, seeing how the matter stood, "he's just referring to yon little difference Thomas had with the master last week. But it's just nothing. Come away in."

"Thomas?" gasped Donald. "My Thomas?"

"You have not heard, then," said Peter, in surprise, and old Donald only shook his head.

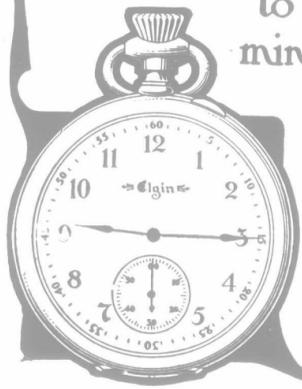
"Then it's time you did," replied Peter, severely, "for such things are a disgrace to the community."

"Nonsense!" said Long John. "Not a bit of it! I think none the less of Thomas for it." But in matters of this kind Long John could hardly be counted an authority, for it was not so very long ago since he had been beguiled into an affair at the Scotch River which, while it brought him laurels at the hands of the younger generation, did not add to his reputation with the elders of the church.

It did not help matters much that Murdie Cameron and others of his set proceeded to congratulate old Donald, in their own way, upon his son's achievement, and with all the more fervor that they perceived that it moved the solemn Peter to righteous wrath. From one and another the tale came forth with embellishments, till Donald Finch was reduced to such a state of voiceless rage and humiliation that, when, at the sound of the opening psalm the congregation moved into the church for the Gaelic service, the old man departed for his home, trembling, silent, amazed.

(To be continued.)

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Work in a Great City.

And the Lord said unto him, Arise, and go into the city, and it shall be told thee what thou must do.—Acts ix: 6.

"I said, 'Let me walk in the fields.'
He said, 'No, walk in the town.'
I said, 'There are no flowers there.'
He said, 'No flowers, but a crown.'
I said, 'But the skies are black;
There is nothing but noise and din.'
And He wept as He sent me back;
'There is more,' He said, 'There is sin.'
I said, 'But the air is thick,
And fogs are veiling the sun.'
He answered, 'Yet souls are sick,
And souls in the dark, undone.'
I said, 'I shall miss the light;
And friends will miss me, they say.'
He answered, 'Choose to-night
If I am to miss you, or they.'
I pleaded for time to be given.
He said, 'Is it hard to decide?
It will not be hard in heaven
To have followed the steps of your Guide.'
Then into His hand went mine;
And into my heart came He;
And I walk in a light divine
The path I had feared to see."

A great change has come into my life. For many years God has plainly told me to stay in the country; but, when my work there was done, the message: "Arise, and go into the city," was spoken as distinctly to me as to Saul of Tarsus. God's calls are as clear to-day as they ever were; though, like Jonah, we may try to escape the responsibility laid upon us, and may rise up to flee from the presence of the LORD, instead of going where He calls. In my case, the call to "go into the city" was plain and unmistakable. I was drawn on by the constraining desire to reach out and touch my fellows where the need was greatest, and I fancied myself free to choose the field of service, but soon found out my mistake. As Saul was directed to the city of Damascus, so I was also guided by a call which could not be disregarded, to the city in which I now find myself. To me also came the message to "go into the city"—this particular city—and it should "be told me" what I must do. And, now, my empty hands are full again, and the days are busy and glad, for they are spent in getting into touch with many who are leading darkened or suffering lives.

The church with which I am connected believes in copying the example of the Good Samaritan and helping the neighbors around, whatever their race or creed. Part of the first week was spent in the pleasant duty of inviting the people who live in a back street near the church to a Neighborhood Party in the Parish House. These parties are given every month. One month the people on one or two streets are invited, and the next month the people who live on other streets. It was delightful to carry the printed cards of invitation into the dreary tenement-houses, and to watch the sad faces brighten at the thought of an evening's fun and entertainment. Three or four families—or more—live in each house; and very forlorn and desolate most of these houses are, though occasionally one finds a room that is tidy and clean. The mothers are many of them Russian Jews, who speak very little English, but there is nearly always a bright little Abraham, Isaac, Israel or Rebecca to talk English to the visitor and chatter away in unintelligible "Yiddish" to the mother. In one room a sick mother was in bed with a baby of three months old, another child was also in bed, and the man of the family—who was nurse, cook and everything else—was just able to drag himself about after an attack of pneumonia.

More than 200 of our "neighbors" from the tenements turned up at the party, and they seemed to enjoy everything provided for their pleasure. It was delightful to pass round the heaped-up plates of cake and to catch the pleased smiles of recognition from one

and another of my friends from the Rochester St. tenements. And how thoroughly they enjoyed the coffee from the big cans in the corner of the room! It was very good coffee too, and the lump sugar handed round with it was of the very best quality. And you should have seen how the young people enjoyed the jolly dance that followed.

There is no direct Christian teaching attempted with these Jews, as that would only antagonize them; but they are being taught by action that speaks far louder than words, that the keynote of the Christian religion is Love. Their children are gathered into the kindergaten every day, the older ones are taught carpentering, cobbling, sewing, cooking, laundry work, etc., or organized into Clubs for playing games after school hours and in the evenings—and so kept off the street. There is a free dispensary for the sick free legal advice for the poor and friendliness everywhere. Whether these Jews ever accept Christianity or not, at least the work is done in Christ's Name, and He will surely accept the neighborly kindness in the loving spirit in which it is offered.

One of the many houses belonging to this mission is called "Welcome House." The name is a very good one, for its doors are ready to open and welcome any girl who needs a helping hand. The other day a poor girl came, asking for admittance. She had only five cents to stand between her and starvation or crime, and not a friend in this great city. Think of it, you who have sweet young daughters growing up like pure lilies in sheltered homes. Think if they were wandering forlorn, homeless, hungry and terrified along the wintry streets, what a blessed thing it would be to find a house with "Welcome" written on the door and on the kind faces within the bright, homelike rooms. Perhaps this poor wanderer had seen one of the cards which are scattered freely about the city, telling any girl who is in need of a friend to come to "Welcome House."

Another young girl came from Europe several years ago—a mere child of sixteen, entirely ignorant of English. She trusted where no trust was due, and one winter night, forlorn, frightened and ill, she crept about the streets, begging to be taken in somewhere and cared-for. Turned away from house after house, she crawled into one that was empty, and next morning was found so badly frozen that parts of her feet had to be amputated. I wish you could see her happy face now that she has found a home and good friends in "Welcome House."

The other day I called on one of the young women who had given way to drink, had been separated from her husband, got into bad company, and was almost in despair. After some time spent in Welcome House, she went back to her home—and a nice, bright home it is now. When I called, I found the room decorated in honor of her husband's birthday. She said she had done it because he was "so good" to her, and she had no present to give him. A very handsome Bible, given her at Welcome House, occupied the place of honor on the table, and she could not say enough about the kindness she had received there. It is a real pleasure to talk with the girls who are now being trained there. Their faces are so bright, and they respond so readily to any friendliness. I had tea with them last Friday, and ladled out hot "chowder" for a long tableful.

Then there is the "neighborhood work" among the Russian Jews, and other people who live in the tenement-houses around us (for this is a mission-church in a very poor district). One day last week I said to one of the little Jews in my "Good Time" Club, "Of course, you don't keep Christmas, Abraham."

"Why, what do you take us for?" was the indignant reply. "Of course we keep Christmas!"

How strange it is that people who reject Christ should keep His Birthday! When I said, "How do you keep it, if you don't believe in Christ?" there was

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An admirable food, with all its natural qualities intact. This excellent Cocoa maintains the system in robust health, and enables it to resist winter's extreme cold.

COCOA

The Most Nutritious
and Economical.



The Angle LAMP

The new principle of coal oil lighting employed in The Angle Lamp is fast displacing gas and electricity. Partly due to the quality of light; best in the world. Soft, mellow, restful to the eyes.

Light Without Any Shadow.

You light and extinguish like gas, you can fill without extinguishing. The only lamp of its kind—the light for country homes. Equals the best light of the city man at a fraction of the cost. You can't know all about it until you use it.

Sold On 30 Days Trial.

Send for catalog 20 and full information.
THE BACH SPECIALTY CO.
355 1/2 Yonge Street, Toronto, Ont.

A Young Man's Face



or his sister's either, should be just as free of pimples, blotches and blackheads as his arms, chest or back. If it isn't what it should be, he can get it so by using our reliable home treatment.

Acne and Pimple Cure.

A dollar pot lasts a month, and will convince any young man or woman of its worth. Don't go about with a blotched face, but get our cure. Fourteen years' experience. Oldest established skin specialists in Canada. **Superfluous Hair**, moles, etc., eradicated forever by our method of electrolysis. Satisfaction guaranteed. Send stamp for book let F.

GRAHAM DERMATOLOGICAL INSTITUTE
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Learn Dressmaking By Mail

At home in your spare time. If you would like to make your own clothes to fit better than you can get them made.

If you would like to conduct a dressmaking business for yourself or someone else.

If you would like to make \$3 a day showing your friends how dressmaking can be taught better and cheaper by mail than any other way. Everything is taught from taking measures to finish. Don't wait until someone else tries first, but write to-day for particulars. Address Sanders Dress-cutting School, Stratford, Ontario, Canada. Agents wanted—whole or spare time.

WEDDING stationery. Young ladies who are interested in what is proper in the matter of stationery for weddings, should send for our booklet. Free for the asking. Latest type faces. Best imported stock. **Lynn Side Press, Dept. 5, Simcoe, Ont.**

a chorus of, "We get presents!" from all the boys. I am afraid a good many Christians think of Christmas as only a time to "get presents." The Christmas spirit of goodwill to men is very strong in this parish. Last Tuesday, at the regular meeting of "workers," one talked about "my Christmas-tree on the 26th," another said something about "my Christmas-tree on the 27th," another said, "you are all invited to my Christmas-tree on the 29th," and another echoed this general invitation to all present to "my Christmas-tree on the 29th." I was quite bewildered, and said, "How many trees do you have?" One of the workers answered, with a beaming smile, "Oh, we generally have the same tree, but we trim it up about a dozen times."

Besides the tree for the 400 children of the Sunday-school, there is one for the 175 women who belong to the Mothers' Meeting, one for Welcome House, another for the Girls' Friendly, another for the kindergaten, and I don't know how many more. Then there is to be a Christmas Party for all the children of the Neighborhood who belong to the various Clubs and classes.

I had to stop there and go to an empty building near here in which there are several empty rooms that have been put at the disposal of the church for club meetings. There were a lot of boys collected for basket-ball, and they were making such a noise that one could hardly think. After staying an hour with them, I drifted into the Parish House, where a jolly crowd of children were dancing

round a Christmas-tree, while they waited for the big slabs of ice cream, and the plates of cake which looked very tempting. The clergyman was amusing some of the tiny tots with a Japanese doll, which he said he had got in his Christmas stocking. I did not stay long there, but came back to finish my little chat with you.

However, I must not talk any longer, or you will feel bored. This is not intended for a sermon—aren't you glad? It is only a letter from one who is starting life anew in a crowded city, and who wants all her old friends to know of the new work in which she is deeply interested. New friends cannot make me forget the old, and you, I know, will like to know something of the work that is being done for Christ, where the need is very great.

But, if you are called to live in the country, never think that your life is narrow or uninteresting. Our Master spent nearly all His earthly life in the country, and yet that Life has been a blessing to all the ends of the earth. The greatest lives are:

"Not always, nor alone the lives that search
How they may snatch a glory out of heaven

Or add a height to Babel; oftener they
That in the still fulfillment of each day's
Pacific order hold great deeds in leash,
That in the sober sheath of tranquil
tasks

Hide the attempered blade of high emprise."

HOPE.



THE CHILDREN'S CORNER

A Strange Doll.

A STORY FOR CHILDREN.

By Lord Brabourne.

Little Mary Preston was very much delighted when her Aunt Jane presented her with a new doll upon the morning of her eighth birthday. It was a wax doll, with a straight nose, blue eyes, and cheeks beautifully tinged with a delicate red color which looked for all the world as if their owner was blushing. It was not only her face, though, which made the doll so pretty to look at. She wore a white dress with a blue sash, and little blue rosettes to match upon her shoulders, and she had the dearest little shoes of the same color, which really seemed too pretty to walk upon.

It was no wonder, therefore, that Mary was delighted with her present, and after thanking and kissing her kind aunt, told her that it was the most lovely doll she had ever seen in all her life, and at once christened it Alexandra. She undressed her dear doll very carefully, and put her to bed in a spare cot which happened to be in her room and had formerly been occupied by one of her little brothers. This seemed a very proper place for Alexandra, and, therefore, her mistress placed her in it, made everything as comfortable as she possibly could, and then went to her own bed.

She never knew exactly how long she slept, but she was awakened by a queer, little noise, and then saw her new doll sitting upright in her cot, yawning and stretching herself as if she, too, had just awakened from sleep. Mary stared at her in speechless amazement, which was increased when the doll turned round and looked at her, and then in the most barefaced manner actually winked at her, first with one eye and then with the other; and then, after another yawn, proceeded to speak.

"Now, Polly," she said, in a tone and manner abominably flippant, especially when addressed by a doll to its mistress—"Now, Polly, don't be lazy; it's time to get up!"

Now Mary knew perfectly well by the light that it was not time to get up. She was never called until a quarter past seven, and by the dimness of the rays of sunlight which were beginning to creep in through the shutter, she knew that it could not be much past five at the latest. What surprised her most was to be called "Polly," which nobody ever

called her but her brothers, Frank and Ernest, and was a totally unexpected familiarity on the part of a doll.

At all events, instead of refusing to obey the command she had received, she made no reply at all, but, putting first one foot and then the other out of bed, stood upon the floor, and began to get ready to wash and dress herself as usual. "Give me my bath," said an imperious voice from the cot, and as Mary rounded round she saw her doll in the act of following her example, and getting up from bed. After a moment's hesitation, the little girl proceeded to sponge the doll carefully with her own best sponge, and then dried her with a cambric pocket handkerchief.

"Now," said Alexandra, "get me my things and dress me properly."

Mary obeyed without a word, and when she had done all that was required of her, could hardly go on with her own dressing for the interest she took on observing how cleverly her new companion finished her toilette. She was, of course, dressed much the first, and then, bidding Mary take her hand, in a tone which showed that she was used to command, and to be obeyed, next told her to open the door, and proceeded to walk downstairs with the air of a mistress. When they had got down into the little breakfast-room, the doll dropped Mary's hand, and, marching up to the glass doors, told her to open them, and so they both passed out. The doll deliberately turned head-over-heels in the middle of the path.

You may fancy Mary's feelings at this moment! Although accustomed to the society of her brothers, and therefore well acquainted with the habits and games of boys, she had never been able to see them turn head-over-heels without wondering how they could do so, and thinking that it must be a very uncomfortable thing to do. It was at any rate a most unladylike proceeding, and one which no girl with any sense of what was right and proper would ever attempt, and to see a respectable doll betake herself to such a trick, was something too terrible to contemplate. It seemed as if the world must be coming to an end, or else that Alexandra had entirely taken leave of her senses. She, knowing or caring little as to what anybody might think of her, was not content with performing the feat once for all. Twice, thrice, four times, she turned head-over-heels, and stood there before Mary with her dress in a such

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NOTE—The first car of this year's winter wheat was shipped from Lethbridge on August 12th last.

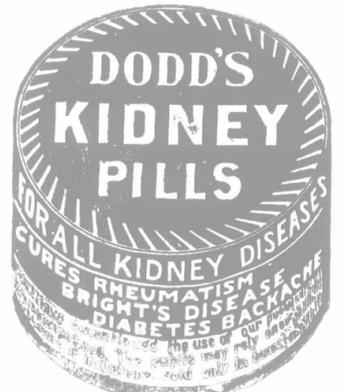
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"Mamma, I don't want to wear these red stockings. Nurse said this color won't run and I don't want to walk always."

"Oh, nurse didn't say it properly. Let me show you. See, on the toes it says, 'fast colors.'"



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To take charge of house and four children. Everything convenient; no milking. Permanent situation to suitable person. Richard Wilkin, Box 60, Harrison, Ont.



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BARRED Rock cockerels, Ellery Bright strain Mammoth Bronze turkeys. Both are prizewinning strains. Also collie dogs. John E. Pearce, Wallace town, Ont.

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BEST ONLY—Barred Rock cockerels; will cheerfully give references of any that's purchased. Prices right, satisfaction guaranteed. A. E. Donaghy, Colborne.

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MAMMOTH Bronze turkeys; Silver-Grey Dorkings; Barred Rocks. Fine lot of birds from prizewinners. Pairs mated, not akin. Alfred E. Shore, White Oak, Ont.

PURE-BRED Pekin ducks, Barred Rock cockerels; very fine. Mrs. Howard, St. Julian's, Sutton West.

SUPPLIES and books on all kinds of poultry: pigeons, pheasants, birds, dogs, cats and rabbits. Catalogue free. Morgan's Incubator Works, London, Ont.

WHITE Wyandotte cockerels. Parents direct from Durston's. \$2. Silver Wyandottes \$1. E. W. Burt, Paris.

WHITE Wyandottes exclusively. Choice quality and fine winter layers. W. D. Monkman, Bond Head, Ont.

