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MANITOBA AND WESTERN EDITION

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.
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VOL. XXIX. LONDON, ONT., AND WINNIPEG, MAN., SEPTEMBER 5, 1894. No. 365.



A GROUP OF DUTCH-BELTED CATTLE,
THE PROPERTY OF MR. H. B. RICHARDS, EASTON, PENNSYLVANIA.

The members of the Agricultural Conference, in their meeting in New Zealand a short time ago, expressed themselves as being favorable to the use of Shropshire sheep and Devon cattle for the frozen meat trade. In the South Island it is said that Merino-ewes must continue to be the basis of the flock. These, crossed with the Leicester and their progeny with the Shropshire, will give a superior class of shipping sheep.

The vigorous efforts of the English Board of Agriculture to stamp out swine fever have not, so far, been attended with any apparent success. The number of outbreaks in some districts in which the disease was, when the present system was first adopted, very prevalent has been reduced, but, on the other hand, many cases are now occurring in localities which were supposed to be free from the disease, and on the whole the result of the action of the authorities cannot be regarded as encouraging.

New York State has passed a law to the effect that no barb wire shall be used in the construction of any division fence, constructed or built after September 1st, 1894, unless the person, association or corporation desiring to use such material shall first obtain the written consent of the owner of the property adjoining that it may be used. The law also provides that should injury to a neighbor's stock be caused by such a fence, the owner of the fence shall be liable to the owner of the injured stock for treble damages for all injuries occasioned.

The British Board of Agriculture has passed final judgment, in reference to Canadian cattle, to the effect that the embargo must stand, as indicated in the *ADVOCATE* of August 1st. As has been frequently pointed out, only the best of finished heaves need now go forward. Feeders and others must plan accordingly. At various times in the past year or so attention has been drawn in our columns to the possibilities for Canada of the dressed meat trade with England, and the recent decision will, doubtless, stimulate action in that direction.

Harvest should not be considered finished until the fence corners, stone piles, and all out-of-the-way places are cleared of weeds. This time of year is especially suitable for exterminating that abominable weed, the burdock, as the seeds will not be ripe enough to shake out when cut and carried to a brush heap to be burned. Three years of care in destroying all the mature plants before the seed has fallen, will pretty thoroughly clean the farm of burdocks. Docks are on the increase in this Province, but if subjected to the treatment given for burdocks, they too will disappear.

Since the publication of the last number of the *FARMER'S ADVOCATE*, reports have come from many quarters, fully confirming our forecast of the apple crop and market prospects. The *Montreal Star* now says: "There is every likelihood of a boom in the Canadian apple export trade this year. Crops in the Old Country are not first-class, and in consequence a number of buyers have already arrived out and are now going through the apple districts, making extensive purchases. Shipments will commence in about three weeks. Considerable steamship space has already been engaged."

The lists, extending over many columns of the daily newspapers, of successful candidates at the recent Ontario examinations for teachers, indicate what a continuous rush there is for professional life. It is hard to say to what extent the "professions," as they are called, would degenerate were it not for the constant infusions of country blood. That the "professions" are becoming greatly overcrowded is no secret. Teachers, book-keepers and clerks of all kinds are finding it more and more difficult to obtain employment even at "living" wages. A local paper in one of our Western Ontario towns mentions the fact that a university graduate applied to that paper the other day for the position of junior reporter. When a man whose training represents the cost of a good, small-sized farm, is begging for a situation carrying with it a salary of \$7 or \$8 per week, and our land is not supporting one-half or one-quarter the persons of which it is capable, it is very clear that we have got into a condition detrimental to the highest interests of the State.

Our Illustration.

We are from time to time giving our readers portraits, with a short history, of valuable breeds of cattle not generally known on this continent. Our frontispiece is a continuation of this series, and represents a group of Dutch-Belted cattle, the property of H. B. Richards, "Avona Farm," Easton, Pennsylvania. The animals in this group are Mikado, No. 22; Huldah, No. 141; Fanny Fern, No. 129; Grateful, No. 123, and Keator, No. 132.

The Dutch-Belted cattle are natives of Holland, and are quite distinct from the Holstein-Friesians of that country. Their breeding dates back to before the 17th century, when the cattle interests in Holland were in the most thrifty condition. This type and color were established by scientific breeding—decidedly among the highest attainments ever reached in that direction. These cattle are solely controlled by the nobility of Holland, and they are to the present time keeping them pure, but are not inclined to sell or part with them. Their form is usually very fine and they are wonderfully productive as milkers.

In color they are black, with a continuous white belt around their body, the white being pure white and the black, jet, making a beautiful and striking contrast. They are at once unique, novel and attractive. This belt is always reproduced, and is so perfectly fixed that it will crop out in their grades for many generations. The prepotency of this feature is the most striking when we consider that we can, by crossing with other blood, produce brown-belted, red-belted, gray-belted, or any foundation color, and still retaining the belt. It proves them to be one of the most prepotent breeds in existence.

Their form is a strongly characterized type of the bodily conformation known as the milk shape. Thin necks, small horns, wide breast and hips, switch long and thin, udder square and well placed, eyes prominent and calm, skin thin, soft and mellow, with silky hair. In size, the mature cows range from eight to twelve hundred, bulls reaching sixteen to twenty hundred.

For beef purposes, cows are said to fatten readily when past the milking age; and a very strong constitution is claimed for them.

They are particularly noted for docility and intelligence, displaying a wonderful knowingness of their surroundings, yielding very readily to kind treatment, but are ungrateful to harsh or rough usage. The bulls, of whatever age, rarely become ill-tempered.

The Dutch-Belted cows are large and superior milkers. Mr. Richards' herd is kept strictly in a business way; the milk of the whole herd is wholesaled to a retail dealer, who has built up an extensive trade in the City of Easton, upon the merits of the milk. No continued milk records are kept, but for the past two seasons the average animal individual record has been slightly over 10,000 pounds. This includes cows and two and three-year-old heifers.

It is proper to assume here that the Dutch-Belted cow fills the requirements of the ideal dairy cow—the cow that will give a maximum amount of yield for amount consumed, the cow whose symmetry, constitution, powers of digestion and secretion, backed by high development of reproduction, fits her for pre-eminence in the dairy.

Mr. Richards is Secretary of the Dutch-Belted Cattle Association of America.

As an indication of the increasing attention paid to poultry in England, Mr. Edward Brown, who has been an agricultural writer under the *nom de plume* of "Stephen Beale," has been appointed Professor of Poultry-Keeping at the University Extension College, Reading.

The Empire, of Toronto, in discussing the special features of the new United States tariff, concludes that "the tendency will, undoubtedly, be toward stimulating commerce and a larger sale of Canadian products to the States, etc.," inasmuch as the duties have been lowered on many articles exported from the Dominion. This is the natural consequence of removing restrictions from trade, and a much cheaper way of helping the farmer than taxing him in support of a lot of such alarming proceedings as the vote of an annual subsidy, or bonus, of \$750,000 for a long term of years to the owners of fast Atlantic steamships. As the Empire remarks, Canada is entitled to decent treatment from the States, seeing that during the past five years Canada has bought some \$267,000,000 worth of goods "across the lines," and Canada has exported there considerably less, viz., \$208,000,000.

Judges and Judging.

