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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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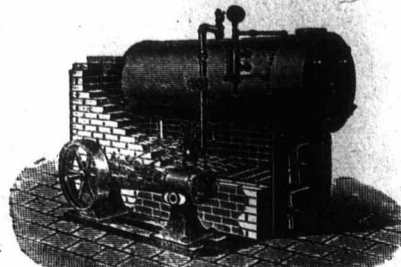
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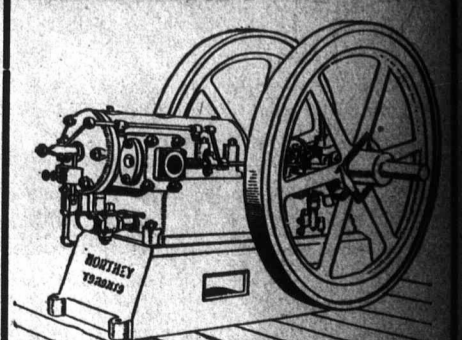
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AND HOME MAGAZINE

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

VOL. XXXIV.

LONDON, ONT., AND WINNIPEG, MAN., MARCH 15, 1899.

No. 474

## EDITORIAL.

### Preparation for Seeding.

The return of spring brings to the farmer a measure of anxiety about the spring work on the farm, and especially in regard to the operations of seeding. He knows that much of the success or partial failure of the prospective crop depends upon the preparation of the soil and the character of the seed sown. It is not necessary to remind the wide-awake farmer of the wisdom of having his implements and tools looked over, repaired if repairs are needed, and put in first-class condition for their work, to have the teams and their harness well prepared for their part, and to have the seed grain cleaned and ready to be taken to the fields as soon as the land is sufficiently dry to work satisfactorily. All these things will naturally suggest themselves to the man who is watching every point with a view to making the best use of the time for seeding when it arrives. The series of letters from successful farmers in various sections of Eastern Canada, published in this issue, show a substantial agreement in most essentials, and should be read in the light of the fact that the same methods do not apply in all soils and circumstances, and each one should use his own judgment as to the best procedure in his case.

It is generally conceded that, as a rule, by far the best results are received from the earliest sown grain crops, especially in the case of spring wheat and oats, while in regard to barley and peas early sowing is more generally approved of now than formerly. As early, then, as the land is sufficiently dry to work without poaching it is well to make a start with the cultivation and preparation of the seed-bed, which should be well worked and stirred to a depth of at least three inches, and it is doubtful whether there is any advantage in the case of land that was plowed in the fall in working it to a greater depth than four inches. We are persuaded that a large proportion of Canadian farmers, especially in the older provinces and on clay or clay loam soils, are sustaining heavy losses every year from inferior crops owing to imperfect or insufficient cultivation of the land in the preparation of the seed-bed. The probability is that in nine cases out of ten the failure to produce reasonably profitable crops is not nearly so much owing to the lack of a sufficiency of the elements of fertility in the soil as to the fact that the mechanical condition of the soil has not been made such that the crops can appropriate them and use them for their development. In far too many cases the implements used are not calculated to do effectual work in breaking up the land, stirring and pulverizing it so as to make a proper seed-bed. In some this is due to the unsuitable construction of the implements, and in others to their not being properly sharpened and kept in the best condition to do thorough work. To skim the land with a jumping cultivator which cuts only here and there the width of its hoes, leaving one half the surface soil unbroken and unmoved and making an imperfect seed-bed, is to court failure in the harvest unless the season be exceptionally favorable. A protracted drouth may defeat the best of cultivation and management, but the probabilities even in that case are largely in favor of the well-cultivated field, other things being equal. The farmer in his seeding operations will do well to prepare for the worst possibilities of either excessive drouth or excessive rainfall by thorough cultivation and thorough drainage; then, having done his part to the best of his ability, he has no delinquencies to regret, and has good grounds to hope and trust for a satisfactory outcome. So great faith have we in the benefits of thorough tillage that we are willing to believe the time is coming when the cultivation of grain crops will not end with the seeding operations, but will be continued till the crop is half-

grown. In view of the manifest advantages of hoeing in the case of roots, corn, and garden stuff, why should we doubt that similar tillage would produce proportionate results in other crops? We are fully persuaded that this idea might profitably be carried out in most grain crops to the extent of harrowing them once or twice after the plants are above ground, or even before they are "braided," as the Scotch say, if the land has been packed by a heavy rain and is in danger of baking. The only reasonable objections to this course is in cases where clover seed has been sown, and even in that event it is a question whether more of the clover plants would not perish in a baked soil than in a loosened and friable bed. Winter wheat, too, is often greatly benefited by a good harrowing in the spring, followed by the roller.

The difficulty of securing a catch of clover in some districts, and especially on clay soils, is to many a perplexing question and one which will bear discussion, as it is a serious matter when repeated failures are met with, the regular rotation of crops being interfered with and continued cropping resorted to, the land being thus depleted of fertility when it should be recruiting. No doubt the lack of humus in the soil is largely accountable for this difficulty, and it is certain that top dressing with short manure worked into the surface soil is one of the best measures known for securing a catch of clover, but it is obvious that the supply of manure on the average farm is insufficient for this and the many other purposes for which it is required.

### The Horse Show.

The prospects for the Canadian Horse Show, to be held in the City of Toronto, April 14th to 16th, under the joint auspices of the Dominion Horse Breeders' Association and the Country and Hunt Club of Toronto, are very satisfactory. The date fixed is some three weeks earlier than in the last two years, which is a decided improvement from the standpoint of the farmers and the breeders. The list of prizes in the breeding classes are liberal, and should bring out a strong show of horses. The steady decrease in the number of horses in the Dominion in the last few years, and the improved demand for good horses, both of the heavy draft class and the stronger types of harness horses and hunters, should encourage farmers and other owners and breeders to turn their attention to breeding the class of horses required, and the probabilities are that the raising of such horses will prove a profitable enterprise. Heavy draft horses are now in very active demand, and the supply is lower than for many years past, while for the most desirable classes of carriage and saddle horses there is constant enquiry, and the prices being paid for such ought to prove an incentive to every farmer who has mares of a suitable class to produce these types of horses to turn his attention to breeding them. The large influx of immigrants and of settlers in Manitoba and the Northwest will doubtless make an improved market for the average class of work horses, and these being largely drawn from the Eastern Provinces will make room for the production of a better class to meet the demand, and in this, as in every other class of live stock, it will be found that the best will prove most profitable, since they cost no more to raise than inferior ones, and command the highest prices going. The service fees for the best stallions in these times are not excessive, and there is no good excuse for patronizing any other; indeed, the man stands in his own light and prejudices his own interest who breeds from inferior sires, since the axiom that like begets like is reasonably reliable, and the only known way to improvement in live stock breeding is by the use of pure-bred sires of the most approved type, coupled with liberal and intelligent care and treatment.

### Dominion Agricultural Statistics.

On page 80 of the last "Statistical Year Book of Canada," a copy of which reached us some time ago, we find the following statement:

"The Dominion Government provides no agricultural statistics beyond those procured in connection with the decennial censuses."

Here we have a standing official confession that only once in ten years does the Canadian Department of Agriculture undertake to furnish the facts relative to the condition and supply of farm products and animals. Such information is surely of practical and economic value, both to the producer and those commercially concerned, else why maintain a statistical department at all? But to be of real service the information must be accurate, prompt, widespread, and frequent. When we consider the vast importance of agriculture as the first of Canadian industries, the steady advances which it is making, the development of new productions, the opening up of new farm lands, and the additions which, through immigration, are being made to our agricultural population, it would seem that the time had arrived when the scope of the Dominion Statistical Department should be enlarged to meet the needs of the situation. The Dominion Statistical Year Book—quoted above—excellent as an annual reference volume—contains a chapter on agricultural exports and imports, selections from British and U. S. agricultural trade returns, a summary of data from Provincial crop reports of Ontario and Manitoba only, and some facts from the censuses of 1881 and 1891.

In this age of intense, world-wide competition, statistical information is necessary to a proper knowledge of the nation's actual conditions, productions, and prospects, tending to assure profit to the producer by augmenting production where needed, by maintaining a fair equilibrium between supply and demand, by contributing to stability in value through reducing the risks in trading, and largely depriving speculators of the power to manipulate markets to the disadvantage of the farmer.

Methods of collecting information: About fifty years ago, in the Province of Ontario, the Board of Agriculture began to collect and publish through the press and otherwise such information, and the celebrated Royal Agricultural Commission of 1880 recommended the regular collection and publication of agricultural statistics. The Government wisely adopted the suggestion, and Mr. Archibald Blue mapped out a plan and was made Secretary of the "Bureau of Industries," which he conducted with great ability until called to take charge of another department, being succeeded by Mr. C. C. James, the present Secretary and Provincial Deputy Minister of Agriculture, whose great executive abilities have further improved the service. We find that:

- (1) Information is collected on crop, stock and food conditions from regular correspondents three times every year—1st of May, August, and November. Occasionally a fourth request is made, if special weather conditions, such as frost, too much rain, drought, etc., demand it.
- (2) These are got from a list of permanent correspondents numbering 800 to 1,000, the list constantly being revised, negligents being dropped, and newly found competents added; 600 to 800 are counted on replying on all occasions.
- (3) The statistics are obtained by sending out blank cards or schedules to every farmer whose name and address is secured through the school teachers. Returns are received from 6,000 to 15,000 persons.
- (4) Correspondents are pretty evenly distributed over the Province, from 25 to 30 in each county.
- (5) To regular correspondents are sent all published reports and special pamphlets; no money is paid.
- (6) In June of each year a large card is sent to every farmer in the Province, returnable first week in July, for details as to acreage of farm crops, timber, etc.; orchard, stock, implements and their

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN  
THE DOMINION.

PUBLISHED BY

THE WILLIAM WELD COMPANY (LIMITED),  
LONDON, ONTARIO, AND WINNIPEG, MANITOBA.

LONDON, ENGLAND, OFFICE:  
W. W. CHAPMAN, Agent, Fitzalan House,  
Strand, London, W. C., England.

JOHN WELD, MANAGER.

1. THE FARMER'S ADVOCATE is published on the first and fifteenth of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
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value. The largest number of returns received in one year was 48,635. From these, the annual estimate on farming operations is made up. (7) Special dairy returns are obtained from butter and cheese factories.

In Manitoba the Provincial Department of Agriculture has a corps of some 250 correspondents, or about one per township (six miles square), who furnish information as to condition of the great wheat and other crops, stock, poultry, etc. The number of stock is reported through municipal assessors, but in some cases these are only made once in three years. British Columbia has a staff of district correspondents, who report to the Department of Agriculture, but the system and returns are not yet very complete. In the Northwest Territories the newly-organized Department of Agriculture is arranging a plan for the gathering of statistics for the first time. In the Maritime Provinces and in the Province of Quebec this work has also been neglected. Even were every Province gathering statistics, it would still be incumbent upon the Dominion Government to deal with the matter from a national standpoint.

The United States has a most elaborate system, engaging a corps of 56,700 regular correspondents, reporting monthly, and 140,500 special correspondents, reporting at particular seasons of the year. There are also 21 salaried State agents. The present head of the Department at Washington (Mr. John Hyde), however, reports the system too cumbersome, and has recommended instead, as more efficient, a select corps of experienced correspondents in the 25 principal agricultural States, who would be paid \$2 for each of nine reports and \$1 for each of two reports, making \$20 per annum; thus obtaining a much more certain and valuable class of information than where the compensation is simply, as he puts it, "an occasional bulletin or a few packets of garden seeds." In the minor agricultural States the returns of the salaried State agents would be relied upon. The information collected from all sources, including that dealing with the productions of foreign countries, is carefully compiled and promptly and speedily distributed, through the press and otherwise, to the people.

## STOCK.

### Shires --- Past, Present, and Future.

The extraordinary prices that have recently been paid in England for Shire breeding stock indicates that the best animals in that popular draft breed of horses are very highly appreciated in their native home. Now, the English farmer is not a faddist, nor is he particularly a sentimentalist, but rather a practical business man possessed of keen, hard sense. If this be true, it must be admitted that the Shire horse of to-day is full of good quality and particularly suited to the class of labor he is called upon to perform. Some two decades or more ago the best animals of the breed were not so popular for their all-round excellence as they are to-day. It is claimed by English horsemen that those present at the recent London Shire Horse Show, who visited the same exhibition twenty years ago, were ready to admit a great change for the better in the animals present on this latter occasion. While there are still a number of indifferent specimens that find their way to the Show, they come chiefly from remote corners of the country where no branch of agriculture, let alone horse breeding, has been taken up in a spirited manner either by landlord or tenant. It is remarked by "Argus" in the *Live Stock Journal*, "that a number of the Shires exhibited at the exhibition of Shires twenty years ago, considered only from knees and hocks to ground, were lacking in length and slope of fore pastern; a proportion of them had scarcely any perceptible hind pasterns at all. The thin, shelly hoofs of a good many outside the prize and commended list had the hair so combed down over the top of them that it really took some little inspection with hand and eye to detect feet at all. Then there were in many a very perceptible roundness of leg, which was invariably accompanied with a coarseness of the exterior skin and feather. This gradually gave way to flatter bones and hair of a more silky texture."

From that time forward an improvement set in, and ten years later the fore pasterns had lengthened down into good, broad-set, deep, ample hoofs, such as are necessary for wear-and-tear work on city streets. More attention was also paid to shoulders, the up-and-down flat fore ends giving way to those with powerful, well-set collar sockets, which allowed of good free pulling. As time went on the hind pasterns became lengthened out. With all this the indispensable properties of weight and size were preserved, while symmetry was maintained to the extent of filling the eye of the knowing spectator, who was also satisfied with what he saw. Besides a well-developed and desirable form of limbs, a better sort of action was in time secured, until the winning specimens in England to-day leave little to be desired in a draft horse, and if we are to judge of the demand for the best stock animals by the prices paid at the present day, we have a right to expect to see within the next decade or two the rank and file of Shire horses well up to the level of the present top standards.

### The Ideal Shorthorn.

A writer in the *London Live Stock Journal*, over the *nom de plume* of Javelin, contributes to that journal, by request, the following description of a model Shorthorn, which we apprehend is so nearly in accordance with the views of advanced judges of that class of stock as to be worthy of reproduction in the *FARMER'S ADVOCATE*, and may be studied with profit by all young breeders and students of Shorthorn lore:

"An ideal Shorthorn should, I think, combine the good points for which several of the leading strains are remarkable. The head of a bull is a feature of the highest importance. The forehead is very wide between the eyes, and a little dished. Under it the face tapers gradually to the muzzle, where it becomes slightly wider round the nostrils, which are prominent and full. The nose is of a rich flesh color tint, and any blueness or spots are to be condemned. Curling hair on the scarp is becoming to a bull. The eyes are bright, prominent, and bold looking, showing high blood and spirited character. The ears are rather long, thin, erect, and well covered with hair. The horns, which are of a creamy or waxlike color, and sometimes inclined to be flat, spring well from the coronet, are short and thick, and with age bent rather inward towards the face. Upward growing horns are very objectionable, and destroy the contour of a head which may otherwise be well formed. There is always much grandeur displayed in the head of a high-class Shorthorn bull.

"Mr. Thomas Bates, and indeed all great breeders, attached great weight to the head of a sire, being assured that it indicated more than anything else his value as a stockgetter. It is recorded of Mr. Bates that, when he was seeking a bull to cross upon his Duchesses, he went to search for one in the herd of Mr. Stephenson. Passing through the farmyard, he was attracted by seeing the head of a bull protruded from a loose-box. He was immediately struck with its excellence, and concluded that this was the stamp he required. He accordingly purchased Belvedere, for that was the bull's name, and used him with extraordinary success, although, in respect to his shape, he was called by some a shabby-looking animal. The double cross of Belvedere produced Duke of Northumberland, the premier bull at the first show of the Royal Agricultural Society, which was held at Oxford in 1830. The late Mr. Bowly, of Siddington, described this bull to me

in terms of the highest praise. His head and crest, his surprisingly prominent eyes, and the general grandeur of his appearance and gait, Mr. Bowly said he could never forget. Mr. David McIntosh and Mr. Wm. Torr considered that the Duke was the grandest bull they had ever seen. This is a proof of the value of a head such as Belvedere possessed as an index to the quality and powers of a sire. It must never be forgotten that the head should distinctly indicate high breeding, and be full of masculine character, yet still be handsome. An eminent critic, who attended Mr. S. E. Bolden's sale at Springfield Hall, in referring to Grand Duke 3rd, spoke of the 'noble expression of his countenance.' The Rev. John Storer wrote that this fine sire had a 'beautiful yet quite masculine head.' The ideal head must be, so to speak, well chiselled, yet displaying all the strength and vigor which go to make up a thoroughly masculine appearance and expression.

"The head is pleasingly set on to the neck, which is wide, of good length, deep and muscular, with a strong development of crest, which adds immensely to the appearance of a bull. The neck vein is well filled out so as to carry the neck back into the shoulders without any appearance of hollowness at their junction. The breast is wide, full, prominent, and deep, so that the dewlap is not far from the ground. I owned a bull, bred at Warlaby, whose dewlap reached within 15 in. of the ground. Mr. Richard Booth used to say that a bull should stand with his forelegs well outside him.

"The shoulder is a point of primary importance in symmetry, and if bad shoulders exist in a herd it may take a lifetime to breed them out. A bull's shoulders should be wide and strong, yet not coarse. They need not be too fine at the points, for this is heifer-like; but they must be oblique or sloping back, and wide on top where they should melt, as it were, into the crops, which must also be wide and well fleshed. From the crops to the forearm, that is the girth, there must be no depression or slackness, but the foreribs should come out equally wide as the shoulders. The animal is then thick through the heart and wide of chest, an essential to good constitution. The fore legs are short, the arm being very stout and wide, and the bone is fine below the knee.

"From the shoulder to the tail the line is straight, the back is wide and level, the ribs growing out roundly from it, and extending well back towards the hips, the loins very strong and nearly as broad as the hips, which must not be too wide in a bull, otherwise he would be spoken of as cow-hipped. The ribs are deep and the flank thick, heavy, and well let down, so that the underline from behind the forearm to the junction of the flank with the hind leg should be straight. Thus there are even lines over and under. The hind quarters are long and wide, the rumps, so valuable as meat, being well filled, and almost concealing the prominence of the hips. The tail is set on neatly and well covered at its root, no lumpiness being seen. The twist is wide and deep, and the thighs heavily fleshed down to the hocks, an essential point in a sire, but seldom seen at its best. The hocks and hind legs are straight and wide apart, the legs being short and set firmly on the ground.

"The hair is abundant, of fine texture, soft and mossy. There is sometimes found an under or second coat of very velvet-like feel, which it is pleasant to touch.

"Color in great variety is one of the charming features which distinguish the Shorthorn above other breeds. There is the rich creamy-white, of which color some of the best Shorthorns were. Different shades of red are to be found, the deep color being most liked. The roans of many hues can be had, from the pale or cool roan which merges towards white, to the deep and splendid plum color, which is so grateful to the eye and so much admired. The late Mr. Fawkes, of Farnley, was very partial to the rich roan, and his experience was that the use of a white bull upon red cows was the most effectual way to get such a color.

"Deep flesh is one of the great essentials in a Shorthorn. There is nothing like the roast beef of Old England. There must be abundance of heavy flesh of fine quality distinguishing the fat Shorthorn, but when milk is wanting that can be also had. The mention of beef leads one to speak of that 'handling,' that fine mellow hide so pleasant to the touch, and so indicative of that 'quality' which is a clear index of thrift and first-rate beef-making propensities. The skin must not be thin; it should be rather thick and soft, and there is felt underneath it a peculiar softness, even in lean animals, which at once evidences thriftiness and a faculty to produce beef with a moderate expenditure of food, or, in other words, to make beef economically.

"The female Shorthorn has, of course, most of the characteristics which belong to males of the same breed, but there are, however, some leading points of difference. For example, the head of the female is finer, longer, smaller, and more tapering. It is full of gentleness and beautiful feminine character. The eyes are more placid, and the horns are much smaller and gracefully curled. There is, in fact, a great general sweetness of expression. Again, the neck is thinner and much finer at its junction with the head, and there can be no thickness or clumsiness at the jole. The brisket is not so deep as it becomes the bull to have it. A heifer's shoulders are very neat and not at all so strong or wide as those of the male; they are also thinner at the top where they join the crops. Mr. Carr, in

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speaking of a handsome heifer at Warlaby, said that she had 'shoulders like a salmon.' A heifer does not need the amount of beef to the hocks which is looked for in the bull, and, furthermore, it is no fault in a cow to be rather wide of her hips, yet she must not be at all extravagant in that point, as it would be injurious to symmetry. The udder should extend well forward and have well-formed and square-set teats of moderate size placed well apart.

"In conclusion, it may be well to state that Shorthorns must be of good size. Their form is so evenly and nice balanced, their proportions so excellent, that they often appear smaller than they really are, and it must be remembered that they stand on short legs, and are near the ground. Furthermore, it is desirable to cultivate stylish carriage and graceful movement. These points must always tell in high company such as is found in a great showyard, and they have an effect on the minds of the judges, if they be men who know how to value cattle of a high stamp.

"Good constitution there must be, but style and elegance can be combined with that now as well as in former days.

"I remember reading many years ago an account of the 'Royal Show at Chelmsford. The report stated that Colonel Towneley's Master Butterfly and Mr. Ambler's Grand Turk were among the great bulls which competed there. These two were eventually picked out as the best of the lot, and then came the final tussle between them for the first prize. Both were ordered to walk past the judges for the last time, but Master Butterfly, led by Joe Culshaw, moved across the ring with such gaiety and style that he was quickly awarded the coveted rosette, and he went to Australia with twelve hundred guineas on his head."

### Shire Horse Show at Islington, London, England.

[SPECIAL.]

The twentieth annual show of this society took place at the above well-known rendezvous. The entries for the present year were somewhat in excess of those of last year, and, in fact, have not been exceeded since 1890, when they were eighty in excess of the present year. Taken in the aggregate, the quality and all-round merit and excellence of the exhibits has certainly never been exceeded at any of the previous exhibitions of this society.

**The Yearling Colts** were judged first. These were a grand class, and numbered fifty-three, the winner being a colt of rare quality and substance, from Mr. P. A. Muntz's (M. P.) stud—Dunsmore Jameson, by Moor's Zealot. In addition to this colt there were six other winners of money prizes and fifteen other exhibits to which the barren honors of H. C. & C. were given.

**Two-year-old Stallions.**—A class of sixty-three entries, not remarkable for outstanding quality, the leading winners being, however, the best of the class, Mr. W. Jackson being first with Knottingly Regent, a capital son of that excellent horse Regent II. Six other entries were placed for money awards, and six others were awarded barren honors by the judges.

**Three-year-old Stallions** numbered seventy-six entries, in which the outstanding winner was found in Buscot Harold, Mr. A. Henderson's last year's champion entry, which led the way. There were also six other money awards, and thirteen barren honors were awarded. The class, for so large and numerous a one, was of very useful merit.

**Four-year-old Stallions**, which numbered thirty-seven entries, was not so good as in the previous year, the winner, Nailstone Cœur de Lion, being a very showy horse with nice action and good quality, his owner, Mr. James Forshaw, paying a high figure for him last year at Mr. J. A. Barr's sale. Six other entries secured money awards, and six others were given the H. C. & C. cards.

**Stallions under 16.2 hands** and over four years but under ten numbered twenty entries, the merit of which was not in any degree a high one, Mr. J. Forshaw's Yorkshire Ben taking the premier place, whilst three other money awards were made and seven received barren honors.

A similar class to the preceding in respect to age, but 16.2 hands and over; the premier winner in this class being a big powerful horse—Blaisdon Conqueror by Hitchin Conqueror, owned by Mr. Peter Stubbs. Five other money awards were made, and three barren honors conferred.

**Aged Stallions** above ten years brought out a class of seventeen veterans, in which the premier award went to a ten-year-old horse, Scarsdale Rocket, from the stud of Mr. J. C. Waddington. Two others received money awards, and one other came in for R. N.

The female classes were, as a rule, better than the male classes. They were strong in number, and, generally speaking, high in merit and quality.

**Yearling Fillies** were a very large and strong class, the entries numbering fifty-eight, no fewer than twenty-one of which were noticed by the judges, or in other words were placed in the award list. The winning filly in this capital class was Nailstone Royal Highness, from the stud of Mrs. A. J. Barrs.

**Two-year-old Fillies** were a really good class, in which there were sixty-nine entries, of which the judges selected nineteen for a place in the award list, putting a well-grown good filly, bred by H. R.

H. the Prince of Wales, and owned by Sir J. B. Maple, Bart., M. P., in the premier place.

Thirty-five entries were found in a good class of **Three-year-old Fillies**, and from the large proportion placed by the judges in the award list, which numbered seventeen, or practically half of the whole, the merit and quality of the class could be assumed; the premier winner in this case being Rolleston Fuchsia, who as a two-year-old last year took fourth place in her class.

**Four-year-old Mares** were a smaller class, but one of great merit. Here Dunsmore Gazelle, from Mr. P. A. Muntz's stud, claimed the first place, whilst eight others out of the remaining twenty-three in the class secured the notice of the judges.

**Mares Five Years Old** and upwards, under 16 hands, made an extraordinary good class, the leading winner being Saxon Girl, property of Lord Rothschild, thirteen others being noticed, and thus, out of a class of thirty-one, fourteen found favor with the judges.

**Mares five years old and upwards** was a large class, forty-one entries being made, and the judging in this class was followed with great interest, owing to the fact that last year's champion Aurea was amongst the contestants, but her development during the past year has not been such as one would have desired, consequently she had to let two others precede her in the award list, the premier one of which was Dunsmore Gloaming, exhibited by Sir J. B. Maple and bred by H. R. H. the Prince of Wales; Aldenham Dame (Lord Rothschild's) being second; and fifteen others were noticed by the judges in the award list.

The two gelding classes were better filled than we have seen them, but there were not nearly so many present as should have been the case. In both classes Mr. James Eadie took first award.

The final fight was over the **Championship** awards, and these were as follows: Cup for the best colt, one, two, and three years of age. Here the victor was at once spotted in Mr. A. Henderson's Buscot Harold, last year's champion. An-



SHIRE STALLION, BUSCOT HAROLD.  
CHAMPION AT LONDON SHIRE HORSE SHOW, 1899.

other R. N. went to Mr. P. A. Muntz's grand yearling colt, who in class competitions holds an unbeaten record. The cup for the older stallions was productive of a stouter contest, the victory ultimately resting with Blaisdon Conqueror, a five-year-old (Mr. Peter Stubbs), and the R. N. for the same honor went to the second horse in the same class—Mr. J. Forshaw's Burgeon.

For the \$500 **Challenge Cup**, Buscot Harold, the winner of the Junior Stallion Cup, made an easy winner, and thus his fortunate owner, Mr. A. Henderson, has the honor of winning this trophy two years in succession with the same horse; the R. N. for this being Mr. Peter Stubbs's Blaisdon Conqueror, the winner of the Senior Cup.

For mares, the cups offered were for the best filly, one, two, and three years old. Sir J. Blundell Maple, Bart., with Victor's Queen rightly secured this, Messrs. Lowndes & Son being R. N. with Rolleston Fuchsia. For the older mares the cup was easily won by Sir J. Blundell Maple's Dunsmore Gloaming, whilst the R. N. for the same was found in Lord Rothschild's Aldenham Dame.

For the challenge cup for best mare, Dunsmore Gloaming was easily winner, with Lord Rothschild's Aldenham Dame for R. N.

H. R. H. the Prince of Wales honored the Show by being present during the final awards, and presented the principal prizes to the winners. It is a fact that must not be overlooked, namely, the great success that has attended H. R. Highness' stud, for the female champion cup winner, as well as the winners of both the other cups, were bred at Sandringham, and thus a clear indication is given of the high merit and value of this noted stud.

The remarkable success of the sales of Hereford cattle recently held at Kansas City and other points speaks well for the estimation in which these cattle are held by ranchmen and feeders in the West. The record price for bulls of the breed was broken by the sale of Sir Bredwell, at Mr. Sotham's sale, at \$5,000, and the average of \$516 for 46 head is an indication of good times for Hereford breeders.

## FARM.

### Preparation for the Seed—Farmyard Manure the Supplier of Humus—Varieties of Grains, Roots, Etc.

The preparing of the soil for the growth of the different crops upon the farm is not yet a settled question. In fact, I am of the opinion that it is undergoing somewhat of an evolution. The methods that we practice in preparing the soil for the different crops are about as follows: The land that has been under root and other hoed crops the preceding year, if we have managed to get lightly plowed after these crops are harvested, the following spring is gone over first with a disk harrow, followed with iron harrows until a suitable seed-bed is secured. This is sown with spring wheat, barley, and oats, as thought advisable. The land that was under grain crops the preceding year is twice plowed (with two-furrow gang-plow) and well harrowed after the crop is harvested; then in spring it is again plowed, not too deep, for oats and barley. Sod is plowed in the spring, harrowed with disk and iron harrows for a seed-bed, and sown with peas. Our root and hoed crops follow oats. In the fall, after the oats are harvested, the land is twice plowed and harrowed; then, whatever manure that may be on hand is put on as far as it goes and the land is again plowed. Then during the winter or in the spring the balance is manured, and as soon as possible after the spring seeding it is again plowed and frequently harrowed (and perhaps twice plowed) until time of planting and sowing.

I have not yet practiced plowing down clover or other green crops for the supply of vegetable matter in the soil, but have relied on barnyard manure, keeping as much land as possible under grass, and, of course, pasture, and not having too large proportion under grain crops, and growing more or less rape. I am of opinion that my farm, and particularly one field, is richer in vegetable matter than nature left it.

I have had but little experience in underdraining; in fact, the farm requires but little. We have about 200 rods of tile drain, made with 3, 4, 6 and 8 inch tiles. It was not hard to dig; it was made with an ordinary spade and shovel. With the limited amount of draining that we have to do, I do not think it would pay us to invest in improved draining machines and tools. I have not done anything in the way of subsoiling, and do not think it would be of any advantage on our soil, and question if on any soil.

The varieties of spring grains that are grown in this vicinity are mainly as follows: Very little spring wheat grown, mostly Colorado; oats, chiefly Siberian and American Banner; peas, nearly all Multipliers or Golden Vine; barley, 6-rowed and Mensury. The low prices that have prevailed for a number of years for barley caused many farmers to cease growing it, but think more will be grown in the future, as barley at present prices pays as well as any other crop. In corn, I think the Leaming has the preference; White Elephant and Empire State are mainly the varieties of potatoes grown; in swede turnips, Elephant or Jumbo has the preference; field carrots, the Beith or Half-long is chiefly grown; mangels, some Half-long, but chiefly Mammoth or Saw Log. **JAMES TOLTON, Bruce Co., Ont.**

### Rotation of Crops—Mixed Farming—Varieties of Grain, Roots, Etc.

At the meeting of the Farmers' Institute held in our village recently we heard considerable about the rotation of crops. We want to hear more concerning the matter. Comparatively few farmers here practice "rotation" to any extent. The acreage of the various crops grown is governed, principally by the needs of the stock kept and the prices of different grains, etc.

We cannot successfully grow barley and peas on our farm. Our grain crop is wheat and oats, and as the farm is in rather poor condition we make a practice of sowing clover with our oats every year. Though we raise plenty of fodder, we buy a quantity of coarse grain, bran and shorts for fattening and dairy purposes.

I think we take up almost every point of mixed farming. We fatten a few cattle, give considerable attention to dairying, feed hogs, keep a few sheep and poultry, and breed an occasional foal. We do not, however, sell any hay, and no grain excepting our fall wheat. I think a "mixture" is safest for the average farmer. At present we are putting more stress on the dairy and the hog. Though hogs are low at present, we are not going out of them. We find it best to keep the even tenor of our way, and by the time the prices revive we generally have a good batch to dispose of. By giving attention to a number of lines we do not lose all by a sudden fall in the price of any one article, and if the prices raise on others we generally have some of them to sell.

We intend sowing spring wheat and oats. We sow the wheat on sod plowed last fall. Though our land, being light, works easy, we like to cultivate well before seeding. We cultivate and harrow once or twice, according to nature of soil. Sometimes, if very loose, we roll. Sow one bushel and a half per acre, and, as a rule, roll and harrow after sowing. Our oat crop will go, part of it, on sod, the same as that for spring wheat, with the same

cultivation. Part of it will follow a hoed crop (corn and roots), and will have practically the same cultivation, with the exception that the cultivator will be used only once. We sow two bushels of oats per acre. With the wheat and oats we will sow ten (10) pounds of red clover seed per acre, or twenty (20) pounds of alfalfa per acre.

Spring wheat has been a failure for a number of years until the last year or two. Wild goose gives very good results, and as the price has been equal to or a few cents above fall wheat, considerable will be sown this spring. The Siberian oat seems to be the favorite, as also the Golden Vine and the Prussian Blue pea. The "bug" is prevalent, but not so popular. In corn, the Leaming and Early Compton take the lead; in potatoes, the Red Elephant, Brown's Prolific, and Carmen's No. 2. The Mammoth Long Red mangel has been popular, but with some farmers is giving place to the Danish Improved Sugar Beet. The frost killed our Japanese millet last year, but we intend giving it another trial this year.

Huron Co., Ont.

### Farm Practices and Varieties of Crops, Etc., in Quebec.

To the Editor FARMER'S ADVOCATE:

SIR,—As to various modes in farming in Sherbrooke Co., Que., I would say in renewing meadows I seed down to oats, using clover as much as possible, fertilized with hardwood ashes, by which I apply potash and phosphoric acid, and the clover secures the nitrogen. Corn and bran can be more cheaply bought in this section than produced.