SHOEMAKER'S BOOK on POULTRY

and Almanac for 1906 contains 224 pages, with many fine colored plates of fowls true to life. It tells all about chickens, their care, diseases and remedies. All about incubators and how to operate them. All about poultry houses and how to build them. It's really an encyclopedia of chickendom. You need it. Price only 15c. L. C. SHOEMAKER, Box 480, FREEPORT, ILL.

worse state than before, but looking in her face with defiant eyes, as if perfectly well aware that she was outraging every rule of propriety, and rather gloried in the fact.

"There!" she cried, in an exulting tone. "Do that if you can, Miss Prim: what are you staring at? You are not half up to fun!"

"Fun!" exclaimed Mary, in horrified accents, "do you call that fun? Well—you are the oddest doll that I ever set eyes upon!"

"Of course I call it fun," replied the other (taking no notice of Mary's last remark), "and so would you if you had any sense in your head, which unhappily you have not. It is fun! Roaring, rampageous fun! Why do you stand there staring like an owl? Come and feed the pigs." She spoke, and without more ado brushed past Mary in the path, and ran towards the pigsties.

Then to Mary's horror and disgust, Alexandra, instead of feeding the creatures (which, indeed, she could hardly have done, since she had not gathered anything for them in the garden), began to pelt them with small stones, which she picked up from a heap of gravel which had been shot down in a corner of the yard hard by to be at hand for repairing the garden paths.

"Don't do that!" cried Mary. "You really must not, and what a shame it is to hurt the poor things!"

"It is not a shame at all," angrily replied Alexandra; "but it is always 'Don't do this,' and 'You mayn't do that' with you. I never saw such a spoil-sport as you in all my life! I've a great mind to put you in the hog-wash tub!"

Mary had no choice now but to engage in a personal combat with her new possession, which would probably determine once for all which of them really belonged to the other. She planted her feet firmly on the ground, and when Alexandra seized her by the waist, she, in her turn, threw her arms round the doll, and firmly resisted all the efforts of the lat-

ter to remove her from where she stood. They tugged and strained at each other for full half a minute, and neither of them seemed to have any advantage.

The doll's strength was great, and at last she absolutely felt herself yielding. Yes, she could resist no longer. She was being dragged—inch by inch, it is true, and very slowly, but still she was certainly being dragged towards the hateful corner, and shame, rage and despair were already rising within her breast, when suddenly a strong hand was laid upon her shoulder—the doll's arms were loosed from around her all in a moment, and a loud, cheery voice exclaimed in well-known tones—"It's a quarter past seven, Miss Mary, and time to get up!"

And Mary—awoke!

Never had the summons to rise been so welcome before. Mary sat up in bed in a dazed and confused state.

"Why, what can all the child?" asked Nurse Saunders, for it was she who had interrupted the doubtful conflict which I have described. "She's all in a fuster, I declare! Wake up, Miss Mary, 'tis a lovely morning, and see, here is your fine new doll all ready to say 'good morning' to you."

INGLE NOOK CHATS.

Phæba's Opinion.

Dear Dame Durden,—You so kindly give us a chance to express our opinions that I shall avail myself of the opportunity. First, I should like to say that I derive much pleasure and benefit from the Ingle Nook. In a recent issue you asked: "Should a wife's confidence to her husband include her friends' secrets?" I do not think so. They have as much right to keep secrets as their husbands have; but the question seems to be, "Are they capable of doing it?" Men do not seem to think so. I think I should love Ralph Conner as a writer, if for no other reason than the tender manner with which he writes about women. The idea of women's inferiority seems to be an impression that dies hard amongst men. I think that it remains for our sex to dispel that illusion. I am sending my recipe for headcheese for "Starlight," as it contains no other meat but pig's head.

RECIPE FOR HEADCHEESE.

Remove the cheek or jaw; have the head cut in small pieces for convenience in cleansing. Put on to cook in boiling water, and boil slowly until the meat will come from bones easily. Remove the meat; strain liquid through sieve, and return to kettle to be set aside until cold, and fat removed. Separate bones from meat (I remove the fat meat, it can be fried out for lard); break meat up in small pieces (do not mince). Put meat in liquid, and season to taste with salt, pepper, and summer savory. Let boil, and pour out in suitable dishes, and the result will be a nice, mottled headcheese. Hoping I have made this plain.

PHÆBA.

Glad to have your opinion on that question, though you and I will have to wait for some other chatterer to answer the other query: "Are they capable of doing it?" What do you think of the view of that wit who at a banquet gave this toast: "Woman—once our superior,

now our equal!" He seemed to think that a woman was lowering herself when she claimed equal rights with men. Tennyson, whose reverence and honor for womanhood excels perhaps that of any other of our English writers, expresses his thought of woman's position very beautifully in the "Princess."

"Let her make herself her own To give or keep, to live and learn and be All that not harms distinctive womanhood. For woman is not undeveloped man, But diverse: could we make her as the man Sweet Love were slain: his dearest bond is this— Not like to like, but like in difference. Yet in the long years liker must they grow; The man be more of woman, she of man; He gain in sweetness and in moral height, Nor lose the wrestling thews that overthrow the world; She mental breadth, nor fail in childward care, Not lose the child-like in the larger mind, Till at the last she set herself to man Like perfect music unto noble words." D. D.

Recipes.

Nut Fruit Cake.—1 cup butter, creamed with two cups sugar; add 4 eggs, whose whites and yolks have been beaten separately; one grated nutmeg sifted with 1 pound "Five Roses" flour, stirred in gradually; two heaping teaspoons baking powder; a large cup of stoned and chopped raisins, and the same amount of finely-chopped nuts, dredged with a little of the flour, are stirred in last. Bake in a cool bread oven. Ice, and decorate with burnt almonds.

Jumbles.—1 quart "Five Roses" flour; 1 pint granulated sugar; 1 cup butter; 4 eggs; 4 tablespoons of canned berry or cherry juice; 1 teaspoon cinnamon; 2 teaspoons baking powder. Make into a soft dough, roll out thin, cut in small shapes, wet the tops with white of egg, dust with sugar, and bake in a fairly-hot oven. Put away in a tin canister.

ATTENTION! SUGAR-MAKERS

Many makers of maple syrup put off buying their requirements until sap runs, then expect their orders to be shipped immediately. As our busy time is just commencing, it would be to your interest to place your orders at once, and thus avoid delays. We make 19 sizes of Evaporators. Write to-day, stating the number of trees you tap, and we will quote you on an outfit suitable for your requirements.



THE GRIMM MFG. CO.
58 Wellington St. MONTREAL.

GUELPH FAT-STOCK CLUB

ANNUAL SALE OF

Pure-bred Cattle

ON

Wednesday, February 28, 1906.

ENTRIES CLOSE JAN. 13, 1906.

For regulations and other information address

J. M. DUFF, Secretary, o Guelph, Ont.

GLENAVON STOCK FARM

Shorthorns

Have from choice milking strains two registered bulls for sale. Prices right.

W. B. ROBERTS, Sparta P. O.
Station, St. Thomas, C.P.R., M.C.R. and G.T.R. o

\$12.80 For 200 Egg INCUBATOR

Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day.
GEO. H. STAHL, Quincy, Ill.

50 MAMMOTH BRONZE TURKEYS

sired by imported toms from the best prizewinning stock in America. Write for prices.

W. E. WRIGHT, Glanworth, Ont.

THE GENUINE SMITH STUMP PULLERS

W. SMITH GRUBBER CO.
LACROSSE, WIS. U.S.A.

Special Low Rates Round Trip

Chicago to New Orleans.

First and third Tuesdays of each month, good 21 days, with liberal stop-over arrangements; \$6 less than regular Mardi Gras rates. Get away from the cold weather. Ask your local ticket agent about it, or write G. B. Wyllie, Trav-Pass. Agent, 210 Ell [], Buffalo, N. Y.

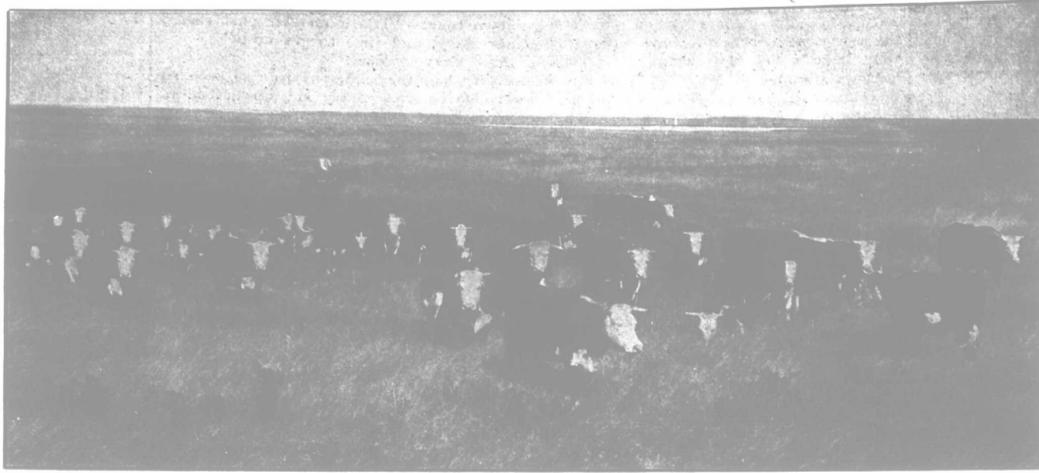
Newspaper reports state that a sow, buried six weeks in a straw-stack at Wellington Langdon's farm, near Lansdowne, Ont., was uncovered, and, after receiving a little care, is none the worse for the hibernation.

Stock feeders should note that in the advertisement of Worthington's Stock Tonic, sold by Bogardus & Co., of Guelph, Ont., the price of this preparation has been slightly advanced, owing to continued advance in cost of crude materials and expense of manufacture; but is yet cheap enough, as it is their determination to keep the quality up to the usual high standard. The value of this tonic has been amply attested by the success at leading Canadian fairs of animals to which it has been fed.

Pe'cheron, Shire and Hackney stallions and mares are offered for sale, in his new advertisement, in this issue by Lew Cochran, Crawfordsville, Indiana, importer and breeder of these classes of horses, who has made a unique record in prizewinning at leading shows in America in the last few years, his claim being that he won more prizes at the World's Fair, St. Louis, 1904, than any other exhibitor of live stock, and at the Chicago International, 1904, on 20 head shown, won 34 prizes, and at the International, 1905, won 34 prizes on 19 head, of which 19 were first prizes, including three gold medals and three championships. See the advertisement, and write for prices and particulars, mentioning "The Farmer's Advocate."

C. P. R. LANDS

The Canadian Pacific Railway Company have 12,000,000 acres of choice farming lands for sale in Western Canada. Manitoba and Eastern Assiniboia lands generally from \$4 to \$10 per acre, according to quality and location. South-western Assiniboia and Southern Alberta lands, \$3.50 to \$8 per acre. Ranching lands generally \$3.50 to \$4 per acre. Northern Alberta and Saskatchewan lands generally \$6 to \$8 per acre.



Hereford Cattle, Crane Lake, Assiniboia, Main Line Canadian Pacific Railway.

\$6 LANDS: 160 acres, or one-quarter section, of \$6 lands may be bought for settlement with a cash payment of \$143.80, a payment of \$48.93 interest at end of the first year, and nine equal installments of \$120 each, which include interest at 6 per cent., annually thereafter. Purchasers who do not undertake to go into residence on the land within one year from date of purchase are required to pay one-sixth of the purchase money down, and the balance in five equal annual installments, with interest at the rate of six per cent. per annum.

DISCOUNT FOR CASH: If land is paid for in full at time of purchase a reduction in price will be allowed equal to 10 per cent. on the amount paid in excess of the usual cash installment of one-sixth. Interest of 6 per cent. will be charged on overdue installments.

FOR MAPS AND FULL PARTICULARS APPLY TO

F. T. GRIFFIN, Land Commissioner, WINNIPEG.

GOSSIP.

Attention is called to the special low round-trip rates from Chicago to New Orleans advertised in this paper by the Illinois Central Railroad Company. To persons contemplating spending the winter in the South, this announcement should be of especial interest.

THE PICKERING SHORTHORN SALE.

Friday, January 19th, is the date of the auction sale advertised for the dispersion of the entire herd of Scotch-bred Shorthorn cattle and other stock and chattels belonging to Mr. Robert E. Johnston, at his farm, near Pickering Station, on the G. T. R., 24 miles east of Toronto. Having rented the farm, all advertised will be sold without reserve, and this sale offers a rarely good opportunity to secure really good representatives of several of the best Scotch families. The offering includes three high-class young imported cows. Lady Lorne, a roan four-year-old cow, bred by Mr. McWilliam, of Keith, Scotland, is a daughter of the Lavender bull, Pride of Lancaster, and her dam was by the Duthie-bred Prince of North, of the Marr Princess Royal tribe. Mina C is a red two-year-old daughter of Imp. Prince Royal, bred by the late W. S. Marr, from the Princess Royal family, and sired by Lavender Victor. Lavender 45th, a red yearling, of the favorite Cruickshank Lavender family, got by Orange Victor, a Cruickshank Orange Blossom. Bessie Lady is a red five-year-old cow, by the Golden Drop bull, Imp. Royal Prince, and her dam, a straight Scotch-bred cow, Imp. Bessie Girl, is by the Cruickshank Brawith Bud bull Craven Knight, by the Clipper bull, Cumberland. Duchess of Gloster 53rd is a red yearling of the Cruickshank Duchess of Gloster family, by Merry Chief, by Imp. Merryman, one of the best bulls ever used in the Greenwood herd. Lady May (imp.), bred by Mr. A. M. Gordon, of Newton, Aberdeenshire, is a roan four-

Profits in Stock-raising



are not accidental, they come as a result of well-directed efforts. Health of stomach and bowels forms the basis to work on for profit. Thousands of the best feeders in Canada testify that

CARNEFAC

produces and sustains this condition. It is worth your while to prove it for yourself. You can do so by simply asking your dealer, or writing us direct for a 25-lb. pail on 30 days' trial, f.o.b. your station.

THE CARNEFAC STOCK FOOD CO.,
WINNIPEG, MAN. TORONTO, ONT.

year-old cow, sired by the champion, Cornerstone, whose show-yard career was unexcelled in his day. Carnation Queen (imp.) is a dark roan four-year-old cow of the Miss Ramsden family, which has produced many notable prizewinners, and her sire was a son of the great Cruickshank bull, Field Marshal. The nine young bulls to be sold are nearly all of serviceable age and richly bred. Of these, Mr. Arthur Johnston writes: "I can truly say that I have never seen a finer lot of young bulls offered at a public sale in this country. They are exceedingly good and in excellent form." Three of these are imported, others are from imported sire and dam, and all are richly bred, the top sires, as well as the earlier ones, being of first-class breeding. Some of the cows will have calves at foot to be sold with them, and all females of breeding age will have been bred to first-class imported bulls. The terms of the sale are easy, and the location convenient for a large portion of country. Those who have not seen the catalogue, and are at all interested, should not fail to send for it, and plan to be present at the sale.

QUESTIONS AND ANSWERS.

Miscellaneous.

LOSS OF COW.

A buys a number of cattle from B in September for twenty-seven dollars per head. B to keep cattle until 15th of November. A goes for cattle on 9th of November, and finds cattle on the highway, and one dead. Who stands the loss, A or B?

SUBSCRIBER.

Ans.—Under the circumstances, probably B; but we would require to know very much more of the facts of the case in order to give anything like a definite answer.

STALLION, BLACK DOUGLAS.

Can you give the number of the stallion, Black Douglas, imported by John Robinson?

Ans.—We do not find Black Douglas recorded in the Canadian Clydesdale Stud-book.

FEEDING COLT TO IMPROVE HIS NECK—QUARRELSOME PIGS.

1. Which is the best way to feed a colt to improve his neck?

2. Have two litters of pigs of about 100 lbs. each. They get fighting in the pen, and have killed two now. What is the matter, or what will stop them from fighting?

J. S.

Ans.—1. We do not know of any feeds particularly strengthening to the neck, but if you wish to increase the colt's spirit and thus improve the carriage of head and neck, moderately free use of oats and avoidance of too much heavy work will do something in this direction.

2. For some reason or other, their tempers do not seem to be so sweet as they ought to be; this is probably hereditary. Separate the quarrelsome ones, if possible, by keeping in different pens; keep warm and comfortable, and feed well enough to make them satisfied. Well-fed hogs are less liable to fight than starving ones.

FACTORY FEEDING OF HOGS

The proprietor of our cheese factory intends starting a hogpen in connection with the factory, and I being appointed on the committee to enquire into the matter for the interests of the patrons, I would be greatly pleased for any information regarding the matter. Is the thing a good investment, or how is business of that kind conducted? I have heard it was carried on in parts of Western Canada with good success.

MICHAEL CLARKE.