Much of the success of an agricultural show depends upon the procuring of thoroughly competent men to act as judges. There are many men who consider themselves such in the different classes of stock which they favor; but in reality the number of really competent judges is quite meagre. There are plenty of men, if given a class of animals to judge in their own barn-yards, with lots of time to devote to inspection, and with few onlookers, who could place the awards so nearly right that there would be very little room for complaint on the part of exhibitors; but when brought before a long class of worthy animals, surrounded by hundreds of intelligent onlookers and keen partisans, would become so bewildered and nervous that such a thing as giving correct awards is more a matter of chance than cool, honest decision. It is comparatively easy to award positions to animals of outstanding merit, but when animals are of nearly equal merit, and yet each possessing different excellencies, it requires greater thought and judgment to arrive at a just decision. When we come down to the final analysis of this question, we find that, as between pretty evenly matched animals, the judging faculty embraces a judicial nicety of discrimination as to which (all points considered) possesses the excellency that must turn the scale in its favor, or the weak point that will cost it the victory. We repeat that experienced men of sufficiently broad minds, level heads and technical knowledge to be quite trustworthy under such a crucial test, are not plentiful.

We realize, to some extent, what it means to be called upon to assume the duties of deciding as to the relative qualities of the individuals in one of the large shows. This is why we draw attention to this subject, and bespeak a little more kindly and patient treatment, on the part of exhibitors and their friends, for the gentlemen who consent to act on such occasions. While all agree that exhibitors are very anxious men before decision is given, we venture to assert that the judges are equally, if not more anxious than any of them, and if occasionally they do seem to err a little in their awards, it is well to think as charitably as possible, and attribute the decision to their taste rather than a willful perversion and abuse of power. It is well to bear in mind that the standard of excellence for any class of animals is not yet fixed, nor, perhaps, will it ever be permanently, because we find different countries and different localities of the same countries differing widely in their types of the same breed. Bearing in mind the great care our Live Stock Associations exercise in recommending the most competent men from which judges are to be chosen, and, again, the selections from these by Fair Associations, it is but rarely that an incompetent gentleman is called to act, and more rarely still do such give a palpably dishonest decision from sinister motives. Honest, candid criticism is quite in order, and even desirable, but it is not uncommon to hear very bitter remarks and uncharitable charges made against judges at the close of a contest.

In addition to the havoc wrought by the swine plague in England of late, we notice that in one week, in the latter part of July, 283 fresh outbreaks were reported in Ireland, cases occurring in 30 counties. Some 123 died and 691 were slaughtered by the authorities. In the Western States it is reported that, owing to the wheat and corn failures, hogs are likely to starve by the thousand. Many have been rushed on to the market, but a host of them are not fit to sell. All this augurs well for the swine industry in Canada. Breeders and feeders are alike pleased with the past season's operations. The outlook is still good.

At the annual meeting of the Central Council of the British National Agricultural Union, a resolution was passed in favor of the formation of an agricultural party in the House of Commons, the members to be drawn from both political parties, but pledged to vote independently on agricultural questions. It was stated that 156 candidates for the next Parliament had accepted the programme of the Union, while 56 others partially supported it. The idea of an agricultural party in England is not a new one. The Farmers' Alliance tried to form one, and had a large number of supporters in the House of Commons; but when the strain of party allegiance came to be tested, the number of men strong enough to assert their independence was found to be small. It was stated at the meeting that the Union had 325 branches in full working order.

Timely Notes for September—No. 1.

NOTABLE SAYINGS AT THE DAIRYMEN'S MEETINGS.

"I remember that when thirty years ago a man talked about scientific farming, the farmers would turn up their noses. . . . But all that is changed, and we have not only that excellent College—the best educational institution in the country—but other Government farms have been established at Ottawa and elsewhere for the encouragement of agriculture. . . . The feeling is now strong among public men, as well as among many farmers, that we cannot have too many institutions in the way of model farms and agricultural schools, which give a most practical education to those who patronize them, and that, too, at the least possible cost."—PRESIDENT A. PATTULLO.

"Science is knowledge—ordinary knowledge—made exact and systematically arranged. It is very important to the farmer to know what his land contains, what crops are best suited to that soil, and what treatment is necessary to keep the land in best condition. . . . But how are we going to get this knowledge? We must get it by practice, by digging it out by hard personal work and observation, or we may get a great deal of it from the various agricultural books and journals that are published."—MR. C. C. JAMES.

"In conclusion, gentlemen, let me urge you, if you wish to become more prosperous dairymen, to grow corn, for it means more cattle, a larger production of flesh and milk, and an increased fertility of the soil, since by feeding the crops upon the farm, the plant food for the most part is retained for succeeding crops."—MR. F. T. SHUTT.

"With the farmer it is particularly true that seeing is believing. Demonstrate a thing by an object lesson and he can understand it; demonstrate it by theory, and it remains as clear as mud to him. . . . I have found that farming, as a rule, does not pay. The experience of the great mass of farmers in this country is that, when their debts are paid, they have very little in their pockets at the end of the year. . . . These are the three great points in farming—practical methods, based on experience, and guided by business principles. . . . The farm I have contains 120 acres under cultivation. . . . What we should call a very light soil. . . . I determined upon a change, and made my plans with a view to procuring the best results with the least labor. The first change was to reconstruct the buildings, putting up spacious stables and silos. The object was to produce milk, beef and pork. . . . The crops of the past year have been 800 tons of corn, 80 tons hay, 70 milch cows; 10 dry cattle and 30 pigs. The feeding this year is 50 milch cows and 90 fattening cattle, young and old. . . . The saleable products for the year up to the 1st of May were: Milk, \$2,300; pork, \$350; fowls, \$350; increase of fat cattle, \$1,800; total, \$4,800 the year's crop; purchased feed, \$2,000. The cost of labor was \$1,200; expenses, wear and tear, repairs of machinery, etc., \$200. This leaves a profit of \$1,200. Every day's work is accounted for as paid for in hard cash out of the returns of the farm. What does the profit of \$1,200 mean? It means that those working on the farm made \$2 for every \$1 paid to them. That is a point that should be seriously considered by every farmer in this land. How much does the farmer receive for every day's work he does on the farm? If he pays \$1 a day to a man, how much does that man produce as a profit? Taking the average farmer of the average district, his receipts for his day's work do not amount to \$1 a day. How can the profit be increased? is the great question for the farmers to consider. . . . Increase the profit of the farm and you increase the value of the farm."—MR. D. M. MCPHERSON.

"We must make the conditions of the cow in the stable as nearly those of summer as possible. There must be equality of temperature and regularity of feeding and milking, and then the results will be regular. When we lay aside what our fathers taught us, and get at the facts, as they exist for us, we shall find that the stable life of the dairy cow is an artificial condition. The dairyman of the future will be as far advanced as the stable will be advanced, and the stable life of the dairy cow will be the greatest strength of the dairy industry."—MR. JOHN GOULD.

HELP THE MINISTERS.

Just about this time many will be called upon to put down their names towards the support of their minister or missionary student. Do it willingly and generously. The life of a preacher of the Gospel is anything but easy in most parts of the Northwest, and he cannot live upon the wind any more than you can. He certainly deserves as good a salary as the school teacher. If you don't consider \$10 or \$20 a year too much for your school tax, it is hard to see how you can consider it too much for your minister. Again, when you want to sell a farm, don't you always put it down as an inducement to buy that it is close to church and school?

GENERAL.

Don't burn your straw this year. Try and make something out of it, either by feeding it to animals in conjunction with grain, by selling it, or by giving it to someone else who can make use of it. If you have a field infested with wild oats or stink-weed or other annuals, harrow it well immediately after hauling off the crop, then plough it late, ploughing down the weeds that will have started into life this fall. Patronize your local show and exhibit something—even a bushel of potatoes.

The Highland Society's Show.

The most important show of Scotland is that of the Highland Society. It was held this year at Aberdeen. The entries, on the whole, were satisfactory, although not up to last year's number at Edinburgh, but, as one would expect in that great stock centre, quality of exhibits was the outstanding feature. The cattle entries numbered 314; for horses, 324; sheep, 314; swine, 52; poultry, 365; dairy produce, 56.