As to mixed farming, men differ so much that, as in business, one is fitted for mixed farming, while another would do better with a few standard specialties; but beware of novelties. Where any one product, such as mushrooms, strawberries, asparagus, grapes, etc., begins to show a profit, there will be 20 rush in where one might have made a fair living. Specialties should be some such choice as barley, clovers, and potatoes; dairying and pork; bees, fruit, and hay; poultry and market gardening, etc., etc; beef-raising, dairying, hog-raising, together with poultry, sheep, and some fruit, is not too much mixed for the family having time and taste to make the most of all the separate items, having each and all of the very best. The most promising special branch that I know of is butter, either private dairying, where the conditions are all favorable, or patronizing a butter factory, and keeping in connection with buttermaking as many calves, pigs and poultry as the skimmed milk will profitably allow of.

Oats form my main grain crop, as I wish to get the hay meadows renewed as soon as possible. Sod is plowed early in the autumn and spring-toothed. Disk and Acme harrows, besides the common steel-toothed iron harrow, are used to mellow the ground and kill weed seeds. We sow four bushels of oats to the acre, finished with a heavy land roller.

The favorite grains, etc., here seem to be the American Banner oats; barley, 2-rowed Chevalier; peas, Golden Vine and Prince Albert; spring wheat, White Russian, White Fife and Red Fife in the order named; corn, for cob, Early Canada Yellow, and Large Yellow Flint; for silo, Thoroughbred White Flint and Evergreen Red Cob, in alternate rows with Compton's Early. Potatoes—Early Rose still holds its own, and Hebrons have given place to it. Carrots—White Intermediate have taken the place of White Belgian. I prefer Yellow Danvers for either table or stock. Turnips (swedes)—Lang's Purple-top and Champion. Mangels—Yellow Globe. While I like trying new varieties from time to time, I find that practically there is not one in ten years that is an improvement on those known as standard sorts.

Sherbrooke Co., Quebec.

### A Fine Seed-bed Indispensable.

To the Editor FARMER'S ADVOCATE:

SIR,—We usually have the ground plowed in the fall for the spring grain crops, and in the spring work up with the cultivator, Acme and disk harrows. We find it pays to take time to prepare a very fine seed-bed. While the amount of vegetable matter in the soil largely determines the degree of moisture the soil will retain, thorough cultivation and a very fine seed-bed will go a long way toward obtaining the desired end. If there is one grain crop more than another that it pays to put special work on it is the pea crop.

We do not depend altogether on barnyard manure to keep up the supply of humus in the soil, but supplement largely with clover.

Very little spring wheat is grown in this district. The best oats are White Siberian, American Banner, Egyptian, and Joannette. Very few carrots and mangels grown; but in turnips, Royal Norfolk Purple-top, Hall's Westbury, Carter's Imperial, and Sutton's Champion are largely grown. With regard to potatoes, "Many people have many minds." Not many are grown on a large scale, but mostly for home use. Nearly all the standard varieties are grown. The Elephant, Empire State, Hebron, Rural New Yorker No. 2, are most largely grown.

Waterloo Co. (South), Ont. JOHN TAYLOR, JR.

### Aim to Get the Grain in Early.

To the Editor FARMER'S ADVOCATE:

SIR,—I aim to get my land fall-plowed, if possible, for spring grain, and then work with cultivators and harrows until we have a good seed-bed. Fall-plowed ground seems to retain moisture better than land plowed in spring; besides, we can get a crop sown earlier, which is of the greatest importance, as early-sown spring grain gives almost always the best crop. We always roll our spring grain after it comes up about an inch high. We never roll before it comes up, unless it is a very dry season, with poor prospects of rain soon.

We endeavor to keep up the supply of humus in the soil by making and saving all the manure possible, by feeding all the coarse grain grown on the farm, as well as hay and a large crop of corn, and also by growing clover and other green crops to plow down.

The varieties of oats that give the best general satisfaction are the Black Tartarian and White Siberian and Banner. Peas were a general failure here last year. The Prussian Blue and Golden Vine and Mummy are the favorites. What little barley is grown is the six-rowed. Some farmers are going to try the beardless this spring. All the earlier-ripening varieties of corn do well in this district. The favorite varieties for husking are Compton's Early for yellow and Smut Nose for white. Both kinds are almost sure to give a good crop of hard corn with fair cultivation. For ensilage the Improved Leaming and Butler and White Cap are the best, as they will all mature here in an ordinary season.

For potatoes it is difficult to say which variety is best, but many farmers are still growing the White Elephant and Beauty of Hebron with good results. The Rural New Yorker is also doing well here. For an early kind I am going to plant a variety called Rose f Erin, which has done remarkably well for one of my neighbors. For turnips, Westbury seems to be a universal favorite. They are nice-shaped and a good keeper and a good



HEREFORD BULL, SIR BREDWELL.

SOLD FOR \$5,000 AT MR. SOTHAM'S SALE AT KANSAS CITY, MARCH 1ST, 1899.

cropper. For mangels, the Giant Yellow Intermediate is a splendid variety, as the quality is much superior to the Long Red varieties, and it is nearly as heavy a cropper. One of our best growers has given up the Long Red in favor of the Yellow Intermediate. The variety of carrots usually grown is the Short White. They are more easily harvested than the long kinds, but are no better in any other particular.

Brant Co., Ont.

### Clover Everything That Admits of Clovering.

To the Editor FARMER'S ADVOCATE:

SIR,—We have always made it a rule to sell little or no hay, preferring to turn it into beef, milk, mutton, or other finished products, thereby increasing its market value and the fertility of our farm at the same time; and as timothy hay would be of little value for our purpose, and is considered hard on the soil, we sow but little of it, and that little to fill in should the clover be heaved out.

But clover we consider our mainstay. We simply clover everything that admits of clovering—fall wheat, barley, oats, etc. That which we do not keep for hay furnishes excellent fall pasture or material for green manuring. Our clover mixture for fall wheat is 6 lbs. red clover, 1½ lbs. Alsike, and 2 lbs. timothy. The latter is put on in the fall at the time of seeding wheat, and the balance of the mixture is applied *early* in the spring with a hand seeder.

Although red clover forms the bulk of the mixture, we find the Alsike a great aid in producing a strong stand, as it does not heave, thickens up the bottom, thereby increasing the yield, and makes a hay of fine quality, much relished by all farm stock.

The spring grain mixture of clover is 6 lbs. red, 1½ lbs. Alsike, and 4 lbs. lucerne clover, the only difference being the substitution of lucerne for timothy, for the reason that the former furnishes, on our land, excellent pasture the first season. This is applied with the clover seed attachment on our grain drill, dropping the seed behind the tubes. If

the land be dry enough we immediately roll it, which covers the seed the required depth and completes the job. If we consider it too wet and liable to bake we harrow at once and roll the grain when four or five inches high, but at one period or the other we use the roller, as we find it aids in preserving the moisture so necessary to the rapid growth of both grain and clover.

Our manner of sowing lucerne clover is similar to the above, always using barley as the nurse crop, which our experience, and that of our neighbors, has proved to give the best results. We seed at the rate of 12 lbs. per acre, throwing in a dash of red and Alsike clover to thicken up the first crop. The strong, rapid growth of the lucerne will gradually crowd the other clovers out, and for this same reason it is one of the cheapest and most effective thistle exterminators yet discovered. We are positive that there is not a field in which a good catch of it can be secured that cannot be cleared of thistles in two years by cutting the lucerne for hay as often as it grows large enough. *Be sure and sow nothing but pure seed!* Neglect in this particular has resulted in two of our neighbors having their farms infested with two of the most obnoxious weeds ever introduced into this section. We make it a point to grow our own seed when possible, or else buy from someone with a clean farm.

The Elephant potato, which was once the favorite, seems losing vitality, and is giving way to more recently introduced varieties, as the R. New Yorker No. 2 and Empire State. The Early Ohio still holds its own against all newcomers.

On account of the bugs, very few peas are grown, and perhaps less spring wheat than peas. Large quantities of oats are grown, the leading varieties being Black Tartarian, Joannette, and White Siberian. This being a heavy corn-producing district, a large number of different varieties are grown. Some prefer the small eight-rowed yellow, others the various flints, but the majority grow white or yellow dents. Personally we prefer the large white dent, which yields us an average of 125 bushels of corn (ears) and any amount of good fodder per acre. There are scarcely any roots grown here, only a few Imp. Short White carrots and Danish sugar beets.

Kent County, Ont.

### Lessons from the Central Experimental Farm.

To the Editor FARMER'S ADVOCATE:

SIR,—I beg to give the following experience with grasses, clovers, etc., at the Central Experimental Farm, Ottawa. Timothy has given the best results when pasturing has not been considered. Orchard grass will give a good yield, is very early, and will make a better after-grass than timothy, especially on low land. I would not advise sowing either timothy or orchard grass alone. For light and poor soils sow timothy 12 lbs., common red clover 8 lbs. per acre, or orchard grass 14 lbs., with alsike clover 6 lbs. per acre. On heavy soil or soil in good condition 2 lbs. less of each may be used, and will yield good results. For wet land red-top is a very valuable grass, making a good thick sward, and providing a moderate crop of fine hay relished by all stock. It does well mixed with timothy and clover, using 8 lbs. timothy to 3 lbs. red-top and 4 lbs. alsike clover. The Awlless Brome grass, which has given such satisfaction in the West, has not as yet been grown to any large extent in the Eastern Provinces. It is, however, a grass of great promise.

You may sow grass seed successfully with wheat, rye, barley, and oats, best in the order named. Choose the varieties of grain that will not lodge and smother the small seed. We have never failed to get a catch of grass or clover. There are three points to bear in mind: (1st) Sow enough seed, (2nd) in the right way, (3rd) and at the right time.

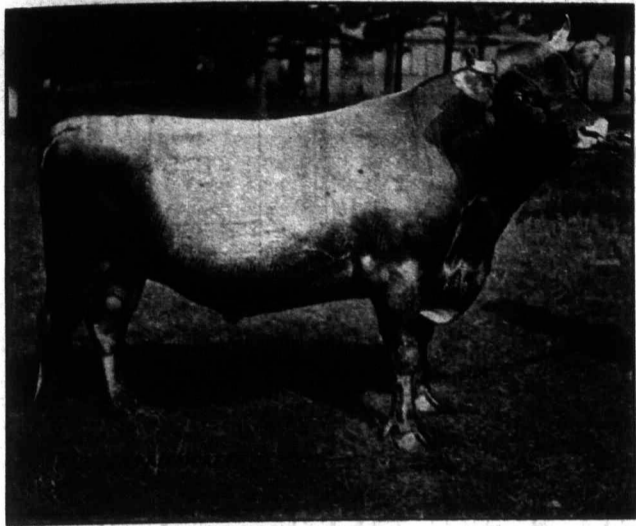
**Clovers.**—The common red, 10 lbs. per acre, appears as yet to be the best all-round clover. It is best for hay, good for mixtures, for pasture, and very valuable as a fertilizer. Alsike, 6 lbs. per acre, comes next, and is sometimes more suitable on very heavy or moist land. I would strongly advise sowing clover with every acre of wheat, rye, barley, and oats that is sown on the farm for a few years. If it is not required for meadow or pasture, it is very valuable as a fertilizer to be plowed under either in the first autumn after sowing or in the following spring. The results as a fertilizer will surprise you.

The advantages of sowing clover with all grain crops are: In the first year weeds are crowded out, and also a considerable amount of fine pasture is available in the autumn if required. The strongest argument, however, in favor of sowing clover is the great increase in the yield of grain crops grown on land where clover has been plowed in.

When growing clover for hog pasture, sow the following mixture: Common red 4 lbs., alsike 2 lbs., white Dutch 1 lb., alfalfa 8 lbs. per acre. Sow this mixture alone, and as early in the spring as you can work the soil to advantage, thus securing the early growth and moisture.

If sowing the small seeds alone by hand, and the soil is dry, have one team on the harrow a few yards ahead of you and a second team on the roller as close as he can get behind you. If only one team be at your command, sow an acre or so, then change and roll. If sowing with the attachment on the grain drill, which is an excellent way, have the seed drop behind the hoes, where the small seeds will come in contact with the moist earth at a depth of

one to two inches. Roll the land at once. Do not allow the seed to lie exposed on the surface to dry out, as the moisture will insure better germination. It is not necessary to harrow after the seed is sown. Should the seed be sown very early in the spring, and the soil be sufficiently moist, the small seeds may be allowed to drop in front of the drill hoes. In no case allow the seed to drop in front of the hoes if the soil is dry or seeding is done late in the season. It is not well to allow meadows to run over three years, and two is better. When clovers and grasses are sown with grain I would not advise harrowing after the seed has germinated, but



FOUR-YEAR-OLD JERSEY BULL, BELVOIR KING, A. J. C. C. 40297.

WINNER OF FIRST PRIZE AT WESTERN FAIR, LONDON, AND TORONTO INDUSTRIAL, 1898. GRANDSON OF BELVOIR PET, SWEETSTAKES COW THREE SUCCESSIVE YEARS AT WESTERN FAIR, LONDON; ALSO AT TORONTO INDUSTRIAL IN 1895. OWNED BY R. B. SMITH, ARKONA, ONT.

where no clover or grasses are sown always harrow with a tilting harrow or weeder when the grain is from four to six inches high to kill seedlings of weeds and loosen up the crust.

**A New Method.**—Many farmers complain that clover is too hard to save as hay, also of having their pastures run out in the hot summer months. To get over this difficulty, I would advise pasturing the new meadows the first season; that is, the next spring after sowing. They will have a great growth of clover, which will last the entire season, and thus secure a good pasture. When clover seed is wanted, Dr. Fletcher recommends pasturing the new clover fields until June 20th to prevent injury by the clover-seed midge. It may then be left and a crop of seed harvested. The second season take off the timothy hay as usual. In the spring, as soon as the land is sufficiently dry to allow the horses to get on without sinking, the meadow should be harrowed thoroughly to break up any cattle droppings that may be left on the field from the former season. The harrow will loosen up the earth around the roots. After this, roll with a heavy land roller to level the ground, and thus make it easier later on to use the mower and rake. An excellent plan for renewing pastures on stony or stumpy land that has never been broken is to take a strong, heavy harrow and go over your land twice very early in the spring. Then sow the following mixture: Common red clover 4 lbs., alsike 2 lbs., alfalfa 2 lbs., white Dutch 1 lb. per acre. After the seed is sown, harrow once and roll with a heavy land roller.

The following are the varieties of grain that have done best at Ottawa in field lots, 1898.

Several sorts have given larger yields in experimental plots, but have not as yet been grown in quantity.

**Spring Wheat.**—Preston, Percy, Wellman's Fyfe, Dion's Monarch, Red Fern.

**Oats.**—Improved Ligowo, Banner, American Beauty, Joannette, Wallis, Golden Giant.

**Barley.**—Canadian Thorpe (two-rowed), Odessa (six-rowed), Mensury, Royal, Trooper, Champion (six-rowed, beardless), and Success.

**Peas.**—Prussian Blue, Canadian Beauty, Crown, Golden Vine, Pride, New Potter.

**Corn.**—Flint sorts: Longfellow, Compton's Early, North Dakota White; Dent sorts: Selected Leaming, New White Cap Yellow Dent, Champion White Pearl, Mammoth Cuban.

**Potatoes.**—American Wonder, Early Harvest, Henderson's Late Puritan, Early Rose, Wonder of the World, Everett, May Queen Early.

**Turnips.**—East Lothian, Purple-top Swede, Giant King, Perfection, Jumbo, Mammoth Clyde.

**Carrots.**—Mammoth White Intermediate, Large White Vosges, Improved Short White, Ontario Champion, Iverson's Champion, Red Early Gem or Guerande.

**Mangels.**—Gate Post, Giant Yellow Globe, Golden Tankard, Yellow Intermediate, Giant Yellow Half-long, Mammoth Yellow Intermediate.

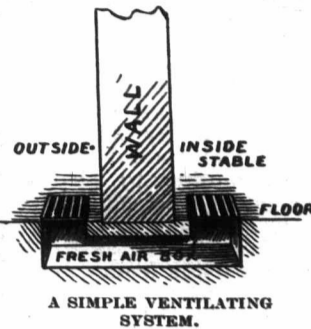
JOHN FITZGERALD, Foreman  
Central Experimental Farm, Ottawa.

Our Scottish Letter, giving reports of the Scotch bull sales and the London Hackney Show, was received too late for this issue, but will be given in our next.

**A Simple and Satisfactory Ventilating System.**

At the joint meeting of the Live Stock Breeders' Associations, recently held in Winnipeg, Dr. Ruth-erford, M. P., in speaking on "stable hygiene," described briefly the system of ventilation that he had in his veterinary infirmary at Portage la Prairie. It was not his invention, he said, nor was it patented; it was very simple and inexpensive, but the best thing about it was that it worked. After several years' experience he found it did its work in all weathers and under all conditions.

Briefly the system is as follows: In the center of the building is a ventilator shaft about 15 inches in diameter, provided with a damper, which can be opened or closed by rope from the stable floor. At each end of the stable are fresh-air inlets, made by putting a square box or "U" pipe under the wall, as shown by the cut.



An iron grating is placed over the ends of the box. Now, when the atmosphere of the stable becomes warm, the air rises and escapes through the ventilator. If air goes out an equal amount must come in to supply the vacuum thus caused, and so a current of fresh air is drawn in through the fresh-air supply pipes. The whole system is regulated by opening or closing the damper in the ventilator to suit the weather conditions and number of animals in the stable. The supply of fresh air works automatically, coming in only to supply the space of the heated air which has escaped.

**Preparing the Seed-bed -- Draining the Land -- Varieties of Crops.**

Perhaps there are but few farmers who have the right kind of implements for all purposes on the farm. For preparing the land for spring crops on fall plowing the spring-tooth harrow or cultivator answers the purpose very well; but not having either, I used the Acme harrow to prepare for sowing. Two years ago we had a very wet seeding, and when I would get a piece worked ready for sowing it would come a heavy rain and beat it solid, so I had either to do the work over again or sow it in poor shape, so I took the tubes off the drill, put on the cultivator teeth, and sowed the oats broadcast at the same time, working it fine with the harrows afterwards. I have followed this course since with good results for oats and barley. Peas require to be sown deeper, and are better sown with the tubes.

It is of great importance to keep a sufficient supply of humus in the soil. This can be done by a rotation, say one or two crops of hay, then break up clover sod and follow with fall wheat, then corn and roots; next year re-seed with oats and barley. You may vary your crops to suit your purpose, but while a clover sod is turned under every four or five years, and the barnyard manure applied, I think there will be an abundance of humus in the soil. By keeping up the fertility of the soil, and the land drained so as to carry off all surplus water, we are masters of the situation as far as our part goes. As far as my experience goes in regard to draining, it pays to do it thoroughly. I prefer putting them three feet deep. If you have enough of fall there is less danger of the tile ever getting displaced, besides they will draw the water farther. We put

in a good deal of underdraining two years ago this spring. We had plenty of water, so we could keep the level true, and placed our tile carefully, and it is giving excellent satisfaction. The man who did the work had done a good deal of ditching, and had a first-class set of tools -- one digging spade, a long-handled shovel the right width to follow and lift the loose earth, and a ditching spade, with a blade about eighteen inches long, tapering to about four inches wide at the end. Take out the last spading with this, say twelve or fourteen inches deep. The tool for cleaning out the bottom has quite a long blade, half-round, fastened to a long handle with an angle, so you can stand on top and draw it along until it is full, cleaning the bottom nice and level. For laying the tile, take a round stick about five feet long, large enough at the thick end to stand an inch hole, put in a pin a foot long, stand on top, slip this pin into the tile, lower it into the drain, then another, placing their ends carefully together. In this way you don't need to go into the drain nor step on the tile.

I never did any subsoiling but once. We made a beam and handles, something like a plow, with a bar coming down from the beam with a bottom like a cultivator tooth, but much longer and wider, and followed the other plow, loosening the subsoil several inches deep, but I cannot say that I ever saw any good results from it.

Among the spring grains that give best results in this district (wheat is not grown): Oats--American Banner, and Siberian; Peas--Mummy, Prince Albert, and Golden Vine; Barley--the six-rowed variety is generally grown; Corn--the Improved Leaming and Butler's Dent give the best results for ensilage purposes. In potatoes, the Empire State has been grown very generally, but I am not much struck on it for cooking. The Rural New Yorker is, I think, preferable.

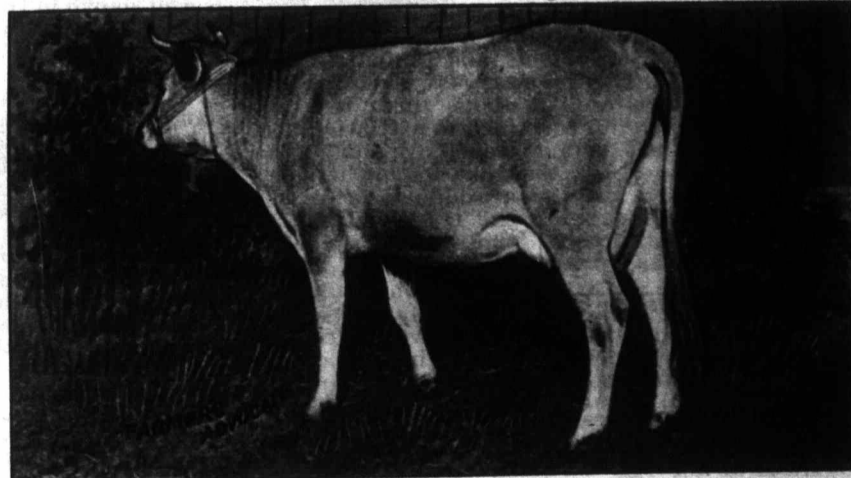
I have not grown many roots for some years, but believe the Danish sugar beet will pay best to grow for feeding cows. It is much better quality, and not liable to flavor the butter. A. B. SCOTT, Middlesex County, Ont.

**The Rearing of Speckled Trout.**

A sport that a few years ago was generally indulged in wherever a trout stream flowed is now becoming more and more a luxury as the streams are being preserved, protected, and stocked for private patronage. This is, no doubt, felt by some of limited means to be a hardship, but however this may be, trout fishing is going to be less and less a free sport as years advance. While this is true, the recreation will not diminish, but rather increase, as many who have command of suitable waters are systematically protecting and stocking them with spawn and fry from the various hatcheries throughout the country. It will be remembered that the Christmas number of the FARMER'S ADVOCATE pictured Mr. W. E. H. Massey's ponds, which are well stocked and conducted, in connection with a hatchery. At the time of our visit there in November we saw the spawn and milt being extracted and placed in the hatching pans, and it is about now (March 1st) that these fry will be leaving their shells. Another and much more extensive preserve and hatchery is in operation at Credit Forks, by Mr. Chas. Willmot, former Dominion Fishery Inspector. His ponds now number some fifteen, and in connection with which he has fitted up an extensive club-house for the accommodation of his many patrons, who yearly visit the preserves for really high-class sport. That such an institution is receiving liberal patronage should be an incentive to those who have suitable locations for spring-water ponds to hedge in some of this desirable game by a systematic effort. A pond supplied with springs, and that cannot be overflowed during freshets, is the needful requirement as a field for propagation, and this can be extended as desired.

**A Pointer in Round Silo Construction.**

SIR,--I see in your issue of Feb. 15th plan for building a round silo. We built one two years ago, the first one in this section of country. There were a great many objections raised. People said the plank would have to be beveled on the edge, and that the hoops would burst, but their prophecies were false. We built ours the same as you have directed, but have found out since that by putting on the top hoop instead of one twelve feet up, or not putting on any but the bottom one, the plank can be set up much easier and a better job done. Fasten the first plank to barn or something solid, then set up the next and toe-nail them together at the top. This can be done by means of a ladder set up on the inside of silo. After three or four planks are set up, put up one plank for a brace on the outside to strengthen; then set up three or four more and put another brace as the ladder is moved around. Then as the planks are continued the first brace may be moved around, as two braces are all that are required. In this plan no nails will be driven through the plank, except the first one. If the top hoop is not put on before commencing it



JERSEY HEIFER, LILY MAY OF BROCKVILLE 124051, A. J. C. C. 22 MONTHS OLD.

PROPERTY OF MRS. E. M. JONES, "BELVEDUE," BROCKVILLE, ONT. TWELVE POUNDS OF BUTTER A WEEK WHEN ONLY TWENTY-THREE MONTHS OLD.

should be put on before the last plank is put in, as it is difficult to get it on after. Tighten top and bottom hoops, then put on the center hoops down close to the ground, where they may be got at handy. Have the nuts on the ends of rods, and the hoops may be slid up the silo by means of light poles until at the proper place; then tighten. It is very inconvenient to get on the upper hoops if the second one is left twelve feet from the ground, as you directed, but by this plan they may be got over with ease. W. M. McLEAN.

Grenville Co., Ont.

**A Satisfactory Piggery and Hennery.**

The foundations are of stone, 18 inches wide, and come about six inches above the level of the ground. The walls are of spruce on 2x4 studs two feet apart. Then tar paper and good quality drop siding, roof tar papered over sheeting, and best quality shingles. The floors are of cement, with fall towards center of each pen, and also towards drain, which passes under alley and through hennery to outlet on S. side. A 12-inch

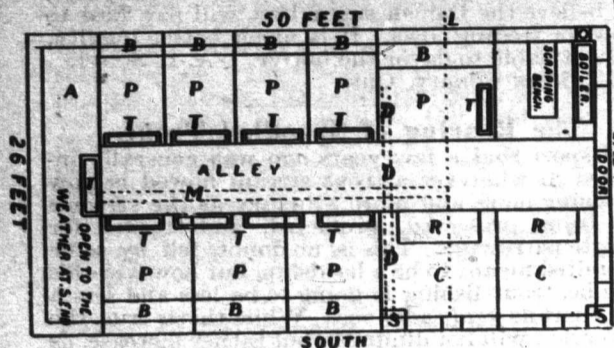


FIG. 1.—GROUND FLOOR PLAN OF F. J. COLLYER'S PIGGERY AND HENNERY.

A, pen for brood sows; B, raised beds for pigs; C, poultry pens; D, drain; M, plank above alley for bedding from above; P, pens; T, troughs; S, dust baths; R, roosts on raised platform, with nests below.

plank covers same in alley and hennery. The boiler (a "Waterloo," 90-gal.) is let down so that top is level with scraping bench, and that portion of floor also falls towards drain. The troughs are of cement, and bed-places are raised, resting on top of stone foundation, and being supported at other side by a wide board, the upper edge of which, coming above the bed platform, holds the straw in place; the doors of pens swing inwards sufficiently to keep pigs out of trough when feeding, and outwards to let pigs in and out. The raised floor under hen-roosts is cleaned, and eggs removed from alleyway, there being hinged doors in partition.

Owing to the cement coming so late, nearly middle of October, some of the troughs and a little of the floor got frozen, and will need replacing next year. Would recommend anyone using cement to have it all laid by Oct. 1st in this part of the country, as I had an immense amount of trouble with mine, keeping on fires, etc.

The straw is put into loft above A in Fig. 1, and then thrown into the beds from plank M, which avoids all litter in the alley.

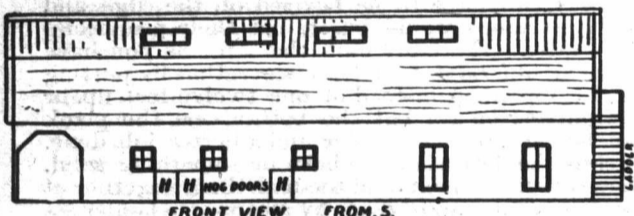


FIG. 2.—FRONT ELEVATION.

The building is lofted at each end, 6 feet at west end for bedding (which lasts a long time, as beds are dry), and 14 feet at east end for feed. The center 30 feet is open to the roof, and the plank M, 10 inches wide, runs from the door in the straw loft across the tie beams (which are six feet apart), which are laid on top of the plates, consequently the plank is about eight feet from the floor of alley.

Each loft is partitioned off from center space, with a door into straw loft, but not into feed loft, which is entered from outside, and grain delivered below by spouts. The "hennery" is boarded up

about three feet six inches, with wire netting above that. The windows in hennery are double storm sash, the rest being single, those above being hinged at the bottom, opening inwards, and one is frequently open.

We cook feed about three times a week, feeding dry chop at other times, and except in the coldest weather the water does not freeze in the troughs.

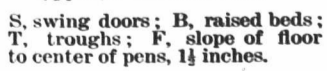
There are but 20 pigs in the building; with 10 more I think it would not freeze at all. Except for cooking feed (a boiler full keeping warm and being sufficient for more than a day's feed), we never light the fire.

Re dampness, I followed the suggestion made in the Nov. 1st ADVOCATE, with the inverted funnel over holes in boiler, but must say it is not an unqualified success, but mean to put it lower down the pipe some of these days.

The building is very comfortable, and the pigs invariably use the bed-places; it is also well lighted—in fact, as well as the average dwelling house.

Eastern Assa.

F. J. COLLYER.



S, swing doors; B, raised beds; T, troughs; F, slope of floor to center of pens, 1/4 inches.

**Mr. Israel Groff's Stock Barn.**

The plan herewith submitted represents the arrangement of the basement of Mr. Groff's new barn, on whose farm (near Alna, Ont.) many well-finished beeves have been reared and fed, as well as a good herd of registered Shorthorns kept. As will be seen, the barn is very compact in form, giving a great amount of floor space for the rods of wall surrounding it. The basement is ten feet clear from cement floor to barn floor above. The plan is well-nigh self-explaining, so that further description is not necessary. The 9-foot shed in front is covered, and forms a shelter in stormy weather for the stock while out for water and exercise.

The ventilation pipes shown in the feed passages consist of 6-inch tile ducts, laid below the cement. At regular intervals of seven feet these ducts are tapped by 2-inch tile, which stand upright, coming to the surface of the cement floor. These openings are protected so as to exclude litter from entering them.

The double-feed shown between box stalls represents fodder racks, from which the animals from either side can feed. The feed room is furnished with a tap direct from the tank, from which water can be obtained for any purpose. It might be pointed out just here that Mr. Groff, when putting in the floor, made a groove in the cement by laying in a scantling along in front of the mangers. This scantling can be lifted out, which will leave a water trough for the cattle. The gutters behind the cattle are sixteen inches wide, and have a 7-inch drop from the cattle and a 3-inch drop from the walk. The feed room is conveniently situated and roomy, and the basement is well supplied with windows.

**A Barn for Horses, Cattle, Swine, and Poultry.**

Mr. Richard Cronsberry sends us the plan of his barn basement, which he claims to be exceedingly well pleased with, especially the manure department, as it enables him to save every particle made by the stock in the best possible condition. The manure from the cattle, horses and pigs is all mixed in the shed and hauled to the field about once a month.

The barn is 100 feet long by 60 feet wide. The basement walls are 10 feet high, and the entire floors, except in the manure shed, are of cement concrete, but a similar floor is to be put in there this coming summer. The cattle are turned loose in the manure shed each day to drink from a trough supplied by a well outside the building. The general plan of the stables for various stock is well shown in the illustration. There should be a door shown through the wall at the end of the passage to silo.

The upper structure has 18-foot corner posts and a hip roof. The posts were placed so as not to interfere with the laying out of the basement. All feed is put down from the barn into feed rooms below. The granaries are arranged so as to receive the chop, and from the bottoms of these spouts conduct the chop to the feed rooms below. By this arrangement the old chop is always fed first.

On the top of the barn a twelve-foot Toronto Airmotor is set, which Mr. Cronsberry has found to be a good investment. It provides ample power for preparing fodder grain and roots for the animals. We are advised that 220 barrels of Queenston cement were used in the walls, floors and troughs of the basement.

**How the Famous "Sussex Chickens" are Fed.**

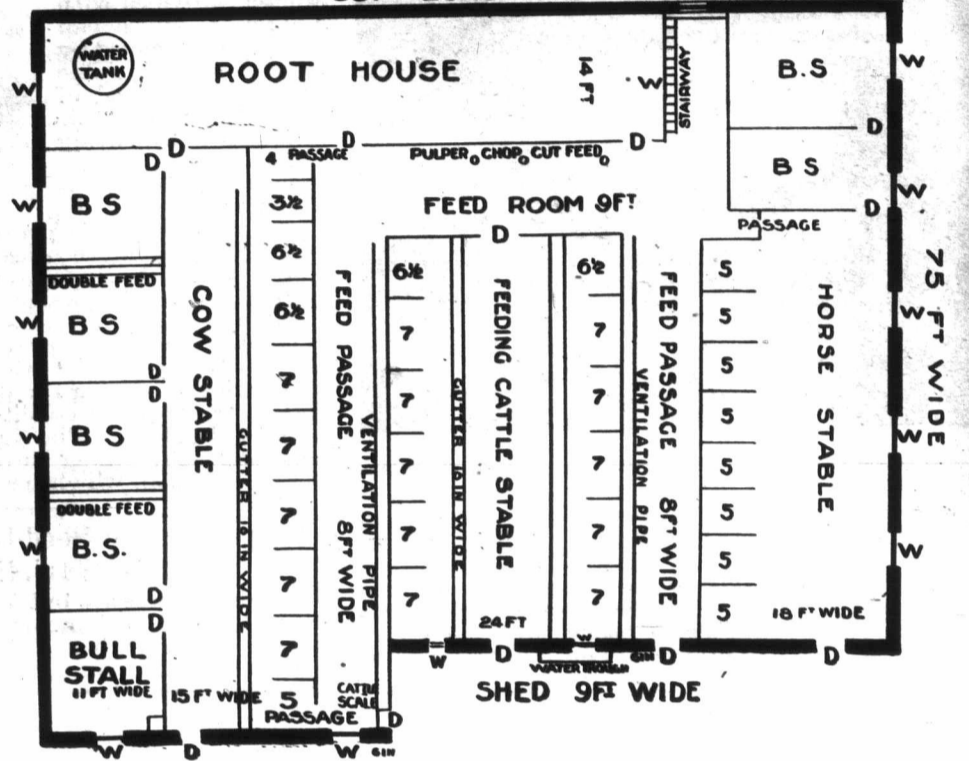
In Sussex, which has become so famous for its supply of prime table birds to the London, Eng., market, the chickens are fed principally on ground oats, mixed with water or skimmed milk. This mixture is sometimes given in quite a sloppy condition, and by others in a somewhat dry and crumbly state. Some breeders give no hard grain of any kind, or any food other than ground oats mixed with a little maize meal, to correct the stickiness of the oats.