Ans.—There are a number of cheese factories in Western Ontario where the whey is fed to hogs kept in conjunction with the factory, and the dairy instructors tell us that when the pigs are kept fifteen or twenty rods from the factory they never see any signs of trouble arising from the proximity of the hogs. In fact, this is considered preferable from the factoryman's standpoint, to sending the whey home in the cans in which milk is hauled. As to how the plan is carried out, that will depend on who owns the factory. If the factoryman is running the thing on his own speculation he should allow the patrons an extra six or seven cents a hundred for their milk to make up for the loss of the whey.

QUESTIONS AND ANSWERS. Miscellaneous.

ENGLISH PHEASANTS.

Where can I get some English pheasants, and at what price? C. J. A.

Ans.—Pheasant fanciers would doubtless get lots of business by using our advertising columns.

TELEGRAPH KEY AND SOUNDER.

Can you inform me how to connect a telegraph key and sounder with a Sheffield or Mesco dry battery to work properly? On the sounder, 4 ohm is printed; designed for use with one-cell gravity battery. REGULAR READER.

Ans.—There are two bending posts on both the sounder and the battery. Connect the bending posts by wires run between the sounder and battery.

REGISTERING STANDARD BRED HORSES

What is the difference between breeding of a Standard and a Standard-bred horse? Can a foal be registered whose dam is Standard-bred? Its sire has a mark of 2.20 1/4. Grand sire is not registered, but great-grand sire is? Can a foal be registered which is sired by a Thoroughbred sire, out of a mare not a Thoroughbred, but by a Thoroughbred sire? SUBSCRIBER.

Almonte.

Ans.—Following is the trotting standard for the American Trotting Register:

When an animal meets these requirements and is duly registered, it shall be accepted as a Standard-bred trotter:

1. The progeny of a registered Standard trotting horse and a registered Standard trotting mare.

2. A stallion sired by a registered Standard trotting horse, provided his dam and grandam were sired by registered Standard trotting horses, and he himself has a trotting record of 2.30 and is the sire of three trotters with records of 2.30, from different mares.

3. A mare whose sire is a registered Standard trotting horse, and whose dam and grandam were sired by registered Standard trotting horses, provided she herself has a trotting record of 2.30, or is the dam of one trotter with a record of 2.30.

4. A mare sired by a registered Standard trotting horse, provided she is the dam of two trotters with records of 2.30.

5. A mare sired by a registered Standard trotting horse, provided her first, second and third dams are each sired by a registered Standard trotting horse.

The address of the Secretary is American Trotting Register Association, 355 Dearborn St., Ellsworth Building, Chicago, Ill.

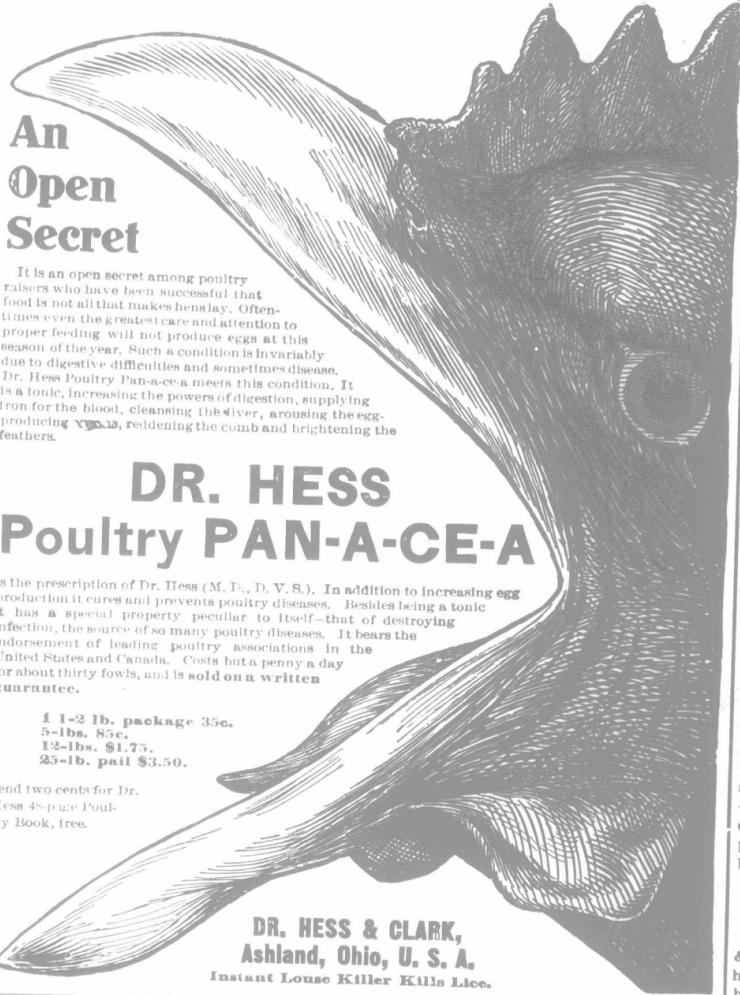
PASTEURIZING MILK FOR SALE—CONDITION POWDERS FOR HORSE

1. Please give a recipe for sterilizing milk for sale.

2. A good condition powder for a horse. O. K.

Ans.—1. The best sterilization is painstaking cleanliness, and where this is observed there is no need of heating the milk to destroy germs. However, if one wishes to do so, he may heat the milk to 150 up to 160 degrees, Fahr., by running it through a pasteurizer, which may be purchased from dairy-supply houses. A similar result might be secured more cheaply, but more clumsily, by surrounding shotgun cans of milk with warm water in tubs; water to be heated by jets of steam, if such are available, and the milk to be stirred so that it may be heated uniformly and held at 160 degrees for fifteen or twenty minutes. This process, by the way, is pasteurization, not sterilization. While pasteurizing adds to the keeping quality, it tends to prevent the cream rising, and possibly renders the milk a trifle less digestible. After pasteurizing, the temperature should be reduced to, and held at, between 40 and 50 degrees by surrounding the cans with cold water.

2. A safe and simple condiment that contains constituents that act upon the system similarly to those found in most stock foods, and has the advantage of being much cheaper than the patent preparations, is as follows: Five pounds each of ground corn or shorts, oats and bran, 1 pound oil meal, 2 ounces gentian, 2 ounces iron sulphate, and 1/2 pound salt. Feed about a pound at a feed; water regularly, and give good grooming.



An Open Secret

It is an open secret among poultry raisers who have been successful that food is not all that makes hens lay. Oftentimes even the greatest care and attention to proper feeding will not produce eggs at this season of the year. Such a condition is invariably due to digestive difficulties and sometimes disease. Dr. Hess Poultry Pan-a-ce-a meets this condition. It is a tonic, increasing the powers of digestion, supplying iron for the blood, cleansing the liver, arousing the egg-producing organs, reddening the comb and brightening the feathers.

DR. HESS Poultry PAN-A-CE-A

Is the prescription of Dr. Hess (M. D., D. V. S.). In addition to increasing egg production it cures and prevents poultry diseases. Besides being a tonic it has a special property peculiar to itself—that of destroying infection, the source of so many poultry diseases. It bears the endorsement of leading poultry associations in the United States and Canada. Costs but a penny a day for about thirty fowls, and is sold on a written guarantee.

- 1 1-2 lb. package 35c.
5-lbs. 85c.
12-lbs. \$1.75.
25-lb. pail \$3.50.

Send two cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK, Ashland, Ohio, U. S. A. Instant Louse Killer Kills Lice.

Advertisement for U.S. Cream Separator. Includes text: 'DON'T WASTE CREAM', 'U.S. Cream Separator is biggest money maker—gets more cream than any other. Holds WORLD'S RECORD for clean skimming.', and 'VERMONT FARM MACHINE CO., BELLOWS FALLS, VT.'

WHEN WRITING TO OUR ADVERTISERS PLEASE Mention Farmer's Advocate.

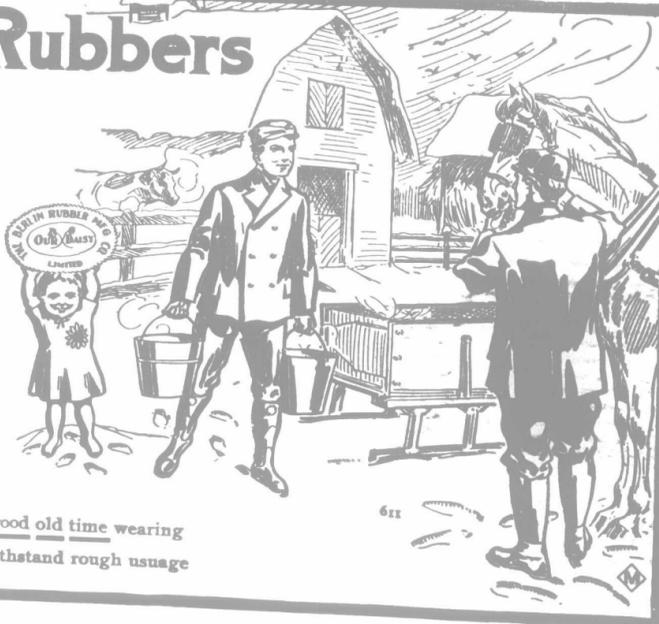
Our Daisy Rubbers

Are adapted for all descriptions of farm and heavy work

Warm and comfortable on the feet

High enough to keep legs dry

Make winter barnyard choring a delight



Made with all the good old time wearing quality, they will withstand rough usage

AGE RING ON COW'S HORN.

There are two parties who have a dispute about what time first wrinkle, or ring, comes on a cow's horn. Is it two or three years? E. S.

Halton.

Ans.—Generally, almost invariably in third year, or by the time she is three years old.

THE CARE OF A DOG.

I have an extra good cattle dog, but during the breeding season he roams at night. I do not want to tie him up, nor yet castrate him. J. S.

Ans.—The latter is the only sure method, and in cases that came under our notice did not depreciate the value of the animals. Give him little or no meat; give him a diet of bread and vegetables.

GOSSIP.

HENRY B. WEBSTER'S SHORTHORN SALE.

On January 24th, 1906, at his farm, adjoining the Village of Fergus, on G. T. R. and C. P. R., Mr. Henry B. Webster will offer for sale by auction, as advertised, his entire herd of 42 head of Scotch and Scotch-topped Shorthorn cattle, representing such families as Matchless, Claras, Marr Beautys, Missies and Margarets, among which are 20 breeding cows, 12 heifers from 6 to 24 months, and 6 bulls from 6 to 15 months of age. All these cows are either in calf or with calves at foot. The present stock bull, Royal Chancellor =44688=, bred by Thos. Redmond, Millbrook, Ont., has for sire Royal Member (imp.) =17107= (64741); dam Matchless =41368=. The stock bull used before was Lord Stanley 4th =22678=, and many of the young cows and heifers are sired by him. Fuller particulars as to breeding of herd will be given in our next issue.

J. GORDON & SONS' SHORTHORN SALE.

This is the last call for John Gordon & Sons' important auction sale of 45 head of Scotch and Scotch-topped Shorthorn cattle, to be sold at their farm, three miles from Sunderland, Ont., where conveyances will meet all morning trains on day of sale, Tuesday, January 9th, 1906. Besides this lot of Shorthorns, Mr. Gordon will sell a big, breedy pair of breeding Clydesdale mares, making all together an offering that offers a rare opportunity to the farmers of this country of purchasing at their own prices some excellent Shorthorn and Clydesdale blood. This lot of Shorthorns are in prime condition, and are regular breeders, all the cows being in calf or having calves at foot. Among the lot is about a dozen heifers from six months to two years of age, prizewinners among them, and about a dozen bulls from callhood up to 2 years of age, some of them pure Scotch, and some of them out of Red Rose dams that are deep milkers; but all of them the making of thick, good bulls. The terms of sale are ten months' credit on approved joint notes, at five per cent. Geo. Jackson will wield the hammer. Catalogues will be supplied on application.

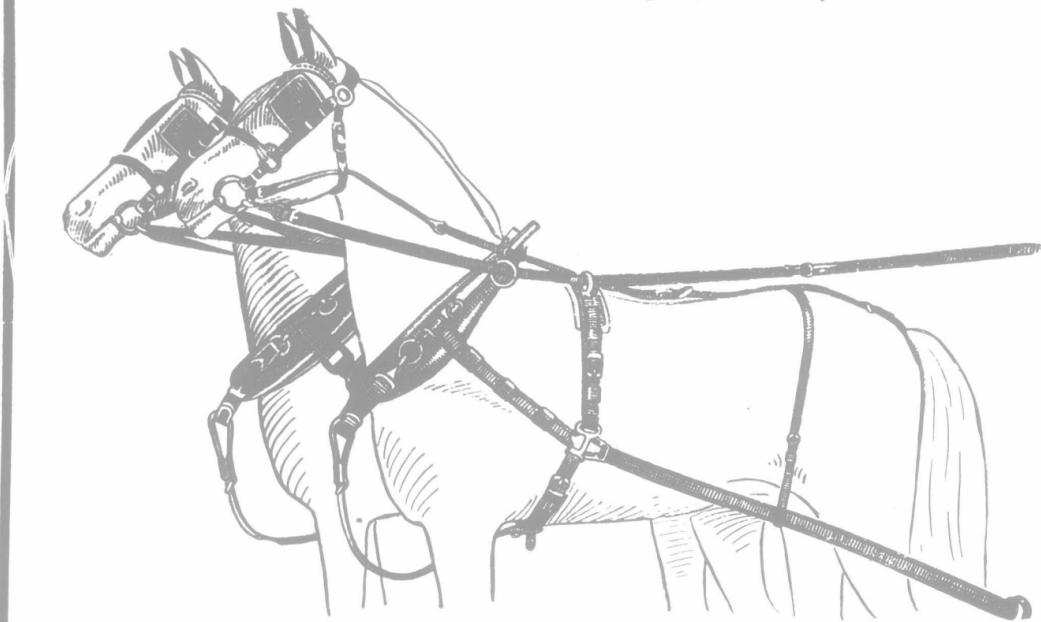
SET OF TEAM HARNESS FOR \$29.40 REGULAR VALUE \$35.00

By good management in buying our leather before the leather market soared as high as it is at present, we are able to still give our customers the benefit of low prices. Leather has advanced 30% in price, and, of course, harness has advanced also. The advantage we have gained in having our own factory and buying the leather months in advance, we give to all purchasers. We give you Harness manufactured by ourselves, and guaranteed to be exactly as represented, at a price that is the lowest.

Our January-February Sale Catalogue has a page of Bargains in Harness and Leather Goods. Write for it to-day.

The Harness illustrated here is made in our own factory, and we guarantee every strap and buckle in it. We ask you to try it, and if it is not all we represent it to be we will refund your money.

We have only a limited number of this Harness at this price, and advise you to order at once.



OUR SPECIAL TEAM FARM HARNESS

Bridles— $\frac{1}{2}$ inch checks, patent leather winkers, good fronts and rosettes, nose bands with bit straps, stiff or jointed bits, round winker stays and side checks.

Lines—1 inch, good length, with straps and spreaders. **Collars**—Thong sewn, leather faced, open top.

Hames—Steel bound, high ball top, wood staples. **Hame Tugs**—3-ply x $\frac{1}{4}$ -inch with D. G. trace buckles.

Martingales— $1\frac{1}{2}$ heavy. **Breast Straps**— $1\frac{1}{2}$ -inch, heavy, with slides and snaps.

Traces— $1\frac{1}{2}$ -inch x 3-ply, hand sewn. **Back Bands**—Padded, fancy housings.

Belly Bands—Heavy folded. **Back Straps**—With buckled crupper and hip straps.

Mountings—X. C. plate.

\$29.40

We pay Freight and Express on shipments of \$25.00 or over on all goods except Furniture, Springs, Mattresses, Organs, Refrigerators, Stoves, Baby Carriages, Flour, Sugar and Salt. We ship the cheapest way.

THE **T. EATON CO.** LIMITED

190 YONGE STREET

TORONTO

CANADA

SHEEP FARMING IN AMERICA is the title of an exceedingly interesting and practical book of 332 pages, by Mr. Joseph E. Wing, dealing with the history of the mutton and fine-wooled breeds of sheep, their selection, breeding, feeding, care and management, treatment of diseases, dipping, shearing, marking and marketing. There is also a chapter on Angora and milking goats. The arrangement of topics, table of contents and the index is complete. It is published by the Sanders Publishing Co., Chicago, Ill., and may be had of the publishers or this office at the quoted price, \$1, for which it is excellent value.

125 Percheron, Shire and Hackney Stallions and Mares.

At the World's Fair at St. Louis I won MORE premier championship awards than any other exhibitor of live stock. I won every premier championship offered on Hackneys, also every gold medal but one. At Chicago International, 1904, on 20 head I won 34 prizes, and in 1905, on 19 head, I won 34 prizes, of which 19 were firsts, including 3 gold medals and 3 championships. I have the GOODS, and will save you \$500 to \$1,000 on a stallion. Come and see. Your own time of payment and guarantee of 60%.

OFFICE: **LEW W. COCHRAN,** 607
109 $\frac{1}{2}$ South Wash- CRAWFORDVILLE, INDIANA. West Main Street.
ington Street.

On Monon, Big Four and Vandalia Railroads, and Interurban from Indianapolis.

QUESTIONS AND ANSWERS. Veterinary.

SCROTAL HERNIA.