A visit of the Duke of York, President of the Society, lent an additional attraction to the show. The presentation to His Highness of Mr. Amos Cruickshank and Mr. Duthie was an event of special interest to breeders.

HORSES.

Clydesdales.—There was a splendid turnout of the premier draft breed. The stallion exhibit was very good. Montgomery Bros.' Baron's Pride was the successful horse in his class. He was bred at Springhill, got by Sir Everard; he has the rarest quality of bone, and is every inch a show-ring animal. The second prize was captured by Prince of Garthland, the Prince of Wales' sire, owned by Matthew Marshall, Stranreer. The 3rd prize horse was a splendid 4-year-old—Prince Albert of Rosehaugh—owned by Mr. Douglas Fletcher. Several valuable horses had to leave the ring unrewarded, except by praise of spectators.

The 3-year-old class was well contested. Last year's two-year-old Highland winner, Holyrood, owned by the Marquis of Londonderry, was the first prize winner, in strong company. He is got by Gallant Prince, out of a Darnley mare. S. Park came 2nd, with Prince of Erskine, got by Prince of Albion. For the 3rd place came Goldmine, by Goldfinder. He was a winner as a yearling, and may have had a better place this year had he handled himself with more grace. He was shown by R. C. Macfarlane, Greenburn.

Two-year-olds and yearlings commanded quite as much attention as their older brothers.

The brood mare class was not large, but contained quality. Mr. Leonard's Pilkington's Queen of the Roses, by Prince of Albion, made a worthy leader. She was in fine form and had a Macgregor youngster at foot. Con. Stirling's noted Brenda was a good second, while Messrs. Ferguson, Lumbhart, Old Meldrum, secured the 3rd award with Lady Dora.

In the yeld-mare class Montrave Maud was a good first. She is a daughter of that noted show ring winner, Moss Rose, which was awarded the Cawdor cup for dam and progeny. All the younger mare classes compared well with those already mentioned.

Hackneys.—The Hackney classes called for some very fine discrimination on the part of the judges to satisfactorily allocate the awards. Among the prize-winning exhibitors were Mr. Gilbraith, Messrs. Crawford, Dumfries, Dr. Mackay and Mr. G. R. Shiach, Elgin.

CATTLE.

Shorthorns.—Very few Shorthorn admirers who witnessed the show of this breed would be inclined to dispute the excellence of the Shorthorn section.

In the aged bull class, Mr. Graham, of Edengrove, carried off the first ticket with Fairy King, which has been a general first prize winner this year. He was bred at Alenwick Castle, and sired by Royal Arthur. A creditable second was taken by a beautiful 4-year-old, None Such, bred by Mr. Hill, Langside, Fifeshire. He was shown by Mr. Thos. Lambert, Elrington Hall, Hexham. Mr. Milne came 3rd, with a grand 3-year-old Waverley, bred by the late Mr. Andrew Strachan.

There was a splendid array in the younger bull classes. The 2-year-olds were not wanting in this respect. A splendid winner was found in an improved young sire, Pride of the Morning, got by Star of the Morning. Two bulls from Col. Smith's, Minmore, were respectively 2nd and 3rd. The former is Goldspur; he was bred by Mr. Duthie. He is a beautiful red, and much stronger behind than his more successful competitor, but in some other points he lacked superiority.

In the yearling class the judges are said to have erred in decision by placing Lord Polwarth's Imperial Gold in first place. He is a neat, level bull, but lacks in size when compared with Duke of York and Champion Cup, which were awarded 2nd and 3rd places. The former was bred by Mr. Strong, Crosby, and shown by Mr. Handley. Champion Cup was bred at Bapton Manor, and is now owned by Mr. Harrison.

The cow class was good. The first prize was awarded to a Campbell-bred cow shown by Mr. Geo. Harrison, Underpark. She is a cow of great character, with capital head and neck. Mr. James Carnegie, Ayton Hill, came second with Rock Cistis, first prize winner at former shows. Lord Polwarth was 3rd with Heroine by Royal Rigby.

The 2 year-olds and yearlings had a good entry. The prizes were largely taken by men already mentioned.

Aberdeen-Angus, Galloways and Highlanders, being near home, turned out well with good specimens. The numbers were hardly up to those of last year, owing to the dispersion of some of the largest and best herds.

Ayrshires have made a better showing on previous occasions, owing, no doubt, to the fact that their home is a long distance from the show ground, and not from any lack of popularity of this breed. The cow class specially was small.

SHEEP.

Black Faces, Cheviots, Border Leicesters and Shropshires were the principal breeds represented. The principal feature of the Shropshire classes was the success of Corston sheep and Corston blood. All the classes were headed by Mr. Buttar's sheep. The 2nd place in the old ram class was taken by the Earl of Strathmore, Home Farm, Glamis, with a sheep of his own breeding by Corston the Fourth. The 3rd sheep was also from Corston, being bred by Mr. Mansell, Harrington Hall, Shifnal. In the yearling class the 1st, 2nd, 3rd and 4th tickets went to Corston sheep. Mr. Buttar was the only exhibitor of ewes.

The Improved Large Yorkshire Hog.

BY J. E. BRETHOUR, BURFORD, ONT.

It has been the custom among the pork raisers of this and other countries to supply the markets with very fat, heavy pork. Why such a practice should become so universal is somewhat difficult to understand. Feeders seldom considered their porkers ready for market before they were swollen out in all directions with fat, fat, fat! In this condition the pigs reflected credit upon the feeders; they were very handsome, if a pig is ever entitled to that epithet. They also "opened well" and presented a fine appearance when dressed and hung up. At this time the pork supply had not assumed the enormous proportions of the present day, and when pork was asked for by customers, nothing else was expected to be given them but something "good and fat." Not at all strange to say, people have found out that pork can be produced in a very much more palatable and nutritious condition by being less fat; hence the present preference for what might be termed half-fat bacon. Mr. Sanders Spencer, in a recent article in the English Live Stock Journal, said:

"Almost every variety of pig bred in England has been declared by its breeders and admirers to be the only "beau ideal" bacon curer's pig. In this interested praise of one's own specialty there is, doubtless, much to admire, but the disinterested opinion of the bacon curers of England, Ireland, Germany, Holland, Sweden, Denmark and Canada may, perhaps, be of more practical value, from the fact that their opinions are based upon experience in handling millions of pigs each year, while most of those who strongly champion the cause of their favorite breed may actually rear one or two hundred pigs per year, the best of those being sold for breeding purposes; therefore the owner's experience of procuring bacon curer's pigs is not extensive."

Those who have been sufficiently interested in the pork producing industry to notice the current articles in agricultural papers, written by pork packers, would see that the long, deep side, not overly fat, is just what is wanted. Short, thick, chunky pigs cannot find an outlet except in the lumber shanties during the coldest weather. It is only reasonable to conclude that pig breeders must pay more attention to the wants of their customers—the consumers of pork and bacon—or else other kinds of meat will be more extensively used and the demand for pork will grow less and less. Much of the success of the development of the export trade will depend on producing an article suited to the demands of the British market, which we well know calls for what is known as the "bacon curer's pig." The following extract from the National Provisioner of New York is exactly to the point:

"The difference between Irish and American bacon, and the superiority of the former, is not a matter of 'cure' and 'cut,' but of 'breed' and 'feed.' The ruling breed in Ireland is the Yorkshire White—very uncouth-looking animals, with long necks, heads and legs. When dressed, with their heads and legs off, they look much better, and one decided advantage over the American is that they cut 'lean,' and throughout the fat and lean is much more evenly divided."