**Seeding with Grasses and Clovers.**

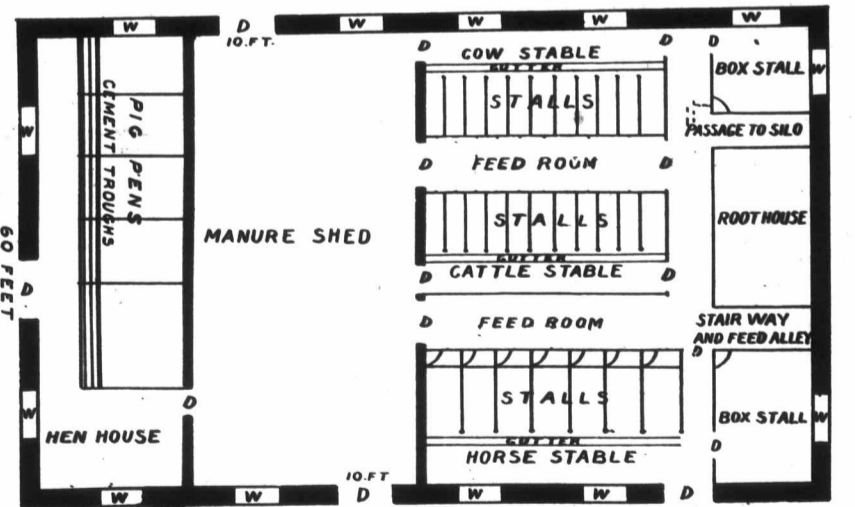
My experience in sowing grass seeds is something like the old darkey's preaching: "We sow the seed, but if't don' grow jest sow't over agin, dat's all." We succeed best with the clovers and timothy. I invariably of late years sow timothy with all clovers, and if we do not get a good catch of clover the timothy keeps down weeds and does not interfere with clover, if ever so good a stand. As to varieties, I like the common red clover for light lands, but for strong loam prefer alsike, either separate or mixed, but prefer a mixture of timothy with either variety.

If with fall wheat, we sow timothy with the wheat after the drill. If in spring, mix timothy

88 FT LONG



BASEMENT PLAN OF ISRAEL GROFF'S STOCK BARN, IN WELLINGTON CO., ONT.



BASEMENT PLAN OF RICHARD CRONSBERRY'S STOCK BARN, YORK CO., ONT.

and clover, at the rate of twelve pounds to the acre—ten of clover and two pounds of timothy, well mixed. If early in season we sow after the drill, and roll it just before the drill, and also roll immediately after sowing. As to harrowing grass seed after it has germinated, it is sure death to the seed, but timothy sown in the fall and harrowed in spring will not injure so much; as I harrow all my fall wheat in spring, as it tends to clean the ground of any noxious weeds, as red-root, shepherd's purse, cockle, etc. I also roll seed sown on fall-wheat ground after harrowing.

As to best varieties of spring crops: Oats—Early White, Siberian; barley—Mandscheuri or the common six-rowed varieties; peas—Golden Vine, Crown, and Centennial; corn—High Mixed and common Dent varieties; potatoes—I might fill a page, as every farmer has his pet. I grew three

varieties last season. American Beauty was best. Carrots—short and white. Gate-post mangel and Vilmorn's sugar beet will yield with any. I intend trying the Danish sugar beet this season on a small scale.

I have sown, along with other grasses that I have tried, Bromus inermis, and think it just what it is recommended, and intend giving it an extended trial. W. G. BELDWIN.

Essex Co., Ont.

A large amount of matter is held over for want of space, which will necessitate an enlarged issue for April 1st.

Senator Ferguson, Charlottetown, P. E. I., writes us under date March 6th: "Professors Robertson and Macoun put in a good week's work here last week. They addressed twelve meetings, two each day. Grand work has been done. Their hearers, in the aggregate, must have totalled 5,000 people."



A New Feature in the Grain Distribution at the Central Experimental Farm.

We learn from Prof. Saunders, Director of the Experimental Farms, that in addition to the usual distribution of 3-lb. samples now in progress, under instruction of the Hon. Sydney Fisher a new feature has been added this year.

Fourteen varieties of grain, which have been thoroughly tested at all the Experimental Farms, and are considered among the best sorts in cultivation, have been chosen for these trial plots.

Table with 5 columns: Variety, Four years' average at Central Farm, Four years' average at all Exp. Farms, Largest Yield, and Source. Lists various oat and barley varieties and their performance metrics.

The study of beautifying yards and public grounds is getting to be a more attractive and profitable one each year, as the people come more and more to appreciate beautiful surroundings.

DAIRY.

Comparing Records Radically Different.

To the Editor FARMER'S ADVOCATE: SIR.—In your issue of Feb. 15th, Mr. Tillson, in his very interesting article on milk and butter records, makes some invidious comparisons.



NELLIE OSBORNE OF BURNSIDE—8507— TWO-YEAR-OLD AYRSHIRE HEIFER, SOLD FOR \$415 AT D. DRUMMOND'S SALE, NEAR MONTREAL, FEB. 16, 1896, TO W. WYLIE, OF HOWICK, QUE.

the circumstances is to be wondered at; but to compare a cow that had traveled as much as she had to Mr. Tillson's, that had never been away from home, is not fair at all.

Helena Burke made, under official test, supervised by Leroy Anderson, Cornell University, 654 1/2 pounds milk and 25.455 pounds of butter in seven days.

Mr. Tillson gives Calamity Jane's record at Brantford as 17 1/2 pounds fat in seven days, which is not correct, as the test was only for two days, consequently she was never tested there seven days.



FOUR PURE-BRED YORKSHIRES. BRED AND EXHIBITED BY J. E. BRETHOUR, BURFORD, ONT. WINNERS OF THE GRAND SWEEPSTAKES AT THE PROVINCIAL WINTER SHOW, BRANTFORD, 1896, AS THE FOUR BEST EXPORT BACON HOGS, ANY BREED OR GRADE.

weighed and tested. Cows vary from day to day, and to make as fine work as is made in the official tests nothing but the closest work will do, and to give a cow a week's record from a day or two's work will be either too small or too great.

A full report of her official test appeared in a recent issue of the ADVOCATE. In official test, commencing six days after calving, she made 22.3 pounds of butter, and was loaded next day for Brantford Dairy Show after completing this seven-day test.

Mr. Tillson has a great cow, but her record is not to be compared to a public test, nor yet is it an official test, but must be considered a private test, and in this class we find records of 33 pounds, 35 pounds, 39 pounds, and still up to 46 pounds 12 1/2 ounces.

records (if made by Jerseys), and at the head of the list is our old friend the 46 pounds 12 1/2 ounces record, and I don't suppose there is a sane dairyman in America that takes any stock in it, yet we are assured it is backed by good proof as the others.

But to return to Mr. Tillson's article. It is enough to set us all thinking. It shows what can be attained by having a definite aim. This result was not brought about in a year or two.

A Grateful Letter—A Question Asked.

To the Editor FARMER'S ADVOCATE:

GENTLEMEN,—Before proceeding to ask your assistance in amending the "causes" of a few recently noted wanton "effects," I must correct the erroneous impression entertained by some correspondents of the ADVOCATE, that your replies to my questions in issue of Nov. 1st, '95, were not adequate, by assuring them that the explanations were quite sufficient in every respect and particularly with regard to the "long churning" dilemma.

I notice in a recent article that one, "Aggie," has misquoted me as saying that I add boiling water directly to the cream until a temperature of 67 to 68 degrees is reached. Now, this is precisely what I did not do, nor will I as long as it is possible to obtain butter at a lower temperature within a reasonable time.

By way of running comment on "hand separators," which I notice you have solicited, I can say with certainty that they greatly increase the yield of butter. As to labor saving, I don't know that there is so much a saving

of work as a shifting of it. The separator shifts the burden of the work from the women to the men, and this to my mind is one of its chief advantages, although I am quite conversant with the deplorable fact that there are some men who will shrug their shoulders as if doubtful on this point.

A Question.—What suggestion would you offer as to the reason for the ensilage in our silo becoming

heated and spoiled on the top and around the sides? The corn was cut green and stooked for a time in the field, but was neither sprinkled with water nor covered in any way after having been cut and placed in silo. We now find that about 3½ feet of corn on top and about 1 foot around the walls all the way down is so mouldy as to be unfit for use, and cannot understand where the trouble has arisen. Have spoken to others who have experienced the same difficulty, as well as some who have not. Could it be that the ensilage was not sufficiently tramped when filling?

D. H. MCA.

Ottawa Co., Ont.

[When ensilage moulds it is because of the admission of air, either by reason of the silo being defective or the corn being too dry to pack tightly. The latter would seem to be the cause in this particular case, as the top few feet is mouldy as well as the sides. We believe the corn should have been moistened and thoroughly tramped around the outer edge. The question is open for discussion.—EDITOR.]

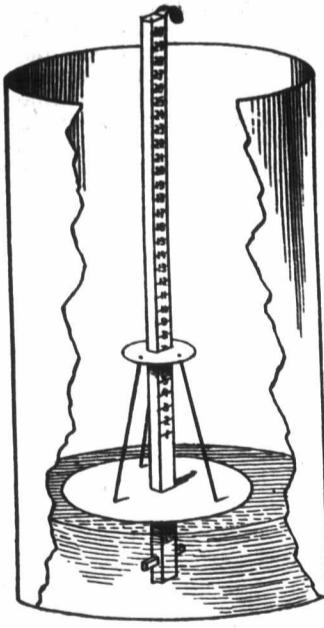
### Float for Overcoming the Froth Difficulty in Creamery Skim Milk.

To the Editor FARMER'S ADVOCATE:

SIR,—I herewith send you a sketch of a device I have used very successfully for overcoming the trouble we have in all creameries with the froth when dealing out the skim milk to patrons. There have been various devices gotten up for the equal distribution of the skim milk, such as measuring cans, check pumps and automatic weighers, and weighers that were not automatic, and they all have their advocates; but for simplicity, cheapness, and general good results, the "float" is ahead of anything I have yet tried. Creamerymen all know that there is no other one thing over which patrons do so much kicking as over shortage in skim milk, and it is something for which no provision whatever, usually, is made, and the creamery manager has to fight it out with the patrons as best he can. The "automatic weigher" is undoubtedly the best, as it deals out simple justice to everybody, but they are too expensive for the common run of creameries, and the "measuring cans" are only guessing machines when the froth is bad, besides requiring an extra hand to attend to them, but the large majority have nothing, and to them I think the "float" will be welcome.

First of all, a measuring stick for the whole milk is required, about 3½ feet long and 1 inch square, and divided off into inches and plainly marked from 1 up to 36. When the patron or milk-drawer drives up to the weigh-stand, he pulls off the cover and measures the milk, holding the stick in the center of the can, and records the number of inches on the top of the cover with a suitable pencil, which is provided; he goes over his whole load in this way, which only takes a very short time, then when he goes to the skim milk tap he knows just how much is to be put into each can, as the measuring stick in the float is divided off into spaces less than one inch (13-16 of an inch is what I allow), and the same number of inches on the "float" stick is

allowed as he has on the can lid. The "float" stick is not graduated from the bottom, but commences just at the top of the small round piece of wood when the lower or large round piece rests on the cross pin in the bottom of the stick. Before commencing to number the divisions on the stick, it is necessary to place the float in a can, and pour in water or milk enough to just move the float upwards on the stick, and then measure the number of inches of water in the can, and if there are 3 inches, 3 will be the number to place on the first line, which is flush with the top of the small circle, and then go on from 3 upwards as high as necessary. You will notice that the small circle in



SKIM-MILK FLOAT.

sketch is just at the figure 8, the float has raised 5 inches, and there was 3 inches in before it reached the float, which makes 8 inches of milk. If there is much froth in the milk the large circle will be buried out of sight, and it might appear as if there were 12 inches of milk, but if the float works free on the stick it will never fail to indicate the right quantity.

The float is made out of inch pine or basswood, and can be made round or square; the top circle is held in place by three or four wooden spindles, which go into the lower one; the hook on top is to hang it up by when not in use. Some may object to it because we are still at the mercy of the man taking the milk. True enough, but I find that the great majority of milk-drawers and patrons only want what belongs to them, and the other fellows we have to watch, of course, but in my experience with it I have had no trouble, and everybody is satisfied.

J. STONEHOUSE.

Ontario Co., Ont., Jan. 2, 1899.

### Annandale Herd Record.

A subscriber wishes to know why Mr. Tillson reports his herd of 55 cows giving an increased profit of \$7.70 per head over last year's product in the FARMER'S ADVOCATE, while in another paper he claims a profit of \$8 per head for the same time, to which Mr. Tillson replies as follows:

In the one statement I included my best cow, which was not yet dry, but had 2½ months more to put in, anticipating that at the end of her milking season, 2½ months from that time, she would have given 20,000 lbs. of milk, which would make the gain as I stated. In my report to the ADVOCATE I left my best cow out of the calculation, and that makes just the difference between the two statements. My reason for making the change was, I thought I should need the big cow to go in with the balance of the herd in order to make the whole herd, 55 cows) hold up my record to the amount stated for the end of the year.

E. D. TILLSON.

Oxford County, Ont.  
P. S.—My big cow has now milked another month, making 18,900 lbs. of milk, and is still giving 30 lbs. per day, so we feel quite sure of the 20,000 lbs.

E. D. T.

### POULTRY.

#### Nest Boxes for the Henhouse.

The accompanying figures of nest boxes represent two forms, either of which answers well to prevent egg-eating, and are convenient to keep clean, gather the eggs from, and keep in general good order. They do not take up much room and are easily constructed. Fig. 1, reproduced from *Artificial Incubating and Brooding*, is made by two one-foot boards for the bottom and one-foot boards for the sides. Nail the side boards inside the top

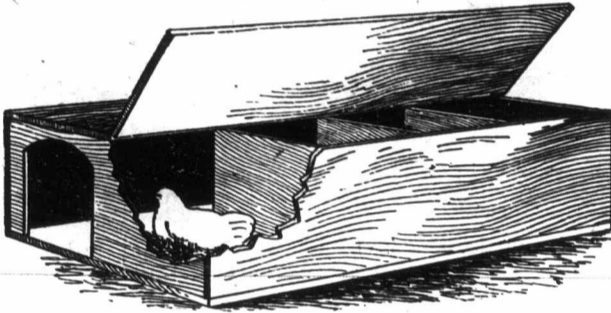


FIG. 1.—FLAT-TOPPED NEST BOX.

and bottom, leaving a space of 22 inches between. Divide the nests with one-foot square boards, leaving the nests one foot in the clear. Nail a two-inch strip on top and bottom edge of the partitions to hold them in place. The balance of the space is for the alley. The nests serve two good purposes—they stop egg-eating by being dark, and the hens are out of sight while they are laying. The flat top of this nest box has the disadvantage of allowing the hens to deposit their droppings on the top. The box may stand on the floor, where it would be suitable for heavy breeds of fowls, or it could be elevated as desired.

Fig. II, represents a sort of nest box we saw in use in a new henhouse on the farm of Gilmore Bros., at Nilestown, Ont. It extends along the entire length of one side of the house, and is about four feet from the floor. Fig. II, shows a short

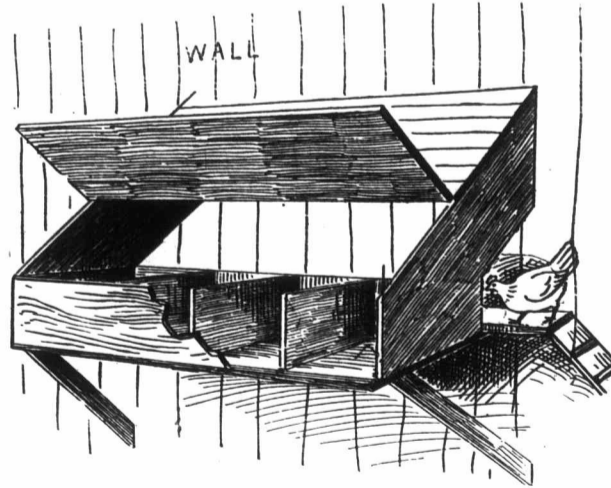


FIG. II.—NEST BOX AGAINST WALL.

section of it which gives a fair idea of the construction. The hens can enter at either end. The hinged lid is in sections, each covering three to four nests. The hens do not have to fly up to lay, as the cut shows the board on which they walk up. Because of the slanting roof or top the fowls cannot perch on the top and leave their droppings.

#### Milton to the "Fore."

In your issue of March 1, 1899, page 124, I notice record of egg production from 45 hens in 44 days—660 eggs. Mr. Adam McKay, of Milton, Ont., has 18 hens that he reports having yielded 515 eggs since January 17, 1899, to date, March 6, 48 days. Pretty good; 11½ eggs per day on an average. Who next?

### Setting the Hen.

In the ordinary, rather indifferent practice of caring for farm poultry, full hatches of all the eggs set are not generally expected, but to those who have very carefully selected a breeding-pen of layers of eggs to set, or have paid out good money for a few settings of eggs, the failure of a number of the eggs to incubate is quite a serious disappointment. It depends in a great measure upon ourselves whether we get a large flock of early chicks or not. The hens that lay all winter are the ones that do the early sitting, and it is on the care of these, while sitting in cold weather, that our success depends.

It is well to have a warm, pleasant building with windows facing the south for a hatching house. In order to protect the sitting hens from the molestation of layers and other disturbing agencies, the pen should, if practicable, be divided into compartments five or six feet long by two feet wide. At the end of each compartment should be placed a covered nest box about 18 inches square. Woven wire answers well for the partitions. The partitions need not extend more than three feet high if the wire netting is extended over the top to keep the sitter in and other fowls out. In each compartment should be a pan of water, plenty of coarse sand and grit, besides a constant supply of mixed grain.

When two or three hens become broody, each should be given a thorough dusting with insect powder and set at night on as many eggs as she can cover well, but not more than twelve. The eggs should be carefully selected, of even, large size and color, rejecting any that are abnormal in size or form, and not more than about ten days laid. When the hens are put on the eggs they should be enclosed in the nests for a day or so and then allowed to come off as they please, in their compartments, for food, water and exercise. It is sometimes necessary to shut them up a second time, but usually when a hen is free from lice she will stick to her nest faithfully. If the eggs have been laid by a pen of about a dozen vigorous young hens, that have been kept with the society of a good male, changed from pen to pen once a week, it is seldom necessary to examine the eggs in a week or more to see that none are infertile. The result should be a good percentage of live chicks at the end of three weeks.

When the batch of hens set at one time bring off their broods, the chicks may be given to a less number of hens, or a brooder may be used, and the hens set with more eggs, as it does not harm a hen to bring off two or three broods of chicks. When a hen is to be set again her chicks, if to be raised in a brooder, should be removed from the nest soon after hatched and more eggs given her at once. The chicks may be kept in a flannel-lined blanket near the stove till they can eat well. They may then be transferred to a brooder, which should be kept at 80 to 90 degrees for the first three weeks, when a lower temperature will suffice.

### VETERINARY.

#### Dr. Mole Replies to Dr. Simpson re Anthrax in Calves.

To the Editor FARMER'S ADVOCATE:

DEAR SIR,—It would scarcely be necessary to answer Mr. Thos. V. Simpson's letter in your paper of February 15th, entitled "Anthrax in Calves," only that he points to a communication from Mr. T. Duckham, Holmer, Hampshire, England, to which I make no complaints excepting that it is not Prof. Pemberthy, of the Royal Veterinary College, who inoculated the stock against "anthrax." Prof. Pemberthy was not a professor, neither was he a member of the profession 20 years ago, if my memory serves me correctly. With regard to the stock in question, it is not quite determined, even now, whether the disease in question was symptomatic anthrax (black leg) or anthrax, and for all clinical purposes not any difference. It is very doubtful if my young friend could himself distinguish the two diseases, or if he has ever seen both. If he has, it is more surprising that he should have the temerity to differentiate between the two diseases. There is no more difficult subject to handle than histology, and picking bacteria from diseased tissue is not quite so easy as talking about it, and requires a little more intelligence than sorting letters out of a basket. I am indeed surprised to learn that anthrax is not black leg, nor is black leg anthrax. I have always thought, and in fact I am quite sure, that they are both blood diseases of an anthracoid nature, with no more difference than my two fingers that hold the pen. Again, I should be glad to learn the authority from where he derived the remarkable information that 47,000 animals died from anthrax in Novgorod, Russia. I have at all times coveted fair criticisms, but am not disposed to take captious advice from one in my own profession.

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

#### Cracked Heels.

To cure a stubborn case of cracked heels in a horse, he should be rested and given a loose box; then poultice the heel with bran and linseed. After removing all dirt, apply the following liniment: Lard, 4 ozs.; oxide of zinc, 1 oz.; carbolic acid, ½ oz. This should be applied every day until quite well. Do not wash the animal's legs, but brush all the mud off and bandage nightly. A physic followed by a course of tonics should also be given.

GARDEN AND ORCHARD.

The Tent Caterpillar--When Shall We Fight It?

BY MARTIN BURRELL.

During a recent Institute trip through the eastern counties of the Province, I was much struck with the evident desire to ventilate and thoroughly discuss the questions of the hour. Even in comparatively remote districts a full discussion of the San José scale was asked for. The introduction of this injurious insect into Canada has not been an unmixed evil, as it has decidedly roused people to a realization of the fact that "bugs" must be reckoned with, and to be reckoned with effectively, must be studied in something more than a casual manner. It is a matter of regret, however, that while many people are reaching out for knowledge about a pest that may never come near them, lots of our commoner injurious insects are getting in their work unchecked all round them. One of these, the tent caterpillar, has done such immense damage in the east during the past season that a few words of special reference to this insect may help in the inevitable fight against them next season. There are two kinds of these tent caterpillar moths, the commoner form, *Clisiocampa americana*, being considered here. This insect passes the winter in the egg state, the eggs being found in little clusters or bands round the smaller twigs, and usually containing two to three hundred in each cluster. The young caterpillars hatch out early in the spring, immediately spinning a silken web, which is enlarged with their own growth. In about six weeks they are full-grown, and some two inches long, and the amount of foliage eaten during the latter part of their life is almost incredible. Arrived at maturity, the caterpillars leave the nest and spin their cocoons in some convenient spot near by. The moths emerge in July, and deposit the eggs, which remain unhatched till the following spring. The tent caterpillar infests many species of trees, and it is, of course, impossible to fight it effectively when it appears in such numbers as it did during the past season. But while we have got to let it play fast and loose in the bush, we can at all events save our orchards with comparatively little trouble. There are three ways of fighting this nuisance, viz., picking off the egg clusters, crushing the nests when small, and spraying with Paris green (4 ozs. to 50 gals.) when the leaves are bursting out. In an orchard of any size, the spraying method should undoubtedly be adopted, as the Paris green can be added to the Bordeaux mixture, and an application can then be given, which will, if thoroughly done, kill the apple scab, codlin moth, and tent caterpillar at one fell swoop. In small orchards, or where only a few trees are grown, by far the best plan is to examine the trees during the next five or six weeks, and rub off the eggs. Give the boys 5c. a dozen for the clusters; it will do you good, and the boy too. A few hours' work will prevent the defoliation of every apple tree round the house lot. It is not nearly so formidable a task as it seems to go over a good sized tree and clear off every batch of eggs. We see what we look for, and the eye is soon trained to detect not only these objects, but the various scale insects which are so injurious to our orchards. The destruction of the foliage of an apple tree is not only a serious loss that season, but the next also. It is true that the tree will usually put out another crop of leaves, but the growth is necessarily much later, and less likely therefore to be ripened up by the winter, and in the effort to meet this unusual demand on its energies the tree is likely to neglect the work—important to you—of forming good healthy fruit buds for next year's crop. Fix the tent caterpillar then, for if you don't, rest assured he will fix you. You will probably see five webs where you saw one this year, and you will kick yourself as you, in imagination, see the beggars laugh and hear the song go up from a million throats, "Tenting on the Old Camp Ground."

Nova Scotia Apples.

Of the exhibit of Gravensteins made by the Nova Scotia Fruit Growers' Association at the Trans-Mississippi Exposition at Omaha, Mr. F. W. Taylor, Supt. of Horticulture, has written Pres. Bigelow as follows: "It gives me great pleasure to say how much your exhibit of Gravenstein apples was appreciated by all lovers of good fruit. The delicious flavor, delightful aroma, and beautiful appearance of the apples attracted a great amount of attention and favorable comment. I am sure that it was well worth your while to make this exhibit, and I assure you that the attention it attracted was equalled by perhaps no exhibit of the same size. The quality of the apples is so good that I do not wonder that your English cousins are glad to buy them at a profitable price."

A Manitoba Apple Tree.

The above is a photograph of a Duchess apple tree in bearing in the garden of Mr. W. L. Lyall, of Portage la Prairie. Last year, 1898, it produced 17 beautiful mature apples.

QUESTIONS AND ANSWERS.

(In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.)

Veterinary.

DIFFICULT PARTURITION IN EWES.

E. M., Northumberland Co., Ont.—"I had two ewes last spring that had great difficulty in lambing. They were in trouble for hours and made no apparent progress. On examination I found the mouth of the womb closed, so that I had difficulty in introducing one finger, and it took a full hour to expand the passage so that I could get my hand in, when delivery was effected in a few minutes. What was the cause and what is the remedy in such a case?"

[Our opinion is that it would have been better to have exercised patience and let nature have its course, when probably expansion would have taken place and delivery would have been all right. We have known one or two cases, in a long experience, where womb was closed as indicated and extreme measures had to be resorted to. In that case, it would be better to smear the neck of the womb with fluid extract of belladonna and give time for relaxation before forcing matters. It is well when parturition is long delayed to make examination to ascertain if the presentation is normal, and, if so, it is generally safer to wait with patience. If the presentation is not as it should be, it must be placed right, and then the birth should not be too much



A MANITOBA APPLE TREE.

hurried. In case of presentation of the hind feet, it is better to take the lamb away in that position.]

GREASE.

J. C. B., Middlesex Co., Ont.—"I have a heavy farm horse, nine years old, which knocked the spur from the hind heel last fall. It has discharged ever since, with a very offensive smell. Have been using carbolic acid and grease on it. What treatment do you recommend?"

[This is a diseased state of the secretive portion of the heels. It occurs especially in heavy horses, and when well established is very difficult to cure entirely. Do not wash the heels with water again; the long hair prevents thorough drying; when very muddy allow to dry and brush off. For immediate treatment apply a warm poultice of mashed turnips and powdered charcoal, then apply the following ointment: Vaseline, 4 ounces; boracic acid, 2 ounces; iodoform, 1 ounce. DR. W. MOLE.]

BRUISED SOLE OF HORSE'S FOOT.

D. H., Sans Bruit, Quebec.—"I have a horse lame of the front feet. He is naturally flat-footed. I took him to a veterinary surgeon, who claimed that it was on his coffin joint. He was blistered around the coronet, and does not seem any better. I have another horse, five years old, and he has a blood spavin about the size of an egg. He appears to be stiff in going. Could you tell me any remedy?"

[This form of diseased feet is seen in heavy cart horses, especially cross-bred. The symptoms are variable; harshness and brittleness of the crust, with a fulness of the sole and low, weak heels; a shuffling gait, the heels are first put to the ground.

This form of lameness is difficult of cure, and only by careful shoeing can it be at all relieved. Get the blacksmith to make a pair of shoes thick at the toe, gradually thinning off to the heels; do away with toe pieces and calkings. The blister around the coronet was the correct treatment. For bog spavin apply biniodide of mercury ointment, 1 part to 8 of lard, four times, with intervals of one week. DR. W. MOLE.]

REGARDING BROOD MARE.

SUBSCRIBER, Stormont Co., Ont.—"I have a fine brood mare, 13 years old; in good condition; when within two months of her foaling period, fell while driving; seven days later she gave birth to a dead foal, with tendency to expel the uterus. Is now apparently well. Would I do well to breed again at once, or should I wait a few months or a year? Will this affect her the next time?"

[The fact that the mare showed a disposition to expel the uterus is evidence of internal irritation, and so long as that condition exists, even in a small degree, service would be of no avail. We would suggest that the mare be allowed a month or six weeks' run on grass, so that she may entirely recover, before breeding her. It should not be necessary, however, to keep her entirely from work during this time. If she entirely recovers, as we expect she will, her future usefulness as a breeder should not be impaired.]

WARTS.

W. C. M., York Co., Ont.—"I have a mare troubled with spongy warts; they are raw and bleed quite freely. Kindly state what treatment you would advise?"

[The treatment depends on the size and shape of the warts. The knife is the best way to remove them, if they have not sufficient neck to retain a ligature (waxed thread tied round tightly to cut off the circulation). The bleeding may be arrested by an application of tincture of the chlorate of iron. About 24 hours after cutting off the wart, apply caustic potash, and again in three or four days. It may be necessary to apply a poultice after each application of potash, to reduce the irritation. Surgery of this or perhaps any sort should not be attempted by one not familiar with using the knife. The knife should be disinfected with hot water before using, and the wound should be dressed with carbolyzed oil occasionally till healed.]

RHEUMATISM IN MARE—INDIGESTION IN CALF.

XL., Deleau, Man.—"(1) Mare ten years old, just recovered from a very severe attack of influenza. When recovering, became very lame in the hind feet or fetlock: For a week or so the left one was the worst, knuckling right over, and almost impossible to make her move. The right hind foot or fetlock then became the worst for a week or so, and now the left front foot is the bad one, and the hind feet appear to be almost all right. Am treating for the blood. Appetite now good. Good warm frame stable.

"(2) Thoroughbred calf one month old, suckling, has lately become dull looking. When chewing cud a thin green watery fluid runs from the mouth. Appetite fair. Eats a little hay."

[Your mare's ailment is of a rheumatic nature. It is quite common as a sequela of influenza. Feed exclusively on bran-mash diet for sixteen hours, and then give the following aperient: Barbadoes aloes, 4 drams; calomel, 1 dram; ginger, 2 drams; soap, sufficient to form a ball. Continue the bran-mash diet until the slight action of the bowels, which the ball will likely produce, has ceased, and then give in soft food, morning and evening, for ten days, salicylate of soda, 2 drams.

"(2) The symptoms are those of faulty digestion, for which there are various causes, such as the milk being too rich or too poor in quality, or it may contain some extraneous substance which renders it indigestible. If the cause is found not to be in the milk, give the calf a dose of castor oil (from four to six ounces), and follow up by giving, in one pint of barley water, one teaspoonful of bicarbonate of soda morning and evening for one week. Two ounces of lime water may be given instead of the soda. A tablespoonful of finely-powdered charcoal may be advantageous, administered two or three times a week.]

DROOLING AND SORE TEAT.

SUBSCRIBER, Hyde, Assa.—"I have a heifer, calved last August. A week ago, in the morning she was drooling at the mouth and nose, her eyelids and lips were swollen, and her four teats were swollen and seemed tender as if fresh calved. In the evening she seemed all right, but her teats are sore yet. She is getting hay and good water. Could you tell me what is the matter, and what to do for her?"

[The "drooling" at the mouth, running at the nose, etc., having disappeared so soon, was apparently caused by some temporary local irritation. The sore teats may have been caused by being chilled. Apply to the teats, morning and evening, after milking, the following liniment: Glycerine, 4 ounces; tincture of arnica, 2 ounces; fluid extract of belladonna, 4 drams; creolin, 2 drams; olive oil, 2 ounces; mix.]

ENCHONDROMA.

W. A. L., Grey Co., Ont.—"My horse has a lump about the size of a quart bowl on his side, quite low on the ribs and a little behind the surcingle. It was hard and a little tender at first, but neither of these conditions exist in a marked degree now. I have applied a mixture of hops, vinegar and salt with

water, with no advantage. What treatment would you advise? We are greatly pleased with the **FARMER'S ADVOCATE.**"

[We are afraid this horse has a cartilaginous tumor, and that it will remain permanently. Old white horses sometimes are affected with melanotic (black) tumors, which are only cured by their removal, and as we are not in a position to state positively from the written enquiry, we would advise W. A. L. to consult a competent veterinarian. We are inclined to believe the only remedy will be removal by the knife.]

#### IMPAIRED SECRETION.

A. H., Huron Co., Ont.:—"I have a young cow, four years old, that was sick from impaction of the rumen. She was properly treated and recovered all right, but gives only half the quantity of milk she formerly did. What is the trouble?"

[This cow's glands are, in all probability, in the same condition as the stomach, and will only improve as her digestion becomes stronger with regular feeding on easily-digested foods until grass comes, when she will probably make a complete recovery.]

#### Miscellaneous.

##### UNTHRIFTY BULL—SOILING CROP FOR COWS.

F. C., Middlesex Co., Ont.:—"(1) I have a bull which is unthrifty. I feed him good timothy hay, and whole oats, as he will not eat chop. He is poor, and makes no improvement.

"(2) What grain crops should I grow for ten cows, to feed in the stables in summer?"

[1] Give the bull a good physic: 1½ lbs. Epsom salts, or 2 lbs. if a very large animal; 1 quart common molasses, and 2 heaping tablespoonfuls of ground ginger; all dissolved in 2 quarts of hot water. Dissolve the salts in the hot water first, and add the other ingredients; drench slowly from a quart bottle. Feed good clover hay, and some roots if you have them. Try a few sliced potatoes, if you have not other roots; feed equal parts oats and bran on chaff or cut straw. A little coarse ground oil cake mixed with oats and bran will be good for him if he will eat it. If he is quiet, let him out to grass with the cows in the spring for a month or two, then keep in box stall during hot weather.

[2] See **FARMER'S ADVOCATE** of March 1st, page 120, under head of "Prepare for Seeding." Oats, peas and tares mixed, and sown at different dates, seem to be preferable for the early months of summer, and fodder corn for the later months.]

##### MANURE CAR—WATER TANK—LIGHTNING RODS.

R. P., Perth Co., Ont.:—"Let me know through the **FARMER'S ADVOCATE** if you have a good plan for carrying the manure out of the stables with a car on track?"