I have a spring colt that got ruptured last summer. I spoke to a veterinary; he told me to leave it alone until the cold weather would come, and it would get all right. It is out about the size of a hen's egg. Can I do anything for it? C. C. N.

Ans.—It is quite possible that nature may work a cure yet. Give it time, and if it does not improve, try a bandage round the body with a large, flat cork covered with cotton placed over the rupture. Failing in this, a veterinarian may by an operation remedy the trouble.

CONDITION POWDERS.

1. Please give recipe for condition powders for feeding cattle and cows.
2. A special powder for small pigs and fattening pigs.
3. A special powder for to make hens lay, and keep healthy the year round. S. K. B.

Ans.—1. We do not advocate the use of condition powders, except in cases where an animal's system is plainly out of tone. In such a case, try the following: Bran, 5 lbs.; shorts, 3 lbs.; oil meal, 7 lbs.; 1 dessertspoonful gentian; 1 teaspoonful iron sulphate. Mix, and feed $1\frac{1}{2}$ lbs. at a feed. After a month or so, omit the gentian and sulphate, and feed instead, twice a week, a small closed handful of sifted wood ashes. Allow water and salt ad libitum. A small quantity of salt may be mixed with the condition powder.
2. The best tonic for pigs is a mixture of charcoal, salt and ashes in a box in the pen. A couple of sods of earth thrown in the pen daily are also excellent.
3. The following, or Douglas mixture, is recommended for fowls in the book, "Veterinary Elements": Sulphuric acid, $\frac{1}{2}$ ounce; copperas, 6 ounces; rain water, 4 ounces. Give a tablespoonful to six quarts of the drinking water. For colds, this is said to be excellent. We have more faith, though, in chopped onions, steamed, cut clover, grit, lime, dust-baths, sunshine, scratching sheds, and other natural requisites to good health.

Miscellaneous.

COSTS OF SUIT.

A dies and leaves all his property to C. B tries to break the will. Who has to bear the costs of the court, or what proportion does each one have to pay, if C wins? SUBSCRIBER.

Ans.—The unsuccessful party would, according to the general rule, have to pay the costs of the litigation; but such costs are in the discretion of the court, and, having regard to special circumstances in the case, the court might make a different disposition of the matter. The case might be such that the court would decline to give costs to either or any party.

AN INSOLVENT ESTATE.

A bought a team, and gave his note. When it came due, he could not meet it, so he went to his brother (B) and borrowed the money from him (\$100). A little over a year after, A was killed, and at the time of his death, his liabilities were between \$700 and \$800, and his assets about \$75. He also left \$1,000 insurance in K. O. F. M. in favor of his wife with two small children. In order to have a settlement with his creditors, she agreed to pay 20 per cent. of the accounts. They all seemed pleased with what she did, knowing her circumstances, but one exception, and that was B, who refused to take the 20 per cent. and demanded the full amount. He has not got any note or any papers whatever to show there had been any money passed between A and B. He now says he will make trouble if she does not settle in full at once. Can he collect his money in full, or after refusing to take the 20 per cent., can he collect anything? Will the law give him the same as the rest (20 per cent.), or the full amount? Ont. P. W. S.

Ans.—B is not in a position to legally enforce payment of any amount. He ought to accept the 20 cents on the dollar along with the rest of the claimants.

Trumans' Champion Stud,

Bushnell, Illinois.

SHIRE, PERCHERON, BELGIAN AND HACKNEY STALLIONS

Read our record at the great International Show recently held in Chicago. We won the following prizes on Shire and Hackney stallions:

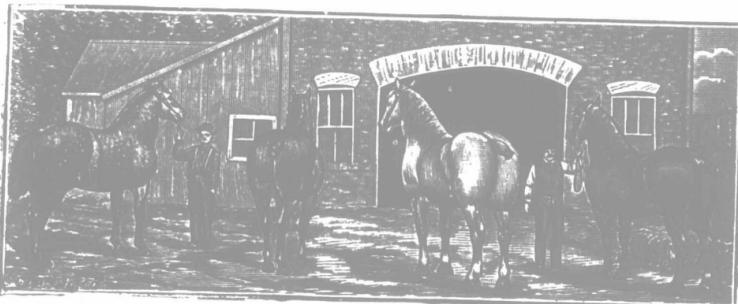
4-year-olds	-	-	1st, 3rd and 4th
3-year-olds	-	-	1st, 2nd, 3rd and 5th
2-year-olds	-	-	1st and 4th

Also Champion and Reserve Champion Hackney Stallions

Our stallions were admired by all who saw them. Before buying a stallion of either breed, we respectfully ask that you write and let us know your wants. We can save you money. Our prices and liberal guarantee will astonish you. Our record in the show-rings is evidence that we keep nothing but the best. Our barns are full of prizewinners, and they are all for sale. We insure stallions against death from any cause, if desired.

Write for illustrated catalogue of our horses. Importations arrived, July, September and November.

TRUMANS' PIONEER STUD FARM
H. W. TRUMAN, Manager,
LONDON - - ONTARIO.



25 Percherons, also French Coachers, Hackney and Clyde Stallions

Have just arrived, Aug. 16, 1905, from Great Britain and France with our new importation of high-class stallions, many of them prizewinners in their native lands, bred by the best breeders. The Percherons are large blocky fellows, 3 to 5 years old, descendants of such noted champions as Brilliant, Besique and Romulus. Blacks and dark dapple greys, weighing from 1,500 to 2,100 lbs., with the right kind of legs and feet, and can go like trotters. We personally selected every horse ourselves, using extraordinary caution to select nothing but good sound serviceable horses that will do our customers and the country good. The French Coachers, Hackneys and Clydes are also of the best breeding, some of them prizewinners in England, Ireland and Paris. We will sell you a better stallion for less money than any other importers in America, with a guarantee as good as gold. Intending purchasers should visit our stables before buying elsewhere. Inspect our stock and get our prices. Terms made to suit purchasers.

Hamilton & Hawthorne, Simcoe, Ont. 83 miles S.W. of Toronto, on G.T.R. & Wabash

Hackneys and Clydesdales



From such noted champions as Baron's Pride, Hiawatha, Marcellus, Macgregor, Baron's Fashion and Lord Lothian, etc. Inspection invited.

For fuller description and prices write: o

T. H. Hassard, Millbrook, Ont.



LaFayette Stock Farm

J. Crouch & Son, Proprietors.

Largest importers in America of Oldenburg German Coach, Percheron and Belgian stallions. Have imported over 400 in the last eighteen months. Won more prizes in 1904 and 1905 than all others combined. Our prices are right, and guarantee gilt-edged, and terms to suit buyers. Our Belgians and Percherons weigh from 1,900 to 2,350 pounds. All from three to five years old. The German Coach horses are the leading coach horses of the world.

J. Crouch & Son, LaFayette, Ind.

Write us at London, Ontario. o

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Breeders of High-Class Clydesdales and Hackneys

BEAVERTON, ONT.

Our present stock of mares and fillies are the best lot we ever had together. Among them are championship, first, second and third prizewinners at Toronto. Our prices are consistent with quality. We have something that will suit you. o

BEAVERTON P. O. & STATION. Long Distance Telephone.

QUESTIONS AND ANSWERS.

Veterinary.

WARTS-SCRATCHES

1. Nose and under lip of two-year-old colt is covered with small warts.

2. He also has scratches. T. D. C.

Ans.—1. See answer to question 1 of J. H. B.'s.

2. Give a purgative of 6 drams aloes and 2 drams ginger; feed lightly, and keep dry. Dress the heels twice daily with oxide of zinc ointment. V.

JOINT ILL

One-week-old calf became stiff in his joints, especially the knees, and he cannot rise without assistance. T. J. M.

Ans.—This is joint ill, and recovery seldom takes place. Bathe the joints frequently with hot water, and after bathing rub well with camphorated liniment. Give, internally, 7 grains iodide of potash night and morning in a little new milk as a drench. V.

PROBABLY DEAD FETUS

Cow was due to calve and udder was quite full on Nov. 22nd and 25th, and she became restless, and showed symptoms of approaching parturition. She did not calve, and the symptoms of advanced pregnancy have gradually disappeared, and her appetite has been very poor since November. J. R. S.

Ans.—I am of the opinion the fetus died in the womb about the time you expected her to calve, and it is quite probable the membranes are ruptured and the fluids escaped, which resulted in reducing the size of the abdomen. If this condition exists, she must have professional attention at once. I would advise you to send for your veterinarian and have him examine her, and if a dead fetus be present, he will remove it. If you think this condition does not exist, give her tonics, as 1 dram each sulphate of iron, gentian, ginger and nuxvomica three times daily. V.

WARTS AND CAPPED HOCK

1. Yearling colt has warts on his nose.

2. Heavy mare had a thoroughpin last fall. This is disappearing, but the point of the hock is swelling like capped hock. I may say that this has been on more or less since she was a sucker. J. H. B.

Ans.—1. With a pair of shears, clip off all with constricted necks. Dress the others once daily with equal parts butter of antimony and tincture of myrrh applied with a feather. Some claim that the daily application of castor oil will remove them.

2. If the capped hock is getting more marked, she must bruise it by kicking the stall post, or in some other way. Remove the cause, and blister the parts with two drams each biniodide of mercury and cantharides mixed with two ounces vaseline. Clip the hair off; tie head so that she cannot bite the parts; rub well with the blister once daily for two applications; on the third day wash off and apply sweet oil; let her head down now, and oil every day until the scale comes off. Repeat the blistering once monthly as often as necessary. V.

MISCELLANEOUS AILMENTS.

1. Is a curb on a horse a disease of bone or muscle?

2. Give treatment for curb.

3. Give treatment for spring colt whose stifle bone slips in and out.

4. Give treatment for driver with chronic cough. T. H. S.

Ans.—1. Curb is a disease of a ligament called the calcaneocuboid ligament, extending from the point of the hock to the cuboid bone at the inferior portion of the joint. Neither bone nor muscle is involved.

2. Shoe with high-heeled shoe (about one inch higher than the toe), and blister the curb once every month until it disappears. Give long rest. It is not probable lameness will be long continued; but if you wish to remove the lump you will have to give a long rest and repeated blistering. Details for blistering are frequently given in these columns.

3. Keep the colt as quiet as possible in a box stall, and blister the front and inside of the joint once every four weeks all winter. While the colt will probably make a serviceable animal, he will never be sound.

4. Give every morning a ball composed of 2 drams each gum opium and solid extract of belladonna, 1 dram camphor and 20 grains digitalis, with sufficient oil of tar to make it plastic. V.



Warranted to give satisfaction.

GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable.

Every bottle of Gombault's Balsam is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS COMPANY, Toronto, Can.

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We breed the very best and soundest, which from birth are kept in their natural condition, neither forcing nor overfeeding for showing purposes. Canadian buyers visiting England are invited to call and see what we have.

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Dr. Page's English Spavin Cure.

For the cure of Spavins, Ringbone, Curbs, Splints, Windgalls, Capped Hock, Strains or Bruises, Thick Neck from Distemper, Ringworm on Cattle, and to remove all unnatural enlargements.

This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by Dr. Fredrick A. Page & Son, 7 and 9 Yorkshire Road, London, E. C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: om

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A choice lot of reg. fillies and Shorthorn calves to choose from. Our stock exhibited have won the highest honors at the largest shows in America. WESTON P.O., C.P.R. and G.T.R., 10 miles west Toronto. Telephone at house and farm. J. M. GARDHOUSE.

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Great Dispersion Sale by Auction

THE ENTIRE HERD OF

42 head of Scotch and Scotch-topped SHORTHORN CATTLE

The property of **MR. HENRY B. WEBSTER**, will be sold at his farm, adjoining the **Village of Fergus, G.T.R. & C.P.R.**, on

Wednesday, Jan. 24th, 1906

This offering represents Matchless, Claras, Marr Beautys, Missies and Margarets, among which are about 20 breeding cows, all in calf or with calves at foot; 12 heifers and 7 bulls, including the stock bull, Royal Chancellor = 44688 =. No reserve, as proprietor is giving up farming.

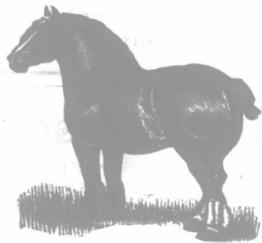
Sale will commence at 1 o'clock sharp. Send for catalogue.

Terms: 10 months' credit will be given parties furnishing approved joint notes, or 4% discount for cash.

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Shires from 1800 to 2200 lbs.



Imported in December, 1905, from **Clement Keevil's world-renowned Blagdon Shire Horse Stud, England**, some of them London and County prizewinners, and bred from such well-known champions as: Prince William (twice London champion), Lincolnshire Lad, Harold, Marston Royal Harold (also London champion), Premier, Buscot Harold (another London champion), Royal Albert, etc. Surely such breeding must tell. Come and see for yourself. King Edward VII. recently purchased a horse from this stud. Why should not you, and thus start the New Year well? Remember, that a stallion from the "Blagdon Stud" won 1st prize at Toronto, 1905. Write for catalogue.

R. KEEVIL, Crampton, Ontario.

Two miles from Putnam, C. P. R.

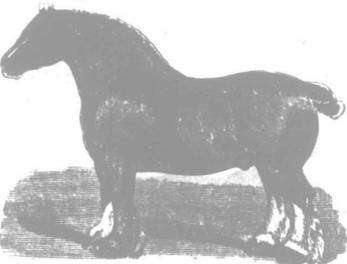


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My latest importation includes 45 head of Shire stallions and fillies, Clyde stallions and fillies, Hackney and Percheron stallions and Spanish Jacks, many of them prizewinners in England, Scotland and France. This is a gilt-edged lot and the best we ever imported, combining size and quality.

Stables at **WESTON, ONT.** Telephone connection.

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DALGETY BROS., Dundee, Scotland, and London, Ont., have on hand just now at their stables, London, Ont., a choice selection of above, including several prizewinners in this country and Scotland. All combining size and quality. Come and see them.

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INNIS & PROUSE

New importation of **CLYDESDALE STALLIONS** represent such noted blood as: Baron's Pride, Hiawatha, Sir Everard, Up-to-time, Pride of Bacon, The Dean, Prince Fauntleroy and Lord Stewart. They were selected with great care; combine size and quality. They are an A1 lot. 21 head to choose from.

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Importers of **HACKNEYS and CLYDESDALES**
Established for 30 years, and winners at all large shows in Canada and United States.
Best of stock always on hand for sale. New importation of Royal winners just arrived.

QUESTIONS AND ANSWERS. Veterinary.

By E. J. H.

Two-year-old colt has lumps all through her skin, and she is dumpish. E. J. H.

Ans.—This is eczema, and is very hard to treat when the coat is long. Give her a purgative of six drams aloes and two drams ginger. Feed bran only for twelve hours before and twenty-four hours after giving purgative. Follow up with one ounce Fowler's solution of arsenic night and morning every alternate week. Make a lotion containing 30 grains of corrosive sublimate to a quart of water, and rub the affected parts well with it once or twice daily. V.

ECZEMA.

Two-year-old colt was pastured on after grass of red and alsike clover. After he was brought to the stable, he broke out in itchy pimples on his neck and back. H. H. D.

Ans.—This is eczema, and may be due to the alsike. Give him a purgative of 6 drams Barbadoes aloes and 2 drams ginger. Feed bran only until purgation commences. After the bowels have regained their normal condition, give 1 ounce Fowler's solution of arsenic night and morning for ten days. Wash the itchy parts well twice daily with a solution of corrosive sublimate, 30 grains to a quart of water. V.

WORMS IN MARE.

Have a mare bad with worms as soon as cold weather comes. She looks hard, but never seems to affect her till then. B. J.

Ans.—We presume this mare is not in foal. Give her one dram each of sulphate of copper, sulphate of iron, tartar emetic and calomel, in form of powders, night and morning for a week, and then give her a purgative of eight drams aloes and two drams ginger. Follow up with one dram each of gentian, ginger and nuxvomica twice daily. Feed fairly well, and give reasonable exercise. If mare is in foal, omit the aloes, and give 1½ pints raw linseed oil instead.

FATALITY IN CALVES.

About the end of August, my calves began to cough; eyes sunk in head, and they would blow and pant like sheep. They ate fairly well, but failed in flesh, and three out of the five died. J. R.

Ans.—The symptoms indicate bronchitis, caused by a parasite. A careful post-mortem would have determined whether or not this was the case. The disease is contagious, and very hard to treat successfully. Inhalation of the fumes of burning sulphur is sometimes successful. This is done by closing the calves in a building where all openings are closed, and then burning sulphur as long as you can stand the fumes; then open doors. Repeat treatment every ten days as long as necessary. Another method is to inject 1 to 2 drams oil of turpentine into the windpipe. This may be repeated in 10 to 12 days, if necessary. V.

OBSTRUCTION IN MILK DUCT

Cow calved Dec. 4th. One teat has never given milk properly. There appears to be a hard lump, the size of a pea, blocking the passage near the udder. We are able to milk this teat, but it takes about half an hour. F. H. M.