There is no doubt but that what is said of the popular Irish pig applies equally well to the Canadian, as the Yorkshire fills the requirements in every particular. This breed has been tried in all parts of the world. Ireland and Denmark hold, perhaps, the highest positions as producers of superior pork and bacon, and it is mainly to the introduction of large numbers of Improved Large Yorkshires into those countries that they have achieved such a high position in the markets of England. This breed answers the requirements of the pork packers in every respect. It is light in the head, has light neck and shoulders, well sprung ribs, with good heart girth; a narrow, well-fleshed back, and thick loins; great length, full flanks, and hams well let down. The meat consists of a very large proportion of lean, while it is a rapid grower, and will mature easily at any time.

Apart from answering the purposes of the pork packer, the Improved Large Yorkshires possess qualities which commend them to the breeder. Being the direct descendant of the original English

breed, they are very prepotent, and stamp their characteristics on their progeny. The sows are excellent mothers and grand milkers, and as might be expected from their great length, they are well able to raise the large litters which they usually produce.

Messrs. Wm. Davies & Co., Toronto, in writing me a short time ago, said: "For the last few years we have, through the press, advised farmers to raise and feed more hogs and to sell them alive. This advice has been acted on to a considerable extent, and farmers have not been slow to own that the advice was good. Hog raising and feeding, as well as dairying, have been branches of agriculture that have not suffered during the depression that has overtaken almost every other industry; the swine thriving so admirably on the waste products of the dairy. Grain, even including wheat, has been so cheap of late that farmers have not needed urging to convert the feed into pork. This last point is what we now wish to call attention to. A very large proportion of the hogs now offering, dead and alive, are too fat, and packers, unless they are prepared to lose money faster than they ever made it, are obliged to discriminate most severely against fat hogs, no matter what weight. We are now paying 60 to 75 cents per 100 pounds more for long, lean hogs, from 150 to 200 pounds. This advantage, which amounts to a very handsome profit, the feeders will lose if they persist in making such fat hogs. Possibly the farmers have not yet experienced this sharp discrimination, but the drovers have, and unless they are prepared to play the roll of philanthropist, the feeders, in turn, will speedily suffer. Here we want to point out very clearly that the mere fact that hogs are between the weights named does not bring them within the charmed circle, unless they are long and lean. Nothing is easier than for farmers to produce such hogs. Yorkshires are scattered all over the Province. Grades are easily obtained, and if they are liberally and judiciously fed till six or eight months old they will be the very 'beau ideal' of bacon pigs, fit for local or export trade, and will bring the highest price. There can be no conflict of opinion on the above between the export packers and local men; the demand for lean bacon and hams is as urgent in one case as the other. Cable advices reach us almost daily: 'Fat unsaleable,' and this mail brings the following from our English agent: 'Buyers have got wonderfully fastidious about weights the last year or two, and in every section of the country where they used to work heaps of fat they will not look at it now, and consequently it is a terrible drug. It is most difficult to find buyers for it at any sort of price.' We feel sure this condition of the trade will become more marked, not only from year to year, but from day to day. We have lost many thousands of dollars in fat hogs in the last six months."

J. L. Grant & Co., Ingersoll, who do an immense pork-packing trade, in a recent letter wrote: "The foreign and home trade demand more lean meat. We have found the Improved Large White Yorkshires and their crosses admirably suited to produce the desired type. Short pigs, with broad, fat backs, are no longer wanted. It is to the interest of farmers and feeders to produce what the market requires; it will be a source of profit to themselves and also extend the pork trade."

I notice that Messrs. J. Y. Griffin & Co., packers, of Winnipeg, recently wrote the *Advocate* in a similar strain, and the new Packing Co. at London, Ont., express their most decided preference for this breed of hogs.

My aim, as a breeder, has been to produce an easy feeding hog that would furnish the highest priced pork which the trade of to-day demands. With a stock that now includes over fifty Yorkshires breeding sows, and an experience of ten years, I still find an increasing demand from the men who feed hogs for the market. As a hog's life is now very short, this test is surely most convincing. People will not go on producing that for which there is no demand and in which there is no profit. I have tried to establish a reputation on merit, not by "boom," having strong faith in the permanence and profit of pork rearing as a Canadian industry.

Fall Feeding of Horses.

Although this season's hay crop is fairly large throughout the Province, there will be a shortage on many farms before next year's hay season, because of the necessity of very early fall feeding of stock, due to failure of pasture. From the time fall ploughing commences, there need be very little hay fed to working teams, provided one has access to a fodder corn field. The common practice of giving horses all the hay they can use, and a heavy grain ration, is entirely unnecessary. It has been the writer's practice for several falls to feed all the cut corn mixed with wheat chaff his working teams would eat, morning, noon and night, with a few pounds of good hay to be eaten before morning. With the corn and chaff was fed the grain ration, consisting of crushed oats and barley. The horses have invariably gained, and when the ploughing season ended, there was little or no trouble with stocked legs or scratches. Mares and foals had better be stabled and fed on corn fodder and chaff than allowed to race about the fields fighting flies most of the time.

The Evolution of the Scotch Shorthorn.

(Compiled from an article prepared by Robert Bruce for the Highland and Agricultural Society.)

Never before in the history of the Shorthorn breed has any family or strain of blood attained such a position as that at present held by the cattle known as Scotch Shorthorns. For years, at the breeding and fat stock shows in England, Scotch Shorthorns have taken a large proportion of the prizes, and in the year just past the merits of this strain of blood have asserted themselves, both at home and abroad, in the strongest manner possible.

At the great World's Fair, at Chicago, almost the entire amount of money offered as prizes for Shorthorns was gained by animals of direct Scotch descent, and the sweepstakes prize for the best male animal in all the cattle classes was won by a bull bred in Canada of pure Sittyton blood. Such a record at such an important fair must have drawn public attention to Scotch cattle, but their doings at the principal breeding and fat stock shows in England during the past few years had in a large measure prepared the minds of breeders to expect such a result at Chicago.

The Collings brothers are said to be the fathers of the Shorthorn breed, as prior to their time such cattle did not hold public favor, and in 1810, 29 females averaged £140 4s 7d, and 18 bulls and calves, £169 8s; and in 1818, 51 cows and heifers averaged £111 13s, and 10 bulls and calves, £215 17s 7d.

These prices created quite a sensation in the cattle breeding world, and led to the spread of the Shorthorn breed of cattle throughout the length and breadth of the kingdom.

BOOTH AND BATES.

Looking back over a period of 50 years and more, we can fancy we see the two rival types. We can see the thick-fleshed, short-legged, wide-chested Booth cattle, of a sort to spread thrift and goodness as meat producers amongst the ordinary herds of the country. We can also see the Kirkleavington cattle, with their fine movement and greater style of carriage, the udders of the cows showing evidence that dairy properties were qualifications especially attended to.

There is no doubt but these two strains of Shorthorns were really superior cattle, that they were brought out and carefully bred by men who were born breeders, and that the influence of their herds was felt throughout the whole Shorthorn world. Their popularity became so great that not to own Shorthorns of one or other of these strains was to be out of the charmed circle. From the time of the Bates dispersion sale in 1850, there was an extraordinary run on that strain of blood. There was a widespread feeling in America that these cattle were the pure, and only pure, strains of Shorthorn blood, and that for a time nothing else was of value in the States. This craze culminated in the New York Mills sale in 1873, when 25 animals of the Duchess family averaged £3,679 18s each. Six of the higher priced animals were bought by English breeders at an average of over £5,000 each. It seemed to become axiom in the belief of such buyers and traders in Bates cattle that to be valuable these animals had to be what they termed straight-bred.

THE PEDIGREE CRAZE.

For several years before 1875 prices for fashionably bred Shorthorns had been steadily mounting upwards, and these Shorthorns consisted of Booth and Bates breeding. Wherever men leaned to the Booth and Bates cattle, every effort was made to enhance the value of their herds by the introduction of highly bred females, and by the use of sires of "straight" blood.