"(2) Would you advise putting a water tank for stock up on posts outside?"

"(3) If you had good buildings, would you get lightning rods on them for protection?"

[In the June 1st, 1897, issue of the **FARMER'S ADVOCATE** is described a stable-cleaning car as seen by a member of our staff on the farm of W. J. Duck, Elgin Co., Ont. It consists of a 3x4-in. scantling track, suspended, like a horse-fork track, from the ceiling of the stable, over the passage behind the cattle. On this track a car with flanged wheels runs, and to which a box is suspended near the floor. The box is 4 feet long, 2½ feet wide, and 1 foot deep. It is hung so as to almost balance, and held upright by a pin. By withdrawing the pin the box is dumped. The track runs out to the yard, over the manure heap, and is suspended on a beam supported on posts, between which the car passes.

[2] The very cold weather in February proved that the outdoor tank on posts is not the proper thing for Ontario. We have heard of several farmers having no end of trouble with such tanks the past winter. The tank should be built inside or protected in some way from frost.

[3] The fact that our editors have good barns, and none of them rodded, answers this question. Rather than live in dread of being burned out by lightning, we would pay for a little extra insurance protection.]

##### THISTLES—TWITCH GRASS.

J. A. G., Norfolk Co., Ont.:—"1. I have a field that is pretty bad with Canada thistles. Can they be successfully killed with a crop of corn, or will I have to summer-fallow to clean the field of them?"

"2. I have some patches of twitch grass. Can you give me the best mode of destroying it?"

"Perhaps some of the farmers who are readers of the **ADVOCATE** can answer these questions."

[1. There is no reason why a properly cultivated cornfield should not prove as effective as a summer-fallow in destroying thistles. The success of thistle destruction lies in the same direction as in drowning pups—the heads must be kept below the surface. Frequent shallow cultivation is the best cure, as then the underground roots become exhausted and die. Of course the hand hoe would require to be used to cut out the thistles close to the corn plants.

2. Twitch grass, like thistles, produces an underground network of roots, which throw up the plants above ground. Shallow surface cultivation for several weeks, followed by a smothering growth of rank growing oats or buckwheat, will usually bring twitch grass into manageable condition. The following season a hoed crop should be grown. We hope to receive some advice from readers upon the eradication of these weeds.]

##### GYPSUM ON CORN AND WHEAT—SEEDING AN ORCHARD.

SUBSCRIBER, Muskoka, Ont.:—"I would like to know from some of your readers if land plaster is of use to corn? If so, when is the best time to put it on, whether in the hills when planting or sow it broadcast and harrow it in or wait till the corn is up? (2) What effect has plaster on spring wheat, if any, in a country like this, where there is no lime in the land?"

"(3) What are the best seeds to sow in a young orchard? Some trees are bearing and some were set out last spring. I want to seed it down and pasture it with hogs."

[1] While gypsum increases the power of soil to absorb ammonia from the atmosphere, its main action as a manure is to liberate potash. The lime it contains is not rendered available to plants, but is fixed in the soil. Such crops as corn and wheat do not usually suffer for lack of potash, so that an application of gypsum would have little, if any, effect upon corn or wheat. Leguminous crops, such as clover, seem to benefit by an excess of potash, which fact gives plaster a value peculiar to these crops.

[2] We would advise seeding the orchard with 6 pounds of red clover, 2 of alsike and 2 of white clover per acre. Sow this mixture with a bushel of tares per acre. As soon as the tares are 10 inches high the pigs may be turned on, but they should wear nose rings to prevent them from rooting.]

##### THISTLE ERADICATION.

G. M. S., British Columbia:—"I have a large patch of Canadian thistles in a pasture field. I keep cutting them down every year when they come into blossom, but with the exception of making them have a weakly growth, they seem to come thicker on the ground than ever. The ground is a sandy loam, river bottom land. What would you recommend to eradicate them? Would summer-fallowing do it? I left off plowing up the land, as I found it cut the roots in pieces, and were carried by the plow or harrows to other parts of the land, consequently spreading the thistles.

"I am thinking of trying copper sulphate, as you recommended last year in the **ADVOCATE**. If so, would there be any danger of it poisoning cattle in the pasture? How often ought the thistles to be sprayed, and what would be the proportion of bluestone to water?"

[What are known as Canadian thistles have long-creeping root stalks, which form a network some four to eight inches beneath the surface. From the joints of these the thistle plants shoot up and grow luxuriantly in favorable locations. The best treatment towards eradication is to repeatedly sever the up-growing plants, thus cutting off the contact with the atmosphere and smothering the root stalks. When the root stalks are cut and brought to the service it is really a successful means of replanting the crop; but if the heads of the plants are repeatedly cut off as soon as they appear above ground, they can be effectually killed in one summer. Yes, summer-fallowing would be good treatment, as would also a hoed crop, but the cultivation should be frequent and not more than about three inches deep.

Regarding the copper sulphate treatment, we would advise that a small portion of the patch be treated as an experiment, rather than to depend upon it to exterminate the weeds. We have not seen enough of this treatment to warrant our recommending it as a positive panacea. About 4½ ounces of copper sulphate to every gallon of water would be a 3 per cent. solution, which is the recommended strength. One application should destroy the thistles. While such a small quantity of the chemical as cattle would get from grazing sprayed pasture could not do much harm, it might be just as well to keep stock off the patch for several days after an application.]

##### HENS EATING EGGS.

JOHN RENISON, Middlesex, Ont.:—"Kindly let me know through your valuable paper what one would do for hens that break their eggs and eat them?"

[When once the habit of egg-eating has become established in a flock of hens, it is a difficult matter to cure it. The best plan we know of is to use dark nests, such as we have illustrated in this issue. Give the hens plenty of meat, grit and lime. Cut green bone will serve a good purpose in this direction. Hens that persist in laying on the floor outside the darkened nests should be separated from the rest of the flock, as they serve to keep the habit going in the flock.]

##### LOW-GRADE FLOUR AS HOG FEED.

R. W. W., Charlotte, N. B.:—"Would you kindly answer, or make the enquiry in your **FARMER'S ADVOCATE** of some of your numerous readers, at what price per hundredweight would it be profitable to purchase wheat flour for pig feed, with corn meal selling at \$1 per hundred?"

[Replying to your St. Stephen correspondent, I beg to say that, according to digestible constituents, wheat flour and corn are very similar, the flour being slightly higher in protein and lower in carbohydrates and fat. Flour, however, will scarcely be found so palatable as corn if fed alone, and if your correspondent can get the flour for the same price as corn, I would advise him to purchase and mix the two. In this way he would have a better food than if he fed either alone.

G. E. DAY, Agriculturist.

O. A. C., Guelph, Ont.]

##### SEEDING WITH ALFALFA—SAMPLES OF SEEDS FROM EXPERIMENTAL FARMS.

J. F. H., Simcoe Co., Ont.:—"Will some of the readers of the **FARMER'S ADVOCATE** be kind enough to tell me how to seed down with alfalfa or lucerne clover? I have a field of wheat which I sowed on a summer-fallow last fall. (1) Would it do to sow lucerne clover on it this spring the same as you do red clover; and if so, how much seed to the acre? (2) At what stage do you cut it? (3) How does a person secure samples of seeds from the Experimental Farms?"

[Lucerne does not do equally well on all soils, nor in all latitudes, so that it is wise to go easy with it at first by trying a small area. It does best sown alone on well-prepared, clean land having a dry subsoil, and it is generally considered that not less than 18 to 20 pounds of seed should be sown per acre. Sown thus in April, it may be cut twice the first season, as it grows rapidly and luxuriantly. It may be drilled in lightly and afterwards harrowed, or sown broadcast and shallowly covered. In the particular case in question it would be well to try a small area along with the fall wheat. We would say harrow the wheat well in April, sow the alfalfa seed 20 pounds per acre, harrow again and then roll.

[2] Alfalfa is not as suitable for hay as red clover, but it is more suitable, where it does well, for green forage. For hay it should be cut just as it is coming into bloom. If left later the stalks become very woody and indigestible.

[3] If seeds are desired from the Guelph Experimental Farm, write to C. A. Zavitz for a list of the grains sent out; and if they are wanted from Ottawa, write to Prof. Wm. Saunders, LL.D., Central Experimental Farm. The seeds are sent free when applied for.]

##### THE BEST SEPARATOR.

G. C. ROSE, Hants Co., N.S.:—"There has been a considerable written lately about cream separators. I would like to know what make of hand separator is considered the best and cheapest, most durable and runs the easiest, and has the least machinery to keep clean. I was thinking of getting one, but think they all cost too much money?"

[We presume a great many dairymen are looking for the same information as our Nova Scotia correspondent asks. In fact we would like to learn which is the best and cheapest separator, but we do not expect the answer in the near future. The question is about as difficult to answer as to decide who has the best wife. We have heard this separator question put to operators of several kinds of separators in dairy schools, and the answer invariably given is that all of the leading separators have their superior points, but none excel all others in all points. In the same dairy schools different members of the staff will be found differing in their opinion as to which is the best separator. Among the best may be mentioned the following: American, Alpha, Melotte, Alexandra, and others. While the first cost may seem high for a good separator, it is considered a profitable investment to one who conducts a dairy of from six cows upwards, not only in the extra quantity of cream secured, but in the uniformly better condition of this product, and other advantages which have been pointed out in these columns by dairymen and dairywomen who have tried different methods of creaming milk.]

##### GRAINS WITH WHICH TO SEED DOWN.

WM. MURPHY, Restigouche Co., N. B.:—"I want to seed down, this coming summer, a piece of interval land with grass seed. I would like to know what would be best to sow with the grass seed. Some say oats are not good. Some of it I broke up last fall, but never seeded it down, and some of it has been growing hay for the last thirty years, but should be re-seeded. I plowed it down and manured in spring, and sowed it in oats. I plowed it again last fall, and intend to manure it again this spring when I am seeding it down. The field is about ten acres. Please let me know through the **FARMER'S ADVOCATE**?"

[Spring wheat and barley are about equally suitable for seeding with grass, and are superior to oats, inasmuch as they are not so liable to smother the young plants. Whatever grain is grown should be sown thinly, and if neither wheat nor barley do well on the land referred to we would recommend sowing a very light-strawed oat, from four to six pecks per acre.]

##### MANURE FOR BUCKWHEAT.

SUBSCRIBER, Simcoe Co., Ont.:—"I have been in the habit of plowing down barnyard manure for buckwheat of late years, and since doing so have never had a really good crop. Do you think the manure has hurt the crop by producing too much straw? My land is a clay loam in fair condition."

[We would like to hear from readers who can give some light on the matter in question. While we have not experienced the difficulty referred to, we are aware that buckwheat is very susceptible to blight, especially if sown early in the season. We have found the best time for sowing to be the last half of June, but we await replies from readers regarding the effect the manure would have on the crop of seed.]

##### SPRAYING.

J. G., Bruce Co., Ont.:—"Kindly state in your valuable paper which are some of the best spraying pumps?"

[We know of none better than those offered in our advertising columns, which we believe have proved quite satisfactory.]

MARKETS.

FARM GOSSIP.

East York.

The unusually changeable weather that we have experienced this winter we fear will prove fatal to the fall wheat. At present it looks very badly burnt, although it is hoped that the heavy top that it attained will protect it from the winds and frost.

Bruce County, Ont.

Winter still holds sway, although we have had many and sudden changes. We have had fairly good sleighing most of the time. Apparently so far the fall wheat has come through all right; perhaps the heavy top last fall has been in its favor.

Chatty Stock Letter from Chicago.

Following were the prices lately current, with comparisons two weeks and one and two years ago:

Table with columns for 'Top Prices' and rows for various livestock including Beef cattle, Hogs, Sheep, and Pigs, with sub-columns for 'Extreme prices now', 'Two weeks ago', '1898', and '1897'.

The beef investigation committee has arrived from Washington. It is said that the investigation will extend to all branches of the beef-packing industry.

Toronto Markets.

The receipts at the Western Cattle Market were very light. Trade was good for all best class of cattle. Exporters have been very badly hit for the past month.

extra quality up to \$4.12 1/2 per cwt. Light and medium sold at from \$3.25 to \$3.60 per cwt. Stockers.—Buffalo stockers in good demand; selling at from \$3.25 to \$3.60 for medium, while choice breed steers and heifers sold at \$3.75 per cwt.



AN AMERICAN GIRL IN LONDON.

BY SARA JEANNETTE DUNCAN.

(Continued from page 126.)

"Certainly. 'M-a-g-d-a-l-e-n,' returned Lord Symonds, very good-naturedly. 'Now that you speak of it, it is rather a run way of spelling it. Something like 'Cholmondeley'."

In due course we all started for the river, finding our way through quads even grayer and greener and quieter than Exeter, and finally turning into a pretty wide tree-bordered highway—much too well trodden to be a popular Lover's Walk.

The word "punting" was familiar to me, signifying an aquatic pursuit popular in England, but I had never seen a punt and was very curious about it. I cannot say, however, that the English punt, when our friends brought it round, struck me as a beautiful object.

The people were beginning to come down upon the barges when we returned from this excursion, and it was thought best that we should take our places. The stream was growing very full, not only of laborious punts containing three brightly dressed ladies and one perspiring young man, but of all kinds of craft—some luxuriously overhauled with founiced awnings, under which young gentlemen with cigarette attachments reposed, protecting themselves further with Japanese paper umbrellas.

Mr. Horton left us with Lord Symonds, who had not to row, he explained to us, until later in the day; and presently we saw our host below, with the rest of his bare-legged, muscular crew, getting gingerly into the long, narrow outrigger vessel, lying alongside. They arranged themselves with great care and precision, and then held their breath in the stern—his little man who sat up very straight in the stern—the cox. He was my first cox, for I had never seen a boat-race before, excepting between champions, who do not row with coxes, and I was delighted to find how accurately he had been described in the articles we read about English boating—his size, his erectness and alertness, and autocratic dignity.

"Where are they going?" Lady Torquill asked. "Oh, for a preliminary spin," said Lord Symonds, "and then for the starting point."

"And when do the barges start?" I inquired, without having given the matter any kind of consideration. "The barges!" said Lord Symonds, mystified. "Do you mean these? They don't start—they stay here!" I asked.

"But can we see the race from here?" I asked. "Beautifully. They come past."

"Do I understand, Lord Symonds, that the Oxford boat-race takes place out there?" "Certainly," said he. "Why not?" "Oh, no particular reason," I returned. "If there is room."

"Rather!" the young gentleman explained. "This is the noble river Isis, Miss Wick."

"It may not be so big as the Mississippi, but it's worthy of your respectable consideration, young lady," put in Lady Torquill. "This admonished, I endeavored to give the noble river a respectful consideration, but the barges occupied so much space in it that I was still unable to understand how a boat-race of any importance could come between us and the opposite bank without seriously inconveniencing somebody."

It did, however, and such was the case. It came off amid demonstrations of the most extraordinary nature, tin whistles predominating on the opposite bank, where I saw a genuine bishop capering along with the crowd, waving his hat on his stick. It came off straight and tense and arrowy, cheered to the last stroke.

"So near it," said Lord Symonds, after shouting "Well rowed, Pembroke!" until he could shout no longer. "Near what?" I asked. "A bump!" said he, sadly; "but it was jolly well rowed!"

And for this moment I felt that no earthly achievement could compare with the making of bumps. After that we had a joyous half-hour in the apartments (at Exeter) of Mr. Bertie Corke, whose brown eyes had Peter's very twinkle in them, and who became established in our affections at once on that account. Mr. Corke was not one of the Exeter eight, but he looked reproachfully at us when we inadvertently stated that we had lingered to congratulate Pembroke.

"Pembroke got a bump, you know, yesterday," I remarked, proud of the technicality. "Yes," returned Mr. Bertie Corke, ruefully, "bumped us."

This was an unfortunate beginning, but it did not mar our subsequent relations with Miss Peter Corke's brother, who was the pleasantest description. He told us on the way down once more to the noble river Isis the names of all those delightful elderly stone images that had themselves put over the college doors centuries ago when they were built, and he got almost as many interiors into half an hour as his sister could. He explained to us, too, how by the rules of the university he was not allowed to play marbles on the college steps, or to wear clothes of other than an "obfusc hue," which was exactly the kind of thing that Peter would tell you—and expect you to remember. He informed us, too, that according to the pure usage of Oxonian English he was a "Fresher," the man we had just passed, being an unattached student, a "toshman" probably walking for what in the vulgar tongue might be called exercise, but here was "ekker." In many ways he was like Peter, and he objected just as much to my abuse of the English climate.

The second race was very like the first, with more enthusiasm. I have a little folding card with "THE EIGHTS, May 22

to 23, 1890," and the names of the colleges in the order of starting printed in blue letters on the inside. The "order of finish," from "B. N. C." to "St. Edm. Hall," is in Mr. Bertie Corke's handwriting. I'm not a sentimentalist, but I liked the Eight's, and I mean to keep this souvenir.

## XXIII.

Of course it was Miss Corke who took me down in Fleet Street to see where Dr. Johnson used to live. I did not hear the name of Dr. Johnson from another soul in London during the whole of my visit.

"This," said Miss Corke, as we emerged from a dark little alley occupied by two unmuzzled small boys and a dog into a dingy rectangle, where the London light came down upon unblinking rows of windows in walls of all colors that get the worse for wear, "this is Gough Court. Doctor Johnson lived here until the death of his wife. You remember that he had a wife, and she died?"

"I have no least doubt of it," I replied. "I have no patience with you!" cried Miss Corke, fervently. "Well, when she died he was that disconsolate, in spite of his dictionaries, that he couldn't bear it here any longer, and moved away."

"I don't think that was remarkable," I said, looking round, to which Miss Corke replied that it was a fine place in those days, and Johnson paid so many pounds, shillings and pence rent for it every Lady Day.

"I am waiting," she said, with ironical resignation, "for you to ask me which house."

"Oh!" said I. "Which house?"

"That yellowish one, at the end, idjit!" said Peter, with exasperation. "Now, if you please, we'll go."

I took one long and thoughtful look at the yellowish house at the end, and tried to imagine the compilation of lexicons inside its walls about the year 1748, and turned away feeling that I had done all within my personal ability for the memory of Dr. Johnson. Miss Corke, however, was not of that opinion.

"He moved to Johnson's Court somewhat later," she said, "which, you must be careful to remember, was not named from him. We'll just go there now."

"Is it far?" I asked. "Because there must be other celebrities."

"Far?" repeated Miss Corke, with a withering accent. "Not ten minutes' walk. Do the trams run everywhere in America? There may be other celebrities—London is a good place for them—but there's only one Samuel Johnson."

We went through various crooked ways to Johnson's Court, Miss Corke explaining and reviling at every step.

"We hear," she remarked, with fine scorn, "of intelligent Americans who come over here and apply themselves diligently to learn London. And I've never met a citizen of you yet, she went on, ignoring my threatening parol, "that was not quite satisfied at seeing one of Johnson's houses—houses he lived in! You are a nation of tasters, Miss Mamie Wick, of Chicago!"

At which I declared myself, for the honor of the Stars and Stripes, willing to swallow any quantity of Dr. Johnson, and we turned into a little paved parallelogram seven times more desolate than the first. Its prevailing idea was soot, relieved by scraps of blackened ivy that twisted along some of the window-sills. I once noticed very clever ivy decorations in iron upon a London balcony, and always afterward found some difficulty in deciding between that and the natural vine, unless the wind blew. And I would not like to commit myself about the ivy that grew in Johnson's Court.

"Dear me!" said I. "So he lived here, too?"

"Yes," she said, "he lived here too, miss, at No 7, as you don't appear to care to know. A little intelligent curiosity," she continued, apparently appealing to the Samuel Johnson omnibuses, "would be gratifying."

We walked around these precincts several times, while Miss Corke told me interesting stories that reminded me of "Collier's English Literature" at school, and asked me if by any chance I had ever heard of Boswell. I loved to find myself knowing something occasionally, just to annoy Peter, and when I said certainly, he was the man to whom Dr. Johnson owed his reputation, it had quite the usual effect.

"We shall now go to Bolt Court," said my friend, "where Samuel spent the last of his days, surrounded by a lot of old ladies that I don't see how he ever put up with, and from which he was carried to Westminster Abbey in 1781."

"Nowhere between here and there?" I asked. "No friend's house, for instance, where he often spent the night? Where did that lady live who used to give him nineteen cups of tea at a sitting? Couldn't we pause and refresh ourselves by looking at her portraits on the way?"

"Transatlantic impertinence," cried Miss Corke, leading the way out, "is more than I can bear!"

"He went from here to Westminster Abbey, I think you said," I remarked, respectfully, to Peter.

"In 1781," said Peter, who is a stickler for dates.

"And has not moved since!" I added with some anxiety, just to aggravate Peter, who was duly aggravated.

"Well," I responded, "we saw Westminster Abbey, you remember. And I took particular notice of the monument to Doctor Johnson. We needn't go there."

"It's in St. Paul's!" said Peter, in a manner which wounded me, for if there is an unpleasant thing it is to be disbelieved.

## XXIV.

Mr. Mafferton frequently expressed his regret that almost immediately after my arrival in London—in fact, during the time of my disappearance from the Metropole and just as he became aware of my being with Lady Torquillin—his mother and two sisters had been obliged to go to the Riviera on account of one of the Misses Mafferton's health.

(The day before they left, I believe) Lady Torquillin and I, coming in, found a large assortment of cards belonging to the family, which were to be divided between us, apparently. But as Mr. Charles Mafferton was the only one of them left in town, my acquaintance with the Maffertons had made very little progress—except, of course, with the portly old cousin I have mentioned before, who was a lord, and who stayed in London through the entire session of Parliament. This cousin and I became so well acquainted, in spite of his being a lord, that I used to ask each other conundrums.

"What do they call a black cat in London?" was a favorite one of his.

But I had the advantage of Lord Mafferton here, for he always forgot that he had asked the same conundrum the last time we met, and thought me tremendously clever when I answered:

"Puss, puss!"

But, as I have said before, there were very few particulars in which this noble man gratified my inherited idea of what a lord ought to be.

One of the Misses Mafferton—the one who enjoyed good health—had very kindly taken the trouble to write to me from the Riviera a nice friendly letter, saying how sorry they all were that we did not meet before they left town, and asking me to make them a visit as soon as they returned in June. The letter went on to say that they had shared their brother's anxiety about me for some time, but felt quite comfortable in the thought of leaving me so happily situated with Lady Torquillin, an old friend of their own; and was it not singular? Miss Mafferton exclaimed, in her pointed handwriting, signing herself mine ever affectionately, E. F. Mafferton. I thought it was certainly singularly nice of her to write to me like that—a perfect stranger; and while I composed an answer in the most cordial terms I could, I thought of all I had heard about the hearty hospitality of the English—"when once you know them."

When I told Mr. Mafferton I had heard from his sister and how much pleasure the letter had given me, he seemed in the most violent and unaccountable manner, but I was pleased, nevertheless. It was odd to see Mr. Mafferton discomposed, and it discomposed me. I could not in the least understand why his sister's politeness to a friend of his should embarrass Mr. Mafferton, and was glad when he said he had no doubt Eleanor and I would be great friends and changed the subject. But it was about this time that another invitation from relatives of Mr. Mafferton's living in Berkshire gave me my one

always-to-be-remembered experience of the country in England. Lady Torquillin was invited too, but the invitation was for a Tuesday and Wednesday particularly full of engagements for her.

"Couldn't we write and say we'd rather come next week?" I suggested.

Lady Torquillin looked severely horrified. "I should think not," she replied. "You're not in America, child. I hardly know these people at all; moreover, it's you they want to see, and not me in the least."

And Lady Torquillin gave me her cheek to kiss and went away and wrote to Mrs. Stacy as she had said.

An hour or two beyond London the parallel tracks of the main lines stretched away in the wrong direction for me, and my train sped down them, leaving me for a few minutes undecided how to proceed. The little station seemed to have nothing whatever to do with anything but the main line. Presently, however, I observed, standing all by itself beside a row of tulips under a clay bank on the other side of the bridge, the most diminutive thing in railway transport I had ever seen.

It was quite complete—engine and cab and luggage-van and all, with its passenger accommodation properly divided into first, second, and third class—and it stood there placidly, apparently waiting for somebody. And I followed my luggage over the bridge with the quiet conviction that this was the train for Pinbury, and that it was waiting for me. There was nobody else. And after the porter had stowed my effects carefully away in the van he also departed, leaving the Pinbury train in my charge. I sat in it for awhile and admired the tulips, and wondered how soon it would rain, and fixed my veil and looked over the "Daily Graphic" again, but nothing happened. It occurred to me that possibly the little Pinbury train had been forgotten, and I got out. There was no one on the platform, but just outside the station I saw a rusty old coachman seated on the box of an open landau, so I spoke to him.

"Does that train go to Pinbury?" I asked.

He said it did.

"Does it go to-day?" I inquired further.

He looked amused at my ignorance.

"Oh, yes, lady!" he replied. "She goes every day—twice. But she 'as to wait for two hup trains yet. She'll be huff in about 'alf an hour, now!" this reassuringly.

When we did start it took us exactly six minutes to get to Pinbury, and I was sorry I had not tipped the engine-driver and got him to run down with me and back again while he was waiting.

Two of the Stacy young ladies met me on the Pinbury platform and gave me quite the most charming welcome I have had in England. With the exception of Peter Corke (and Peter would be exceptional anywhere), I had nearly always failed to reach any sympathetic relation with the young ladies I had come in contact with in London. I rejoiced when I saw that it would be different with Miss Stacy and Miss Dorothy Stacy, and probably with the other Misses Stacy at home. They regarded me with outspoken interest, but not at all with fear.

We drove away in a little brown dog-cart behind a little brown pony into the English country, talking a great deal. Miss Stacy drove and I sat beside her, while Miss Dorothy Stacy occupied the seat in the rear when she was not alighting in the middle of the road to pick up the Pinbury commissions, which did not travel well, or the pony's feet, to see if he had a stone in it. The pony objected with mild viciousness to having his feet picked up, but Miss Dorothy did not take his views into account at all—up came the foot and out came the stone. The average American girl would have driven helplessly along until she overtook a man, I think.

Of course, Miss Stacy wanted to know what I thought of England in a large, general way; but before I had time to do more than mention a few heads under which I had gathered my impressions, she particularized with reference to the scenery. Miss Stacy asked me what I thought of English scenery confidently, including most of what we were driving through, with a graceful flourish of her whip. She said I might as well confess that we hadn't such nice scenery in America.

"Grandeur, you know—more mountains, and lakes, and things," said Miss Stacy, "but not really so nice, now, have you?"

"No," I said; unfortunately it was about the only thing we couldn't manage to take back with us, at which Miss Stacy astonished me with the fact that she knew I was going to be a treat to her—so original, and I must be simply craving my tea, and it was good of me to come, and flicked the pony severely, so that he trotted for almost half a mile without a pause.

But we returned to the scenery, for I did not wish to be thought unappreciative, and the Misses Stacy were good enough to be interested in the points that I found particularly novel and pleasing—the flowering hedges, the beanoed up against the fields by the wayside, and the quantities of little birds that chirruped in and out of them, and the trees, all twisted round with ivy, and especially the rabbits, that bobbed about in the meadows and turned up their little white tails with as much naivete as if the world were a kitchen-garden closed to the public. The "bunnies," as Miss Dorothy Stacy called them, were a source of continual delight to me. I could never refrain from exclaiming "There's another!" much to the young ladies' amusement.

"You see," explained Miss Dorothy, in apology, "they're not new to us, the dear, sweet things! One might say one has been brought up with them—one knows all their little ways. But they are loves, and it is nice of you to like them."

## XXV.

I drove in at the gates of Hallington House as one might drive into the scene of a dear old dream—a dream that one has half believed and half doubted and wholly loved and dreamed again all one's life long. There it stood, as I had always wondered if I might not see it standing in that far day when I should go to England, behind its high brick wall, in the midst of its ivies and laburnums and elms and laurel bushes, looking across where its lawn dipped into its river at soft green meadows sloping to the west—a plain old solid graystone English country house, so long occupied with the birthdays of other people that it had quite forgotten its own. Very big and very solid, without any pretentiousness of Mansard roof or bow-window or balcony or veranda, its simple story of strength and shelter and home and hospitality was plain to me between its wide-open gates and its wide-open doors, and I loved it from that moment.

It was the same all through—the Stacys realized the England of my imagination to me most sweetly and completely. I found that there had been no mistake. Mrs. Stacy realized it—pretty and fresh and fair at fifty, plump and motherly in her black cashmere and lace, full of pleasant greetings and responsible inquiries. So did the squire, coming out of his study to ask, with courteous old-fashioned solicitude, how I had borne the fatigue of the journey—such a delightful old squire, left over by accident from the last century, with his high-bred phraseology and simple dignity and great friendliness. So did the rest of the Stacy daughter, clustering round their parents and their guest and the teapot, talking gaily with their rounded English accent of all manner of things—the South Kensington Museum, the Pinbury commissions, the prospects for tennis. Presently I found myself taken through just such narrow corridors and down just such unexpected steps as I would have hoped for to my room, and left there. I remember window flung back on its hinges, swelling out the muslin curtains and bringing with it the sweetest sound I heard in England—a cry that was quite new and strange, and yet came in to me from the quiet hedges of the nestling world outside, as I sat there bewitched by it, with a plaintive familiarity—"Cuckoo!"—"Cuckoo!" I must have heard it and loved it years ago, when the Wicks lived in England, through the ears of my ancestors.

"Cuckoo!" from the hedge again! I could not go till the answer came from the toppling elm boughs in the field corner. "Cuckoo!" And in another minute, if I listened, I should hear it again.

[TO BE CONTINUED.]

## THE QUIET HOUR.

## Short Views.

Too long outlooks are bad. They are depressing—disheartening. We have not the faith or the energy necessary to cope with them. Many a possible result has never been attained because the way to it seemed so long. An aged woman said to a little child, "If you look at the whole length of your seam you will never get it sewn; look only at the little bit between your thumb and finger." Our life is mercifully cut up into "littles." God knows that the "whole" of many things cannot be presented to us at once. And so our Lord taught us to pray for our daily bread, and said that sufficient unto the day was the evil thereof. God does not will His children to be crushed with anything too heavy for them. Let us be content to do each "little" as it is presented to us, and then the "great" will be attained. The great is always the aggregate of littles. While we are doing only some one "little" we are making progress—we are on our way to the end. There are many attainments, both spiritual and temporal, which we could never have arrived at but by a progress of littles. It is not God's measures which crush us—it is our own. We will not become small enough—simple enough. We want to have to do with years, when God only means us to have to do with days. God's years are made of days.

## "The Harvest Home."

That both he that soweth and he that reapeth may rejoice together.—St. John iv. : 36.

From the far-off fields of earthly toil  
A goodly host they come,  
And sounds of music are on the air—  
'Tis the song of the Harvest Home.  
The weariness and the weeping,  
The darkness has all passed by;  
And a glorious sun has risen—  
The sun of Eternity!

We've seen those faces in days of yore  
When the dust was on their brow  
And the scalding tear upon their cheek—  
Let us look at the laborers now!  
We think of the life-long sorrow  
And the weariness days of care;  
We try to trace the tear-drops,  
But no scars of grief are there.

There's a mystery of soul-chastened joy  
Lit up with sunlight hues;  
Like morning flowers most beautiful,  
When wet with midnight dews,  
There are depths of earnest meaning  
In each true and trustful gaze,  
Telling of wonderful lessons  
Learned in their pilgrim days;

And a conscious confidence of bliss  
That shall never again remove—  
All the faith and hope of journeying years  
Gathered up in that look of love.  
The long waiting days are over;  
They've received their wages now;  
For they've grazed upon their Master,  
And his name is on their brow.

They've seen the safely-garner'd sheaves,  
And the song has been passing sweet  
Which welcomed the last in-coming one  
Laid down at their Saviour's feet.  
Oh! well does His heart remember  
As those notes of praise sweep by,  
The yearning, plaintive music  
Of earth's sadder minstrelsy.

And well does He know each chequered tale  
As He looks on the joyous band—  
All the lights and shadows that cross'd their path  
In the distant pilgrim land;  
The heart's unspoken anguish,  
The bitter sighs and tears,  
The long, long hours of watching,  
The changeful hopes and fears!

One hath climbed the rugged mountain-side—  
'Twas a bleak and wintry day;  
The tempest had scattered his precious seed,  
And he wept as he turned away.  
But a stranger-hand had water'd  
That seed on a distant shore,  
And the laborers now are meeting  
Who never had met before.

And one he had toil'd amid burning sands  
When the scorching sun was high,  
He had grasp'd the plow with a fever'd hand  
And then laid him down to die.  
But another and yet another  
Had sown that deserted field,  
Nor vainly the seed they scatter'd  
Where a brother's care had till'd.

Some with eager step went boldly forth,  
Broadcasting o'er the land;  
Some water'd the scarcely budding blade  
With a tender, gentle hand;  
There's one—her young life was blighted  
By the withering touch of woe;  
Her days were sad and weary,  
And she never went forth to sow;

But there rose from her lonely couch of pain  
The fervent, pleading prayer;  
She looks on many a radiant brow  
And she reads the answers there.  
Yes! sowers and reapers are meeting,  
A rejoicing host they come!  
Will you join the echoing chorus?  
'Tis the song of the Harvest Home!

—P.

If "Do as you would be done by" were made the "Common Law" much less parchment would be used.

MINNIE MAY'S DEPARTMENT.

MY DEAR NIECES,—

Now that Spring will soon be upon us, we shall be turning our thoughts to that important subject to women, viz., dress. Let us glance backwards at some of the styles which were in vogue at one time. Of all subjects relating to the history of men, there is not one more interesting than that of dress. "Providence hath clothed all animals that are unable to clothe themselves. Man can clothe himself, and he is endowed beside with an appetite for dress, no less natural than an appetite for food." Originally dress was not necessary to health, but was invented later. One of the first customs among savages was painting their bodies or staining them with various colors, such as blue, which they squeezed from the leaves of the woad plant. Then they tattooed their skins with strange designs in many colors. For protection against cold, mankind began to clothe themselves with the skins of animals caught in the chase. The transition from these rude coats of skins to garments of wool, cotton and silk was very gradual. When the art of weaving was discovered, it opened the way for various designs in various fabrics. The Egyptians were skilled in manufacturing linen, as we see from the wrappings of mummies. They were also clever at coloring and preparing leather, of which they made sandals and shoes. The Orientals dressed very sumptuously, for we read of their long flowing robes, interwoven with gold and silver, their costly

must endure for the sake of fashion? But our own footwear will stand a great deal of improvement. Some of us still wear high heels and pointed toes, so we can scarcely afford to smile at others.