Ans.—This is a little tumor in the milk duct, and the only way to treat is to get a veterinarian to operate with an instrument especially designed for the purpose, and this is often unsuccessful, especially when the obstruction is close to the udder. I would advise you to take very little milk from this quarter at each milking, just enough to prevent inflammation, and allow the quarter to go dry. As the predisposition to these growths is undoubtedly congenital, and there is a danger of another teat being affected at some future date, I would advise you to fit her for the butcher after this period of lactation. V.

Fistula and Poll Evil

Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 16 to 30 days.
**Fleming's
Fistula and Poll Evil Cure**
is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scar. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it.
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IT SAVES TROUBLE and annoyance many times to have ABSORBINE

handy in case of a Bruise or Strain. This remedy is rapid to cure, pleasant to use, and you can work the horse. No blister, no hair gone.
ABSORBINE cures Lameness, aches, pains, removes any soft bunch quickly. \$2.00 per bottle delivered or of regular dealers. Book 6-B Free.

ABSORBINE, JR., for marking, \$1.00 Bottle. Cures Badly Strained Joints or Ligaments. Kills Pain.
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Special Sales of Thoroughbred Stock conducted.

Consignments solicited. Correspondence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

Shire, Percheron, Clyde, Belgian, Standard-bred and Coach Horses, also **SPANISH-BRED JACKS**, for Sale.



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For Sale—Three **Shorthorn** bulls, two 20 months and one 9 months. **Triumvir** (imp.) heads the herd.

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makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from

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Seven good young **Shorthorn** bulls for sale, from 6 to 15 months old; sired by **Brave Ythan** (imp.), some from imp. dams. Prices right. **JAMES GIBB, Brookdale P.O. and Tel.**

SHORTHORNS AND DORSETS.

3 bulls, seven to nine months old; also a few ewe lambs and ewes in lamb for sale. Prices reasonable.

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"PSYCHINE" is a wonderful tonic. It contains medicinal elements not found in any of the patent medicines. "PSYCHINE" is a regular practicing physician's formula. A tonic for weak people, for men of business worries, for the tired mother, the pale, languid girl. Young girls just budding into womanhood; elderly people who feel that weakness due to old age find it a remedy they cannot do without. It restores vitality, creates rich, new blood, removes all impurities, strengthens the nerves. If you need a trial ask druggist for "PSYCHINE."

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ALL DRUGGISTS—ONE DOLLAR—FREE TRIAL

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9 heifers, yearlings.
29 heifers, calves.
4 bulls, yearlings.
26 bulls, calves.

All out of imported sires and dams.

Prices easy. Catalogue.

John Clancy, N. GARGILL & SON,
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Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers
for sale at greatly reduced prices
for the next 60 days. om

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Scotch Shorthorns

Herd headed by Imp. Royal Champion.
Young stock for sale from Imp. sires
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Ed. Robinson, Markham Sta. and P. O.
Farm within town limits.

T. DOUGLAS & SONS,
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SHORTHORNS and CLYDESDALES

Present offerings: 19 young bulls, of No. 1
quality, ready for immediate service; also cows
and heifers of all ages. Also one imp. stallion
and two brood mares. Prices reasonable. Visitors
welcome. Farm one mile from town.

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Breeders of
Scotch and Scotch-topped Shorthorns, Lincoln and
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A good selection of young stock of both sexes
always on hand for sale. Scottish Prince (Imp.)
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20867, at head of stud. Farms 3 1/2 miles from
Weston, G. T. R. and C. P. R., and electric cars
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Maple Lodge Stock Farm.

1854.
An excellent lot of Shorthorn bulls and
heifers for sale now. Have choice milking
strains. Have a few Leicesters left yet. Bar-
gains in ewes. om

A. W. SMITH, Maple Lodge, Ont.

GOSSIP.

Anent the creditable prize-winning record at the International of Canadian breeders and fitters, it may be of interest to know that the first-prize Shorthorn cow was not only bred in Canada, but was fitted, as was the first-prize herd of which she was a member, by Graham Bros., formerly of Ailsa Craig, Ontario.

Volume 51 of the English Shorthorn Herdbook, thanks to the courtesy of the editor, has been received at this office. It is a volume of 1,185 pages, containing the pedigrees of bulls numbering from 87759 to 90585, and probably a larger number of females, besides a list of leading prizewinners at shows of 1904.

At the annual meeting of the American Shorthorn Breeders' Association, held in Chicago during the International Live-stock Show, the rule by which the ancestors of cattle registered in the American Herdbook must be recorded in the 20th or earlier volumes of the English Herdbook, was, by a practically unanimous vote, changed to allow the registry in the American Herdbook of any whose ancestors are recorded in the 40th or previous volumes of the English Herdbook. This will admit the entry into the American Herdbook of many first-class English Shorthorns which have hitherto been barred. Volume 20 of the English Herdbook was issued in 1873, and volume 40 in 1893. The rules of the Canadian Shorthorn Herdbook will doubtless be altered likewise at the next annual meeting of the association, which will be held in Toronto February 6th. When the American Shorthorn Association rescinds its monstrous rule requiring a one-hundred dollar registration fee for imported animals, it will earn the commendation and respect of broad-minded business men the world over.

AMERICAN COTSWOLD REGISTRY ASSOCIATION.

The annual meeting of the American Cotswold Registry Association was held at the Pedigree Record Building, Chicago, December 19th, at 7 p.m. In the absence of President D. McCrae, Guelph, Ont., Mr. D. B. Watt, Xenia, Ohio, presided. The Secretary and Treasurer's report, as follows, was approved, and in view of the fact that business done represented an increase of 75% over any other year since the organization of the association, general satisfaction was expressed in the good result for the year.

The Treasurer's report for year ending December 5th, 1905, showed: Receipts, \$2,463.70; expenditures, \$1,555.18; balance for year, \$908.52; brought forward from 1904, \$395.18; total cash on hand, December 5th, 1905, \$1,303.70.

Election of officers resulted as follows: President, T. Hardy Shore, Glanworth, Ont.; Vice-President, D. B. Watt, Xenia, Ohio; Secretary-Treasurer, F. W. Harding, Waukesha, Wis. Board of Directors—T. Hardy Shore, Glanworth, Ont.; D. B. Watt, Xenia, Ohio; D. McCrae, Guelph, Ont.; D. C. Lewis, Camp Point, Ill.; F. W. Harding, Waukesha, Wis.

Representatives of the National Record of Canada were heard in the meeting, and their request for affiliation with this Registry Association was discussed freely, and finally referred to Board of Directors, with power to consider details and act. The resolution was adopted, favoring taking up at the next annual meeting the matter of charging double fees to non-members. Motion that the chair appoint every breeder, now a member, a committee of one, to secure one or more new members before the next annual meeting was carried. Stockholders' meeting adjourned.

A meeting of Board of Directors was held following stockholders' meeting. Four hundred dollars for special cash prizes and special advertising for 1908 was set aside as follows: International Live-stock Exposition, Chicago, \$200; American Royal, \$150, upon condition that this show offer a like amount on Cotswolds, and that, at least, three other breeds participate in the show; \$50 to be used for special advertising; \$150 for State and Provincial Fairs, providing the American Royal Show do not qualify in accordance with terms imposed by the offer made.

QUESTIONS AND ANSWERS. Veterinary.

RINGWORM.

Is there any preventive or cure for cow ringworm? If so, what is it?

SUBSCRIBER.

Ans.—We know no preventive other than whitewashing the walls of the stable. Usually ringworm is curable by simply rubbing a mixture of sulphur and lard well into the affected parts. To make a thorough job of it, first wash the parts well with warm soft water and soap, and remove as much of the scale or scab as possible, then apply the sulphur and lard or oil. A little coal oil added makes it still more effective. Zenoleum, or any of the other coal-tar sheep dips, applied warm and of considerable strength, will also effect a cure.

PROTRUSION.

Bought a Jersey cow two weeks ago at a sale; due to calve in May; was apparently all right. A few days after I let her out with rest of cattle, and that evening part of calf-bed, about the size of one's fist, was protruding; returned it, but she has shown symptoms of the trouble since. She eats heartily, and gives a fair amount of milk.

1. Do you think she was hurt, or may she have been affected with trouble before getting her?

2. Can anything be done to prevent the recurrence of the trouble?

J. D.
Ans.—The part protruding is the lining of the vagina. She may or may not have had the trouble before. It is not, as a rule, dangerous, the cow generally going her full time and producing a live calf without difficulty. To minimize the trouble, it is well to keep her hind parts somewhat higher than her front, and not to feed too freely of roots or silage, but substitute concentrated foods, such as ground oats and bran and oil cake. If it should get worse, a rope truss over the parts and attached to a collar may be used to advantage. The trouble may not recur, but it will be wise not to breed her again for two or three months after calving.

AIR TREATMENT FOR MILK FEVER.

In your issue of July 27 and August 3, you give a remedy for milk fever, by simply pumping the udder full of air with a bicycle pump and test-tube, for which accept my thanks. Before hearing of this treatment, I lost a valuable Jersey, and in order to avoid any such trouble in the future, I would like to have the necessary apparatus ready and handy. The bicycle pump we all know, and most everyone has one, but what about the "test-tube," what size and length should it be, and where can it be procured, and will it fit to the bicycle pump?

H. R. D.
Ans.—The common milk tube, or teat syphon, is about two and a half inches long, costs 25c. to 35c., and can generally be secured from dealers in veterinary or dairy supplies, or from a veterinarian. A small rubber tube about 3 feet long is required, which is attached to the bicycle pump at one end, and the test-tube is fastened in the other end by binding with fine wire or strong string, or better by means of small screw to which the tube is soldered so that it may be easily taken off for cleaning. The tube should be placed in boiling water, or otherwise disinfected, before using.

WORMS IN MARE.

1. I have a pregnant mare that is troubled with worms. Give safe cure.
2. I have also a colt, eight months old, troubled with worms.
3. A young heifer, carrying her first calf, has difficulty in breathing, almost like a horse with the roars; seems all right every way, and eats well.

YOUNG FARMER.

Ans.—1. A worm remedy suitable for a mare in foal is the following: Take 1 1/2 ounces each of powdered sulphate of iron, sulphate of copper, and tartar emetic; mix, and make into 12 powders. Give a powder every night and morning in damp food, or mix with 1/4 pint of cold water as a drench. After the last powder has been given, feed only bran for 8 or 10 hours, and then give 1 1/2 pints raw linseed oil; feed only bran for 24 hours longer, and give water in small quantities after.
2. The same treatment will answer in the case of the colt.

3. The trouble in this case is probably a thickening of the lining membranes of the trachea, and as she is thriving, may never become more serious.

DYSPEPSIA AND STOMACH DISORDERS

MAY BE QUICKLY AND
PERMANENTLY CURED BY

BURDOCK BLOOD BITTERS.

Mr. P. A. Labelle, Maniwaki, Que., writes us as follows: "I desire to thank you for your wonderful cure, Burdock Blood Bitters."

Three years ago I had a very severe attack of Dyspepsia. I tried five of the best doctors I could find but they could do me no good.

I was advised by a friend to try Burdock Blood Bitters and to my great surprise, after taking two bottles, I was so perfectly cured that I have not had a sign of Dyspepsia since. I cannot praise it too highly to all sufferers. In my experience it is the best I ever used. Nothing for me like B.B.B.

Don't accept a substitute for Burdock Blood Bitters. There is nothing "just as good."

Hunters

Send for our price list of cash for your furs. Also our letter as to values.

You miss an opportunity if you do not write at once. om

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Offers for sale at moderate prices:

3 high-class imp. bulls.
2 excellent yearling bulls, home-bred.
17 first-class bull calves.

Also cows and heifers, imp. and home-bred.
Most of the above imp. or sired by imp. bulls
and from imp. dams. om

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Crickshank
Shorthorns and
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16 choice young bulls
of Crickshank breed-
ing, from which you
can select high-class
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wish to see the breed-
ing we shall be pleased
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JOHN DRYDEN & SON,
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Stations { Brooklin, G.T.R. Long-distance
Myrtle, C.P.R. telephone.

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Wednesday, January 10, 1906

Twenty-six young bulls and 26 young
heifers of highest individuality and pedi-
gree. For catalogues apply to om

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SPRING VALLEY SHORTHORNS.

Imp. Bapton Chancellor = 40359 = (78286) heads
the herd. We have for sale a choice lot of young
bulls of the very best breeding and prices right.
Inspection and correspondence invited.

Address:
KYLE BROS., Agr. C.P.R. Paris, G.T.R.

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of best families. Herd headed by the grandly-
bred Lavender bull, Wanderer's Star = 48585 =.
A few choice young bulls.

Box 426. WM. R. ELLIOTT & SONS, Guelph, Ont.

Advertise in the Advocate

Scotch Shorthorns SHROPSHIRE SHEEP.

4 yearling bulls.
12 young bulls, 8 to 13 months, all from imp. sires and dams.
30 heifers under 3 years old.
40 breeding ewes, 20 ewe lambs and 20 ram lambs.
3 imp. Yorkshire brood sows.
Prices easy for quick sales.

W. G. PETTIT & SONS, Freeman, Ont.
Burlington Jct. Sta. Long-distance telephone in house.

HILLYVIEW STOCK FARM SHORTHORNS, CLYDESDALES and COTSWOLDS

Present offerings: Choice young bulls and heifers. Also a few good young cows.
Apply to **JOHN E. DISNEY & SON,**
Stations: Greenwood, Ont.
Claremont, C.P.R.; Pickering, G.T.R.;
Brooklin, G.T.R.

1864 + HILLHURST FARM + 1905 SHORTHORN CATTLE

Herd of thirty. Stock bull:
Scottish Hero (598983),
Missie 134th, by William of
Orange.
Prince Horace, bred by W.
S. Marr.
Butterfly 46th (Sittytton
Butterfly).

JAS. A. COCHRANE, Compton, P. Q.

R. A. & J. A. WATT, SALEM P.O., Elora station

13 miles north of Guelph, on the G.T.R. & C.P.R.
Two trains daily each way.
This season's offering comprises ten young bulls and an equal number of heifers, richly bred in the best of Scotch blood.
Prices reasonable.

A. EDWARD MEYER Box 378, Guelph, Ont. SCOTCH SHORTHORNS

a specialty. Herd bulls—Scottish Hero (imp.), a Shethin Rosemary, Lovely Prince, a Cruickshank Lovely. Correspondence solicited. Visitors welcome. Long-distance phone in house.

Queenston Heights Shorthorns

Choice yearling heifers,
Straight Scotch.
Two bull calves at easy prices.

HUDSON USHER, Queenston, Ont.

SHORTHORNS AND LINCOLNS.

Present offerings: 4 choice young bulls 9 to 14 months; also a few good heifers, Lincolns, descended from the best English flocks.
JOHN LEE & SONS,
Highgate, Ont.
40 miles west St. Thomas, on
M.C.R.R. & P.M. Ry.

PLEASANT VALLEY HERD SHORTHORNS

Headed by imp. Old Lancaster. Young stock for sale. For particulars, write or come and see.
Visitors met at station, Moffat, C.P.R., 1/2 mile, or Guelph, G.T.R., 11 miles.

GEO. AMOS & SON, Moffat, Ont.

KENWOOD STOCK FARM. SHORTHORNS.

Headed by (Imp.) Jilt Victor=45187=, 10 grand young bulls; also heifers from imp. and home-bred cows, for sale. Choice Lincoln sheep; Berkshire and Tamworth hogs offered.

HAINING BROS., Highgate, Ont. Kent Co.

BELMAR PARO SHORTHORNS

Bulls in service: Merryman, imp. (77263)=32075=; Pride of Windsor, imp. (Vol. 50)=50071=; Nonpareil Archer, imp. (81778)=45203=. Our females have been carefully selected and are of the best Scotch breeding, many of them imported.
Address correspondence to

PETER WHITE, Jr., Pembroke, Ont.

FOR SALE OR EXCHANGE

Scottish Baron =40421= (imp. in dam). Also several young bulls and heifers.

H. GOLDING & SONS, Thamesford, Ont.
Stations: Thamesford, C.P.R.; Ingersoll, G.T.R.

BONNIE BURN STOCK FARM

Offers Scotch and Scotch-topped bulls, cows and heifers, 50 Shropshire rams and ewes, and Berkshire pigs, from imp. dams and sires, not akin. A bargain for quick sale.
D. H. RUSSELL, Stouffville, Ont.

Willow Bank Stock Farm | Established 1866 Shorthorn Cattle, Leicester Sheep.

Imp. Rosicrucian of Dalmeny =45220= at head of herd. Choice young stock for sale.
JAMES DOUGLAS, Caledonia, Ont.

DEHORNING STOPS LOSS.

Cattle with horns are dangerous and a constant menace to persons and other cattle. Debore them quickly and with slight pain with a
KEYSTONE DEHORNER
All over in 2 minutes. Not a harsh method. Leaves a clear, clean cut. Cows give more milk; steers make better beef. Send for free booklet.
R. H. MCKENNA, Picton, Ontario, Can.



STYLISH SHORTHORN BULL

15 months old, above average size, dark roan and good fleshy fellow; sire and dam both imported. This bull will do credit to any herd. Will sell him right.

JAS. COWAN, Seaforth, Ont.
CLEAR SPRING SHORTHORNS.