From the time these cattle became valuable on the market may be dated the decline of their usefulness. Pedigree became to a large extent the only requirement necessary to obtain a good price. Because of this, Shorthorns were only dealt in by a few moneyed people, and were no longer farmers' cattle. Farmers became conscious of the fact that highly bred bulls were not of the rent-paying sort, and therefore could not be induced to buy them; dairymen would not use them, and butchers scoffed at a system of breeding which aimed at producing fat animals with but little flesh.

In short, the whole system of what was termed high-class breeding operated against the general production of Shorthorn cattle full of practical utility.

SCOTCH SHORTHORNS.

Practical utility seems to have been the aim of Scotch breeders. For this there appears to be good and sufficient reasons. If the matter is looked into it will be found that many, and indeed most of those North Country breeders that have done much for the breed were tenant farmers, who had to depend upon their cattle for their livelihood. They pursued their calling in a country where farmers made cattle breeding and feeding the main source of income. They had to produce a class of bulls likely to get steers to feed quickly, and die full of lean, marketable flesh. That they succeeded in this is quite beyond question, and a short survey of what may be justly termed the parent herd will suffice to make the matter clear as to how Scotch Shorthorns originated, and how they have been bred.

THE SITYTYTON HERD.

We cannot enter into particulars of the breeding or details as to pedigrees of the animals selected by Amos Cruickshank. Constitution, substance and quality were three essential points looked for in both bulls and cows. After these were put symmetry, and in the cows a fair appearance of milk

as this indicated not only direct usefulness, but a disposition to more regular and continued breeding. The cows were selected from herds of acknowledged purity. There was at the date the herd was formed little known of the two great rival herds, which afterwards came to be looked on as the two, and only two, fountain heads from whence anything that was good in Shorthorns could be drawn.

Females from the very best herds were introduced into the Sittyton herd, and individuals that failed to reach the required standard in breeding, etc., were at once weeded out. For a long series of years the best bulls to be found in England were bought; money was freely spent whenever and wherever bulls to please Mr. Cruickshank could be obtained. These bulls were bought, not because they were of any particular strain of blood or family, but on account of their individual merits, while all the time the quality and kind of stock from whence they came received the most careful attention.

One cannot fail to admire the greatness of the breeder who, in a steadfast way, kept breeding his own ideal of what constituted the animal needed by the rent-paying farmers, when we consider that this was done for a long series of years, when fashion was dead against him. Many of them became infected with the general, we might justly say the universal, opinion that one of two sorts—Booth or Bates—ought to be at the head of every herd. We again repeat, when he kept steadily on, while hundreds and thousands were freely given for single animals, and the whole Shorthorn world was against him, the greatness and worth of the man stand out in bold relief.

The utmost limit of perfection in Shorthorn breeding was not reached in the days of the Collings, as many would have us believe; nor are we prepared to assert that Amos Cruickshank has reached that limit. The purposes to be answered by the cattle of to-day are altogether different from what they were fifty or even twenty years ago, and there is still scope and room for brains and ability in the pursuit of Shorthorn breeding. This aspect of the subject cannot be entered upon just now, because of its magnitude and growing difference of demands.

CRUICKSHANK CATTLE IN ENGLAND.

The success which attended the introduction of Cruickshank sires into herds full of Bates and Booth blood naturally led to many being taken south, and their general utility qualifications widely acknowledged. The Canadian and American demand for Cruickshank cattle, which for some fifteen or sixteen years previous to the disposal of the Sittyton herd, absorbed every available bull. There were comparatively few bulls bred by Mr. Cruickshank in the country. Under these circumstances, the selection of sires to be taken south was restricted almost entirely to the last crop of bull calves bred at Sittyton.

It is to be acknowledged that there is much about the Scotch Shorthorns which is certain to impress many breeders as being "common." They have neither the dash of the Bates cattle nor the round ribs of the Booth sort, while, generally speaking, they lack a certain finish of quarters which would tend to increase the length of body. Many also object to the style of heads met with in the majority of Cruickshank bulls. Judging from what Mr. Cruickshank has done in bringing out a fixed type of animals, it is quite evident that his aim had been to produce a class of stock full of lean flesh and constitution, while other features, more striking, seem to have been neglected. To infuse a little more of those striking features, and yet retain the main practical utility of these North Country cattle, is the ambition of several able men who have profited so largely through Mr. Cruickshank's work. They have, without doubt, the hearty good wishes of all lovers of Shorthorns.

It may strike breeders as peculiar, when we tell them that very few Sittyton-bred females have ever been allowed to remain in England. The reason is this: for 16 years before the herd was finally sold, every female that could be spared from Sittyton, and all the young bulls, except those kept for a few regular customers, were contracted for, first by a Canadian and afterwards by an American speculator. Englishmen regret that such animals should have been allowed year after year to leave their shores. The fact that they did so accounts for the unparalleled success of Scotch cattle at the great World's Fair, at Chicago, last year.

CRUICKSHANK CATTLE IN SCOTLAND.

There are, we believe, only three herds in Scotland where direct Sittyton females are to be found. In two—those of Mr. Wilson, Castle Park, Huntly, and Mr. Cameron, Fettes—has been made with great care and judgment. With regard to the other—that of Mr. Duthie, Collynie, Tarves—a great deal may be said. At the time the entire Sittyton herd was sold, Mr. Duthie arranged to purchase from the Messrs. Nelson all the cows over nine years of age, and in this lot he got possession of 18 of the proved matrons of the herd. Had a public sale been made, we are inclined to think that a goodly number of these old cows would have been competed for more keenly than even the younger ones. With the annual draft made for so many years to go across the Atlantic, such old cows as were the best breeders were naturally retained in the herd, and but for a question as to their extreme old age, they were the very cream of the herd.

(To be continued.)

[Note.—In our next issue we will continue our excerpts from Mr. Bruce's interesting paper, giving details of the general management of the cattle at Sittyton.—ED.]

THE FARMER'S ADVOCATE & HOME MAGAZINE

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Manitoba Crop Report.

The latest Manitoba crop bulletin, as issued by the Department of Agriculture of that Province, is based on returns received from the regular correspondents of the Department, made under date of August 5th

As to the condition of the weather from various sources, we give a few answers in brief:—"This has been a hot, dry summer, without a single good rain in June or July." "Grain has suffered from drouth." "Late crops light on account of hot weather and no rain," etc. The estimated total yield of wheat is 15,761,868 bushels, being an average of 15.6 bushels per acre.

Estimated yield of oats	12,197,772 bushels.
" " " barley	2,182,520 "
" " " peas	20,000 "
" " " flax	282,487 "
" " " rye	53,074 "

The hay crop, both prairie and cultivated grasses, is light this season. Prairie hay averaged 1.52 tons per acre; cultivated grasses, 1.40 tons per acre. Roots and potatoes are reported fairly good throughout the Province.

Chatty Stock Letter from the States.

FROM OUR CHICAGO CORRESPONDENT.

Best cattle, some 1,650 lb. Shorthorns, sold at \$5.35; best hogs, \$5.90, best Western range cattle, \$4.55; best sheep, \$3.25 to \$3.50.

Prices are 35c. higher on cattle, 45c. higher on hogs, and 50c. higher on sheep, than two weeks ago. All prices are on the up grade.

Receipts at Chicago from Jan. 1, 1894, to date, show a decrease of about 222,000 cattle and 76,000 sheep, and an increase of 890,000 hogs, compared with a year ago.

The decrease in cattle receipts is entirely in Texas and Indian cattle. The number of Texas cattle being marketed is quite small in comparison with a year ago. Owing to the abundance of cotton-seed and corn in Texas this year, and the prospective high prices for feed stuffs elsewhere, thousands of Texas cattle are being shipped back from the Indian Territory to their native State to be fattened.