In old English times one's rank was shown by one's dress. Those who could spend £40 a year might wear saracenot to line hose, doublets, and caps. A trimming of velvet was allowed to those who spent £20 a year. Nowadays one's dress is not to be taken as a mark of rank, except that a lady is always known by her plainness in outdoor attire. One never finds masses of jewelry and great display of grandeur in the dress of people of refinement. But our fashions of the present ought to be ruled by utility and health. We should not be controlled by persons who, regardless of the welfare of others, introduce absurd whims. How many ills are attributable to tight-lacing, that awful evil? All the organs are displaced and distorted, the circulatory and respiratory systems are crushed, indigestion begins, and life becomes misery. And for what? For fashion's sake. What a sin to abuse in such a way the beautiful bodies given to us by God!

It is amusing to trace the origin of certain fashions. The padded doublet was worn in the reign of Henry VIII, because that monarch became so corpulent. His subjects wished to appear as bulky as himself. Patches on the face and neck became the rage because a leading beauty had a mole which she wished to hide!

Can we do anything to keep down foolish fashions in dress? I think so. We can refuse to sacri-

fine, and we can readily imagine how he will stick to his post until the time arrives for all this "good bag" to be carried off. The fawn's covering and straps are already there. Yes, not only will this good dog stick to his post, but woe betide any unwary intruder who approaches his charge.

Recipes.

HOT CROSS BUNS.

Rub quarter pound butter into two pounds flour, and add a pinch of salt. Into a cup of fresh yeast stir a pint of warm milk and gradually stir this into the flour till it forms a light batter. Cover over and allow it to rise, then work into it with a wooden spoon half pound sugar, half nutmeg (grated), half pound currants, one egg, and half teaspoon allspice. Knead well, cover again, and allow it to stand until perfectly spongy; then knead into buns, cut a cross on top, let rise until light, cover with clarified sugar, and bake twenty minutes.

ORANGE PUDDING.

One cup sugar, half cup rolled crackers, two eggs, teaspoonful butter, one orange; grate the rind and squeeze the juice; one quart milk. Bake like custard and serve when cold.

TOMATO SOUP.

Take one can of tomatoes and strain through a soup strainer; add one teaspoon salt, one saltspoon pepper, half saltspoon of soda, and set it on the stove to heat slowly. Meanwhile make a white sauce, with one tablespoon butter, one of flour, and



"A GOOD BAG."

turbans, their bracelets and various jewels, and their artificial hair. The ladies, living very secluded lives, had little else to do than to adorn themselves. "They consumed the whole morning at the toilet, employing paint and every drug for cleaning and whitening the skin. They laid red even upon their lips, and took great care of their teeth; their hair, made up in buckles with a hot iron, was perfumed and spread upon the shoulders; their dress was elegant, and artfully contrived to set off a fine shape." Some of these devices are not unknown even to-day, are they, girls?

The head appears to have been first chosen for decoration, for everyone can recall to mind pictures of savages with feathers in their hair. The fashionable dame of to-day takes her model from these rude ancestors of hers, and appears with her hair adorned with feathers and flowers. Jewish ladies used to powder their raven locks with gold dust, and in 1593 the nuns of Paris wore their hair curled and sprinkled with white powder.

Now to descend to the feet. In England in the 15th century, shoes were worn with very long, pointed toes, which turned up. At one time the turned-up toes were so long that they were attached to the knee by gold chains. A year or two ago these pointed toes again became fashionable, though not nearly to the same extent. We laugh at these fashions, and at the Chinese, who bandage little girls' feet to prevent growth, for their idea of beauty is a foot so small as to measure about four inches in length and two in breadth. Can you imagine the torture which the poor little children

face health and comfort for such whims. Our lives are far too valuable to be thrown away for this style or that one. We can join hands in trying to reform dress, to make it more hygienic and rational. By all means let it be as becoming as possible. It is the duty of every woman, young or old, to please, and one way of pleasing is to clothe one's self becomingly. But at the same time let our dress be reasonable and sensible and comfortable, and if we have the courage of our convictions and are brave enough to carry out our ideas, we shall soon see our influence making a wonderful difference in the dress of others.

Your loving old auntie— MINNIE MAY.

"A Good Bag."

What a proud doggie! He surely feels that he has had a hand (!) in every separate capture of that forlorn group. One cannot help feeling sorry for those poor helpless victims: The rich-plumaged birds, so lately spreading their beautiful wings in joyous flight, now lying limp and spent; the young fawn with its gentle and pathetic face; and we forget the proverbial cunning of Mr. Fox (often made out worse than he is, I fancy) when we see him stretched out, prone and helpless, with his fine brush outspread on the ground. One generally thinks of fox-hunting as a separate sport in which the fox and his brush are rarely seen together, save when running. This German artist, however, has drawn a very graphic picture, if a trifle sad. The expression of the faithful hound on guard is very

one pint milk, thus: Set the milk on the fire in a saucepan to heat; put the butter and flour in another pan on the fire, and stir gently until the butter melts; let them bubble together two or three minutes, then pour in milk, a little at a time, till all is used; stir, so it will be smooth, until it bubbles; add this sauce to the tomato, strain all again, return to fire, and serve as soon as steaming hot.

The boy raised on a farm has a better chance in life than the city-bred boy. The farm-bred boy almost invariably has the better constitution—those elements of good health and ability to stand hard work that mean so much in this life. He is usually endowed with a stronger moral character. Absolute integrity was never in greater demand in young men. The city boy often has a pertness or "smart" air that country youth do not possess, but the latter more frequently develop the manly, substantial carriage that denotes real character. His mind is better trained than the average town boy's. He may not be quite as glib in his book-learning, but the farm-bred boy, taught in Nature's school to observe and understand, has a rare foundation upon which to build a knowledge of industry, art, science or any branch of farming. The boy on the farm doesn't appreciate all this, but he ought to be thankful for his country life. After he has had some years of experience in other vocations he will realize how true these words are.



MY DEAR CHILDREN,—

It is quite a long time since we had a chat together, isn't it? I wonder how you have been amusing yourselves this winter, when work and lessons were over for the day. Did you ever play parlor croquet? If you want to really enjoy the game, make a set of mallets, hoops, etc., for yourself—it is far more fun than playing with "boughten" ones. Make the hoops of wire, bent into shape, and fastened with glue or sealing-wax into small pieces of cork. The mallets can be made of corks, with small sticks for handles, and you can use marbles for balls. Cover the table with a cloth, fasten a strip of wide tape around it to keep the balls from rolling off, and your lawn is ready for the game.

Talking of corks, lovely chairs for the little sister's doll's-house can be made in this way. Cut a slice off a large cork and cover it with a scrap of velvet. Stick into it four large pins for legs and three for the back. Twist in and out between the pins which form the back, colored wool to match the seat, and you may be sure the pleasure it gives will pay you well for your trouble. The beds can be made of small match-boxes and a little muslin and lace. Any box, nicely papered, carpeted, and divided into rooms by cardboard partitions, will do for the house. Of course, if you make a roof to it and cut out the windows, putting in glass, it will look much better.

Perhaps you will say, "I don't want to waste my spare time making things for other people." But is it waste of time? Think a moment. Do you remember our Lord's words? "Inasmuch as ye have done it unto one of the least of these My brethren ye have done it unto Me." Never think that work for others is waste of time—work for ourselves very often is. Did you ever hear the saying: "What I spent I had; what I gave I have." This saying applies to time just as much as it does to money.

"What have you done, dear children,"  
The mother gently said  
As she kissed her white-robed babes at night  
And tucked them up in bed;  
"What have you done through all this day  
To help someone along the way?"

Then each one told her some kind deed—  
A loving word just spoken;  
Some sacrifice for other's wants,  
Or gift of friendly token,  
But when 'twas Katie's turn to speak  
A tear-drop glistened on her cheek.

"I cannot think of anything  
So very good to-day,"  
She sadly said, "only I helped  
A chicken find its way  
Back to its mother—that was all;  
But it was lost, and oh, so small!"

"'Twas naughty when it ran away,  
But, dear mamma, I know  
It felt so sorry, for it tried  
The right way back to go,  
You told us once we ought to seek  
To save the lost ones and the weak."

"The little chicken looked distressed,  
And how it cried, poor thing!  
It was so glad to cuddle up  
Under its mother's wing,  
I was so happy when I found  
'Twas there with her, all safe and sound."

The children hid their smiles beneath  
The bed's white coverlet,  
But the mother kissed her Katie  
Just where the cheek was wet.  
"Your part," she said, "you too have done;  
God is well pleased, my little one."

I don't know who wrote these lines, but they are very true. God is well pleased with any of His children when they, like the Lord Jesus, "go about doing good." Don't wait until you are grown up; don't wait even until to-morrow; look round you now and see whether there is not some little thing you can do for Him. You can surely lighten somebody's burden, or give pleasure to someone. Try it, and see if you are not much happier than if you had wasted your spare time looking after "Number One."  
Ever your loving friend—  
COUSIN DOROTHY.

Motto Competition.

In order to encourage the little ones we offer three prizes—first, second, and third—to the child sending in the best quotation, most carefully written out. No one who is over thirteen years old may compete. Send one short motto only. None will be accepted unless accompanied by a statement from teacher, parent or guardian, that the competitor is not over age, and has done the work alone and unaided.

Remember, the writing will be taken into account as well as the choice of a motto.  
The competition closes on the first of June. Address your letters to "Cousin Dorothy, FARMER'S ADVOCATE, London, Ont."

Puzzles.

[The following prizes are offered every quarter, beginning with months of April, July and October: For answers to puzzles during each quarter—1st prize, \$1.50; 2nd, \$1.00; 3rd, 75c. For original puzzles—1st, \$1.00; 2nd, 75c.; 3rd, 50c. This column is open to all who comply with the following rules: Puzzles must be original—that is, must not be copied from other papers; they must be written on one side only of paper, and sender's name signed to each puzzle; answers must accompany all original puzzles (preferably on separate paper). It is not necessary to write out puzzles to which you send answers—the number of puzzle and date of issue is sufficient. Partial answers will receive credit. Work intended for first issue of any month should reach Pakenham not later than the 15th of the month previous; that for second issue not later than the 5th of that month. Leave envelope open, mark "Printer's Copy" in one corner, and letter will come for one cent. Address all work to Miss Ada Armand, Pakenham, Ont.]

1—BEHEADMENT.

When Night descends and howling winds drive past,  
When dark clouds gather and the rain falls fast,  
Then Nature is my *Whole*, till morning light  
Returns, and sheds its sunshine warm and bright.  
Cut off my head—a coward I must be,  
For in the front you never can find me.  
But inconsistency is passing strange,  
And though in backward file I take my range,  
My tendency's to rise, and upward bring  
Children, cattle, fruit or anything!  
Behold again, and I to you belong.  
At least I hope that I am not far wrong.  
A great affliction it would surely be  
To go through life entirely without me.  
Hey, presto! Turn my head into my tail  
And you will see, for you can hardly fail.  
A tiny, useful word of letters three—  
Part of a verb well known to you and me;  
A verb so common that we every day  
Are pretty sure some part of it to say.

SIMPLE SIMON.

2—SQUARE.

(1) To crouch in fear; (2) a kind of fruit; (3) an old British council; (4) to avoid. (5) to make new.

G. E. K.

"A Serious Case."

What is the matter with Toby?  
Do you think he has got "la grippe?"  
For he looks very ill,  
Perhaps he needs a bread pill,  
Or of cod-liver oil just a sip.



He hasn't been eating the chickens  
Or fighting with Kitty, I'm sure—  
No, I won't let you flog  
My own dear little dog;  
His sickness you'll please try to cure.

3—SQUARE.

1. An animal; 2. empty; 3. a child; 4. to record; 5. twice five, look.

"UNA."

4—ANAGRAM.

A summer scene near a lake is fine;  
And a winter scene in the woods of pine;  
But who can the thoughts of a JUNE SCENE SEVER?  
Why, it makes the old feel as young as ever! "DICK."

5—CENTRALS.

1. Remove the central letter from hurry and leave dislike.  
2. From a famous river and leave part of a skeleton.  
3. From punishable and leave a loud sound.  
4. From pertaining to a duke and leave double.  
5. From a temporary shop and leave a pair.  
6. From a tree and leave masculine.  
7. From a vision and leave a small weight.  
The centrals give a suitable name for this puzzle. F. L. S.

6—

1.—100,—50,—R.—1000,— A river in United States.  
2.—1000,—10000,—i,—i,— What Canada is.  
3.—10000,—10,1,100,— An American gulf.  
4.—50,—N,—R,— County of Ontario.  
5.—1000,—H.—10000 County of England.  
6.—10000,—N,—R.—50. A Canadian city. M. A. A.

7—CHARADE.

ONE, is often seen on the floor.  
TWO, means "one."  
THREE, is ladies' apparel.  
FOUR, is a preposition.  
TWO, THREE, is a covering for the hands.  
TWO, THREE, FOUR, is a sponge cake.  
ONE, TWO, THREE, FOUR, is a low, mean fellow.  
ONE, TWO, THREE, FOUR, is a low, mean fellow. "DICK."

8—MULTIPLICATION.

(Multiply four letters by three letters and get convulsion. Answer—paroxysm.)

1. Multiply a vowel by clear and get to define.  
2. A firm by a toothed instrument and get a dude.  
3. A pronoun by pointed and get six-cornered.  
4. An exclamation by a passage and get the name of an English university.  
5. A letter by large and get a pattern.  
6. A vowel by hearty and get to breathe.  
7. In favor of by y and get a substitute.  
8. Multiply festive by y and get a brilliant gathering.  
9. A vowel by assumed and get remonstrated. F. L. S.

9—CHARADE.

ONE, TWO came to town the THREE of COMPLETE,  
With shoes on their hands and mits on their feet.  
"Why come TWO in this way?" cried the boys, short and tall;  
"Why?" queried TWO, ONE, "because this THREE is "DICKENS." ALL."

10—BEHEADMENT No. 2.

When WHOLE, alas! this world is full of me,  
To harm both rich and poor at any hour.  
Sometimes I am approached by gradual steps,  
Yet man oft falls, at once, into my power.

Behold me, and I sparkle like a gem,  
And shed my breath on fields and foliage green,  
Making fair Nature shine with lustre bright  
That fades, and for a while is no more seen.

Behold me twice, and what a change appears!  
I am your very self—your life, your soul,  
Which must be kept for good, and ne'er to fall  
In contact with my dreaded name, when WHOLE.

SIMPLE SIMON.

11—ADDITION.

(1) 5+a valley—a self-closing door; (2) 100+a verb=worry; (3) 1000+help—a young girl; (4) 6+a vehicle—a clergyman; (5) 1000+a female deer—a famous city; (6) 50+a son of Adam—a printed slip of paper. M. N.

12—SQUARE.

1. A friend of ADVOCATE puzzlers; 2. one who raises; 3. malignity; 4. the beard of grasses or corn; 5. a pleasant liquor; 6. dismal. "BOZ."

13—MEN IN THE PUBLIC EYE, PHONETICALLY EXPRESSED.  
1. A boy's name, a grain, and a child; 2. a Canadian writer, part of the face, and a pronoun; 3. a girl's nickname and something we all have; 4. sour; 5. robust; 6. brittle, and a bother; 7. a girl's name, a verb, and to hide; 8. a pronoun and a box. "ARRY 'AWKINS."

14—SUBTRACTION.

Take a thousand from something we love and leave remote;  
take one from carriage and leave what all boys become; take fifty from soft and leave intervening; take fifty from the soft roe of fishes and leave a winter's covering; take one from containing water and leave the greatest; take nothing from damp and leave fine rain; take part of a hundred and leave the fashion. Subtracted amounts added together form a very large number. "ARRY 'AWKINS."

Answers to February 15th Puzzles.

1—Isabel, Una, Bertha, Ada, Ora, Ann.

3—r e c e i v e  
2—h i r e e t h i c s  
i r o n c h i d e  
r o o d e i d e  
e n d s i c c  
v s  
e

4—Kilt, itch, tone, cons, home, emu, need, era, roan; Kitchener, the Soudan.  
5—Great Britain, Kitchener, Canada, Bala-klava, Gibraltar, Perm, convolvulus, mouse.  
6—Representatives.  
7—Spice—ice; stick—tick; madam—Ada—a,a; David—a; friends—flends.  
8—St. Valentine's day.

9—d i s m a l

i n c a s e  
s c a r p s  
m a r k i s  
a s p i r e  
l e s s e n

10—Gladstone.

11—Phra the Phoenician.  
12—Levi, vile, evil, veil, live.

13—Bump Yeddo } Byron  
Roe } poets.  
Out }  
Nuts }

14—Fire-fly.

15—Expect (x specked) me between five and six for tea.  
16—Revelation.

SOLVERS TO FEBRUARY 15TH PUZZLES.

Geo. Lawson, "Ena," "Dick," "Arny 'Awkins," "Barney," Una Shepherd, M. N., G. E. K., "Toledo," "Burns," Henry S. Sweet, Barclay Green.

ADDITIONAL SOLVERS TO FEBRUARY 1ST PUZZLES.

"Ena," Lizzie Conner, Una Shepherd, J. McLean, M. N., H. C. G., "Toledo," "Burns," Maggie Beattie.

COUSINLY CHAT.

"Ena."—I have your name credited with answers for both January issues.

A. E. T.—A mistake was made in printing your initials last time. Come often.

G. E. K.—All puzzle matter, whether answers or puzzles, will come for one cent, provided no regular correspondence accompanies it.

H. S. S.—Your puzzles are scarcely up to the standard this time, but do not be discouraged—try again.

"Barney."—I cannot use your puzzle, either.

M. B.—You are very welcome, and your answers were correct.

"Burns."—You are getting along very well, but of course the older solvers have the advantage. Never despair—practice makes perfect.

Geo. L.—You keep the rules very well. Keep trying, even if you should not win first time.

C. B. M.—I dare say "Arny" surprised more than you. He is a veritable veteran, is he not?

I regret that I have not space to use more of the many excellent puzzles I receive. Our contributors will have to be patient and they will see their work later. We have plenty of room for more solvers. Everybody is welcome.

In a Minor Key.

She—Look at the ocean from here. So grand!  
So majestic! So peaceful!

He—It may be grand and majestic, but it isn't peaceful. It always stirs up an ill-feeling in me.—  
Chicago Tribune.



# FIFTH ANNUAL Canadian Horse Show

UNDER THE JOINT AUSPICES OF  
The Canadian Horse Breeders' Ass'n  
AND  
The Country and Hunt Club of Toronto

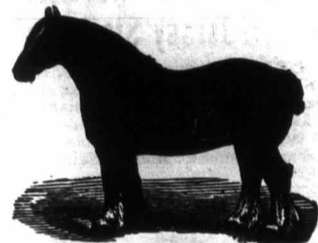
## TO BE HELD IN THE ARMOURIES TORONTO, CANADA.

on Thursday, Friday and Saturday,  
April 13th, 14th and 15th, 1899

ENTRIES CLOSE on Wednesday, March 30th, 1899,  
and should be addressed to  
**HENRY WADE,**  
Parliament Buildings, on TORONTO, ONT.

### FOR SALE...

**IMPORTED AND CANADIAN-BRED Clydesdale Stallions**  
From One to Four Years Old. Also



**SEVERAL THREE YEAR OLD FILLIES,**  
All registered and warranted sound. Inspection invited.

**ROBT. DAVIES,**  
Thorncliffe Stock Farm, TORONTO.

## CLYDESDALES



**D. & O. SORBY,**  
GUELPH, ONT.

**One Imp. Clydesdale Stallion For Sale!**  
3 YEARS OLD IN JUNE.  
Large, Quality Good, and Breeding Right. For particulars apply to  
**JNO. DAVIDSON, ASHBURN, ONT.**  
Station: Myrtle, C. P. R. or G. T. R.

### FOR SALE: Nine Clydesdale Stallions

Just landed from Scotland; also a few imp. and home-bred Shorthorn females.  
**JOHN ISAAC,**  
KINELLAR LODGE, MARKHAM, ONT.

**For Sale: Two Clydesdale Stallions**  
Rising three years old; also some Fillies and Mares from two to seven years old, all registered. For further particulars, address  
**DAVID CARSTAIRS, Bomanton, Ont.**

**CLYDESDALES, AYRSHIRES and POULTRY.**  
We are now offering a limited number of imported stallions and mares, and booking orders for young Ayrshires from our show cows. Shetland ponies and fancy poultry.  
**R. Ness & Sons, Howick, Que.**

**CLYDESDALE STALLIONS FOR SALE**  
Prizewinners of such noted breeding as Prince of Wales and Darnley. For particulars, write—  
Kelly Siding, **JAS. HENDERSON, BELTON, ONT.**

**Seven Imported Clydesdale Stallions**  
Four just landed, two winners at Royal Northern Show, 1898. For particulars address  
**GEORGE ISAAC, BOMANTON, ONT.**  
Cobourg Station, G. T. R.

## THE FARMER'S ADVOCATE. AUCTION SALE OF SHORTHORN CATTLE

THURSDAY, MARCH 23RD, 1899.

SEVENTEEN HEAD REGISTERED SHORTHORNS (10 Females, 7 Bulls),

The entire herd of JOHN A. GORDON, Acton, Ont., one mile from Acton Station, G. T. R. In healthy breeding condition. Cows are good milkers, from good milking strains, and have calves at foot. Good sound pedigrees, with top crosses of Scotch-bred bulls. Certificates of registration furnished on day of sale. All will be sold without reserve, the proprietor having rented his farm. Sale to commence at 1 o'clock. Teams will meet trains at Station morning of sale.  
**THOS. INGRAM, Auctioneer, Guelph, Ont.**      **JOHN A. GORDON, Acton, Ont.**

**W. C. Edwards AND COMPANY.**  
IMPORTERS AND BREEDERS

**Laurentian Stock and Dairy Farm,**  
NORTH BAY MILLS, P. Q.

**Ayrshires, Jerseys, Shropshires, Berkshires.**

Our excellent aged herd of Ayrshires is headed by our noted imported bull Cyclone. Tam Glen heads the young herd, and Lisgar Pogis of St. Anne's heads the Jerseys. The young stock are all from time-tried dams.  
**A. E. SCHRYER, Manager.**

**Pine Grove Stock Farm,**  
ROCKLAND, ONTARIO.

**Shropshires and Scotch Shorthorns.**

The imported Missie bull, Scottish Pride, at the head of herd, assisted by British Knight. Special bargains in young bulls, young cows and heifers of the best of breeding.  
**JOS. W. BARNETT, Manager.**

We can be reached either by steamboat, the C. P. R., or C. A. R.; the C. A. R. making connections with the G. T. R. at Coteau Junction. Rockland is our station, on all lines. 7-1-y

### WE ARE OFFERING FOR SALE 8 HIGH-CLASS YOUNG IMPORTED SHORTHORN BULLS OF THE BEST SCOTCH BREEDING.

TOGETHER WITH A FEW Home-bred Bulls AND A NUMBER OF Cows and Heifers

Correspondence or a personal visit solicited. Catalogues on application.

BOTH IMPORTED AND HOME-BRED.

**H. CARGILL & SON,**  
CARGILL, ONTARIO.  
Cargill Station and Post Office on G. T. R., within half mile of barns.

**Dentonia Park Farm**  
EAST TORONTO (Coleman P.O.)  
**W. E. H. MASSEY, Proprietor.**

**Dentonia Jersey Herd**  
Winners of the herd prize at both the Toronto and London fairs last fall, also some thirty other prizes. The herd comprises fourteen head of imported cattle, many of them winners of valuable prizes on the Island; also some thirty animals carefully selected from the best Canadian herds. Heifer and Bull Calves, also good Cows, always on sale.

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**Dentonia Trout Ponds**  
"Eyed" Trout Eggs, also yearling and two-year-old Brook Trout for sale. Market trout supplied in season.

Address, DENTONIA PARK FARM, COLEMAN, ONT., CANADA.

### Pure-bred Ayrshire Imported Cattle.

**LARGEST AND MOST EXPENSIVE IMPORTATION IN AMERICA.**

Bred for the dairy, with grand constitution, and champion prize records awarded them in Scotland and England. Sweepstakes herd, Montreal, Toronto, London, and Ottawa, in 1897. Awarded four years in succession herd prize at Ottawa's great exhibition, and special gold medal; at Montreal, herd prize and Mr. W. W. Ogilvie's special \$100.00 prize. Their individual prize records are of the same distinguished honors of the four years of their exhibition career. Stock all ages for sale and at prices in reach of all.

**Maple Grove Ayrshire Stock Farm**  
LYN, ONT.      **R. G. STEACY,**  
Importer and Breeder,  
Line G. T. R.      Box 720. Brockville, Ont.

**GUERNSEYS.** The grandest of dairy breeds; good size, hardy, persistent producers of the richest colored milk and butter when fed in the stable. A few young bulls and heifers from prizewinning stock for sale.  
**CHESTER WHITES.** The farmers' favorite; easy feeders, early maturers, good breeders, giving satisfaction bred as pure or as cross breeds. The largest prizewinning herd in America to select from.  
**DUROC-JERSEYS.** Easiest fed, easiest fattened; will do best when fed on forage crops. Sweepstake herd to select from. Seventy now for sale.  
**TAMWORTHS.** The ideal bacon hog; two boars fit for service; 10 sows (bred); some prizewinners included. Write  
**WM. BUTLER & SONS, DEREHAM CENTRE, ONT.**

## CLYDESDALES, HACKNEYS, COACH HORSES. Alex. Galbraith, JANESVILLE, WISCONSIN.

OFFERS A SPLENDID SELECTION OF EACH BREED AT PRICES TO SUIT THE TIMES.  
His Clydesdales are an extra choice lot, possessing great substance and weight, with excellent quality, and of the most fashionable breeding. Call and select early, if you want a Toronto prizewinner.

## SHORTHORNS OF THE CRIMSON FLOWER and Minnie Strains



And from such sires as Scotchman 2nd, Duke of Laverender, Premier Earl, Indian Chief, and Glen Campbell. A few splendid young bulls ready now. Cows-would sheep.  
**DAVID BIRRELL,**  
Greenwood, Ont.

**W. R. BOWMAN, MT. FOREST,**  
OFFERS FOR SALE  
12 Thorough-bred Shorthorn Cows and Heifers (reds and roans). Also, a 10-months Jersey Bull, solid color and richly-bred, for \$35.  
**YORKSHIRE and BERKSHIRE BOARS**  
ready for service, at \$10 each. Sows due to farrow in April and May, at \$12 each. Two-months pigs, of either breed, for \$6 each.  
All stock registered and shipped C. O. D.



**SHORTHORN Bulls, Heifers, Cows**  
Some very choice.  
**WM. LINTON, AURORA, ONT.**

**ROBERT MILLER, STOUFFVILLE, ONT.,**  
Importer and Breeder of  
**Shorthorns and Shropshires**  
Offers young bulls and heifers, rams and ewes of the most approved breeding and finest quality, at moderate prices.  
Station, Telephone, Post Office, three minutes' walk.

**SPRING GROVE STOCK FARM**  
Shorthorn Cattle and Lincoln Sheep. Herd prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by Imported Blue Ribbon—1705—and the famous Money-fuffel Lad—20521—High-class Shorthorns of all ages for sale. Also prizewinning Lincolns. Apply on  
**T. E. ROBSON, Ilderton, Ont.**

**W. G. PETTIT & SON,**  
FREEMAN P. O., Burlington Junction Ont. Telegraph Office.  
**10 SHORTHORN BULLS 10**  
By Indian Statesman—23004—, from 10 to 20 months. Twelve young cows or heifers with calves by side or in calf. Twelve ram and 20 Shropshire ewe lambs, sired by (Imp.) Flashlight. Also, Berkshire boars and sows, all of which will be sold at moderate prices. Farm half mile from Burlington Junction, G. T. R.

**8 SHORTHORN BULLS 8**  
Reds and roans, by St. Louis (a Morton-bred bull), and from our best cows reserved from sale. Also a few females of all ages.  
**FITZGERALD BROTHERS,**  
Mt. St. Louis, Ont.  
PLEASE MENTION FARMER'S ADVOCATE.



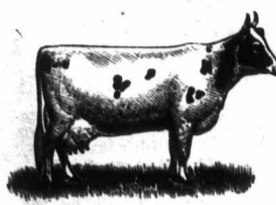
Brookbank Holstein Herd 50 CHAMPIONS FOR MILK AND BUTTER. 50

A number of desirable young BULLS on hand, from one to eight months old, from our great milkers. Write for just what you want. Females of all ages.

HOLSTEIN-FRIESIAN BULLS of the very richest milk and butter breeding, from 3 to 11 months old, for sale. Also, B. P. Rock cockerels, and eggs for breeding in season.

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FOR SALE: A NUMBER OF Choice Ayrshire Bulls Fit for service; also a few heifers.



And eggs for hatching from choice matings in Barred Rocks, Black Spanish, and Black Minorcas at \$2.00 per 13. Cayuga and Rouen Ducks at \$1.50 per 11. Have still a few fine Rock cockerels left.

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AYRSHIRES AND YORKSHIRES.

Several young CALVES of either sex, mostly light-colored.

Females, any age. All of which are of the choicest breeding, from either imported stock or close to imported. We have four distinct strains of females in our herd, and have used as many bulls of the best breeding, either for milk or show records.

Young Boars, fit for service. Sows just bred. Young pigs ready to ship. No inferior ones offered. Price within reach of any ordinary breeder or farmer.

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Six-Young Ayrshire Bulls-Six FOR SALE!

From eight to ten months old; all imported in dam, and all from good herds. Will sell them right. Address

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Breeders of high-class, deep-milking Ayrshires. Sweepstakes young herd at Ottawa. Shropshire sheep from prizewinning stock. Berkshire pigs and Barred Plymouth Rocks. Young stock for sale. Visitors met at Queen's Hotel. Give us a call.

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Two bulls 12 and 13 months old, from imported cows and by imported bull, also three (3) bull calves from 2 to 6 months.

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BERKSHIRES, TAMWORTHS, Booking orders for spring litters.

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Breeder and importer of choice and fashionable

AYRSHIRES

from deep-milking strains. Two bull calves for sale. Write or come to

BROOK HILL FARM, Carr's Crossing, G. T. R. on Trout River, Que.

AYRSHIRES!

An extra fine bull calf for sale; dam a first-class milker; sire Royal Monarch - 1941-, of the noted Sprightly and Maggie Brown of Barnoorhill strains. Also choice young females of same breeding. Prices reasonable.

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KAINS BROS., Byron, Ont. (R. R. London), are offering a number of grand young bulls, prize-winners; also a few choice females. Prices right.

AYRSHIRE CATTLE of the most fashionable and deepest-milking strains. No trouble and expense spared to produce the best. Stock of all ages for sale. Scotch Collies.

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PLEASE MENTION FARMER'S ADVOCATE



THESE PILLS

Cure Stomach Trouble, Nervous Diseases and all Blood disorders. They restore health and strength to the weakened system.

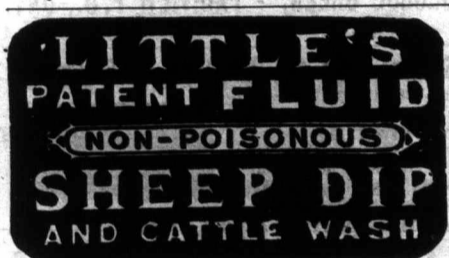
Dr. Ward's Blood and Nerve Pills are sold at 50c. per box. 5 boxes for \$2.00 at druggists, or mailed on receipt of price by The Dr. Ward Co., Limited, 71 Victoria St., Toronto. Book of Information free. Dept. F.

Mr. Isaac Holden, Omemece, Ont., a well known Cattle Buyer, says: "They cured me of constipation, and the rheumatism pains have entirely disappeared from my loins and stomach. They are a marvel in the medicine line. It is the only medicine of the many I have taken that gave me immediate and permanent relief. I am satisfied that if I had not taken them I would to-day be helpless in bed, suffering from torture such as only those who have acute muscular and nervous rheumatism can imagine. Yours truly, ISAAC HOLDEN, Omemece, Ont."

GUERNSEYS.

This is the dairy breed for ordinary farmers. Large, vigorous, and hardy, giving plenty of rich milk. Several fine young bulls for sale at very reasonable prices. A few heifers can be spared.

Address— SYDNEY FISHER, 17-y-o ALVA FARM, KNOWLTON, P. Q.



THE ORIGINAL Non-Poisonous Fluid Dip

Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large stockmen.

FOR SHEEP: Kills ticks, maggots; cures scab, heals old sores, wounds, etc.; and greatly increases and improves growth of wool.

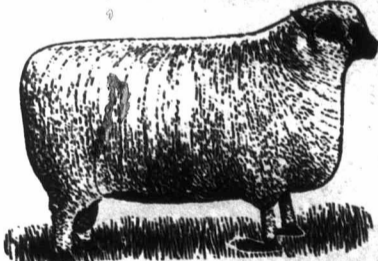
CATTLE, HORSES, PIGS, ETC.: Cleanses the skin from all insects, and makes the coat beautifully soft and glossy. Prevents the attack of warble fly. Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.

NO DANGER! SAFE, CHEAP, EFFECTIVE. BEWARE OF IMITATIONS.

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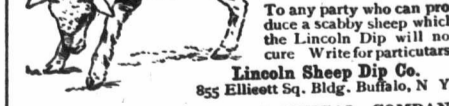
Eggs and all; frees the hide of them; improves the wool; easy to use. A 35c. tin does 20 sheep.