Imp. Spicy Broadhooks at the head of herd. Young bulls from 6 to 11 months old, females of all ages.
Prices reasonable. Call or write

JAMES BROWN, Thorold. HIGH-CLASS SHORTHORNS.

The great Duthie-bred bull, Scottish Beau, formerly at head of R. A. & J. A. Watt's herd, now heads my herd.
Present offerings: two bulls seven months old, and females of different ages. Also for sale, Clydesdale mare and foal.

N. S. ROBERTSON, Arnprior, Ont.

Shorthorns FOR SALE

Two red bull calves; 6 heifers, sired by that grand bull sire of unbeaten Fair Queen and sister, Queen Ideal. First prize senior heifer calf at the International, 1904. Also first prize and junior champion, and reserve grand champion at Winnipeg, 1905.

M. K. FAIRBAIRN, Thedford, Ont.
PEARGROVE SHORTHORNS & SHROPSHIRE

We are now offering 20 Shropshire ewes, one and two shear, imp. and from imp. stock, a big, strong, well-covered lot; also a few Shorthorn heifers. No fancy prices asked, for quick sales.

T. H. MEDCRAFT & SON, Sparta P.O., St. Thomas station. Long-distance telephone.

SHORTHORNS & CLYDESDALES.

For Sale: Some grand young cows with calves at foot, by imp. sires; bulls and heifers of different ages; also matched pair of fillies, two and three years old, granddaughters of the great Baron's Pride. For quality and breeding they stand second to none. All at easy prices.

J. A. LATTIMER, Box 16, Woodstock.
ROWAN HILL STOCK FARM OF SHORTHORNS

Greengill Archer (imp.) 45184, at head of herd. Present offering: Young cows and heifers at reasonable prices. Correspondence or inspection invited.
A. DUNCAN & SONS, Carluke P.O., Ont.

3 Shorthorn Bulls 3

For sale immediately. Sire, Prince
Gloster =40998=.

WM. D. DYER, Columbus, Ont.
Stations: Myrtle, C.P.R. Brooklin, G.T.R.

CLOYER LEA STOCK FARM SHORTHORNS

Imp. Golden Cross at head of herd. 6 young bulls, three reds and three roans, from six to twelve months old. Parties wishing to visit the herd will be met at Ripley station and returned.
R. H. REID,
Ripley Sta., G.T.R. Pine River, Ont.

SHORTHORNS

Young bulls for sale, sired by Spectator, imp. Prices reasonable. Apply to
JOHN McCALLUM, Springbank Stock Farm, M.C.R. and P.M.R. Box 21, Iona Station.

SCOTCH SHORTHORNS. RIVER VIEW STOCK FARM

is offering young stock for sale from Marr Stamford, Scottish Maid and Rosemary dams, and sired by Scott's Choice =43970=.

A. J. ROWAND, Dumblane, Ont.
SHORTHORNS AND LEICESTERS.

4 extra choice young bulls ready for service 4 Also bull calves, all from imp. sires. Leicester ewes and lambs of both sexes for sale. Address:
W. A. DOUGLAS,
Caledonia Station, Tuscarora P.O.

BOWHILL SHORTHORNS AND LEICESTERS

The roan yearling bulls that I imported in Aug. now for sale. Smooth, even, good size, and good individuals; also a few good home-bred bulls and females. Come and see them.
GEO. B. ARMSTRONG, Teeswater, Ont. Mildmay, G.T.R. Teeswater, C.P.R.

THE CEDARS STOCK FARM. SHORTHORNS.

Imp. Scottish King at head of herd. Some choice young bulls for sale. For prices apply to
O. L. WESTOYER, Luton, Ont.

QUESTIONS AND ANSWERS. Veterinary.

LUMP JAW.
Steer had a lump on his jaw about two months ago. I had it opened a month ago, but it has grown again to about its former size.

J. H. W.
Ans.—This is lump jaw, and is not always curable. The iodide of potassium treatment has given the best results. This consists in giving iodide of potassium three times daily, commencing with dram doses, and daily increasing the dose by say 15 grains, until appetite and desire for water fail, tears run from the eyes, and saliva from the mouth. As soon as any of these symptoms appear, cease giving the drug. Repeat treatment in two months, if necessary. If pus forms, lance, and insert 10 grains corrosive sublimate, rolled in tissue paper, into the opening, and in a few days you will be able to pick out some detached tissue. Then dress daily with a five-per-cent. solution of carbolic acid.

THRUSH.
My horse has thrush in fore feet. The frogs are practically rotting away. He stands on board floor, clear of all dirt. Give cause and cure.

W. A.
Ans.—The cause of thrush is the more or less continued presence of irritant material in the cleft of the frog. As your horse stands in a stall free from dirt, etc., the irritants must gain entrance when he is out of the stall, and are not removed. Some horses are so predisposed that slight exciting causes produce the disease. Clean the cleft of the frog out thoroughly, and keep it clean; remove all partially-detached horn, and dress with calomel once every second day, until all discharge ceases. Work the calomel well down to the bottom of the cleft. Neglected, or very severe cases, are liable to complications that require the personal attention of a veterinarian.

PARTIAL LUXATION OF PATELLA.
Colt, seven months old, got hurt about three months ago. The cap on stifle will not stay in, but comes out when he walks and goes back with a snap. It is different from luxation of the patella. I have blistered and painted with iodine without avail. Would it be well to place him in slings?

C. E. H.
Ans.—The patella becomes partially dislocated and slips back with a click. In all probability you will notice a puffy enlargement just below the joint on the front of the leg. It is not probable he will ever be right, but he should make a serviceable horse. It would not be wise to place him in slings. Repeated blistering is the best treatment. Keep him as quiet as possible in a box stall. Do not allow him out of the stall at all. Take 1 1/2 drams each of biniodide of mercury and cantharides, and mix with 2 ounces vaseline. Clip the hair off the part; tie him so that he cannot bite it; rub well with the blister once daily for two applications; on the third day wash off and apply sweet oil; let his head down now, and oil every day. As soon as the scale comes off, blister again, and once monthly after this, until you can turn him out on grass.

HORSES COUGHING.
Young horses had distemper last winter, and this winter are coughing again.

1. Should the stable be disinfected, and how?
2. Is there any preventive measures?
3. What is the treatment for the disease?
D. McL.

Ans.—It is not probable your horses have a second attack of strangles or distemper.

1. It is good practice to disinfect stables after an outbreak of strangles. Sweep and dust thoroughly, then wash with a hot, five-per-cent. solution of carbolic acid (the crude acid will do). Follow this with a thorough coat of hot lime wash with five-per-cent solution carbolic acid. It is good practice to give a second coat of whitewash.

2. The only preventive measures is prevent exposure of the virus.

3. Isolate; keep comfortable in well-ventilated stables; poultice the throats; open all abscesses as soon as ready; give internally 2 to 6 drams hyposulphite of soda three times daily. If complications arise, such as heavy breathing, failure to eat, etc., send at once for your veterinarian.

The Danger that Lurks in Colds

AND HOW SERIOUS RESULTS CAN BE AVOIDED BY USE OF

DR. CHASE'S SYRUP OF LINSEED AND TURPENTINE

There is one way in which the ravages of consumption can be very materially lessened and that is by the prompt and thorough cure of coughs and colds.

While weak lungs undoubtedly predispose to lung trouble and consumption, the beginning must always be with a neglected cold.

By directing your attention to Dr. Chase's Syrup of Linseed and Turpentine, we make known to you the most certain and effective means of curing coughs and colds and preventing such diseases as bronchitis, consumption and pneumonia.

This is not a new medicine, not an experiment, but a preparation which has successfully stood the test of time and has to-day by far the largest sale of any similar treatment.

If we can only help you to realize the danger of neglecting coughs and colds, we know that you will not run the risk of depending on any "cough mixture" the druggist may choose to hand you out, but will insist on getting a medicine with a reputation, such as Dr. Chase's Syrup of Linseed and Turpentine.

It is impossible for a doctor to prescribe for man a more effective treatment for croup, bronchitis, whooping cough, asthma, coughs and colds than Dr. Chase's Syrup of Linseed and Turpentine. 25 cents a bottle, at all dealers.

Shorthorns, Cotswolds, Berkshires
Present offerings: Calves of both sexes, from 1 to 7 months; also cows and heifers, 56 head to select from. Nothing to offer in Berkshires or Cotswolds.

CHAS. E. BONNYCASTLE,
Campbellford, Ont.
MAPLE + GROVE + STOOK + FARM
Scotch and
Scotch-Topped SHORTHORNS

Present offering: Two choice nine-months-old bulls, by Captain Mayfly 2nd; also young cows and heifers at very reasonable prices. For particulars write to

L. B. POWELL,
Wallenstein P.O.
Elmira Stn. and Tel.

SHORTHORNS AND CLYDESDALES

One pair registered Clyde mares 3 and 5 years old; one pair Clyde geldings, 4 and 5 years old (show team). Shorthorn heifers, cows and bulls.

JAS. McARTHUR, Gobles, Ont.
Pine Grove Stock Farm.

SHORTHORNS—Will sell or exchange Kinellar Stamp, my famous Golden Drop show bull. Have for sale also young heifers and bulls got by him. Tracing Imp. Pansy Lily and Beauty.

SOLOMON SHANTZ, Hayville, Ont.
Plum Grove Stock Farm. Baden Station.
CEDAR YALE SCOTCH SHORTHORNS
Present offering: A few Scotch-bred heifers, sired by Scott's Choice =43970=. For particulars write to

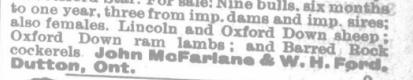
JOHN SCOTT, Dumblane P.O.
Port Elgin station and telegraph.
MAPLE LEAF STOCK FARM
4 Choice Young Bulls for Sale. Also some cows and heifers, and prizewinning Berkshire pigs. Terms reasonable.

ISRAEL GROFF, Alma P.O. & Stn., G.T.R.
SHORTHORNS FOR SALE
A few females of different ages, and one red Golden Drop bull, 12 months old. Prices reasonable.

Hugh Thomson, Box 556, St. Mary's, Ont.
SHORTHORNS, LINCOLNS & OXFORD DOWNS.
Herds headed by imp. Royal Prince and imp. Abbotsford Star. For sale: Nine bulls, six months to one year; three from imp. dams and imp. sires; also females, Lincoln and Oxford Down sheep; Oxford Down ram lambs; and Barred Rock cockerels. **John McFarlane & W. H. Ford, Dutton, Ont.**

Glenburn Stock Farm
For Sale: A few good SHORTHORN bull and heifer calves. The balance of our Shropshire ram lambs at special prices.

JOHN RACEY, JR.,
Lennoxville, Que.



Blatchford's Calf Meal
 RAISES THE FINEST CALVES AT ONE-HALF THE COST OF MILK
 Free Pamphlet at your Dealers or
BLATCHFORD'S CALF MEAL FACTORY
 WAUKEGAN, ILLINOIS
 Established at Lakeview, England, in 1890

Shorthorn Bulls I have for sale two good young roan SHORTHORN bulls, fit for service, sired by imp. Scottish Peer - 40th. Come and see, or address,
JAMES SNELL, Clinton, Ont.

SHORTHORN BULLS.
 Seven good young bulls, also a number of heifers for sale. Prices very reasonable.
J. WATT & SON, Elora station, G.T.R. and C.P.R. Salem P.O.

HOLSTEIN BULL
 You need a to head your herd, sired by a noted sire as "Vale Piebe De Kol," whose dam and sire's dam records average 619.3 lbs. milk, 27.31 lbs. butter in 7 days, or "Duchess Aaggie De Kol Beryl Wayne," grandson of the famous "Beryl Wayne," 2 lbs. milk in one day, 27.87 lbs. butter in 7 days, 17.175 lbs. milk in 104 months. We have 12 imported and home-bred bulls to offer of such breeding; also heifers and young cows. Just imported, 36 head in the past six months. 72 head from which to select. It will be to your interest to enquire before buying elsewhere.

H. E. GEORGE, Crampton, Ont.
 Seven miles from Ingersoll.

ANNANDALE HOLSTEIN HERD

are the greatest of the breed individually, and backed by great records, viz.:
 Brookbank Butter Baron, dam and sire's dam average 23 lbs. butter in 7 days, 4.5 per cent. fat. First-prize bull at Ottawa and Toronto, 1905.
 Prince Posch Calamity, dam and sire's dam average 26.1 lbs. butter in 7 days, 86 lbs. milk in one day, 3.6 per cent. fat. Also a prizewinner at Toronto and Ottawa.
 Wopke Posma, imported in dam from Holland. Sire Wopke, his dam Boss, greatest cow in Holland. Record: 17,160 lbs. milk in 335 days, 734 lbs. butter, 3.97 per cent. fat.
 You don't draw a blank in purchasing a bull from such sires and such dams as are kept at Annandale Stock Farm, Tilsonburg, Ont.
GEO. RICE, Prop.

WOODBINE HOLSTEINS

Herd headed by Sir Mechthilde Posch, absolutely the best official-backed sire in Canada. Dam Ianthe Jewel Mechthilde, 25.8 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Aaltje Posch 4th, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale.
A. KENNEDY, Agr. Ont.
 Agr. C.P.R.; Paris, G.T.R.

With Cheese at 12c. and Butter at 25c. why not

Buy a Holstein Bull
 and Improve Your Dairy Herd? I have them Right in Breeding, Right in Quality, Right in Price. Order early if you want one.
G. W. CLEMONS, ST. GEORGE, ONT

RIVERSIDE HOLSTEINS

80 head to select from. Six young bulls, from 4 to 7 months old, whose dams have official weekly records from 16 to 21 lbs. butter; sired by Johanna Rue 4th's Lad, a son of Sarcastic Lad, Grand Champion prize bull at World's Fair, St. Louis, 1904.
MATT. RICHARDSON & SON, Caledonia, Ontario.

HOLSTEINS AND CHESTER WHITES.

Our Holsteins are producers and prizewinners. Young bulls and a few choice heifers for sale, also some extra good young Chester White pigs, both sexes. D. G. GOODERHAM, Thornhill P.O. G. T. R. and street cars.

MAPLE GLEN STOCK FARM

Can now offer one young bull, born last spring, and four bull calves, born in Aug., Sept. and Oct., from select cows, and sired by the great imp. bull, Sir Alta Posch Beets. Any female in the herd can be secured at their value.
C. J. Gilroy & Son, Glen Buell, Ont.

IMPERIAL STOCK FARM HOLSTEINS

Stock for sale, all ages, imported and home-bred.
W. H. SIMMONS, New Durham P.O. Burgessville or Harley Stations.

SPRINGBROOK HOLSTEINS & TAMWORTHS

Two choice bulls, 11 and 12 months old, Toronto prizewinners, rich breeding; yearling Tamworth boar, 2nd prize at Toronto, good stock-getter; Tamworth sows, bred, and young pigs, pairs not akin. All high-class stock. Come and make your own choice. Prices right.
A. C. Hallman, Waterloo Co., Breslau, Ont.

Queen City Holsteins

of the noted Favorit family, whose reputation as prizewinners and producers are world-renowned. For sale are 8 young bulls from 4 to 12 months old, out of enormous producing dams and sired by richly-bred bulls. R. F. HICKS, Newtonbrook P.O., Co. York. 7 miles north of Toronto

TRADE TOPIC.

A SCALE ON THE FARM.—Most farmers realize the necessity of owning a good reliable scale. Selling and buying so much by weight, he must realize that a little inaccuracy in his dealer's scales means considerable loss to him. We don't believe that prosperity makes him so reckless of his own interests that he cares not whether the grain buyer cheats him or gives him full value, but the average farmer figures that he cannot afford to buy a farm scale when the crop is light or prices low.

"Suppose a certain farmer sells thirty hogs weighing 200 pounds each, receiving for these five cents per pound. If the scales are out of the way 1-20, it will mean a loss to him of \$15.00 on the lot. This same farmer sells 2,000 bushels of wheat at 75c. per bushel. If the scales are out 1-40, it will mean a loss to him of \$37.50. Now, the above examples are by no means gross exaggerations, and it will be seen from the above figures that the total loss incurred would be \$52.50, enough to purchase a good set of scales to guard against all future loss. It is never an equitable proposition to measure farm produce when selling it. Hay measured in the stack is only so much guesswork, although the most infallible rule is used. The same is true of grain. Sometimes oats will overrun one-fourth in weight, and the farmer who sells by measure is simply losing one bushel in every four."

The feeder of stock is also very desirous to know just what progress his animals are making as a result of his efforts. With a set of farm scales they can be weighed regularly, thus accurately determining the gain proportional to the amount of feed.

A firm in Chatham, Ont., is advertising a farm scale, guaranteed by the Canadian Government. It is made in three styles, which are convertible into useful trucks. The firm sell them on very easy terms, in fact, so easy that what the scale will save a farmer should pay for it in the time. We are sure it would pay any farmer to investigate the offer this firm makes. A post card with your name and address on it sent to The Mapson Campbell Co., Limited, Chatham, will bring full particulars.

GOSSIP.