The European cattle markets appear to be feeling the shortage of good, ripe, corn-fed cattle. A very healthy feature of the American live stock and meat trade is the steady increase in the exportations. The exports of live cattle show a marked increase. No business is done in exporting hogs, but the shipments of hog produce show marked gains over last year.

The move of Swift & Company, in the matter of actively resuming the exportation of live cattle on a larger scale than ever before, is among the numerous favorable signs in the cattle prospect. This company has for a long time been foremost in the exportation of dressed beef, and doubtless it will cut an important figure in the live cattle trade. Liverpool will be the headquarters of a special agent, who is being sent over to sell the cattle.

A live stock salesman of many years' experience remarked that while prime cattle were selling high, thousands of cattle that looked prime to their owners when in the country fell far below grade when brought into competition with cattle from all sections. It is true that many farmers who do not bestir themselves much, think that if their stock is the best in their neighborhood, it ought to be the best anywhere.

The conditions are all favorable for still higher prices for hogs, and the packers who thought prices would be down to \$4.00 by this time feel very much puzzled over the situation. There is unquestionably a shortage of matured hogs in the country, and, with the exalted ideas farmers now have of the value of corn, and after the enormous slaughter of drouth-stricken pigs, it will take some time to replenish the crop.

While fancy 300 to 350 lb. hogs have been selling lately at \$5.80 to \$5.90, inferior heavy hogs have sold a dollar per 100 lbs. lower. A year ago, light hogs were selling at \$6.00 when heavy were at \$5.60, but now the best light are 25c. per 100 lbs. below top-heavy. The only reason this is so is the fact that the great drouth lessened the number of heavy, while at the same time increasing the number of thin, light pigs necessarily put upon the market. Had it not been for this unusual condition, the light hogs would now be at a premium instead of a discount, as the demand for bacon grades is quite strong.

Wheat feeding is still a subject of great interest to farmers, and many of them report more satisfactory results in stock fattening than were obtained by an exclusive corn diet. Wheat of low grade is bought up by country millers and feed men, and the elevator men say they do not expect to get much of the poorer wheat this year, so strong is the demand from feeders. Country millers in some instances are running their mills nights to supply ground feed to consumers.

The sheep market is not so dead and buried as it was, and while wool raisers felt discouraged, there is a much more comfortable feeling among them since Congress has stopped its tariff juggling, and adjourned. On one day recently, a large lot of fat 115 to 120 lb. Western sheep sold at \$3.25, to be exported alive to Glasgow. Best lambs sold at \$4.10 to \$4.15; fat ewes, 137 lbs., sold at \$3; 102 lb. Wyoming muttons sold at \$3; 89 lb. Oregon feeders, at \$2, and scalawag lambs, at \$1.35.

Draining the New York State Treasury.

Some time ago the New York State authorities set out upon a cow slaughtering campaign (to which a halt was afterwards called) on the strength of the tuberculin test for tuberculosis. Among other herds inspected was that on the Pittsford Farms, where about 90 Jerseys were found infected, according to the Board of Health expert, and slaughtered. Mrs. Estelle F. Hawley has now entered a claim for damages against the State for \$32,277, the itemized account being as follows:

Value of cattle killed (89)	\$19,915
Value of cattle condemned, but not killed	1,200
Expense of keeping, Dec. 8 to July 1	1,400
Value of 50 animals injected with tuberculin	1,200
Keeping 72 cattle from Dec. 8 to Dec. 29	300
Do. from Dec. 8 to Feb. 24	282
Damages sustained by destruction of dairy business	3,000
Do. cattle trade	5,000
Total	\$32,277

Though not the largest item, perhaps the most interesting is a claim for \$1,200 on fifty animals injected with tuberculin and pronounced free from the disease. It is claimed that "by reason of said injection of tuberculin the animals depreciated in value to one-fourth of their original worth." Other claims for less amounts are also pending.

Feeding Off Rape.

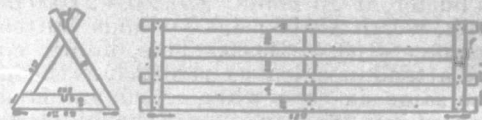
To farmers who have just commenced growing rape—and there are many of them—we wish to point out some of the methods of feeding it off, and also some of the dangers attending its use.

The crop is more especially grown for feeding sheep; but fattening cattle, pigs and even milk cows do very well on it. When sheep are to feed on rape they should not be turned into it when hungry, and always when the rape is free from external moisture. Tagging should always precede rape feeding, as purging often results at the commencement. If there is no grass pasture within easy access, the sheep should remain in the rape field constantly, so that they never become hungry and take an over-feed, which is very apt to cause derangement of the animals. When it is at all convenient, the sheep should have access to a grass pasture, on which they will feed alternately with the rape, thus keeping them in the best sort of thriving condition. A small feed of bran and oats, given in the morning, is never lost, especially when the sheep have no grass run, as the very succulent nature of rape is often too laxative for best results. It is not well to turn stock on rape until the plant has almost assumed its full growth, which will be in about six or seven weeks after sowing, in a good growing season. When rape is grown in drills, sheep may have access to the whole field, and will do no harm from tramping, but when it has been sown broadcast, some sort of portable fence should be used, so that a fresh piece can be given them every few days. Sheep are very fond of a change of feed, which can be given by the hurdling method.

Pasturing rape has its dangers. Scouring, as has already been spoken of, is quite frequent in the early stages of feeding. This, however, may be lessened to a great extent, and perhaps hindered, by having a constant supply of salt in the rape field. Bloating may in some instances be induced, especially in windy weather, which may prove fatal, if not soon relieved. For sheep, a block of wood fastened in the mouth, by strings passing over the head, generally gives early relief. A drench of salt and water has been found efficacious with sheep and cattle, but in bad cases, with cattle, puncturing the left side of the animal about a span of the hand in front of and a little below the point of the hip bone generally gives instant relief. The trocar and canula should be used, if at command, otherwise a tube of some sort, e. g., a large goose quill inserted into the incision will answer very well. Animals that bloat once are more subject to it than before, and should be watched more carefully in the future. Cattle, in no case, should be fed exclusively on rape, but when in connection with pasture will do very well. On the approach of cold weather cattle should be fed in sheds or stables at night, and returned to the rape in the morning, after it has become thawed and moderately dry. It is just questionable if there is any profit in pasturing rape after the stalks have been made brittle with hard frost.

Special care should be exercised when pasturing valuable pure-bred sheep on rape, as one or two fatalities with such stock may take the entire profit from the rape crop. There is always more danger with fat sheep than with those in poorer condition, not only from death by inflammation caused by derangement of the bowels, but from becoming cast on their backs between the drills, when death will soon result. If a flock is carefully observed two or three times a day, there need be no fear of loss from rape feeding.

Some authorities advocate hurdling the sheep while feeding on rape, claiming that the ground will be more evenly manured in such a case, and the advantage of a frequent change of field is also an important consideration. For this purpose we give the accompanying illustration.

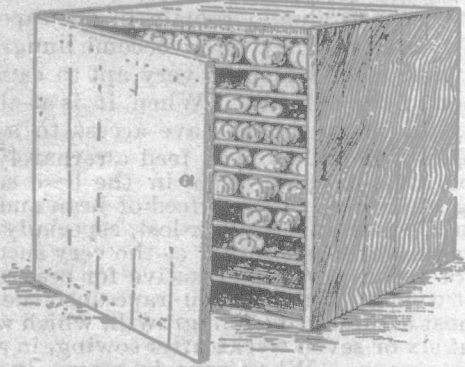


A HANDY SHEEP HURDLE.