30 YEARS' REPUTATION. Still made by the old firm of

HUGH MILLER & CO., 167 KING ST. E., TORONTO.

SCABBY SHEEP. \$500 REWARD To any party who can produce a scabby sheep which the Lincoln Dip will not cure. Write for particulars. Lincoln Sheep Dip Co., 855 Elliest St. Bldg. Buffalo, N. Y.

Canadian Office: WEST CHEMICAL COMPANY, 15 Queen Street East, Toronto.



SHEEP, CATTLE, CALF, HOG, LABELS AND EAR PUNCHES. Patent Grain Truck and Bagger. Send for circular and prices to R. W. JAMES, Bowmanville, Ont.

NOTICES.

Spring Term.—The Central Business College, Stratford, Ont., announces that the spring term in that institution will begin on April 4th. Mr. W. J. Elliott, the Principal of the College, will be pleased to send full information to any one desirous of obtaining a business education or a course in shorthand and typewriting.

Fruit Pulp.—The Department of Agriculture for Ontario has issued a special bulletin which should be in the hands of every fruit-grower who wishes to see a way out of the apparent lack of a demand for the small fruits, such as raspberries, currants, etc. The bulletin shows the possibility of working up a trade in the pulp of these fruits with the British people. The bulletin will be sent free on application.

Power Users should secure a copy of the "Northey" Gasoline Engine. It gives, in readable form, a short, pithy description of the uses of a gasoline engine. It is handsomely illustrated and the testimonials printed show what the users think of it. The booklet will be sent free to all who write for it. State your power requirements. Address, The Northey Manufacturing Company, Limited, 1012 King Street Subway, Toronto.

Canadian Windmills Going Abroad.—We note that the Ontario Wind Engine and Pump Company have an order on hand for one of their well-known Wind Engines (Canadian Airmotor) for H. M. Government in India. This is to be placed on a steel tower, also supplied by the same company, and is to be utilized to run a dynamo. The harnessing of one for all description of power has been greatly perfected within the last decade. The Canadian Airmotor has already found its way extensively into Europe, land, as well as Cyprus, Egypt, and Australia, and in this way Canadian goods are being widely advertised.

All About Spraying.—We have just received from the Spramotor Co. of London, Ont., a copy of their new annual catalogue and treatise on diseases affecting fruit trees, vegetables, etc., and their remedies. It is a handy, instructive volume of 75 pages, well indexed, covering the whole subject up to date. It contains several important and improved features respecting the Spramotor apparatus, among these being the Emulsion attachment and Spramotor Jr. wheel outfit. The portion relating to diseases and pests and their treatment has been carefully revised. Drop a post card to the company for a free copy of the volume.

Pearce's Seeds.—In the vegetable as in the animal kingdom, like produces like, and for that reason it is the worst possible economy to try to save money by planting, or sowing cheap seeds. The best is none too inferior, or run-out seed. To get the best, when we come to harvest the crop, and this can be obtained only from good seed. The firm of John S. Pearce & Co., of London, Ont., enjoy the reputation for a thorough understanding of the seed business, and to select from their 1899 catalogue is to reap the advantage of their wide experience and careful study. The catalogue contains cuts, descriptions, prices, and some useful notes on numbers of the best varieties of flowers, vegetables, grains, grasses, clovers, etc. Their new oats and selected corns are of especial interest. Garden tools, poultry, apiary and dairy supplies are also offered in the catalogue. It is sent to all who apply for it, and is well worth perusal before making selections for this season's sowing. See list of seeds advertised by Messrs. Pearce & Co. in this issue.

Good for Enlarged Tendons. ST. JOHNS, N. B., April 29, '97.

The Lawrence-Williams Co., Cleveland, O.: The bottle of "Gombault's Caustic Balm" you so kindly sent me in November, 1896, I have used on my horse for enlarged tendon, and found it to work to my entire satisfaction, and would recommend it to all horsemen instead of using the firing irons, as it has even a better result.

GOSSIP.

The Canadian Horse Show, under the joint auspices of the Canadian Horse Breeders' Association and the Country and Hunt Club, will be held in Toronto, April 13, 14, 15. Send for prize list to Henry Wade, Secretary, Toronto.

At the Perth Spring Show and sale of Short-horn bulls there was an entry of 159, of which 147 were sold at an average of \$27 1/2. The highest price was 155 guineas, for Colonel, 1st prize in aged class, a roan, bred by Lord Lovat, purchased by Mr. (1502), the purchaser being Mr. McLennan, of Buenos Ayres. In the young class Lord Lovat also won 1st with the white Marksman, also by Royal Star, and he sold for 47 guineas, while the 2nd prize bull, Peter the Great, a roan, shown by Mr. Granger, Pitcair, brought 100 guineas, Lord Rothschild being the purchaser. The average for 208 bulls at Perth last year was 219 1/2, and the highest price 75 guineas. At the Aberdeen Show and sale 179 bulls averaged \$24 1/2, the highest price being paid for the 2nd prize young bull with the plain name "Jack," shown by Mr. Crombie, Woodend, which went to Mr. Bruce at 129 guineas. He is described as a great, wealthy guinea. He was sired by Czarwitch (7022), dam by Coldstream (69153), bred at Sittytown. The 1st prize bull, Lucky Pride, by Sittytown Pride, and shown by Mr. Durno, Jacktown, brought 75 guineas, and was bought by Mr. Wilson, Perriemills. This was the second highest price.



Persiatric Sheep and Animal Wash

A powerful non-irritant and healing preparation that is proving a boon to farmers all over Canada for sheep and cattle ailments, such as Ticks—Maggots—Gangrene—Shear Cuts—Red Lice on Sheep—Parasites—Ringworm—Bruises and Scab. Full directions on every can. Cures the worst cases, and makes the skin healthy and whole. The most effective and economical dip on the market. If your dealer can't supply you, write us direct for it, and if there's anything out of the ordinary in the ailments of your flocks and herds we'll be pleased to give free any additional advice in the matter.

THE PICKHARDT RENFREW CO., Limited, STOUFFVILLE, ONT.

Hampshire Down Sheep.

GREAT ENGLISH PEDIGREE SALES, July, August, and September, 1899

WATERS & RAWLENCE, SALISBURY, ENGLAND.

Will sell by auction during the season upwards of

50,000 PURE-BRED EWES, LAMBS, RAMS

Including both Rams and Ewes from the best Registered Prizewinning Flocks in the country. Commissions carefully executed. Address:

WATERS & RAWLENCE, SALISBURY, ENGLAND.

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: FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W. Cables—Sheepste. London.

J. E. CASSWELL,

Laughton, Folkingham, Lincolnshire, breeder of Lincoln Long-wooled Sheep, Flock No. 46. The flock was in the possession of the present owner's great-grandfather in 1785, and has descended direct from father to son without a single dispersion sale. J. E. Casswell made the highest average for 20 ram, at the "Annual Lincoln Ram Sale," 1895 and 1897. The 1896 rams were all sold for exportation. Ram and ewe hogs and shearings for sale, also Shire horses, Shorthorns, and Dark Dorking fowls. Telegrams: "Casswell, Folkingham, Eng." Station: Billingboro, G. N. R.

SMITH EVANS, GOOROCK, ONT.

Breeder and importer of registered Oxford Down Sheep. Selections from some of the best flocks in England. Stock for sale at reasonable prices. Inspection invited. 6-1-y-o

GOITRE CAN POSITIVELY BE CURED

By applying SICCANTA externally.

This is beyond the experimental stage. We can furnish unsolicited testimonials from our patients, and guarantee satisfaction. \$1.00 a bottle by mail, with full directions.

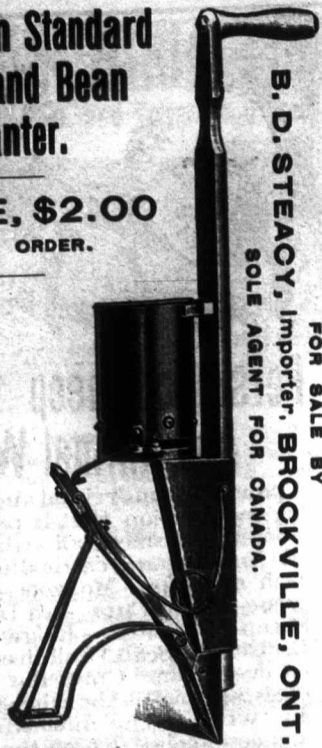
RUSSEL C. TEFT, MARKHAM, ONT.

**American Standard  
Corn and Bean  
Planter.**

**PRICE, \$2.00  
WITH ORDER.**

It is the only Planter containing an Adjustable Dropping Disc.

Upon examination you will find it is accurate, light, easy to handle, and the best made Planter ever offered for sale.



**B. D. STEACY, Importer, BROCKVILLE, ONT.**  
SOLE AGENT FOR CANADA.

**MARYSVILLE HERD OF IMPROVED  
YORKSHIRES AND BERKSHIRES**

Have no more for sale at present. Will book orders for spring pigs from the same stock as I breed my winners from. My Yorkshires have been herd winners for three years in succession at Toronto.

R. G. MARTIN, Marysville, Ont.

**HIGHEST TYPE OF BACON HOGS.  
Oak Lodge Herd of Large Yorkshires**

The largest herd of pure-bred Yorkshires in America. This herd has won the best prizes offered for the breed during the last ten years.  
**STOCK BOARS.**—Three imported boars, all winners at the Royal Show, including championship and gold medal. Also, two Canadian-bred boars, both first prize winners at Toronto, 1888.  
**BREEDING SOWS.**—Royal Duchess, Royal Queen and Royal Queen 2nd, all winners of highest awards at Royal Show, and 15 of the best sows to be purchased in England. Also, 50 matured Canadian-bred sows of the choicest quality.  
PRIZEWINNING STOCK A SPECIALTY.  
J. E. BRETHOUR, BURFORD, ONT.

**GOSSIP.**

**NICHOLSON'S SALE.**  
Messrs. R. & S. Nicholson, Sylvan, Ont., were fortunate in having the advantage of a good day on which to hold their sale of Shorthorns. The attendance was very good, and consisted largely of representative Shorthorn breeders. The auctioneer, Capt. T. E. Robson, was in his usual good form, and in less than two hours all the animals catalogued, numbering 29 head, were disposed of at prices satisfactory alike to Messrs. Nicholson and the purchasers. Since a number of the animals sold were calves a few months old, and a few others were young cows somewhat low in condition, the prices were not high in all cases. Following went to \$75 and up:

**Females.**  
Vacuna 25th, 6 years old; purchaser, R. Shaw-Wood, London, Ont.; price, \$160.  
Baroness Stanley 5th, 6 years; Geo. Harding & Son, Waukesha, Wis.; \$145.  
Vacuna 32nd, 7 years; R. Shaw-Wood; \$90.  
Seventh Leonore of Sylvan, 6 years; F. A. Gardner, Britannia, Ont.; \$85.  
Eleventh Leonore of Elmdale, 9 years; Daniel Cameron, Ailsa Craig, Ont.; \$75.  
Vacuna 38th, 4 years; John McCubbin, Springbank, Ont.; \$175.  
Twelfth Leonore of Sylvan, 3 years; R. Shaw-Wood; \$150.  
Thirteenth Leonore of Sylvan, 3 years; Geo. Harding & Son; \$140.  
Baroness Stanley 6th, 2 years; A. W. Smith, Maple Lodge, Ont.; \$85.  
Vacuna 45th, 2 years; A. Brewer; \$90.  
Leonore of Sylvan 19th, 1 year; Geo. Harding & Son; \$85.  
Vacuna 41st, 2 years; R. Shaw-Wood; \$165.  
Vacuna 40th, 2 years; T. Shantz, Waterloo, \$100.  
Vacuna 48th, 1 year; T. Shantz, \$100.

**Bulls.**  
Valasco 36th, 16 months; Geo. Hindmarch, Ailsa Craig; \$110.  
Valasco 37th, 16 mths.; W. Cable, Birnam, \$115.  
Twenty-first Crown Jewel, 17 months; J. Wylie, Grisy, Ont.; \$105.  
Valasco 31st, 17 mths.; Geo. Harding & Son, \$100.  
Twenty-nine head sold for \$2,065, an average of \$91.90 per head.

**WANTED TO SELL**

THE best paying retail dairy and small creamery business in Western Ontario. Good plant. Three good milk routes. Good staff employees. With or without cattle. Two years lease to run. Plenty of milk, and business can be increased. Apply  
-o- DAIRY, CARE FARMER'S ADVOCATE.

**PINE GROVE FARM HERD OF LARGE YORKSHIRES.**

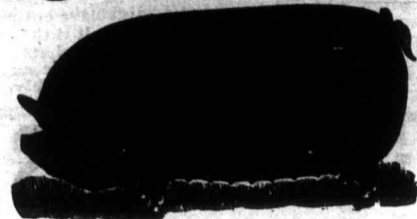
Imported and Canadian-bred, from the Hasket family, which has taken more prizes at the leading fairs in Canada and the World's Fair at Chicago than any other family of Yorkshires in America. Young boars and sows fit for breeding for sale. Correspondence solicited, which will receive prompt attention.  
JOSEPH FEATHERSTON, Streetsville, Ont.

**YORKSHIRES AND COTSWOLDS**

Young Boars and Sows on hand now; also well-covered shearing and two-shear Rams, and half a dozen Ram Lambs.

**R. HONEY,**  
Warkworth, Ont.

**LARGE  
English Berkshires.**



Herd headed by four first prize stock boars of large size, strong bone and fine quality. Young Boars and Sows, all ages, for sale. Orders booked for Spring Pigs.

**GEORGE GREEN, - FAIRVIEW P.O., ONT.**  
Telegraph and Station: Stratford, G. T. R.

**Special Sale for 30 Days on Following:**

One Chester White boar, 12 months (imp.); one Chester White sow, 12 months (imp.), safe in pig; one Berk boar, 2 years old, a herd header. Berk pigs all ages. Write and secure a bargain.

H. BENNETT & SON, St. Williams, Ont.

**LARGE ENGLISH BERKSHIRES**

For a choice pig of any age, bred from imported stock, right in quality, right in price, and guaranteed to be as represented, write  
W. J. SHIBLEY,  
Harrowsmith, Ont.

**JAS. DORRANCE,**  
SEAFORTH, ONTARIO.

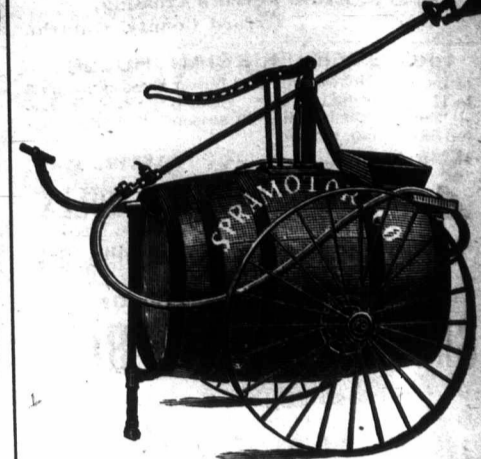
BREEDER OF

**Shorthorn Cattle and Berkshire Pigs**

Young stock always for sale.

**W. E. H. MASSEY,**  
President of the Massey-Harris Co., certifies to the

**MERITS OF THE SPRAMOTOR**



Toronto, November 9th, 1898.  
Spramotor Co., London, Ont.

Gentlemen,—The machines for spraying and white-washing you have supplied to Dentonia Park Farm have done their work well, and are quite satisfactory. I could not have believed there was so much value in spraying fruit trees. We had a good crop of apples, whereas our neighbors who used no spraying machine had practically none. Yours truly,  
W. E. H. MASSEY.

For further information regarding this peerless Spraying Apparatus, write for our 76-page copy-righted catalogue and treatise on the diseases affecting fruit trees, vegetables, etc., and their remedies (free). Address—

**SPRAMOTOR CO.,**  
357 RICHMOND ST., LONDON, ONT.

Mention this paper

**FOR SALE...**

A CHOICE LOT OF  
**LARGE  
Yorkshire**

**SOWS**

in pig to a show boar; also boars fit for service, and fall pigs of good length and quality. Berkshire sows in pig, and boars fit for service, at very reasonable prices. Two good Short-

horn bulls, red-roads. Write  
-om

**H. J. DAVIS, Woodstock, Ont.**

**REMEMBER, We Manufacture the BEST IN THE FOLLOWING LINES:**

**PLOUGHS:**  
They last longest, draw lightest, work easiest.

**PLOUGH REPAIRS:**  
Our Iron Mixture is the toughest and strongest. Name and address on all of them.

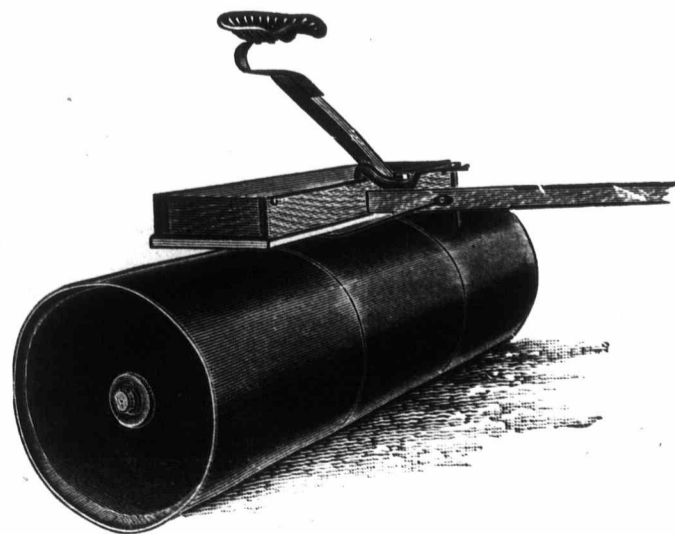
**LAND ROLLERS:**  
Two and Three Drum. Solid Steel Head. All weights; all sizes. You can never wear them out.



**PACKERS:**  
Keep the moisture in the ground. Every Manitoba farm is crying for one.

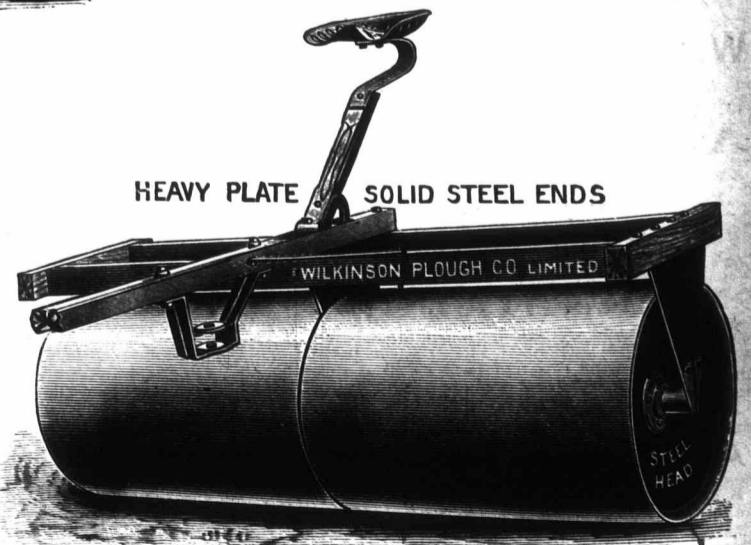
**PNEUMATIC  
ENSILAGE CUTTERS:**  
ABSOLUTELY PERFECT.  
The whole system of straw, hay and corn cutting revolutionized. Our machines are fully covered by patents, and our prices are reasonable.

**ORDER EARLY.**



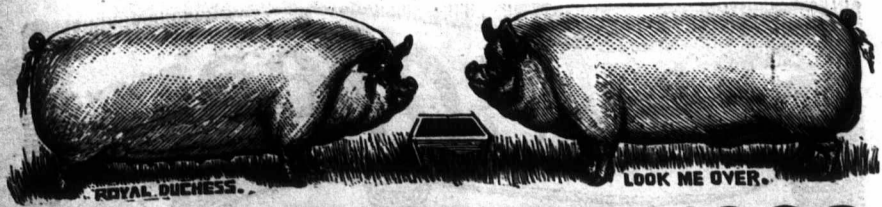
**STEEL-HEAD GANGS**  
(ALL SIZES).

- SCUFFLERS,
  - TURNIP DRILLS,
  - LAWN ROLLERS,
  - DRAG HARROWS,
  - DRAG SCRAPERS,
  - WHEEL SCRAPERS,
  - WHEELBARROWS
- OF ALL KINDS.



**HEAVY PLATE SOLID STEEL ENDS**

**THE WILKINSON PLOUGH COMPANY, LIMITED,  
TORONTO.**



SUMMER HILL HERD OF YORKSHIRE HOGS. LARGE, LENGTHY, ENGLISH TYPE.

Among them being the undefeated prizewinning boar, "LOOK ME OVER" 2602. Also Royal Duchess, a first prize sow at the Royal Show of England in 1896, and several choice young sows bred to Look Me Over; also, young stock of both sexes, single or in pairs, not akin. We ship to order, prepay express charges. Guarantee stock as described.

D. C. FLATT, MILLGROVE P. O., ONTARIO.

To the Farmers of this Canada of Ours!

Gentlemen,—We thank you for your ever-increasing patronage, and remember we do not class our Queenston Cement with the water limes and hydraulic cements now on the market, but we guarantee our cement equal to the Imported or Domestic Portland Cements for all farm structures, such as Basement Walls for Stables, House or Cellar Walls, Cisterns, Hog Pens, Poultry Houses, and for all kinds of stabling. Kindly investigate our system of ventilation. This system is fully covered by letters patent, but to our patrons we make no charge. Write us for our new pamphlet for 1899, containing valuable information, prices, etc.

ISAAC USHER & SON, Queenston, Ontario.

THE WORLD-RENOUNDED "QUEEN" CHURN



It does not require a "CRANK" to work the Improved "Queen" Churn. Decidedly the Easiest Working Churn ever offered to the trade. A Child can operate it.

Before purchasing other Churns, be sure to make a critical examination of this one.

PATENT APPLIED FOR.

MANUFACTURED ONLY BY

THE LONDON AND PETROLIA BARREL COMPANY, LONDON, ONTARIO.

Advertisement for 'The Coiled Spring Page' wire fence, including a diagram of the fence and text describing its history and benefits.

GOSSIP.

MR. A. HUME'S AYRESHIRE AND YORKSHIRES. Mr. Hume's farm near Menie, Ont., is the scene of very active breeding operations in Yorkshire cattle and Yorkshire swine. We found on the occasion of our visit in January a herd of 40 Ayrshire matrons, all due to calve before the end of September, headed by the typical three-year-old bull, White Chief of St. Anne's 2368, a son of the noted cow, Chief of St. Anne's, and by imported Glencairn 3rd, to which most of the cows are in calf. Among the matrons may be found such as imported Eva Barcheskie, by Craigs of Kyle and out of Eva 3rd of Orchardton, in her seventh year. She has had a successful showyard career, both locally and at the big fairs. The bull which she carried from Scotland was 1st as a yearling in Toronto, and now heads the herd of Mr. A. Terrill, Wooler. A pair of her daughters are on the farm and are considered among the choicest in the herd. Her stable mate and granddaughter is one of the choicest and most highly valued females on the farm, with large and well-formed udder and prominent veins, finely formed and stylish appearance, and is due to calve about the middle of August. Dairymen's Maid 3445 would attract the attention of any shrewd dairyman, carrying as she does the deep substance and milking qualities inherited from her sire, White Prince 2nd, through his dam. Among the younger females we were shown White Princess, winner of the second prize in her class under a year at Toronto in 1898. She has grand dairy form and quality, transmitted through her sire, White Chief of St. Anne's, and strongly impressed all through the young stock on hand, their uniformity being a noticeable feature. Eva White Pearl, a November '97 calf, is growing into a splendid young cow, with a large, well-balanced udder. We also saw a 12-months-old son of White Chief of St. Anne's, which is developing into a splendid young bull, full of quality and rugged constitution, and with splendidly marked, velvety skin. Some half dozen cows have already dropped calves, and the majority are due within the next sixty days, so that an abundance of young stuff will soon fill the vacancies made by the enormous demand of the past season. In the Yorkshire pens we found some five in stock, chiefly of the noted Marion family, which were bred to Seymour Hero 2904, by Oak Lodge Rufus 2494 and out of Oak Lodge Wench 2nd 1714, a sire selected on account of the superiority of his ancestry, and possessing good individual quality with size and vigor. The Agricultural College bred boar, Lord Rock, by Gen. Miles 3061 and out of O. A. C. 83, 2745, is also doing service, and as the result a bunch of a dozen sows of August litters of superior quality and five fine November sows and two boars are held for sale, in excellent growth and thrifty shape.

D. DRUMMOND'S SALE OF AYRESHIRE.

Following is a report of the sale of Mr. Drummond's herd of Ayrshires, near Montreal, Feb. 16th:

- List of cows for sale, including Laura of Burnside, J. P. Dawes, Louisa of Burnside, Baby Ruth, Fairy of Burnside, Adela, Myrtle, Glen Bessie, Fairy of Ormsdown, Nancy, Patty, Mint, Mistake of Burnside, Trim of Burnside, Burnside Maggie, and Snowdrop of Burnside.

Heifers.

- List of heifers for sale, including Nellie Osborne, Pearl of Burnside, Pet of Burnside, Little Queen, Aunt Sally, Dorothy Drew, Boyver, Brownie of Burnside, Miss Sandilands, Misshap of Burnside, Evelyn of Burnside, and Helen Grace of Burnside.

Bulls.

- List of bulls for sale, including Victor of Boghall, J. Templeman, The Don, Bull calf, Lord Minto, Bull calf, J. Whitaker, and Bull calf, Lord Kitchener.

SALE OF ELSENHAM SHIRES.

A great sale of Shire horses was held on Jan. 25th by Messrs. Sexton, Grimwade and Beck, who then disposed of 45 lots, the property of and many of them bred by Sir Walter Gilby, England. The following is the satisfactory outcome, and speaks volumes for the esteem in which the Shire breed is held in England:

Summary table showing total and average prices for various lots of Shire horses.

BELLEVILLE BOGLE & JEFFERS, BUSINESS COLLEGE PROPRIETORS.

Students have a LARGER EARNING POWER who acquire the following lines of preparation under our efficient SYSTEM OF TRAINING. IT HAS NO SUPERIOR.

- 1. Bookkeeping. 2. Shorthand. 3. Typewriting. 4. Telegraphing (Commercial and Railway Work). 5. Civil Service Options.

Students may commence telegraphing on the first of each month, and the other departments at any time.

J. FRITH JEFFERS, M. A., Principal.

Address: BELLEVILLE, ONT.

Advertisement for 'An Education by Mail' featuring illustrations of students and text describing correspondence courses in mechanical and electrical engineering.

LARGE ENGLISH BERKSHIRES FOR SALE

All ages, from prizewinners of the very best quality. Royal King 5215 at the head of the herd. Write for prices.

ALB. NAUMAN, Fisherville, Ont., Haldimand County.

LARGE ENGLISH BERKSHIRES Maplehurst Herd.

IF YOU WANT MONEY-MAKERS FROM US. ORDER A PAIR.

We have the kind that both the farmer and the packer want. Stock of Best Breeding, all Registered. Pairs not akin. Write us—

J. J. Ferguson, Box 373 Smith's Falls, Ont.

OXFORD HERD OF POLAND-CHINAS

The home winners of the winners. Headed by the imported boar, Conrad's Model and Klondike, assisted by Bacon Boy and Lennox. Has won 64 out of a possible 69 first prizes. Stock of all ages for sale. Write for prices or come and see.

W. & H. JONES, OXFORD CO., ONT. MT. ELGIN, ONT.

POLAND-CHINA BOARS FIT FOR SERVICE.

A few choice sows three months and under. Black Wilkes (imp.) and Jack Sanders head of herd. A few choice Black Minorca cockerels cheap.

R. WILLIS, JR., GLEN MEYER, ONT.

E. D. GEORGE, PUTNAM, ONT., Importer and Breeder of Ohio Improved Chester White Swine.

The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices.

IF YOU WANT Chester Whites Write me for particulars. The imported sires, John A. 751, and Nonsuch 910, at head of herd.

JOS. CAIRNS, Lambton County, ONT. CAMLACHIE P. O.

BORNHOLM HERD IMP. CHESTER WHITES.

Stock for sale at all times, all ages. Nothing but first-class stock shipped. Inspection invited. Correspondence answered.

Daniel DeConroy, Bornholm P. O., Ont.

CHESTER WHITE SWINE.

Young stock, both sexes. Booking spring orders.

W. E. WRIGHT, GLANWORTH, ONT.

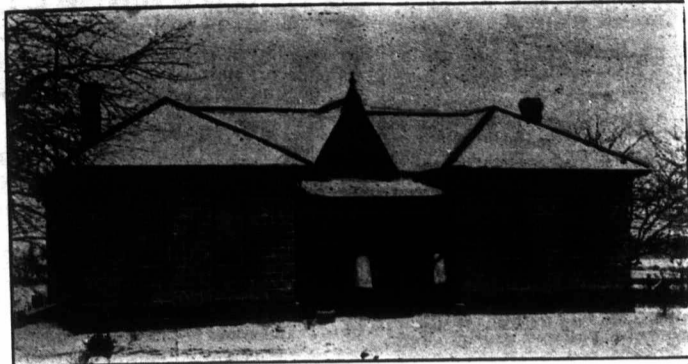
STRATFORD BROS., BRANTFORD.

Tanworth boars, Dorset rams, Shetland ponies, Light Brahmas, Houdans, Cornish Indian Game, Black Langshans, White Langshans, White Plymouth Rock, Buff Plymouth Rock, Barred Plymouth Rock. Prices right.



# Work Done With THOROLD CEMENT Speaks for Itself.

Examine the following neat and attractive views of some Houses and Barns it has built with great satisfaction.



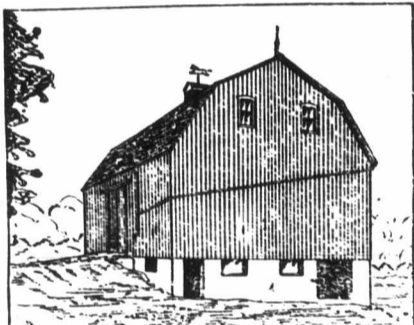
Concrete Residence of Joseph Harris, near Kerwood, Ont. Size..... BUILT WITH THOROLD CEMENT IN 1896.



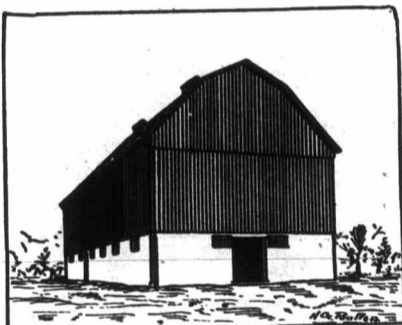
Barn of Benjamin Pile, Parkhill, Ont. Size of Walls, 50 x 81 x 10 feet high. BUILT WITH THOROLD CEMENT IN 1898.



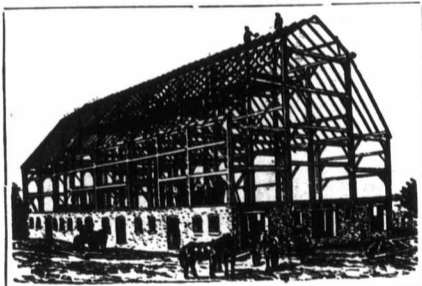
Barn of Allan McMane, Atwood, Ont. Size of Walls, 84 x 100 x 9 feet high. BUILT WITH THOROLD CEMENT IN 1898.



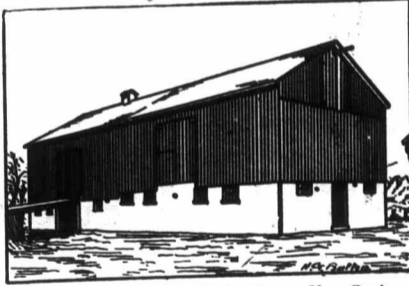
Barn of Wm. Patton, South Cayuga, Ont. Size of Basement Walls, 36 x 60 x 9 feet. BUILT WITH THOROLD CEMENT IN 1898.



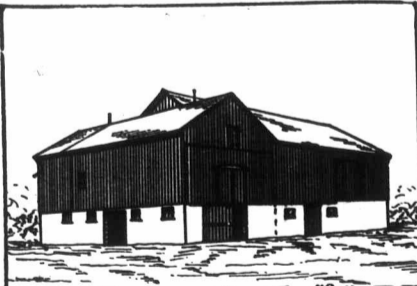
Barn of Burt Kennedy, Iderton, Ont. Size of Walls, 36 x 100 x 9 feet high. BUILT WITH THOROLD CEMENT IN 1898.



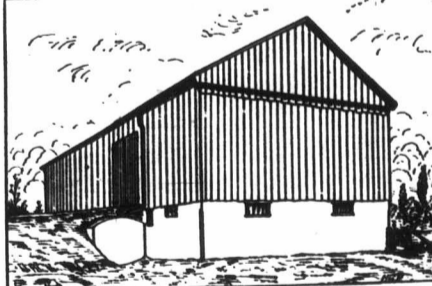
Barn of Beswetherick Bros., Hagersville. Size of Floor, 60 x 120 feet. PUT IN WITH THOROLD CEMENT IN 1896.



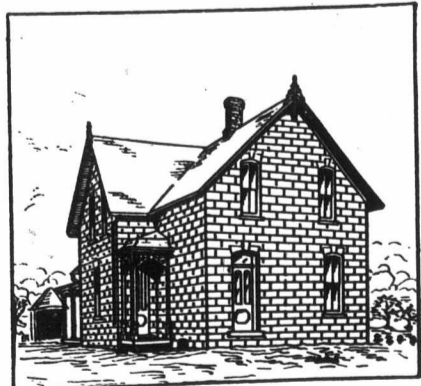
Barn of Wm. J. Welr, Grumlin, Ont. Size of Walls, 34 x 102 x 9 feet high. BUILT WITH THOROLD CEMENT IN 1898.