MONKLAND YORKSHIRES.
 One of the largest herds of registered Yorkshire hogs in Canada is owned at Monkland Stock Farm, within half a mile of both the Grand Trunk and Canadian Pacific Railway stations at Fergus, Ont., the property of James Wilson & Sons, the well-known millers of that town. There is, perhaps, no other farm in Canada so well situated and equipped for the successful raising and handling of hogs as "Monkland." The main pigsty is 150 feet long by 35 feet in width, supplied with flowing water. Huge tanks in which the feed (which consists of a mixture of ground grains and shorts) is mixed, with an ever-ready supply of fresh water to be turned on or off, make the feeding of their 200 Yorkshires an easy matter. As soon as a tank of feed is emptied, it is immediately filled again in order to get thoroughly soaked for the next meal, and so well supplied are this vast aggregation of Yorkshires with feed, that during our visit we scarcely heard a grunt out of them, and what particularly struck us as being a little ahead of the ordinary was the cleanliness everywhere observed. At the present time, there are about 35 brood sows, imported or out of imported stock, and Canadian-bred, an ideal lot, true to type, strong-boned and large. There are four stock boars, the premier of which is Imp. Hollywell Cardiff 6th, bred by Sanders Spencer, St. Ives, Eng. This grand hog is acknowledged to be almost without a peer, both as an individual and as a stock-getter. The other stock boars were selected for their individual excellence, regardless of cost. At present, there are between one and two hundred on hand of both sexes and all ages, and the trade can be supplied in any quantity; pairs and trios not akin. The Messrs. Wilson are blessed with an abundance of the necessary, consequently are in a position to buy the best available breeding stock, and anyone buying from them can depend on getting exactly what they buy, and everything will be represented exactly as it is, and, owing to their exceptionally favorable shipping facilities, there will be no delay in filling orders to be shipped

by either the G. T. R. or C. P. R. Look up their advertisement in this issue.

Mr. W. R. Bowman, Mt. Forest, Ont., writes: "We have had a rushing trade this fall with our Shropshires. We have still to offer a limited number of shearing ewes, sired by Marauder (imp.), who won first honor at Toronto this season, and bred to our Chicago winner, Prolific (imp.); also 20 right good breeding ewes, bred to same ram, which we are offering at tempting prices."

W. G. PETTIT & SONS' SHORTHORNS AND SHROPSHIRES.

One of the oldest and most successful Shorthorn importers in Canada is Mr. W. G. Pettit, of Freeman, Ont. This firm, now known as W. G. Pettit & Sons, whose 400 acres of Canada's choicest agricultural land lies but half a mile east of Burlington Station, and seven miles from Hamilton, are the owners of one of the largest herds of imported and Canadian-bred Scotch Shorthorns in Canada, numbering 130 head. Nearly all the breeding cows are imported, and belong to the following fashionable families: Crimson Flower, Duchess of Gloster, Claret, Ury, Flora, Jill, Roan Lady, Broadhooks, Village Maid, Orange Blossom, Cinderella, Butterfly, Averde, Primrose, and Waterloo Princess, headed by the two grandly-bred sires, Prime Favorite (imp.), bred by W. S. Murr, sired by the Sittytown Crocus bull, Bapton Favorite, dam Prince's Royal 49th. This richly-bred bull is an ideal type of the up-to-date, thick-fleshed, short-legged, stylish bull, and, as a sire, has few equals. His lieutenant in service is Imp. Scottish Pride, bred by J. Young, Tilbouries, sired by the Princess Royal bull, Scottish Prince, dam Cinderella 2nd. This bull is also proving a splendid sire, leaving his get particularly well-backed and even-fleshed. There are about 25 young bulls, all the get of the above stock bulls, and nearly all out of imported dams. They vary in age from three months to two years. A bull of the thick, mossy, show kind, or of the large, coarser range kind, can be had here. Many of these young bulls are extra choice, and will make not only high-class herd headers, but will make show bulls as well. One is a roan yearling by Prime Favorite, dam Imp. Rosetta 9th, a big, smooth fellow, with lots of quality. Next is a nine-months-old roan, by the same sire, and out of Imp. Rosetta 14th. He is the making of a good one. Next is a roan yearling, by the same sire, out of Imp. Broadhooks Beauty. This youngster is also the making of something extra. Another is a red yearling, by Scottish Pride, out of Waterloo Princess 36th (imp.), a nice, smooth, young bull. Next is a red yearling, by Scottish Pride, out of Imp. Lady Ann 11th. He is a very thick, even youngster, and has a grand covering of hair. Another is a roan eight-months-old, by Scottish Pride, dam Silver Roa (imp.). This youngster is one of the coming stars. We think him one of the best all-round calves in the country. Another is a nine-months-old, by Prime Favorite, out of Imp. Lustré 43rd. He is a thick, even-quartered youngster, and will make a good one. Another of the rare good ones is a red eleven-months-old, by Scottish Prince, dam Imp. Dido 20th. Another that will make a show bull is the six-months-old roan, by Scottish Prince, and out of Imp. Mayflower. Still another of the up-to-date kind is the red six-months-old calf, by Scottish Prince, dam Imp. Countess of Balmoral 4th. Space forbids further individual mention. Suffice it to say, these mentioned are only representative of the entire lot, and as good young bulls are scarce, particularly those bred from imported stock, parties wanting a herd header should make an early selection. There are also about 25 heifers on hand, principally by the above sires, and out of the herd cows, among which are some show candidates. The Messrs. Pettit are too well known on both sides of the line to need any recommendation in these columns. Their stock is to be found in all sections of Canada, and in most of the States, and we have yet to hear of a dissatisfied customer. Their large flock of Shropshires are in fine condition. They have still on hand for sale some 20 ram lambs—part of them the get of an imported ram, the others by a Canadian-bred ram. They are a perfect-covered lot, and show splendid form and type.

LIVER COMPLAINT.

The liver is the largest gland in the body; its office is to take from the blood the properties which form bile. When the liver is torpid and inflamed it cannot furnish bile to the bowels, causing them to become bound and costive. The symptoms are a feeling of fullness or weight in the right side, and shooting pains in the same region, pains between the shoulders, yellowness of the skin and eyes, bowels irregular, coated tongue, bad taste in the morning, etc.

MILBURN'S LAXA-LIVER PILLS

are pleasant and easy to take, do not gripe, weaken or sicken, never fail in their effects, and are by far the safest and quickest remedy for all diseases or disorders of the liver.
 Price 25 cents, or 5 bottles for \$1.00, all dealers or mailed direct on receipt of price by The T. Milburn Co., Limited, Toronto, Ont.

Lyndale Holsteins

Stock for sale, any age, either sex.
BROWN BROS., - Lyn, Ont.
"GLENAROHY" HOLSTEINS
 We have for immediate sale several young bulls, and a number of young females, that for ideal type and superior quality, backed up by gilt-edged breeding, are unsurpassed.
G. MACINTYRE, Renfrew P.O. and Stn.

Brampton Jersey Herd—We have now for immediate sale 10 bulls, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars address
B. H. BULL & SON, Brampton, Ont.
 Phone 68.

Highgrove Jersey Herd—Our present offering is: 5 young bulls and few females, among them being 1st, 2nd, 3rd and 4th prize winners at Toronto this year. Bred from producers and sired by richly-bred bulls. o
ROBT. TUFTS & SON, Tweed P.O. & Sta.

AYRSHIRES

The famous Reford Herd at St. Anne de Bellevue, Que., now owned by Sir William C. Macdonald.
 Several yearling bulls for sale; also a number of bull calves, Quality and appearance extra good, bred from the best milking strains, noted for robust constitution and large teats.
 For particulars apply to

MACDONALD COLLEGE

St. Anne de Bellevue, Quebec.

AYRSHIRE BULLS

Fit for service; sired by Royal Peter, imp. Grand Champion at Dominion Exhibition this year; also one May and several August calves by a son of imp. Douglasdale and imp. Minnie of Lessnessock, both champions and out of daughters of imp. Daisy and imp. Kirsty.

W. W. BALLANTYNE, Stratford, Ont.

Hillview Herd of Prizewinning AYRSHIRE CATTLE

All animals bred and carefully selected for size, constitution, long teats and deep-milking qualities. Select animals of both sexes for sale at reasonable prices. For further information and prices write
A. KENNEDY & SON, Hillview Stock Farm, Vernon, Ont. Winchester Station, C.P.R.

AYRSHIRES

Choice stock of either sex, different ages, for sale. Prices reasonable. For particulars apply to
N. DYMENT, Hickory Hill Stock Farm, Dundas Stn. & Tel. Clappison, Ont.

Maple Cliff Dairy and Stock Farm

Breeders of Clydesdale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times.
R. REID & CO., Hintonburg, Ont. Farm adjoins Central Experimental Farm.

Meadowside Farm

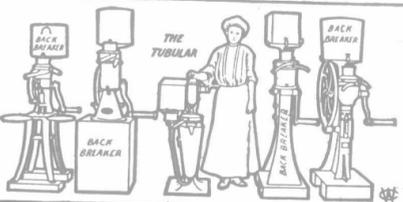
Ayrshire Cattle, Shropshire sheep, Berkshire pigs, R. P. Rocks and B. Orpingtons. Young stock for sale.
A. R. YUILL, Prop., Carleton Place, Ont.

Burnside Ayrshires—One two-year-old and two females of all ages, just imported June 1st, Scotch prizewinners; also a number of imp. and home-bred cows, due in Aug. and Sept. Order a good calf from heavy-milking dams.
R. R. NESS, Burnside Farm, Howick, Que.

TUBULAR--or "Back Breaker?"

When you see the waist low Tubular you can't be driven into buying a back-breaking, "bucket bowl" separator. Can and crank are just the right height on the Tubular. Here is the largest Dairy Tubular along side four "back breakers." The girl with her hand on the Tubular is 5 feet, 4 inches tall. This is an exact reproduction from a photograph. Which kind for you? Makers of "back breakers" try to get their cans low by setting the cranks low. High cans break your back backward—low cranks break it forward. Unless you are a double jointed giant, you'll find a high can is no joke. To show you how high these "back breaker" cans really are, when the machines are set high enough to turn easily, we raised these "back breakers" 'til their crank axles were level with the Tubular crank axle. "Back breaker" makers don't like this picture—it's too true. They try to squirm out of it. You wouldn't like turning cranks as low as "back breaker" makers put them.

The low can is only one of many advantages Dairy Tubulars have over all others. Dairy Tubular bowls are simple—"back breakers" are complicated. Tubulars are self-rolling—no oil holes to fill up. "Back breakers" are oil drippers and oil wasters. To learn a lot more about Tubulars, write today for catalog N-193



The Sharples Separator Company
West Chester, Pa.
Chicago, Ill.
Toronto, Can.

GOSSIP.

Messrs. C. J. Gilroy & Son, Glen Buell, Ont., breeders of Holstein cattle, write: "The year just closing has been one of the best in our history, having disposed of more stock and for a better average price than ever before. The demand for bulls has been very active, and we are closely sold down. It is pleasing to state that we were able to win the second breeder's herd at Toronto this fall, and the week later the same herd won the first for us at Ottawa, which goes to prove that we are keeping pace with the improvement of the times. Our present stock bull, Sir Alta Posch Beets, is going to prove a valuable herd header for us. He won first at both Toronto and Ottawa this fall. His breeding is A1, being sired by a son of Alta Posch, the champion butter heifer of the world, while his grandsire, Paul Beets De Kol, has more daughters in Advanced Registry than any bull in the world. Such breeding and individuality, when coupled with such great cows as the Sylvias have proven to be in test-work, ought to give encouraging results, both for ourselves and the good of the breed. A few of our sales have been as follows: To Mr. Edwards, near Russell, Ont., the young bull that won third in senior calf class at Toronto this fall; to Archie Stewart, Kenmore, Ont., went the first-prize junior bull calf at Ottawa. His grandam, Juanita Sylvia, has been a winner in milk-test competition, winning second at Ottawa, where her record was better than was the first-prize record at Toronto, same year. Mr. John Cruise, Lachute Mills, Que., secured a heifer out of a daughter of Carmen Sylvia, that won first for him at their show. This makes the fourth time Mr. Cruise has bought from us. A young bull we shipped him last spring was the first-prize senior bull calf at Ottawa this fall. To X. Plaunt, North Cote, Ont., went the young bull, sired by J. De Kol, a high-bred sire. The dam of this calf was sired by the grand show bull that Messrs. Stevens, of Lacona, headed their show herd with the year they showed at Toronto. Mr. J. J. Riley, Jr., Graham, Que., secured the dam of this young bull, along with the cow, Willas Duchess, bought at Syracuse sale last June, also the young son of Carmen Sylvia to mate with them. Mr. A. J. Daugherty, Beachburg, Ont., secured the first son of our Imp. Posch bull, from the Carmen Sylvia 4th cow, a member of the third aged herd at Toronto this fall, and one of our best females. We recently sold to Mr. Geo. Bellamy, Toledo, Ont., the young bull calf from the Willas Duchess cow. This calf was sired by Canary Mercedes' Son, whose dam tested over 25 lbs. butter in seven days, and milk tested 4.92 per cent. fat. The Canary Mercedes family is one of the richest of the breed for butter-fat tests. There are other sales to report, but we will leave them till a later time. We have on hand a few bull calves born this fall, from our imported Posch bull, and from our best cows, that can be secured at fair prices, quality considered."

Ring-Bone

So common nearly every body knows it when he sees it. Lameness, and a bony enlargement just above the hoof, or higher and on the upper pastern bone, sometimes extending nearly around the part, sometimes in front only, or upon one or both sides. Cases like the latter are called Sidebone. No matter how old the case, how big the lump, how lame the horse, or what other treatment has failed, use

Fleming's Spavin and Ringbone Paste
Use it under our guarantee—money refunded if it fails to make the horse go sound. Often takes off the bunch, but we can't promise that. One to three 45-minute applications required and anyone can use it. Get all the particulars before ordering—write for Free Horse Book that tells you what to use for every kind of blemish that horses have.
FLEMING BROS., Chemists,
65 Front Street, West, Toronto, Can.

Shropshire & Cotswold Sheep

SCOTCH SHORTHORNS and CLYDESDALES



Choice ram and ewe lambs. Also 50 shearing ewes for sale. Apply to

JOHN BRIGHT,
Myrtle Station, Ontario.

FAIRVIEW SHROPSHIRE

I now offer:
15 shearing ewes, bred to St. Louis Champion ram.
15 shearing and 2-shear ewes, bred to other choice rams.
This is a rare opportunity to get the progeny of the best rams at a World's Fair. Considering quality and value of common sheep. Extra good bargains are offered. Send for circular.

JOHN CAMPBELL,
Fairview Farm, Woodville, Ont.

SOUTHDOWNS

For sale: Babraham Pattern, two years old, the best ram lamb in the second-prize pen at the Royal, and first London Fair.

COLLIES

At stud, imported Wishaw Hero, \$10. Puppies out of dam of first and sweepstakes New York. o

ROBERT McEWEN, Syden, Ontario.

DORSET HORN SHEEP and SCOTCH SHORTHORNS

The latter representing the Nonpareil, Miss Ramsden, Missie and Gloster families exclusively, and the former comprising more Royal winners and more St. Louis prizewinners than any other flock in the world. Stock for sale always on hand.

JOHN A. MCGILLIVRAY,
North Toronto, Ontario.

HIDES, SKINS

WOOL, FURS, TALLOW, Etc.

Consignments solicited. Top prices.

E. T. CARTER & CO., Toronto.

Farnham Oxford Downs

Won 70 Prizes in 1905.

Present offering: 50 ewes from 1 to 4 years (bred), 15 imported rams; also a number of ram and ewe lambs at reasonable prices.

HENRY ARKELL & SON
o Arkell, Ont.

IMPORTED SHROPSHIRE RAMS AND EWES

From the Best Breeders. Home-bred Rams and Ewes, both Shropshire and Cotswold, of the best breeding. Great sappy strong fellows that will breed well, and at prices that cannot be anything but satisfactory. Write me.

ROBERT MILLER, Stouffville, Ont.

BROAD LEA OXFORDS.

Present offerings are: Ram and ewe lambs of the low-down, blocky type. Also Yorkshire boar and sows five months old, of improved bacon type. A number of nice Barred Plymouth Rock cockerels at reasonable prices. Correspondence promptly answered.

R. R. Stations: Mildmay, G. T. R. o **W. H. ARKELL,** Teeswater, C.P.R. o Teeswater, Ont.

SHROPSHIRE—We have for sale a number of choice ram lambs at reasonable prices. Also ewes and ewe lambs; also 4 young Shorthorn bulls, from 6 to 11 months old, and a few yearling heifers.
BELL BROS.,
The Cedars Stock Farm, Bradford, Ont.

Trout Run Herd of Prizewinning AYRSHIRE CATTLE

For sale: One choice yearling bull, \$45; bull calves from dams with milk records from 50 to 92 1/2 lbs. of milk per day, from \$35 to \$40 each; high-class dairy and exhibition cows and heifers from \$65 to \$75 each. Above stock is No. 1 quality, tracing direct to imported stock. Also Toulouse geese, \$5 per pair; B.P. Rock and White Wyandotte cockerels, \$2 each. For particulars write **WILLIAM THORN,** Trout Run Stock Farm, Lynedoch, Ont. Norfolk Co.