The accompanying cut shows the plan of a convenient, portable hurdle fence, which has been in use on the Ontario College Farm for a number of years. The material used at the College Farm for manufacturing the hurdles for a number of years has been the remains of old straight-board fences, which are from year to year giving way for a more modern structure. The sound boards, which are usually about eight inches wide, are ripped by means of a circular saw, and are put together as shown in illustration. It is well to have the lower piece in the panel about six inches wide; all others will do four inches. Panels do very well about twelve feet long and three feet two inches high. The standing pieces, which are placed across the fence, into which the panels fit, are four feet high and three feet four inches wide at the base. The ends of the panels fit into notches in the end pieces. It is the most easily constructed and ported fence we have seen. Under ordinary conditions the fence will stand sufficiently solid just placed on the ground, but if exposed to winds or unruly stock, such as hogs, there should be stakes driven into the ground beside the standing pieces, which should be nailed to them. To hold hogs, stakes may be necessary at every panel, but in no other case will they require to be nearer than every three or four rods.

Ripening Tomatoes.

It does not seem to be generally known that tomatoes do not require sun, but ripen best in warm, dark places. One can hardly pass along by country homes without seeing in the kitchen windows rows and rows of this delicious fruit, in all stages of ripening—and decaying too, perhaps; for sunstrokes are common among the "love apples," and exposure to too much light and sun-heat ruins them altogether oftentimes. The accompanying illustration, says the American Gardening, suggests a simple and suitable box or closet for storing tomatoes while they are in process of ripening. It is only a drygoods box, fitted with sliding shelves and a snug door. The time needed to thus fit it up



is scarcely worth the mentioning when one reflects upon the rich, red fruit, thus saved from "spoiling." The closet may be large or small, with more or less shelves, according to the amount of fruit raised. When filled, it should be set in a warm, moist place, and inspected from time to time, in order to remove any of the fruit that may have ripened, before there is possibility of decay, and consequent harm to the rest. The convenience of the sliding shelves is apparent here, as a whole shelf-full may be inspected at a glance by slipping out the shelf. Darkness is the important thing, and the closely fitting door at once secures that, leaving only the necessary moisture and warmth to be attended to.

Which Shall it Be?

BY F. J. S.

Whether shall the farmer and dairyman depend on pasture for the milk cow during the summer months, or house and soil her? By way of answer to this, we propose to offer some brief comments on the two systems. Be it understood in commencement that we believe that at this season of the year no other one question has as much to do with profit and loss in dairying as this. We shall consider the subject as affecting chiefly the months of July, August, September and October.

What does it cost to pasture a cow for these four months? Say about eight dollars, which for a herd of six cows is forty-eight dollars. And we will suppose that each of these cows gives 20 pounds of milk daily; we then have 120 pounds milk per day, or about five pounds of butter, or 600 pounds of butter for 120 days. This, at 20 cents, gives us \$120 as the gross return. Deducting the cost of pasturage (\$48.00), leaves us \$72.00, plus about 11,000 pounds of skim milk, worth about 20 cents per 100 pounds, or in the total, \$22.00, plus about 3,000 pounds buttermilk, worth 20 cents per 100 pounds, or \$6.00, making in all \$100.00 as the income from the six cows on pasture.

What does it cost to soil a cow for these four months? Let us see. One man, at \$1.25 per day, will get in feed, feed them, and clean the stables in two hours and a-half. Attendance will, therefore, cost about 31 cents per day, or \$37.20 for four months. Feed will cost, allowing 75 pounds per cow per day, about 25 cents per day for the herd, depending upon seasons and localities. Cows thus fed and housed will give at least 35 pounds of milk per cow per day, or for the herd and four months, 25,200 pounds milk. This will make, at the same rate, 1,008 pounds butter, at 20 cents=\$201.60, + 20,000 pounds skim milk, worth \$40.00; 4,000 pounds buttermilk, at 20 cents=\$8.00,=\$249.60. This, minus cost of feed and attendance, leaves us \$182.40 as the income from the same six cows when soiled and housed, a difference of just \$82.40 in favor of the soiling system.

But this is not all. The cows on pasture will dry up at least one month sooner than those that are out only at nights. It is safe to allow 300 pounds of milk as the yield of each cow for these thirty days, or 1,800 pounds for the herd, which is worth at least \$16.00.

Then, again, cows that are required to depend on pasture alone during this period will become thin and cost a great deal more to winter, and every pound of milk they give during the winter months following will cost a good deal more to produce it than in the case of cows under the other conditions. Not only so, but the progeny from the poorer fed cows will dry up in milk sooner in the season than the progeny of the others, and will be less thrifty and give less satisfaction to the owner, even though the progeny of both be fed and cared for the same.

I hear some one say that this is overdrawn. Dear reader, the farmers of Ontario would give thanks and sing were this not so. Travel through any of the very best and most favored dairy districts in this favored Province, and nine out of ten dairymen will tell you that their cows have failed more than one-half during the last four or five weeks. Alas, the picture is too alarmingly near the truth. In short, the one who depends upon pasturing wholly for summer feed for milk cows will look upon his dairy ledger next December with a woeful countenance.

The Canadian Group of Victorious World's Columbian Shorthorns Awarded More Money and First Prizes than any Herd Shown at Chicago.

BRED AND OWNED BY MESSRS. J. & W. RUSSELL, RICHMOND HILL, ONT.

It is with the most pleasing sense of satisfaction that we are enabled to commemorate in the accompanying illustration eight head of Canadian-bred prize-winning Shorthorns, which played so important a part at the World's Columbian Exposition at Chicago.

Canadian Shorthorn breeders can well afford to eulogize the men who battled so successfully in behalf of their favorite sort. Although it may be truly said that the Messrs. Russell have gained a full measure of personal honor in the contest, yet Canadians must look proudly and gratefully upon the men who had the ability and enterprise to step to the front and win in the face of the keenest competition, where the skill of a continent, backed by unlimited wealth, employing the most expert judges, had selected and congregated the best cattle from either side of the Atlantic.

Certainly the strongest point in the success that the Messrs. Russell achieved is the fact that these cattle were bred in their own herd, the crosses being dictated by themselves, not after any prescribed rule, except that which has carried the early breeders to victory, viz., the comingling of the best obtainable prize-winning blood. Here an interesting study presents itself for those who will analyze the blood lines of this wonderfully successful herd.

First, we find that all the eight were sired by Stanley, a prize-winner and sweepstakes bull in many competitions.

Secondly, we find that three of the group, i. e., Lord Stanley, Queen Mary and Ruby Princess, are the produce of the imported cow Roan Princess, a Highland Society winner that has proved a most wonderful breeder, for of the six calves she has produced, four have been winners.

Thirdly, three others of the group, viz., Centennial Isabella 25th, Centennial Isabella 27th, and Centennial Isabella 30th, are descendants of the cow Isabella, by imp. Wellington, which won first prize in her class and sweepstakes gold medal over all beef breeds, male or female, at the Philadelphia Centennial in 1876.

A no less interesting study is the number of prizes that this group, and the individuals of which it is composed, won at Chicago; beginning with Lord Stanley, which won first in his class as the best Shorthorn yearling bull at the show. In the sweepstakes by ages he won first as the best bull of the beef breeds under two years. He stood at the head of the Shorthorn herd that won first in the class under two years, and again stood at the head of the best beef herd under two years, all breeds competing. He also stood at the head of the herd that won first premium for the best four animals sired by one bull.

Standing in the right foreground of the illustration is Centennial Isabella 30th, really the most successful animal in the group, as she never stood up excepting in first position. She won first as the best Shorthorn heifer under one year. In sweepstakes by age she won first premium for the best female under one year, all beef breeds competing. She made a strong member in the herd that won first, under two years, all beef breeds competing. Again, she was one of the group of four, sired by one bull, that won first premium.