Barn of R. W. Jackson, Iderton, Ont. Size of Walls,..... BUILT WITH THOROLD CEMENT IN 1898.



Barn of Geo. Axford, Talbotville, Ont. Size of Walls, 34 x 88 x 9 feet high. BUILT WITH THOROLD CEMENT IN 1896.



Concrete Residence of W. H. Fry, Fenwick, Ont. Size of Building, 28 x 32 x 18 feet high. BUILT WITH THOROLD CEMENT IN 1877.

For FREE Pamphlet with full Particulars Address:

Agents Wanted in Unrepresented Districts.

## ESTATE OF JOHN BATTLE, THOROLD, ONTARIO.

### GOSSIP.

The closing-out sale of the estate of the late J. G. Snell, Snellgrove, Ont., takes place on Monday, March 30th. Registered and grade Jerseys, Cotswolds and Berkshires are included in the offering. The farm is four miles from Brampton, G. T. R., and two miles from Snellgrove, C. P. R.

P. J. Coldwell, Constance, Ont., writes us as follows:—"I do not show any of my stock now, as I want to keep them as vigorous as possible, and I consider that showing injures them as breeders. Mr. Felch told me that chicks from these Plymouth Rock matings will be as good as anyone has. Those I am offering farmers are cheap at the price. I have not a poor bird in the flock, and the breed cannot be beaten for a general purpose fowl. Altogether I have put \$35 worth of new blood into my stock this season. I doubt if I can take it out of them, with other expenses, this year, but last season I had a good profit, and there seems to be a growing interest in poultry all over, so I may be successful again. I thank you for the help you have given me."

Mrs. E. M. Jones, Brockville, Ont., writes:—"I have to report the sale to Mr. J. S. Smith, of Chilliwaick, B. C., of five head of the choicest Jerseys that ever left Ontario. They are the two-year-old bull, Royal of Belvedere, grand-son of my famous Lillium's Rioter that took in one year first prize at Toronto, Montreal, Ottawa, and Gananoque, sweepstakes at all four places, and headed my first prize herd at all four places. Sire of Royal was Signal of Belvedere, whose dam was one of my greatest prize cows, who made for me 20 lbs. 6 ozs. butter a week, in 2nd calf. With Royal went Grace of Belvedere, one of the finest cows of her age in the Dominion, and her yearling daughter in calf; also, Lily May of Brockville, whose photo I enclose, a golden-fawn heifer, making 12 lbs. butter a week at 23 months old on ordinary feed of the herd; also, a yearling heifer, in calf, of great promise and beauty. These went out in Government car in February."

Mr. S. Hoxie, Superintendent of Advanced Registry, Holstein-Friesian Association of America, has issued a circular giving official butter tests of twenty-one Holstein-Friesian cows from March 23 to May 1, 1896. These tests are for seven consecutive days, and are supervised by officers of agricultural colleges and State experiment stations, or by persons vouched for by such officers. The amounts of butter-fat are determined by the Babcock test, and the amounts of butter are calculated on the basis of 80% fat to a pound of butter, the rule established at the World's Columbian Exposition. The cows were from two to eight years old, and produced from 9 to 15,903 lbs. butter-fat, and 13 to 19,879 lbs. estimated butter. The following tests to ascertain cost of food per pound butter were also made. These tests are supervised and made at the same time: Mutual Fried 3rd 2589—age, 6 years, 6 months, 26 days; amount of butter-fat, 14,724 lbs.; amount of butter, 18,405 lbs.; cost of food per schedule of prices, 96.65 cents; cost per pound of butter, 5.2+ cents. Paula Dorinda 41109—age, 2 years, 10 months; amount of butter-fat, 11,069 lbs.; amount of butter, 13,874 lbs.; cost of food per schedule of prices, 131.085; cost per pound of butter, 7.9+ cents.

### ANOTHER SHORTHORN SALE.

As will be seen by our advertising columns, Mr. John A. Gordon, Ayr, Ont., will sell his herd of Shorthorns on Thursday, March 23rd. The list comprises 17 head—10 females and 7 bulls—of which 5 are calves, the others being from 13 to 20 months old. As Mr. Gordon has lately rented his farm, he is selling his cattle without any special preparation and in ordinary breeding condition, but he claims for them good health and good milking qualities, which we should expect to find, judging from their pedigrees, which trace to early importations of good milking strains with top crosses of Scotch-bred bulls of approved type, among which are sons and grandsons of such famous bulls as imp. Baron Lenton, War Eagle (a Toronto sweepstakes winner), Royal Standard, British Flag, imp. Baron, imp. Reporter, imp. British Statesman, and Hampton Hero. As this sale comes on the day following that of Messrs. Pearson, at Meadowvale, it can readily be taken on the same trip, and as no fancy prices are expected, there will be a chance for bargains, as most of the cows have calves at foot and will be sold without reserve.

### THE PEARSON SALE OF SHORTHORNS.

March 22nd is the date of the dispersion sale of the Valley Home herd of Shorthorns at Meadowvale, C. P. R., 20 miles west of Toronto. The catalogue shows that the cattle are exceptionally well bred, nearly all of them being of popular Scotch families, and only first-class imported bulls, or those directly bred from imported stock, have been used. The young bulls are a very useful lot, such as the country needs, and the yearling and two-year-old heifers are excellent, while the imported bull, British Statesman, would do credit to the best herd in the Dominion, in breeding and individual merit. Meadowvale is easily accessible, being a station on the Orangeville & Teeswater branch of the C. P. R., two miles from Streetsville Junction, and connecting with the G. T. R. at Brampton, seven miles distant.

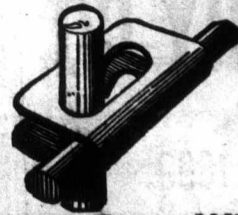
### OUR ILLUSTRATION OF EXPORT BACON HOGS.

The export bacon hogs illustrated in another column are from the Oak Lodge herd of pure-bred Yorkshires, owned by J. E. Brethour, Brantford, Ont., and were the winners of the grand sweepstakes at the Provincial Winter Show at Brantford, December, 1895, as the four best export bacon hogs, any breed or grade, in the show. They are all of one litter and are bred from Mr. Brethour's celebrated "Cinderella" family. Three of them were also shown at the same show, bred by exhibitor, in which they again won first prize. The following week two of these same pigs won the challenge silver cup at the Woodstock Fat Stock Show as best pair export bacon hogs.

### A GOOD DAIRY SHORTHORN COW.

F. Martindale, York, Ont., reports the following test of his Shorthorn cow, Florence Cleeving, land No. =19850=: Two days test—Lbs. of milk, 87; tested by Babcock tester, 12 per cent. fat; per cent. of solids not fat, 4.9; giving 2.5 lbs. more milk testing 4% more fat than the first prize Shorthorn cow at the Provincial dairy test at Brantford last December, and churned from her in seven days 14 lbs. 9 ozs. butter.

## FARMERS WANT IT AND WILL HAVE IT.



We Make It

And want you to sell it.

Write for our illustrated fence catalogue describing it.

## The Frost Wire Fence Co.

WELLAND, ONT., CAN.



WRITE FOR SAMPLE STAY and full particulars Machine \$10

Wholesale Price where we have no Agent. AGENCY FREE. NO DUTY TO PAY

THE BOWEN CABLE STAY FENCE CO. Box No. 58 NORWALK, OHIO, U.S.A.

**\$8 to \$15 MACHINE**

to save your own time of cutting wire fence. Call on your agent for a sample stay. It is 25 inches high, at 25 Cts. per Rod. \$25 buys wire for 100 rods fence. Write for our illustrated catalogue from GAITHER Wire Fence Mach. Co. Box 9, Mt. Sterling, O.

S. CROUCH, Box 12, Ridgeway, Ont., General Agent for Ontario. FRED SMITH, Box 16, Brandon, Man., Agent for Manitoba and N.-W. Territories. No duty on wire. -om

## CYCLONE FENCE CO.

From 27 to 60 inches. From 7 to 11 cables. Build Your Fence Cheap. 100 Rods Per Day. TORONTO, ONT.

## BARRED PLYMOUTH ROCKS (Exclusively), J. K. FELCH'S ESSEX STRAIN.

FARMERS TAKE NOTICE, AND IMPROVE YOUR FLOORS. Eggs from vigorous pure-bred stock with free range, \$1.00 per 15. Incubators supplied at lower rates. From choice breeding pens (as described in March 1st issue), mated by Felch, \$3.00 per 15. (MISS) P. J. COLDWELL, Constance, Huron, Ont.

\$1.00 per Setting. Eggs from the "Ontario" Silver Wyandottes, Barred and White F. Rocks, and Pekin Ducks. A few Bronze Turkey Eggs at 25c. each. JAMES LENTON, Park Farm, Oshawa.

## BARRED PLYMOUTH ROCKS EGGS \$1.00 per setting from select stock. We guarantee satisfaction. E. GEE & SONS, Haldimand Co. FISHERVILLE, ONT.

EGGS FOR HATCHING From Bronze Turkeys, Fowls, and Rouen Ducks, B. F. Rocks, Andalusians, Black Javas, Houdans, B. Leghorns, and Black Spanish. Turkey eggs, 25c. each; others, \$1.50 per setting. W. R. KNIGHT, Bowmanville, Ont.

## IN POULTRY SUPPLIES WE LEAD, OTHERS FOLLOW.

Sole Canadian Agents for the Cyphers Incubator, endorsed by all as the only up-to-date incubator on the market. Endorsed and used by L. G. Jarvis, Agricultural College, Guelph; A. G. Gilbert, Agricultural College, Ottawa, and all leading poultrymen, Bone Mills, Mica Grit, and anything needed in the poultry line. Two 200-egg size Willett's silver medal incubators for sale, taken in part exchange for Cyphers Incubator. Price, \$15 each; \$25 the two. Also, a 240 Meyer's Incubator—price, \$30. C. J. DANIELS, 221 RIVER ST., TORONTO.

## LOTS OF PEOPLE HAVE Hatched 90 to 100 per cent. OF THE FERTILE EGGS IN THE TORONTO INCUBATOR

You can do as well. Write for circulars. Address: T. A. WILLITTS, 514 DUNDAS ST., TORONTO, ONT.

**SHOEMAKER'S BOOK OF POULTRY**

and Almanac for 1896. 100 pages. 100 illustrations of Fowls, Incubators, Breeders, Poultry Houses, etc. Tells how to raise chickens successfully. Their care, diseases and remedies. Diagrams with full descriptions to build poultry houses. All about INCUBATORS, BROODERS and Poultry, with Lowest Prices. Price only 15c. C. C. Shoemaker, Freeport, Ill., U.S.A.

## Boiler

Work into the bush. Cheapest Work Cost.

vanized steel, thor- available for cleaning. and linings are made will not burn out

steel, which heats ly protected against out.

NS, ETC. Width. Depth. Height. 19 40 11 11 x 12 inches. 50 gals. Imp.

ssful Boiler Made in Canada. NG CO., ncouver.

## REDER



IMPLEMENTS

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SONS

# WINONA NURSERY CO.

Offers for Spring of 1899.

A full line of stock, both fruit and ornamental, at very moderate prices. No agents' commission to pay.

Send for price list and catalogue. Dealers will find it to their interest to correspond at once with

**J. W. SMITH,**  
MANAGER.

Winona, Ontario.

## NURSERY STOCK IN VERITY!

Our new catalogue is our agent, giving descriptions, PRICES, and how to plant fruit, ornamentals, shrubs, ROSES, Clematis, evergreens and small fruits. All well assorted, clean and handsome at the Central Nursery. Shall we send you one—nineteenth year Also choice Seed Potatoes.

**A. G. HULL & SON,**  
St. Catharines, Ont.

ESTABLISHED 1866.

# GEORGE KEITH

for sure-growing

# SEEDS

Finest Quality. Send for Catalogue.  
124 KING ST. E., TORONTO.

In buying seeds "economy is extravagance," because the cost of cultivation wasted on inferior seeds always largely exceeds the original cost of the best seeds to be had. The best is always the cheapest. Pay a trifle more for

## FERRY'S SEEDS

and always get your money's worth. Five cents per paper everywhere. Always the best. Seed Annual free. H. F. FERRY & CO., Windsor, Ont.

## Reliable Seeds

FOR THE FARM AND GARDEN.

Our stock includes all that is best in GARDEN AND GRASSES, FIELD ROOTS, CLOVERS, SEED GRAIN, FLOWER SEEDS, AND FLOWERING PLANTS.

Illustrated Catalogues mailed free on application.

**William Ewing & Co.,**  
Seed Merchants, 142 McGill Street, MONTREAL, QUE.

## FOR SALE!

A quantity of Herrison's Bearded Spring Wheat, the most productive and one of the nine selected by the Dominion Millers' Association out of fifty-seven varieties as first-class milling wheats. Free from all four seeds.

**JAMES MARTIN, Renfrew, Ont.**

**STRAWBERRY PLANTS** Fifty each of 5 leading varieties—early and late \$1.00. Raspberries, etc. N. E. MALLORY, GUILDS, ONT.

## BIG MONEY FOR AGENTS THE STAR RIVETER

For MENDING HARNESS, BELTING, etc. Indispensable to Farmers, Livermen and Threshermen. STAR RIVETER complete, with 50 tubular rivets, \$1.00. Best selling article ever introduced. Agents write for special prices and territory.

ENTERPRISE MAN'G CO., TORONTO, ONT.

### GOSSIP.

Mr. Israel Groff, Alma, Ont., writes that he has sold all his bulls at good, paying prices, as well as a large number of Berkshire pigs.

The Hackney stallion, Courier, so successfully shown by Graham Bros., Claremont, Ont., at Chicago, Toronto, and other large shows, was sold some months ago to a Quebec syndicate, and has again changed ownership by returning to his first American home in the noted stud of Dr. M. Seward Webb.

F. J. Gallenough, Thornhill, Ont., writes: "Please discontinue advertisement of my Thoroughbred stallion, Monotony, as I sold him soon after the advertisement appeared once in your paper to Messrs. Geo. Robinson & Bro., of Richmond Hill. These gentlemen have bred seven colts from Monotony, and were glad to notice a chance to buy him."

Alborn Nauman, Fisherville, Ont., writes: "My Berkshires are doing exceedingly well. Have sold a number lately and have enquiries for others, which I expect to lead to sales soon. Have just received an order from Mr. Shirley, Houlton, Maine, U. S., for a young boar. One of my sows, Marion of Snelgrove, bred by J. G. Snelgrove, Royal Signal, 3522, bred by J. E. Darby, Shrewsbury, England, has a fine litter of good lengthy pigs that soon will be ready to ship."

Edgar Silcox, Shedden, Ont., writes: "I have sold out of Jersey bulls, all but one calf. This fellow is well bred, from my best cow, and sired by Sir Briar of Brampton, my stock bull; and he is good enough for any place, and will sell cheap for quality. My Wyandottes are doing splendid, laying right through the extreme cold weather in ordinary; their pen was down to zero. I have had so many enquiries for birds, will answer here: have none for sale, but will sell a limited number of guaranteed eggs in season."

Mr. C. A. Archibald, Truro, N. S., while in Ontario recently, purchased among other stock from Wm. Oliver, of Avonbank, the yearling Shorthorn bull, Heir of Baron Cruickshank, by Duke of Waddeburn—23862—, dam Missie of Neidpath 18th—24928—. This is an exceedingly well-bred young bull, and is said to be as good individually as his breeding would indicate. His sire was by imp. Baron Cruickshank, a bull of high-class character, and his dam was by Indian Prince, a son of imp. Indian Chief and imp. Nonpareil of Kinellar. The Missie family was one of the favorite tribes in the Upper Mill herd of Mr. W. S. Marr, and has produced many prizewinners, including Marango, the champion bull at Royal Show in 1898.

A. J. Watson, Castlederg, Ont., when instructing us to change his advertisement, writes as follows: "Shorthorns at Ashton Frontview are now in their winter form, and never before looked so well. Have three extra fine young bulls for sale now. They are fit to head any herd. Sales since I last wrote you are: 2 rams and 9 ewes to Hows & Todd, North Yam Hill, Oregon; 1 ram and 3 ewes to H. H. Bartons, Council Bluffs, Iowa; 1 ram and 3 ewes to A. S. Martin, Sutherland, Iowa; 131 rams and 30 ewes to Frank Reavey, Newton, Iowa; 1 ram to George Green, Fairview, Ont.; 1 ram to J. W. Deacon, Lloydstown, Ont.; 1 sow to George Laird, Guelph, Ont.; 2 sows to Parkinson Bros., Eramosa, Ont.; 2 sows and 1 boar to Robert Moody, Guelph, Ont.; also 2 heifers to Edward Martin, Beeton, Ont."

Mr. J. A. Caskey, Madoc, Ont., writes us regarding the Holstein bull, Korndyke Queen De Kol's Butterboy, which he advertises in this issue, as follows: "He was dropped on July 15, 1898, and is an exceedingly large, straight and thrifty young bull, quite fit for service any time now to a limited number of cows. His dam, Korndyke Queen DeKol, has for a sire Manor DeKol, whose dam, Netherland Hengerveld, has an official butter record of 26 lbs. 10.98 oz. butter in one week, which is the largest official butter record to date. For a sire this bull has a son of the great cow, DeKol 2nd, with an official butter record of 26.57 lbs. in one week. Holsteins of the Korndyke strain are especially noted for their high test of butter-fat. Korndyke Queen, a sister to the dam, having an official butter record of 23 lb. 7.76 oz. in one week, and 51.81 lbs. milk in 7 days. So highly do Messrs. Stevens & Sons prize the dam of this young bull that they bought her back from me at a very long price. With such breeding as this, the young bull, Korndyke Queen DeKol's Butter Boy, stands second to very few, if to any, on the North American continent to-day."

### AN IMPORTANT SHIPMENT OF SHORTHORNS.

Mr. J. C. Mills, Preston, Minnesota, has recently visited Ontario and made purchase of a selection of high-class Shorthorns from several of the leading herds. The consignment comprises the following from the herd of H. Cargill & Son, Cargill: The four-year-old cow, Myrtle 4th, by imp. Saladin (71546), a Collynie-bred bull, dam imp. Myrtle 3rd, and her roan heifer calf by the imp. Kinellar-bred Royal Member; the two-year-old heifer, Rantin Rose, by imp. Rantin Robin, bred at Collynie, dam Rosa Fame, by imp. Indian Chief, grand-dam imp. Rosalind, and her red heifer calf; the five-year-old Ury Princess 3rd, by imp. Saladin, dam Ury Princess, by imp. Albert Victor, grand-dam Ury Queen, imp. by Gravesend. From the herd of W. D. Flatt, Hamilton, was drawn the grand five-year-old cow, Butterine, by Conqueror, son of imp. Vensgarth, and Coquette, a daughter of imp. Baron Surmise and imp. Cornflower, bred by Mr. Cruickshank. The dam of Butterine is Northern Beauty, by imp. Sussex, and out of imp. Northern Bell, bred by E. Cruickshank. The fine roan cow, 6th Missie of Neidpath, is another from the same herd. She was sired by imp. Prince Royal (66349), and out of imp. Missie 81st, one of the famous Upper Mill family of that name, which has produced many prizewinning bulls, including Mountaineer, Miranda, and Marango, the champion of the Royal Show in 1898. A very promising six-weeks roan bull calf goes with this cow, and also an imported heifer calf, daughter of imp. Red Rose, and sired by Clan Alpine, bred by A. Cruickshank. From the herd of Capt. T. E. Robson, Iderton, Mr. Mills selected Mina of Denfield 2nd, a capital two-year-old heifer by Jocelyn, son of the imp. Cruickshank Victoria bull Vice Consul, and of Gipsy Lady, by imp. Wind-or, grand-dam imp. Gipsy Queen. The dam of Jocelyn was imp. Julia, of the Kinellar 3rd family. Mr. Mills is to be congratulated on his selection of representative animals of superior individual merit and of approved breeding.

# RENNIE'S NEW OATS. NEW SUGAR BEET.

"Danish White."

Forty Stalks produced from one grain; 769 grains from a single head.

The above actual Yield would seem incredible if not authenticated by the testimony of eye-witnesses and the sworn statements of well-known farmers. Never before has such an enormous yield been known, while our claims for productiveness, plump, heavy grain, with thin, bright yellow and close-fitting shells, wonderful stooling qualities, and adaptability to great diversities of soil and climate, have been maintained.

Very productive, strong, stiff straw, growing in height from 4 to 5 feet; plump, thin-hulled, bright yellow grain, often three grains in a spikelet and evenly distributed over the entire head. The stalks do not lodge nor the grain fall off in stormy weather.

Price—Per lb., 20c.; 4 lbs., 50c., post-paid. Peck, 35c.; bush., \$1.; 10 bush., or over, at 95c.

(COTTON BAGS, holding 2½ bushels—om-15c. EACH EXTRA.)

Address all orders—**WM. RENNIE, TORONTO.**

"Danish Improved" Red Top.

For Feeding to Milch Cows, Noted for its Wonderful Butter Producing Qualities, of Fine Shape, Splendid Color, a Very Heavy Cropper, Easily Harvested.

This New Sugar Beet comes from Denmark, where it is used exclusively by the world's famous DAIRYMEN. It is distinguished by its great productiveness.

For fattening purposes and for feeding to milch cows, in cases where a liberal flow of rich creamy milk is the main object (for butter production), this variety of root, without exception, is the best in the world. The roots are nice and clean, of fine shape and of splendid color, and growing considerably above ground, are more easily harvested than any other Sugar Beet.

Sold only in Sealed Packets—1-4 lb., 20c.; 1-2 lb., 30c.; 1 lb., 50c.; 5 lbs., \$2.25, post-paid.

Caution! We control this Novelty, and sell it only direct to farmers to avoid fraud.



JAPANESE MORNING GLORY.

FREE When ordering, state where you saw this offer, and we will send a packet of Giant Pansies and our Handsome Catalogue free.

Try Up-to-Date Flowers and see the difference.

REMEMBER our Famous Seeds are sold by leading dealers. Refuse cheap! Seeds and substitutes, the small saving in cost will not warrant the risk of crop. "Good Seeds" are surest and pay best. Every packet bears our name.

# GOOD SEEDS

WHEN buying Seeds do you consider the difference between "Good Seeds" and Seeds that are sold at bargain prices? You prize a well-stocked, carefully-attended garden, rather than the one that is neglected. Here is just the difference between the value of carefully-grown Seeds and Seeds that are carelessly and cheaply grown; which do you think the best for you to grow? Every careful planter considers the high character of the Seeds he uses, this is the class of trade we supply, and that more may prove the fact that Good Seeds Pay Best we offer the following Trial Collection. Every packet contains full quantity.

## STEELE, BRIGGS' Good Vegetables

Any seven varieties for 25 cents; the 12 varieties for 40 cents.

Cabbage, Succession	Blood Beet, New
Carrot, Chantenay	Half Long
Mk. Melon, Exquisite	Water Melon,
Onion, Giant Prizek'r	Sweet Heart
Parsnip, Guernsey	Peas, Dw. Excelsior
Radish, Non Plus Ul't	Lettuce, G'd Rapids
Cucumber, Evergreen	Tomato, Early Ruby

NEW SHOWY FLOWERS  
5 packets (one each full size) for 25 cents (regular price 10 cents each).

New Branching Aster  
Globe of Gold Sunflower  
Japanese Morning Glory  
Golden Mignonette  
Snowball Poppy.

The Steele, Briggs Seed Co., Limited, TORONTO, ONT.

# GOOD SEEDS ARE THE CHEAPEST.

Before the Public Nearly 50 Years.

## SUGAR BEET.

Danish Improved Sugar Beet.—This variety is distinguished by its great productiveness; in rich, deep soil in good cultivation nearly approaching the standard varieties of Mangel-wurzels in yield of bulk, in connection with a high percentage of sugar. For fattening purposes, and for feeding to milch cows, in cases where a liberal flow of rich, creamy milk is the main object (for butter production), this variety is especially to be recommended. It is one of the cleanest and best beets for cattle feeding that we have. Price—oz., 10c.; 1 lb., 15c.; lb., 50c.; 5 lbs., \$2.25; 10 lbs., \$4.00. Post-paid.

NOTE.—The Danish Improved Sugar Beet we offer is the genuine variety, and the stock of it is not controlled by any one seed house, as is claimed.

FREE!

WITH every order, 1 pkt. of our grand novelty, the Chinese Lantern Plant.

## NEW BLACK OATS.

"Black Mesdag."—The Black Mesdag Oat, which is now offered for the first time, was imported from France in the spring of '97, and has been thoroughly tested the past two seasons. We believe it is the earliest black oat in cultivation, having ripened the past season in 90 days, and early oats always pay and pay big, because they are the first in the market. The straw is strong and stiff, and so far has never shown the slightest signs of rust. It is the hardiest and healthiest variety grown. So strong is it that protracted droughts, heavy rains, have no effect upon its growth. In these years of changeable weather, we need something we can always count on, always sure of. It is one of the greatest yielding oats on record. At the Central Experimental Farm, Ottawa, it yielded at the rate of 80 bushels per acre this past season. It has a large branching head filled with plump grain, and is one of the heaviest black oats in the market. Lb., 30c.; 3 lbs., 75c., post-paid. By express or freight: Peck, 50c.; bush, \$1.75; 2 bush., \$3.; 5 bush., \$7.; 10 bush., \$13.; cotton bags included.

ADDRESS ALL ORDERS:

**J. A. SIMMERS, TORONTO, ONT.**

POULTRY. L. and D. Brahmas, B. and W. Black Minorcas, Indian Game, and Red Caps. Young stock and eggs from above breeds. Eggs, \$1.25 for 13; \$2 for 26. Satisfaction guaranteed.  
JACOB B. SNIDER, German Mills.

EGGS FOR HATCHING. From Barred P. Rocks, Silver Wyandottes, S. C. White Leghorns, at \$1 per 13. Pekin and Rouen ducks, at \$1 per 11. Every egg is guaranteed to arrive safely. Try our stock.  
W. R. GRAHAM, BAYSIDE, ONT.



# RELIABLE SEEDS

To introduce our reliable Seeds to ADVOCATE readers, we make the following liberal offer:

seeds in them to sell at a reduced price, but are full-sized packets, same as we sell over our own retail counter at 5c. each. Remit us the amount (\$1), and we will guarantee safe arrival.

## \$1.60—VEGETABLE AND FLOWER COLLECTION—FOR \$1.00

- |  |                                       |  |
|--|---------------------------------------|--|
| <b>VEGETABLE SEEDS.</b>                      | 1 Pkt. Onion, Large Red Wethersfield. | 1 Pkt. Turnip, Golden Stone.             |
| 1 Pkt. Beet, Early Turnip.                   | 1 " Parsnip, Imp. Hollow Crowned.     | 1 " each Summer Savory, Sage, Thyme.     |
| 1 " Cabbage, Charleston Wakefield, early.    | 1 " Onion, Yellow Globe Danvers.      | 1 pint Corn, White Cory Sweet.           |
| 1 " Cabbage, Lupton or Imp. Vandergaw, late. | 1 " Pepper, Long Red Cayenne.         | 1 " Beans, Golden-eyed Wax.              |
| 1 " Carrot, Long Red Coreless.               | 1 " Pumpkin, Japanese Pie.            | 1 " Peas, Premium Gem.                   |
| 1 " Cauliflower, Extra Early Paris.          | 1 " Parsley, Taber's Exquisite.       |  |
| 1 " Cucumber, Pearce's Imp. Long Green.      | 1 " Radish, Scarlet Turnip.           | <b>FLOWER SEEDS.</b>                     |
| 1 " Cucumber, Pickling.                      | 1 " Radish, Long Brightest Scarlet.   | 1 Pkt. Balsam, Best Double Mixed.        |
| 1 " Celery, Giant Golden Heart.              | 1 " Salsify or Vegetable Oyster.      | 1 " Aster, all varieties.                |
| 1 " Lettuce, Imp. Hanson.                    | 1 " Spinach, Giant Thick-Leaved.      | 1 " Mignonette, Large Flowering.         |
| 1 " Muskmelon, Burpee's Melrose.             | 1 " Squash, Essex Hybrid.             | 1 " Stock, Dwarf German Ten-Week, mixed. |
| 1 " Watermelon, The Fordhook.                | 1 " Tomato, Pearce's Princess.        | 1 " Phlox, Grandiflora Mixed.            |
| 1 " Vine Peach.                              |                                       | 1 " Nest-Egg Gourds.                     |

Above collection contains 29 pkts. Vegetable Seeds, 6 pkts. Flower Seeds, 1 pt. Sweet Corn, 1 pt. Wax Beans, 1 pt. Garden Peas; sent to any address, post-paid.

**BEST VALUE EVER OFFERED**

**COUPON**  
The purchaser of the above collection can, by cutting out this coupon and sending with order, secure a packet of either "Giant Idaho Coffee Pea" or our "Grandest Mixture of Poppies" — mark an X opposite or over the one you want, and mail this with order.

### JOHN S. PEARCE & CO., LONDON, ONT.

Seedsman to the Canadian People.



**SEND FOR ILLUSTRATED PRICE LIST.**

We Sell **Everything** You Eat, Wear, or Use.

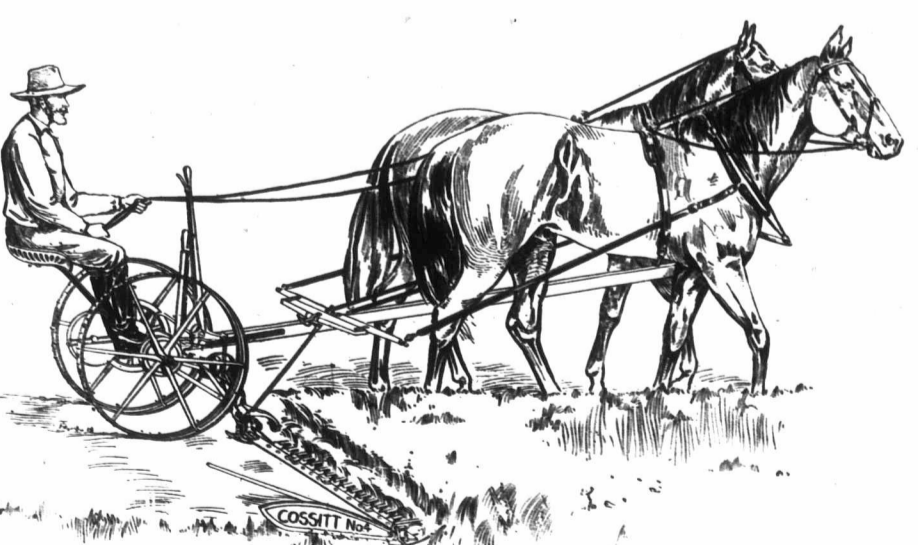
- TREE SPRAYERS** (Like cut), made of the best material, only \$2.50 each.
- BRACE and 6 Best Auger Bits**, only \$1.50. Post-paid anywhere in the Dominion for \$2.00.
- BLUESTONE** for spraying trees, 8c. per pound.
- SAP BUCKETS** holding ten quarts, only 8c. each.
- SAP SPILES** the best, 90c. per 100.
- WEIGH SCALES** to weigh 1,200, \$16.00 each.

We pay freight on all orders to the value of \$10 and upwards, if in our freight limits in Ontario.

## WILKINS & CO., TORONTO.

166 and 168 King Street East.

## The COSSITT BROS. CO., Ltd.



**COSSITT'S NO. 4 MOWER**  
That has made itself famous throughout Canada, complete with Patent Roller Bearings and Foot Lift. Customers write pronouncing it the strongest, simplest, and the most free-cutting machine on the market. Send for Catalogue.

**HEAD OFFICE AND WORKS: on BROCKVILLE, ONT.**

**GOSSIP.**

Alex. Hume & Co., Menie, Ont., breeders of Ayrshire cattle and Yorkshire swine, in ordering change of ad. write: "We are sold out of bulls old enough for service, but have several choice young calves of both sexes, and more to follow, besides females of different ages. We have several litters of February pigs, which are doing well, also boars fit for service, and young sows just bred."

R. J. & A. Laurie, Wolverton, Ont., in sending a change of ad., write: "Our stock of Tamworths and poultry are doing fine, and the pigs which we are offering are the best we ever had. We have one boar fit for service yet, which is 14 months old, and a grand stock hog; he won 2nd prize at the Southern Fair, Brantford, and other shows, in strong competition. We also have a grand lot of young pigs ready to ship, sired by Sandy 3rd, winner of 2nd prize in Toronto, 1898, in a strong class, and others by Oak Hill Toby, and out of prizewinning sows. And our poultry yards contain some of the best blood obtainable, of English and American blood, and also all our prizewinners at the following shows: Galt, Brantford, Guelph, Stratford, Woodstock, and other shows. Besides the varieties mentioned in our ad., we can supply a limited number of eggs from R. B. R. Game and Red Pile Games, also Buff Cochins Bantams, Brown-Red and Silver Duckwing Game Bantams."

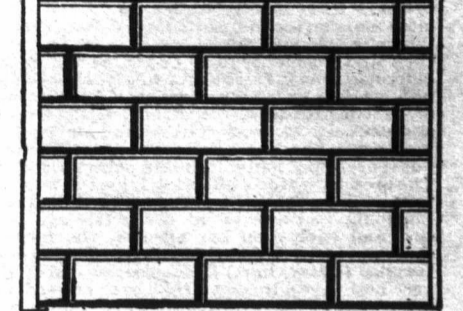
WM. STEWART & SONS' AYRSHIRES AND POULTRY.