SHANNON BANK STOCK FARM FOR AYRSHIRES and YORKSHIRES

Young stock of both sexes for sale from imported stock.
W. H. TRAN, Cedar Grove, Ont.

AYRSHIRES FROM A PRIZEWINNING HERD

Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to **W. M. STEWART & SON,** Campbellford Stn. o **Menie P.O., Ont.**

SPRINGBROOK AYRSHIRES.

Averaged nearly 7000 lbs. of milk last year, testing 3.9% butter-fat. 1 yearling bull; 1 bull calf six months, also females for sale.
W. F. STEPHEN, P.O. Box 101, o **Huntingdon, Que.**

HAMPSHIRE DOWN SHEEP

"Reserve" for Champion in the Short-wool Classes, Smithfield, London, 1904

SPLFNDID MUTTON
GOOD WOOL GREAT WEIGHT

This highly valuable English Breed of Sheep is unrivalled in its

Wonderfully Early Maturity.

Hardiness of constitution, adapted to all climates whilst in the quality of mutton and large proportion of lean meat it is unsurpassed, and for crossing purposes with any other breed unequalled. Full information of

JAMES E. RAWLENCE, Secretary Hampshire Down Sheep Breeders' Association.

Salisbury, England.

The Ribby Herd and Flock

of Shorthorn Cattle and Lincoln Sheep

The largest of each in England. Established 150 years, with world-wide reputation both in the show ring and sale yard. Holders of the 100-guineas champion prize at Smithfield Show, London, 1902, against all breeds, and breeder of the two 1000-guineas rams, and also the heaviest sheep at Chicago Show, 1903. Selections for sale. Cables **DUDDING, KEELBY, ENG.**

The MARHAM COTSWOLDS

Largest flock of the breed in England, numbering 1,200. Over 300 rams disposed of annually. Fifty-second annual ram sale on **July 27th, 1905.**

B. BROWN & SON, Marham Hall, Downham Market, Norfolk, Eng. Railway station: Downham, G. E. Ry.

W.W. CHAPMAN,

Secretary of the National Sheep Breeders' Association.

Secretary of the Kent or Romney Marsh Sheep Breeders' Association.

and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: **MOWBRAY HOUSE,** Norfolk St. LONDON, W. C., ENGLAND. Cables—Sheepcote, London.

Lincolns are Booming

We have only a few more ewes and ram lambs and breeding ewes for sale. We have seven choice young bulls, Scotch-topped, and a grand lot of heifers and young cows for sale at reasonable prices. Write or come and see us.

F. H. NEIL & SONS, Telegraph & R.R. station, LUCAN, ONT.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live-stock organization in the world. Hon. John Dryden, President, Toronto, Can. Address correspondence to **MORTIMER LEV-ERING,** Secretary, Lafayette, Indiana.

100 Shropshires & Cotswolds 100

One hundred head for sale. Ten shearing rams, fifty ram lambs, and sixty shearing ewes. Rams are good enough to head any flock. The ewes are a choice lot and will be bred to imp. ram.

John Miller, - Brougham, Ont.

LEICESTERS

We have for sale some good Leicesters. 1 two-shear ram, shearing and some good ram lambs, two-shear ewes, shearing and ewe lambs, all bred from imp. stock.

DUNNET BROS., Cianbrassil, Ont.

Sheep and Cattle Labels.

Do not neglect to drop me a line for circular and sample. Now is the time to get posted.

F. G. JAMES, Bowmanville, Ont.

COTSWOLDS

Some good shearing ewes and ewe lambs, and a few choice ram lambs, right type, for sale. Prices moderate.

E. F. PARK, Burgessville, Ont.

Hampshire Downs

We have a few choice ram lambs for sale, from imp. stock. Correspondence invited.

FREEBORN BROS., Denfield Stn. and P.O. o

SHROPSHIRE

Choice ram and ewe lambs for sale; also a few aged ewes.

GEO. HINDMARSH, Ailsa Craig, Ont.

Leicester Sheep—Choice ram and ewe lambs; also a few yearlings for sale. For particulars write to **CHAS. F. MAW,** Milton Stn. and Tel. o **Omagh P.O.**

Oxford Down Sheep, Shorthorn Cattle, Yorkshire Hogs.

Present offering: Lambs of either sex. For prices, etc., write to **John Cousins & Sons,** Buena Vista Farm. o **Harriston, Ont.**

TRADE TOPIC.

A FAMOUS BUSINESS COLLEGE.—Students entered the Ontario Business College, Belleville, the other day from Victoria, British Columbia, on the Pacific Ocean, and from Digby County, Nova Scotia, on the Atlantic Ocean. The provinces between these far-distant points are well represented, including eleven French and many English-speaking students from Quebec. In addition to students from all parts of Canada, there are in attendance students of both sexes from several of the West India Islands, and from various parts of the United States. O. B. C. continues to be what it has been for so many years, the most widely-attended business college in America. This month, the institution entered its 39th year; for over 28 years of that time Mr. J. W. Johnson, F. C. A., has been at its head. The best there is in commercial and shorthand training is imparted at O. B. C. Its three famous textbooks, "The Canadian Accountant," "Joint-stock Book-keeping," and "Negotiable Instruments," are sold throughout the English-speaking world. Send for the college catalogue.

If You Suffer

From Germ Troubles, Please Learn What Liquozone Can Do.

Thousands who were sick—like you perhaps—are well to-day because of Liquozone. Many had doctored long. Many were discouraged because other treatments had failed. But they were treating germ diseases with remedies which do not kill germs.

We offered to buy them a bottle of Liquozone—just as we offer you. They did with it what other remedies failed to accomplish. And those countless cured ones—scattered everywhere—are now telling others what Liquozone has done.

Kills Disease Germs.

Contact with Liquozone kills any form of disease germ, because germs are of vegetable origin. Yet to the body Liquozone is not only harmless, but helpful in the extreme. That is its main distinction. Common germicides are poisons when taken internally. That is why medicine has been so helpless in a germ disease. Liquozone is exhilarating, vitalizing, purifying; yet no disease germ can exist in it.

The virtues of Liquozone are derived solely from gases. They are generated from the best products of oxygen, sulphur dioxide and other germicidal gases. The process of making requires large apparatus, and from 8 to 14 days' time. The object is to so fix the gases, and to combine them, as to carry into the system a powerful tonic-germicide.

We purchased the American rights to Liquozone after thousands of tests had

been made with it. Its power had been proved, again and again, in the most difficult germ diseases. Then we offered to supply the first bottle free in every disease that required it. And over one million dollars have been spent to announce and fulfill this offer.

The result is that 11,000,000 bottles have been used, mostly in the past two years. To-day there are countless cured ones, scattered everywhere, to tell what Liquozone has done.

But so many others need it that this offer is published still. In the last few years, science has traced scores of diseases to germ attacks. Old remedies do not apply to them. We wish to show those sick ones—at our cost—what Liquozone can do.

Where It Applies.

These are the diseases in which Liquozone has been most employed. In these it has earned its widest reputation. In all of these troubles we supply the first bottle free. And in all—no matter how difficult—we offer each user a two months' further test without the risk of a penny.

- | | |
|---------------------|---------------------|
| Asthma | Gout |
| Abscess—Anemia | Gonorrhea—Gleet |
| Bronchitis | Hay Fever—Influenza |
| Blood Poison | La Grippe |
| Bowel Troubles | Leucorrhoea |
| Coughs—Colds | Malaria—Neuralgia |
| Consumption | Piles—Quincy |
| Contagious Diseases | Rheumatism |
| Cancer—Catarrh | Scrofula—Syphilis |
| Dysentery—Diarrhea | Skin Diseases |
| Dyspepsia—Dandruff | Tuberculosis |
| Eczema—Erysipelas | Tumors—Ulcers |
| Fever—Gall Stones | Throat Troubles |

Also most forms of the following
Kidney Troubles Liver Trouble
Stomach Troubles Women's Diseases
Fever, inflammation or catarrh—impure or poisoned blood—usually indicate a germ attack.
In nervous debility Liquozone acts as a vitalizer, accomplishing remarkable results.

50c. Bottle Free.

If you need Liquozone, and have never tried it, please send us this coupon. We will then mail you an order on a local druggist for a full-size bottle, and will pay the druggist ourselves for it. This is our free gift, made to convince you; to let the product itself show you what it can do. In justice to yourself, please accept it to-day, for it places you under no obligations whatever.

Liquozone costs 50c. and \$1.

CUT OUT THIS COUPON.

Fill it out and mail it to The Liquozone Company, 458-464 Wabash Avenue, Chicago.

My disease is.....
I have never tried Liquozone, but if you will supply me a 50c. bottle free I will take it.

Note that this offer applies to new users only
Any physician or hospital not yet using Liquozone will be gladly supplied for a test.

GOSSIP.

The London, England, Live-stock Journal Almanac for 1903, containing 335 pages, price on mailing, is a mine of information regarding the various British breeds of horses, cattle, sheep, swine and poultry, beautifully illustrated with portraits of the principal prize animals of the previous year, a breeders' directory, and a station table, together with much other useful information. The address is Vinton & Co., Ltd., 9 New Bridge St., Ludgate Circus, London, E. C., England.

Mr. J. B. Hogate, Weston, Ont., writes: "The Farmer's Advocate": "I am pleased to report to you that my advertisements in your paper are bringing lots of correspondence, both from Ontario and the Northwest. My stock are all doing well. Sales have been very brisk, and prospects never better for future sales, and I expect to have another importation arrive about March 1st of Clydesdale stallions and Clyde and Shire fillies. There will be 30 head in this shipment. Wishing you the compliments of the season."

R. MITCHELL & SONS' SHORTHORNS.

Shorthorns are certainly on the upward trend, and salable imported animals are scarce. The Greenhill Herd of Imported and Canadian-bred Scotch Shorthorns, property of Messrs. Mitchell & Sons, Nelson, Ont., ranks among the very foremost of Canada's many high-class herds. Greengill farm lies about four miles from Burlington Station, a few miles from Hamilton. The herd now numbers about 80 head, 25 of which are imported, and the majority of the others are the produce of imported sires and dams, representing such noted and fashionable families as the Roan Lady, Jilt, Rosemary, Orange Blossom, Duchess of Gloste, Princess Royal, Mayflower, Mysie, Gwynne, Augustus, Victoria, Rosebud, etc., the get of such noted sires as Lavender Victor, Craibstone, Scottish Prince, Sittytton Style, Marengo, Best of Archers, Prince Horace and Goldie's Pride. They are a heavily-fleshed lot in prime condition; are regular breeders, and good doers; in fact, one of the best herds in the country. The stock bull is the massive, eye-built, and richly-bred Imp. Lord Rosebery, bred by T. A. Anderson, Ballachragan, Scotland, sired by Challenge, dam by Silver Star, grandam by Merry Archer. He is a Broadhooks-bred bull, and a wonderfully prepotent sire. His predecessor, and the sire of nearly all the young stuff, was the Princess Royal bull, Imp. Greengill Victor, bred by W. S. Marr, Upperville, Aberdeenshire, sired by Lavender Victor, dam by Sea King, grandam by William of Orange. This grandly-bred bull left a stamp of superiority on his get that places him at once among the great Canadian sires. In the herd are about 20 heifers, all old enough being in calf to the present stock bull. They are a typical, evenly-fleshed lot, and among them can be picked out a few that could easily be put in shape to make times very interesting in the show-ring. In young bulls, there are about a dozen from 10 to 18 months of age, all by imported sires, and nearly all out of imported dams, many of them being fit to head any herd. There is a roan yearling, by Imp. Strawberry Chief, out of an imported Mysie-bred cow. Another is a red yearling, by Imp. Greengill Victor, and out of an imported Orange Blossom cow. Next is a red yearling, by Greengill Victor, and out of an imported Jilt-bred cow. This is an extra good young bull. Next is a red eight-months-old fellow, by Greengill Victor, out of an imported Mysie-bred cow, also an extra good one. Another is a red yearling, by the same bull, and out of an imported Orange Blossom-bred cow—a big, growthy fellow, with lots of quality. Then, there is a red yearling, by the same bull, and out of a Village Girl. These mentioned are only a sample of the rich breeding of the entire lot. Good bulls are scarce, herd breeders are scarce, imported animals and the get of imported sire and dam will soon be at a premium, as there has been practically no importing done for the last two or three years, and not likely to be as the Old Country prices are so high it is not a paying venture. These young bulls are a choice lot, and anyone wanting one should see them early. Look up their advertisement in this paper.

NEWCASTLE HERD OF Tamworth Swine and Shorthorn Cattle

Still have a lot of beauties to offer in Tamworths of both sexes, from 2 months to 2 years old; a half-dozen March sows that will be bred in October and November. All for sale at moderate prices. Also four young Shorthorn bulls ready for service, and a half-dozen beautiful heifers.

COLWILL BROS., Newcastle, Ontario.

TAMWORTHS & HOLSTEINS

Two boars sired by Colwill's Choice, sows bred and ready to breed, and a choice lot ready to wean. Pairs not akin. Also cows and calves of the deep milking strains. All at moderate prices. Write or call on **BERTAM HOSKIN**, Grafton Sta., G.T.R. o The Gully P.O.

TAMWORTHS

2 fine boars fit for service; also a choice lot of both sexes, from 2 to 4 months old, of good breeding stock. Prices reasonable. o
Glenairn Farm, Jas. Dickson, Orono, Ont.

Large White Yorkshires

A choice lot of young boars ready for service, young sows ready to breed, and young pigs all ages; all direct from imported stock of choice quality. o

H. J. DAVIS, Importer & Breeder of Shorthorns & Yorkshires C.P.R. and G.T.R. Woodstock, Ont.

ORCHARD HOME HERD (Registered)

Large English Yorkshires & Berkshires

Present offering: A number of choice Yorkshire and Berkshire sows ready to breed; also a fine lot of fall pigs, 6 to 12 weeks old. Our stock is of the highest standard, and our shipments invariably please. We prepay express, guarantee safe arrival and satisfaction. Prices moderate. Inquiries promptly answered. o
B. D. Crandall & Sons, Cherry Valley, Ont.

MONKLAND YORKSHIRES

Imported and Canadian-bred.

We keep 35 brood sows, and have constantly on hand between 100 and 200 to choose from. Can supply pairs and trios not akin. Quality and type unsurpassed. Prices right. o

JAS. WILSON & SONS, FERGUS, ONT. G. T. R. and C. P. R. Long-distance Phone.

For Sale—Ohio Improved Chester Whites, the largest strain, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address: o
E. D. GEORGE, Putnam, Ont.

POLAND-CHINAS

—Two litters farrowed Oct. 19th; ready to ship Dec. 19th. Price, \$10, registered, crated and f.o.b. here. Order early, as supply is limited. o
F. S. WETHERALL, Rushton Farm, Cookshire, Que.

BERKSHIRES

Imported and Canadian-bred
H. M. VANDERLIP, Gainsville,
on T. H. & B. and B. & G. division of Grand Trunk. Telephone and telegraph, Gainsville

HILLCREST HERD OF ENGLISH BERKSHIRES

For Sale: A lot of very choice young things of various ages. We prepay express charges and guarantee satisfaction. Enquiries promptly answered. o
Vine Sta., G. T. R., near Barrie. **JOHN LAHMER, Vine P.O., Ont**

LARGE ENGLISH YORKSHIRES

Pigs of the most improved type, of both sexes, all ages, for sale at all times. We have more imported animals in our herd than all other breeders in Canada combined. We won more first prizes at the large shows this year than all other breeders combined. We won every first but one and all silver medals and Bacon prizes at Toronto and London, and at St. Louis we furnished all the first-prize hogs in the breeding classes except two; also supplied both champion and grand champions. Prices reasonable. o

D. C. FLATT & SON, Millgrove, Ont.

Glenburn Herd of YORKSHIRES

Now on hand, a number of sows, 5 and 8 months old, for spring farrow; also a large number of September sows and boars. Booking orders for spring pigs. o

DAVID BARR, JR., Box 3, Renfrew, Ont.

SNELGROVE BERKSHIRES

A number of large, good sows in farrow; also some choice young pigs for sale. Now is a good time to order. Our herd has won more first prizes at leading shows in Ontario than any other. Pigs of different ages for sale. Write for prices. o

SNELL & LYONS, Snelgrove, Ont.

Blinfield Yorkshires

Young stock, both sexes, by imp. sire and dam, and the get of imp. sire and dam, up-to-date type with plenty of bone; also one 13-months-old Shorthorn bull, dual-purpose bred. A good one. G. B. MUMA, Ayr P.O., Ayr and Paris stations. o

YORKSHIRES AND LEICESTERS

For Sale: Boars and sows, 6 weeks to 5 months old; ram and ewe lambs, of good quality; at moderate prices. Write
C. & J. CARRUTHERS, Cobourg, Ont.

YORKSHIRES

My offering is: young stock of both sexes and all ages; bred from imp. stock and the get of imp. stock, they are true to type and first-class in every particular. Write me for what you want. L. HOOEY, Powle's Corners P.O., Fenelon Falls Station. o

Oakdale Berkshires

Of the largest strains. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not akin. o
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