The long and favorably known herd of Ayrshire cattle of Messrs. W. Stewart & Sons, whose farm is near Menie, Ont., was found quite up to former conditions on the occasion of our visit at the farm in January. Over 30 animals, of all ages, now occupy the newly arranged and comfortable stables, and as nearly two-thirds of that number are expected to drop calves before fall, the herd will be largely increased as the summer advances. The important place which this herd has commanded during its existence is no doubt largely due to the fact of the superiority of the sires used, a feature carefully and wisely considered by Mr. Stewart, and we have only to mention the names of White Prince 208, Dainty Davey, Douglas of Loudoun Hill, Tam Glen 2nd, Highland Chief, Dainty Lad of Elm Shade, Glencairn of Burnside, and White Chief of St. Annes, to show the character of breeding followed, while at present three of the most important (Glencairn, White Chief, and Douglas of Loudoun) are all within access of the herd. Among the females may be found such cows as Jean Armour 2058, by Royal Chief (imp.) 75, and out of imported Sprightly 1210 (5509), in the prime of life as well as form. Her prize earnings have not by any means been confined to the highest honors in her class at the big fairs, but upon several occasions she was placed at the head of the sweepstake competition. Her quality does not end here, for she has proven herself capable of producing prizewinners. Her daughter, Lady Ottawa 3001, by Sir Donald 1718, a year ago was not defeated in the ring, and stood high in the money prizes in 1898, in strong competition, winning 1st at London, so that it is simply a matter of opinion as to where she rightly belongs. She is safely in calf again. Red Rose 3rd 2384, by Roving Robin 1287, and out of imported Red Rose 1208, has not only been a prizewinner herself, but her son was placed 1st over a class of 28 in Toronto in '98. Her superior excellence, coupled with the high dairy qualities of the Red Rose family, makes this a cow worthy of the admiration of her owners. Lady Aberdeen 3288, Moss Rose 2695, Lady Mitchell, Little Queen 2nd, and Jess the Flower of Dumblane, have all demonstrated their ability to win in strong competition, the former being a full sister to the great show cow and winner at the World's Fair, Ayrshire Maggie, whose unbroken record did much for the country as well as the breed. Among the young bulls we saw Wandering Willie, the 15-month-old son of White Prince, Admiral Dewey, and Hover A. Blink, the get of Dainty Lad, and one a few months younger, a promising son of Jean Armour, with all the excellence necessary as to conformation, backed by the showing record of his ancestry to qualify him to head any pure-bred herd.

Among the poultry we saw Bronze turkeys, Aylesbury and Rouen ducks, L. and D. Brahmas, B. Cochins, Silver and Colored Dorkings, Golden Wyandottes, Blk. Minorcas, Silver Combed, Brown, Black and White Leghorns, Rose Combed W. and B. Leghorns, Indian Games, Golden Pencilled Hamburgs, Silver Spangled Hamburgs, White Crested Blk. Polish, Golden and Silver Polish, and Houdans, all of which have taken prominent positions among the money-winners at the leading shows, and established an enjoyable reputation for the firm.

## Sheet Steel Pressed Brick

Can't be equalled as a durable, practical, economical covering for buildings.



It gives a protection that is fire and lightning proof. Keeps out the cold in winter and the heat in summer. Is uniformly handsome in appearance. Can be quickly and easily applied, and costs very little. You will find it most desirable for use in new buildings or for improving old ones. Write for full particulars.

**METALLIC ROOFING CO., LIMITED,**  
1185 KING ST., W. - on TORONTO.

## DO YOU REQUIRE ROOFING?

WE HAVE THE LATEST IN **METAL SHINGLES**



— OUR —  
**Patent "Safe Lock" Shingles**

Interlock each other on all four sides, leaving no edges or laps to open up. They cost no more than wooden shingles, are practically FIRE and LIGHTNING proof, give a building a handsome appearance, and are absolutely rain and storm proof. Can be put on easily by anyone. We send free samples and catalogue to intending purchasers.

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

## EVERY MERCHANT AND FARMER SHOULD OWN A PARSELL TRUCK SCALE

Combining a first-class warehouse truck with a fine 300 Canadian Standard Scale. It has "caught on" splendidly and is going like "hot cakes."

**WILL SAVE ITS COST IN NO TIME.**



For descriptive circular and full information, Address: **THE ST. MARY'S TRUCK SCALE CO., ST. MARY'S, ONT.**

29 of our Students have recently taken good situations; 4 positions remain unfilled.

**CENTRAL Business College**  
STRATFORD, ONTARIO,  
gives the "best" in the line of business or shorthand education. In fair competition our graduates are nearly always chosen, while others are turned aside. Enter now. Circulars free.

— on **W. J. ELLIOTT, PRINCIPAL.**

## WANTED!

Experienced farmer with wife on a farm near London. Must be industrious and good managers. Address: **FARMER'S ADVOCATE, LONDON, ONT.**

**GOSSIP.**

In writing to advertisers, mention the "Farmer's Advocate"

**W. F. TAYLOR'S AYRSHIRES.**

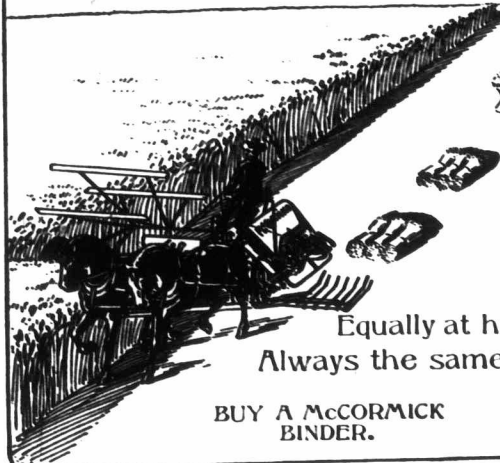
Upon our visit at Mr. W. F. Taylor's farm near Wellman's Corners, Ont. we found Mr. Taylor displaying his usual enthusiasm in the breeding and care of his Ayrshires, and the herd were in their usual form, if not rather better. In a roomy, well-lighted, well-ventilated and convenient stable we were invited to inspect a splendid row of young cows, carrying their first, second or third crops, as well as the older matrons in full career, with their splendid milk vessels and roomy bodies, indicating vigorous constitutions. In all fifteen cows are approaching the parturient season, and as each year's crop has developed, not only satisfactory, but sensational individuals are being produced. The present season's offspring is looked forward to with interest, as the stock bull, Douglas of Loudoun, has arrived at the prime age as a sire, and each crop has excelled the former, showing more vigor, if possible. The dam of Douglas (Daisy, imp.) is considered one of the very best Ayrshire cows that ever crossed the ocean, while his sire, Royal (Chief imp.), was classed among the best of sires, and as the descendants of the noted Red Rose predominate, little need be apprehended as to the dairying qualities of the offspring from such mating. Of the Red Rose family Mr. Taylor informed us that in Prince Edward county, where they were formerly owned, they were regarded as the very best dairy strain in the country, with uniform adders of great capacity, which were furnished with large, well-formed teats, particularly well set apart, qualities which are quickly recognized in the present herd under consideration. While Mr. Taylor has not bred to suit any whimsical fancy in color, fineness, etc., the up-to-date markings, with the qualities necessary to make them desirable, are unquestionably on the advance, due no doubt to the fact of his having access to many of the leading sires of the day, and in answer to our enquiries we were informed that such animals as White Prince, Prince Leopold, Earl of Percy, Glencairn of Burnside, etc., had been employed. Forming part of the herd and closely approaching a serviceable age, we were shown half a dozen splendid young bulls, two of which were out of daughters of White Prince (White Princess and Princess Louise), a pair of splendid young cows of a high order of usefulness and possessing fine dairying conformation. In looking over the bunch it occurred to us that a sire could be selected to suit the most fastidious, and that any of them should be qualified to head a pure-bred herd where breeding, conformation and constitution are regarded as essentials. Watch Mr. Taylor's advertisement.

**W. F. STEPHEN'S AYRSHIRES.**

Mr. W. F. Stephen's farm at Trout River, Quebec, was found again, on a recent visit, the scene of very active dairying operations, and the stock in fine producing form. As Mr. Stephen carries a large cream contract with a Montreal house, productiveness becomes of the first consideration with him. He has been breeding his cattle with this in view for many generations, and to this end much attention has been given to the selection of the sires, none but the best individuals with good milk records behind them having been employed. This course, with equal good care in the management, has built up a splendid herd of cows and young things, of which any breeder might well be proud. The present herd taxes the capacity of the extensive accommodations already provided, and we think we ever heard Mr. Stephen express himself in such a way that we may reasonably look for larger and finer farm buildings in the near future. Among the sires most recently employed we might mention the royally bred Uncle Sam of Trout River 6974, by Baron Renfrew of Manschurries, and out of the famous Nellie Osborne, receiving his name from the country in which he was born. (World's Fair, Chicago). Uncle Sam left some exceedingly promising young stuff on the farm, the eldest of which are now coming into the tracks, the beautifully formed young bull Klondyke 8679, by Victor of Star Hill 7788, and out of Sibel 3rd 4657, was purchased to head the herd, and of him Mr. Boden speaks in the highest terms as likely to prove a sire of high-class stock. A great many pedigrees of females were gone over and the animals inspected, and we could not but admire their extreme uniformity in size and quality, all possessing vessels which stamp them as producers of the highest order. Many fine daughters of Allan Gordon 5211 are now in their prime. Among them may be mentioned such cows as Minnie of Brook Hill 7465, a 6-year-old, deep bodied, strongly constructed red and white cow with a splendid udder. Queen Bess of Brook Hill 7469 is another exceptionally smooth, yet rugged, business-looking cow, and in calf to Uncle Sam. Irey of Brook Hill 7473 has just passed her fifth year, and lately dropped a beautiful straight heifer calf to Uncle Sam, a year of Brook Hill 7475 and Leslie of Brook Hill are a pair of splendid young cows. The former cow's style should attract attention in any company, while the latter has distinguished herself by winning many good prizes in hot competition. The young things of 3 years and under are credited to Uncle Sam, and they are a splendid lot, being very uniform in size, color and conformation. The first one to come into milk possesses good size and carries a well-formed udder, with other strong dairy points. Other Uncle Sam females are equally deserving of notice, but the list is too long to dwell on their individual merit. The daughters of Queen Bess and Minnie, of 1 and 2 years old, are grand specimens of the breed, and go to show what can be accomplished by persistently pursuing one's course with care and good judgment. Mr. Stephen's success in the cream business, is completely due to the productiveness of the great majority of his cows. This is not all, as he has been successful as well as quantity, as of the best of the breed, and has been breeding with one object in view, and one may find at Trout River, today, a herd of uniform Ayrshires, having the best of constitution, and without a single individual of best of adders, with long and well developed

**Astonishing The Nations!**

That has always been the way with the McCormick. Always New! Always in Front! Always Leading! The most Modern of all Machines!



Equally at home in Oriental wheat fields and American prairie lands. Always the same. Always efficient.

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BUY A McCORMICK MOWER.

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BUY A McCORMICK CORN HARVESTER.

BUY A McCORMICK REAPER.

BUY A McCORMICK RAKE.

"Chainless"

"Perfect"

"Garden City"

"Dominion"



WELLAND VALE MFG. CO., Limited,

ST. CATHARINES, ONT.

**THE ASHES OF WHEAT ARE 76% PHOSPHATES**

By far the greatest portion of which is Phosphate of Magnesia.

**ALBERTS' THOMAS-PHOSPHATE POWDER**

Supplies Phosphate of Magnesia as well as Phosphate of Lime and of Iron. Clovers and turnips should also receive plenty of phosphate

**WALLACE & FRASER,**

Canada Life Building, ST. JOHN, N. B. TORONTO, ONT.



RANEY, SELBY & COMPANY, BOX 620, KINGSTON, ONTARIO.

ONTARIO FARMERS' FAVORITE COSTS NO MORE THAN THE OTHER, AND IT'S VASTLY BETTER. WON 12 GOLD MEDALS FOR ITS SUPERIORITY IN STANDING SEVERE TESTS OF WEAR, CLIMATE CHANGES, AND SAVING OVER OTHERS. JUST ASK YOUR DEALER FOR

**ROGERS' "PEERLESS" MACHINE**

It's worth remembering. QUEEN CITY OIL CO., Limited, TORONTO. SAMUEL ROGERS, President.

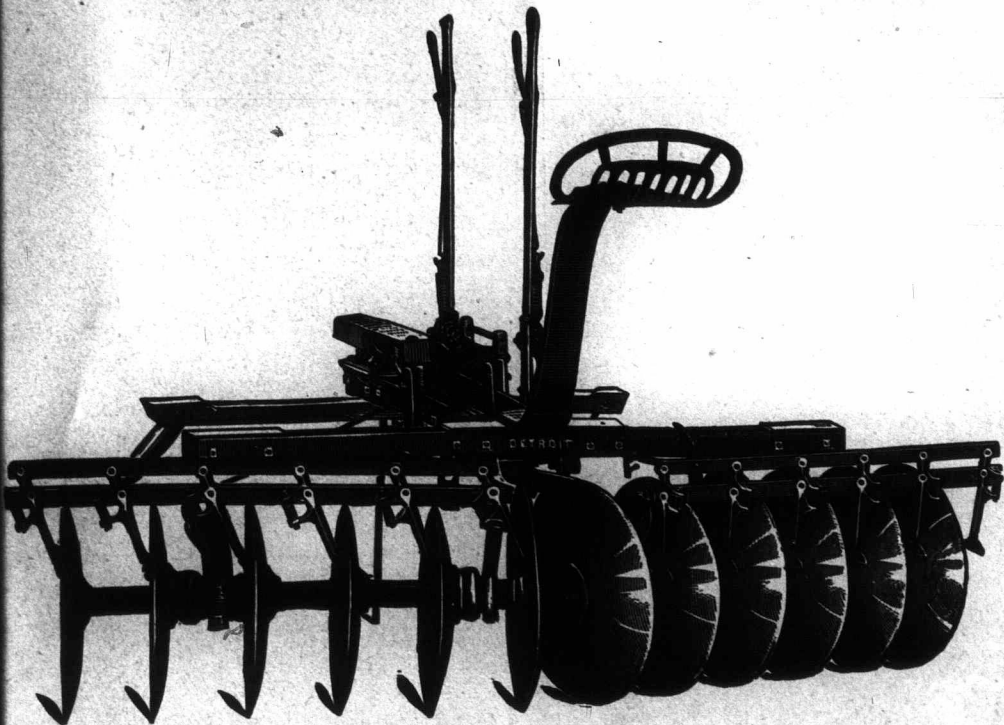
**MARK YOU** your live stock of whatever kind with the thoroughly reliable, rust proof, non-corroding, easily read...

**ALUMINUM "STAY THERE" EAR MARKERS** Can't pull out, rust out or tear out. Name, address and consecutive numbers on each tag. Free sample, catalog, etc. WILCOX & HARVEY MFG. CO., 201 Lake St. CHICAGO, ILL.

**CURED TO STAY CURED ASTHMA** Dr. HAYES, Buffalo, N. Y.

THOMAS INGRAM, Guelph, is prepared to conduct purchased auction sales in any part of the Province; 20 years' experience. Can refer to such breeders as John I. Hobson and Alfred Stone, Guelph; Jas. Hunter, Alton; and Mossom Boyd, Bobcaygeon.

**FROST & WOOD CO. (Limited),**  
 HEAD OFFICE AND WORKS:  
**SMITH'S FALLS, - ONTARIO.**



**THE DETROIT DISK HARROW.**

Made in different sizes: 16, 18 and 20 inch plates; double steel frame; adjustable scrapers; light draft; cuts an even depth. No weight on horses' necks. Patented device for changing pole for two, three or four horses without removing any bolts. This is the most popular and perfect working harrow in America. Call at one of our agencies and see sample. Order early. Stock selling fast.

Toronto Branch: 77 Jarvis St. Winnipeg Branch: Market Square.

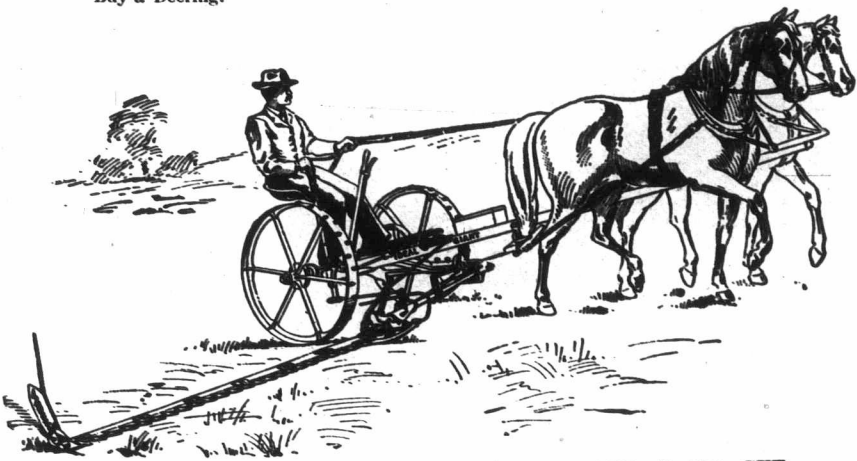
...THE...

**MACHINES**

.. THAT MADE ..

**AMERICA FAMOUS!**

IF YOU are a good farmer you are competent to judge between a good harvesting machine and a bad one. Buy a machine that you know is trustworthy. It's better to be sure than sorry. Buy a Deering.



DEERING IDEAL GIANT MOWER, 6 FT. AND 7 FT. CUT.

EVERY MOWER with the name "Deering Ideal" on it will start in any crop without backing the team. Other mowers will not. The Deering mower runs lighter and will last longer than any other.

**Deering Harvesting Co.**

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

Permanent Branch House:  
**LONDON, ONT.**

**Hackney Horse Breeders' Annual Meeting.**

The seventh annual meeting of the Hackney Horse Society was held on February 23rd in the Albion Hotel, Toronto. The chair was occupied by Mr. Robert Beith, M. F., and the other members of the Society present were: Messrs. R. Davies, Dr. A. Smith, John Macdonald, H. N. Crossley, Geo. Pepper, Robert Bond, John Holderness, O. Sorby, P. Pollard, and H. Wade, Secretary.

The President, in his opening remarks, mentioned that the Hackney Horse in Canada had been a great success, and horse dealers had wanted a showy harness horse would pay a longer price for one with a cross of Hackney on either a Thoroughbred or Standard-bred mare, thus making an ideal for a striking brougham horse, or for a cob. Farmers had been slow to appreciate this, but were now realizing the fact that Hackney horses brought long prices.

Mr. H. Wade, the Secretary, read the annual report, showing that 32 pedigrees of Hackneys had been recorded during the past year, and that 16 gentlemen had paid their fees to the Society. After paying \$75 for premiums and other expenses, the Society had \$165.51 in the treasury.

The list of officers elected was as follows: President, H. N. Crossley, Toronto; 1st Vice-President, John Macdonald, Toronto; 2nd Vice-President, Robert Graham, Claremont. Vice-Presidents for the Provinces—Ontario, A. G. Ramsay, Hamilton; Quebec, James A. Cochran, Hillbush; Alberta, A. Macdonald, Calgary, Alta.; Manitoba, Mr. McMillan, Brandon; New Brunswick, J. R. Frink, St. John, N. B. Directors—Robert Davies, Toronto; Robert Miller, Stouffville; Robert Beith, M. P., Bowmanville; Robert Bond, Toronto; Dr. Andrew Smith, Toronto; O. Sorby, Guelph; John Holderness, Toronto; Geo. Pepper, Toronto; D. B. Simpson, Bowmanville. Secretary-Treasurer, H. Wade, Toronto. Delegate to Industrial Exhibition, Henry Wade, Toronto; delegate to the Western Fair, London, Adam Beck, London; A. G. Bowker, Woodstock; delegate to Ottawa, Robt. Beith, M. P., Bowmanville; delegate to Montreal, Jas. A. Cochran, Hillbush; Que. Delegates to the Horse Breeders' Association: Robert Beith, M. P., Bowmanville; John Macdonald, Toronto. Auditor, C. F. Complin, London.

Silver medals were accepted from the English Hackney Society for Canadian-bred stock. The sum of \$25 was voted to the Canadian Spring Horse Society, a very fine Hackney stallion of any age, and \$25 for the best mare of any age, sired by a registered Hackney stallion, both classes to be shown on the line.

**GOSSIP.**

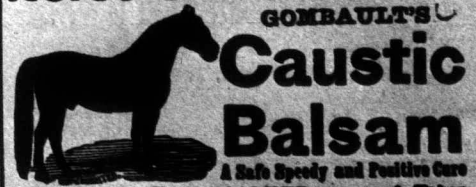
Charles Rankin, Wrebridge, Ont., offers for sale three fine young Durham bulls. Two of them fifteen months old, and one ten months. They are all sired by Crimson Chief.

A. C. Hallman, New Dundee, Ont., writes: "Trade in Holsteins never better. Sold three cows to H. Park, Norwich, Ont.; one cow to James Kettle (Lad. Acma, a very fine cow); also a fine Pieterson cow to G. D. Montmercy, Norwich. Demand for Holsteins never better. My August bull calves are a grand lot, full of quality, and the very best breeding. My herd of Tamworths never was as complete. My imported boar, Royal Prize-winner, is developing very fine. I have some young stock from him now; they are nice. My other imported boar, British King, is fully equal to the Royal Winner, very lengthy and grand side. Have some sows bred to him just due to farrow. I was never in such shape to offer stock equal in breeding (both the sires and dams). I have an excellent lot of brood sows. My imported champion sow is due to farrow on the 15th inst.; bred to British King. The produce ought to be something rare. My young imported boars (dam, the champion sow Whitacre Countess 2nd) are doing fine. Have three left yet that I could spare. My Barred Rock chickens are also a select lot, and hope to be able to supply my numerous customers with choice settings."

**DONALD CUMMINGS' AYRSHIRES.**

The farm of Mr. Donald Cummings is situated some four miles north of the village of Lancaster, in Glengarry Co., Ont., and perhaps as fine an agricultural section as lies in the Dominion of Canada. (The Glengarry men are justly proud of their county.) The present Ayrshire herd was established over a dozen years ago from stock obtained from Mr. Cottingham, when Snowball 3654, by Sir Hugh 3163, and out of Lady Laury 3167, was obtained; the family being able to distinguish themselves in the large showings, and some of them were prominent prizewinners at the Centennial in 1876. The old cow was unusually successful as a matron, and a whole herd of high producers have been placed to her credit. Snowdrop of Ormstown was also purchased from the same herd. Her full sister was the sweepstakes cow in the three counties for two years. Safura 5236, by Joe 4712 (imp.), and out of Strawberry 2906 (imp.), is now in her prime, and has proven herself a very persistent milk-er. She produces splendid calves. Maggie of Lancaster 7943, by Lynhurst 5215, and out of Ormstown Lass 5441, traces her breeding to two of the best herds in the breed. Her sire was bred by Mr. David Benning, and was a prizewinner. The bulls that have been employed were: Uncle Sam 3697, by Sir Hugh 3163; Prince of the Glen 5232, by Duke of Parkhill 4668, and out of Flo 3357; Sunrise of Lancaster 5373, by Dictator 6367, and out of Lady May 6319; and Tom Brown, was a bull that was never defeated in the showing, and was considered by many to be one of the first sires in the breed. Pride of Ormstown 5055, by Sam Ormstown 4199, and out of Lady Laury 3167, left some splendid offspring. The present stock bull, Victor of Maple Cliff 8753, by Matchless 7560, and out of Viola of B. 7612, was purchased at R. Robertson's sale a year ago. He has done remarkably well since coming to his new home. Of his dam Mr. Robertson said, "This is one of the most promising young cows in the herd; hard to beat in any company." Last year, he won six 1sts, one 2nd, and one 3rd prize. His sire was also a show bull of high order, and sold for \$225 at public auction. At the same sale Mr. Cummings purchased a pair of very promising young females, which promise to strengthen his herd. A flock of choice Leicester sheep were also shown us, and, like the Ayrshires, Mr. C. will admit of nothing but the employment of the very best sires procurable. See ad.

**Horse Owners! Use**



**Caustic Balsam**  
 A Safe Speedy and Positive Cure  
 The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold 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 circular. THE LAWRENCE-WILLIAMS CO., TORONTO, CAN.

**It Pays to Care for Your Horse**



**NATIONAL GALL CURE**

Is wonder-working in its effects. No other preparation in the world can equal it. It is the only speedy and sure cure for GALLS, SORE BACK AND SHOULDERS, CORNS, SCRATCHES, MUD SCALDS, ETC. National Gall Cure does its Good Work while the Horse is Working! For Sore Tests on Cows, it gives immediate relief and certain cure.

**OUR SPECIAL OFFER!**  
 On receipt of 25 cents we will send a full size box of National Gall Cure and a pair of handsome Crystal Rosettes, like illustration above, which are retailed at 50 cents a pair. Money refunded if not found satisfactory. National Gall Cure is for sale by all dealers. When ordering from us, please write name and address plainly, and enclose this advt.

English Embrocation Co.,  
 337a St. Paul Street, -on MONTREAL.

**CONTAGIOUS ABORTION AND HOG CHOLERA**

can positively be cured or prevented by the use of **WEST'S FLUID, DISINFECTANT.** which is also a cheap and effective. Circulars (specially prepared by a veterinary surgeon) on these diseases, on application.

**THE WEST CHEMICAL CO.,**  
 TORONTO, - ONTARIO.  
 Agents wanted in all countries.

**Sheep Shearing**

Revolutionized. **New Chicago SHEEP SHEARING MACHINE.** Greatest Machine ever invented. Price, \$15. (Used and endorsed by the Editor of the American Sheep Breeder.) Don't bathe or your sheep. Saves 1/2 to 1 lb. more wool per head.

Drop us a postal and we will tell you all about it. We also make Horse Clipping Machines. Chicago Flexible Shaft Co., 150-160 Huron St., Chicago.

**TORONTO ENGRAVING CO.**  
 92 BAY ST  
 CUTS BY ALL PROCESSES  
 LIVE STOCK A SPECIALITY.

**CURED TO STAY CURED HAY FEVER**  
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PLEASE MENTION FARMER'S ADVOCATE.

**PLANT LIFE**, to be vigorous and healthy, must have

# Potash

Phosphoric Acid and Nitrogen. These essential elements are to plants, what bread, meat and water are to man.

Crops flourish on soils well supplied with **Potash**.

Our pamphlets tell how to buy and apply fertilizers, and are free to all.

GERTIAN KALI WORKS,  
93 Nassau St., New York.

**"McLaughlin Carriages Are Good Carriages."**

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- Combined Dash Rail and Rein Holder.



YOU run no risk of being deceived in buying a **McLAUGHLIN CARRIAGE**, because we make "one grade only and that the best." When an unscrupulous dealer tries to palm off another make of carriage, representing it to be as good as ours, you will know he is after the "Almighty dollar," because our carriages of necessity cost *him* more than any other make.

Consider all the above before buying.  
96-page Catalogue mailed free, direct or from agents.  
**The McLaughlin Carriage Co.,**  
OSHAWA, ONT.

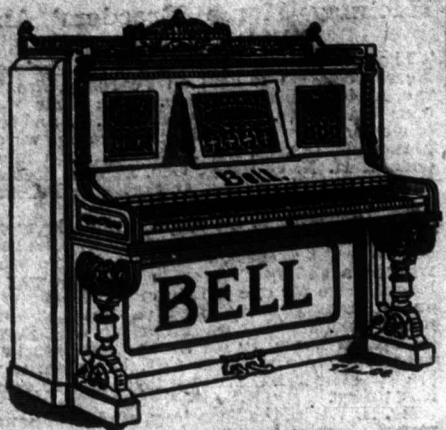
## WANT A BICYCLE?

For only \$29.50 we can sell you as good a wheel as you can buy elsewhere at any price. This is the description: Color, black; 1889 Model; name, **FAMOUS**; made by the Milwaukee Engineering Co., the largest makers of Bicycles in the U. S. Tires—Morgan & Wright—best double tube; size of frame, 23-inch; flush tubing; 24-inch drop frame; three crowns; standard gear; new patent saddle; adjustable nickel handle-bars with leather grips; wheels, 28-inch, with hardest of ball bearings; dust-proof; 2-piece crank; rat-trap ball-bearing pedals; tool bag, wrench, oiler, and bell. Gents, 24 lbs.; women's, 25 lbs.—both same price, viz., \$29.50. Terms: \$4.50 with your order and balance of the money (viz. \$25) when the wheel reaches you. We send the wheels by express C. O. D., subject to examination in the hands of the Express Co. You pay the Express Co.'s charges. We accept no order unless \$4.50 comes with it as a guarantee that you mean business. Send your order promptly so as to get your wheel promptly. Our profits are small, and our terms are hard, but we have a grand good wheel to sell, and we can save you money if you can pay cash. You run no risk. If the wheel is not exactly as we represent it, don't pay the Express Co. the \$25. Remember, you examine the wheel thoroughly before you pay for it. Write at once to—

**Stanley Mills & Co., Hamilton, Ont.**



**WIRE MACHINE**  
Sells at 10¢ per foot.  
Not only the cheapest,  
but fastest and best.  
Price, 50¢ per  
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Write for  
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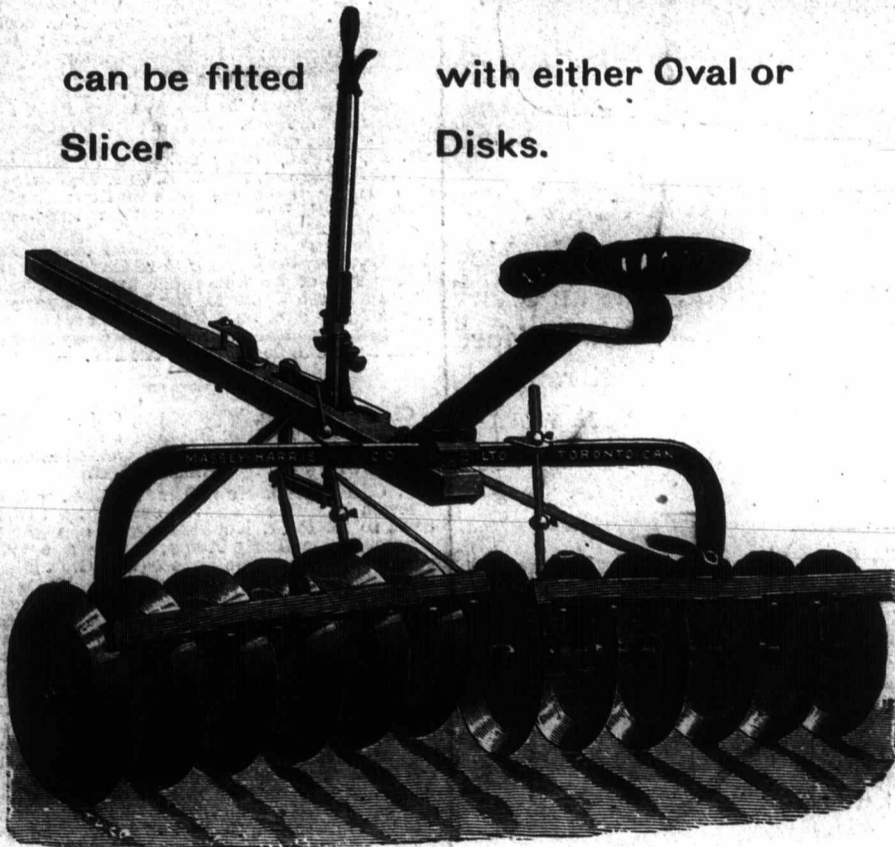
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Formulated by a Physician and Veterinary Surgeon.

## DR. HESS' STOCK FOOD

For Horses, Cattle, Hogs, and Sheep; an appetizer, a flesh producer, a blood purifier and tonic. It expels worms.

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Cures Diseases and Makes Hens Lay.

Its wonderful effects are at once shown when fed to young fowls, preventing or curing gapes, indigestion, diarrhoea or other bowel disorders; promoting a healthy, vigorous growth of muscle, bone and feathers. Use it and the ills of poultry raising will rapidly disappear.

## INSTANT LOUSE KILLER KILLS LICE.

The effective and convenient article for destroying lice on horses, cattle or poultry, ticks on sheep, fleas on dogs, etc. Just the thing to dust in the nest and on the sitting hen. It destroys the large, gray-headed lice that are so fatal to ducks and turkeys.

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

PRICE: Pan-a-ge-a and Louse Killer, 7 lbs., 65c.; 12 lbs., \$1.00; 35c. per lb. by mail, extra.

Send for Scientific Bulletin on Stock and Poultry. FREE.



There is no Doubt About the MERIT of THE KEystone DEHORNER. It cuts both ways, does not crush. One clip and the hair falls off close. Write for circular. The Keystone Dehorner Mfg. Co., Toronto, Ont., Can.

## IMPORTANT TRUTH

FOR STOCK RAISERS.

**LUMP JAW** has been transformed from an incurable to an easily curable disease. The entire credit for this wonderful result is due to



### Fleming's Lump Jaw Cure.

When this remedy was discovered no other real cure was known. No other positive cure is yet known. **FLEMING'S CURE** was first introduced in Saskatchewan, and from there its reputation has spread over the entire continent. It is the only remedy endorsed by leading ranchers, shippers, and stock journals. It is positively guaranteed; money is returned if it fails. One bottle usually cures one to five cases.

Like all other articles of exceptional merit, it is imitated in external respects, but these imitations wholly lack the distinctive qualities of the genuine.

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SEND ANSWERS BY MAIL. TREATISE AND IMPORTANT REPORTS SENT FREE.

**FLEMING BROS.,**

CHEMISTS.

ST. GEORGE, ONTARIO.

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Farmers and Dairymen!

The best packages for putting up butter, honey, jam, etc., whether for shipment or for storage, are made from our

## Antiseptic Ware

WRITE FOR CATALOGUE AND PRICES.

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Hull, Montreal, Toronto, Quebec  
London, Hamilton, Kingston,  
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## FREEMAN'S

— DOUBLE STRENGTH —

## FERTILIZERS

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## FAMILY KNITTER!

Will do all knitting required in a family, homespun or factory yarn. SIMPLEST KNITTER ON THE MARKET.

We guarantee every machine to do good work. Agents wanted. Write for particulars.

PRICE, \$8.00.

**DUNDAS KNITTING MACHINE CO.,**  
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## LIVE STOCK AUCTION SALES

Conducted in all parts of the country. Pedigree stock a specialty. Write for terms. References: J. C. Snell, Edmonton; John I. Hobson, Guelph; Hon. M. H. Cochrane, Compton, P. Q.; or this office.

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