Her next of kin, Centennial Isabella 25th, the heifer in the centre foreground in the portrait, won second in her class, although it was considered by all fair-minded judges that no greater injustice was done than by placing this heifer second. However, this was the only occasion when she has not won the highest honors since, including the first time she was shown as a calf in Toronto in 1891.

Ruby Princess, the white heifer in the background, also figures well in the contest. She was commended in her class, and was one in each of the prize groups before mentioned. She and Lord Stanley won third premium as the best two animals, the produce of one cow.

Queen Mary, the three-year-old roan in the left foreground, was one of the strong members in the group under four years, the get of one sire.

The white yearling to the right in the illustration is Centennial Isabella 27th, that took her place in all three group prizes, while the red yearling in the left background is Rose of Autumn 11th, and the other red in right background is Nonpareil 51st. Both of these were in group prizes mentioned below.

The foregoing will give an idea of the honors each individual in the illustration won, while collectively the herd prizes and those that took part were as follows:—

Herd of four animals under four years, the get of one sire—Lord Stanley, Queen Mary, Centennial Isabella 25th, Centennial Isabella 27th; winnings, \$300.

Herd of bull and four females under two years, bred by exhibitors—Lord Stanley, Rose of Autumn 11th, Ruby Princess, Centennial Isabella 27th, Centennial Isabella 30th; winnings, \$300.

Herd consisting of bull and four females under two years, bred by exhibitors, all beef breeds competing—Lord Stanley, Ruby Princess, Centennial Isabella 27th, Centennial Isabella 30th, Nonpareil 51st; grand premium, \$600.

To sum up, the honors won are remarkable, and it is a question if the great breeders of any day could have gone higher, for 'tis an honor to possess a good animal, but a much greater to breed one.

It is worthy of comment that although there are three successful white animals in this group, they are the only ones to be found in the herd, while only four have been dropped in as many years, and perhaps no greater advantage has been gained from this contest than the effect it will have towards removing the absurd prejudice with which the color has been regarded in Western breeding circles, and show yards.

Agriculture in Schools.

In a letter to Mr. Gilbert Wilson, commending his paper on "Agriculture in Schools," a copy of which appeared in the *Advocate*, April 20th, Wm. Houston, M. A., Director of Teachers' Institutes, Ontario, appended a memorandum on the subject, which we publish below. As Mr. Houston is one of the most advanced educationists in America, his opinions on this subject should be of interest to Canadians at the present time:—

I am heartily in accord with the main contention of your admirable paper—that agriculture should be a compulsory subject in the programme of rural schools—and also with the chief reason urged in support of that contention, namely, that it is an excellent subject for educational discipline. Three reasons may be urged for the action proposed:

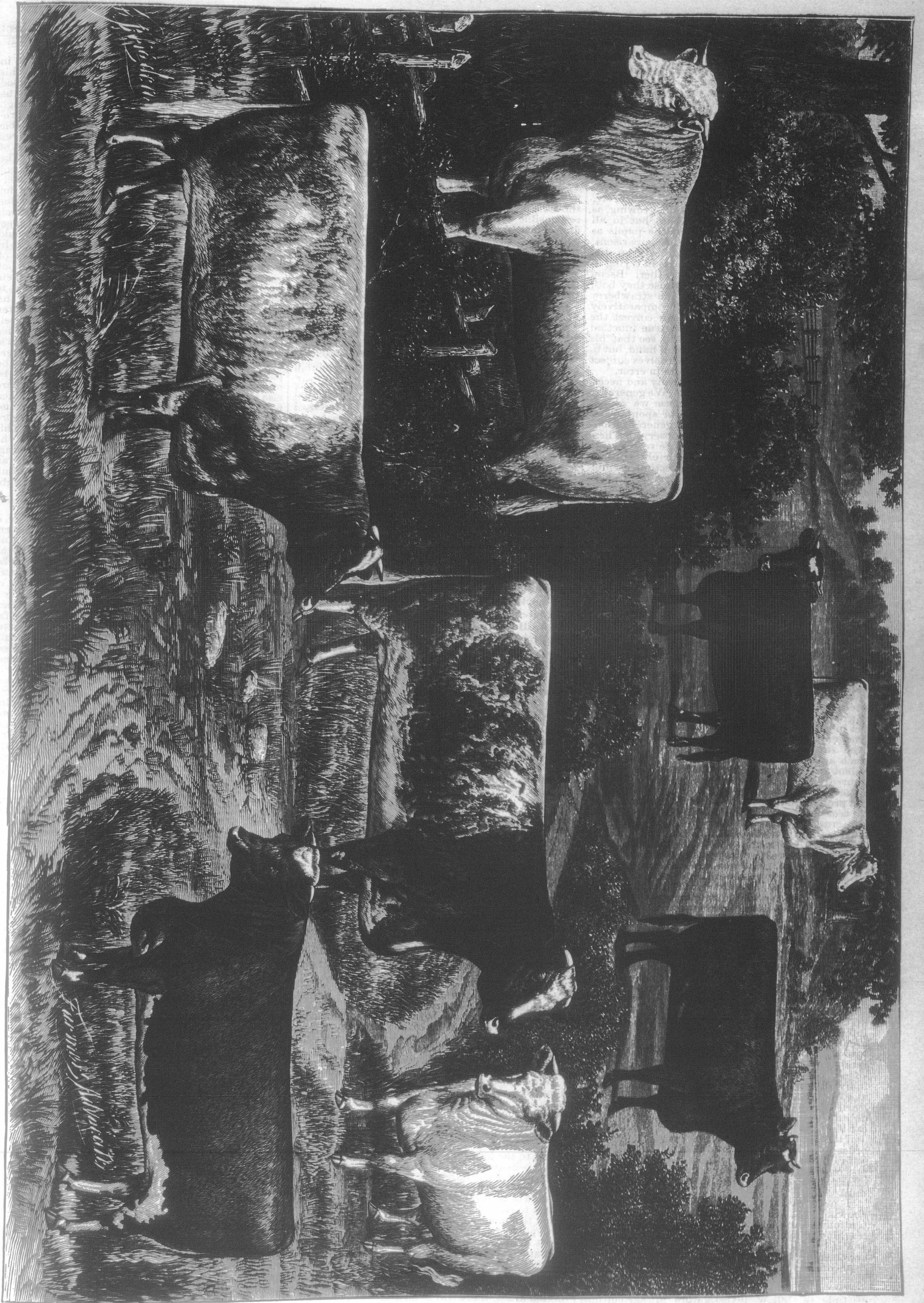
1. The educational value of agriculture in schools.
2. The sociological value.
3. Its economic value.

These I have stated in what I believe to be the order of their comparative importance; and to make my meaning clear I would like to go a little into detail.

THE EDUCATIONAL VALUE OF AGRICULTURE AS A SCHOOL STUDY.

No education that is worth much can be secured from the mere memorization of knowledge already accumulated and systematized by others. The value of the study for cultural purposes depends almost entirely on the process by which the knowledge is acquired—by the pupil. Certain powers with which he is endowed must be persistently trained or the time in school will be wasted. He must be trained (1) to observe phenomena instead of learned facts by rote; (2) to compare and classify the phenomena he has observed, so as to systematize his knowledge instead of leaving it in a crude and amorphous condition, and (3) to draw general conclusions either (a) in the way of foretelling what is to come, or (b) in the way of accounting for what has happened.

You are right in your contention that agriculture is pre-eminently fitted for becoming an instrument for this kind of discipline. The facts, phenomena, operations, experiments to be observed are within easy and constant reach of the pupils. They have no trouble of a physical kind to encounter, as the botanist has. They are familiar with much already, and need only keep their eyes and ears open to learn more. They see the farmer ploughing, sowing, manuring, selecting one kind of plant for preservation and another for destruction, planting crops in rotation, and experimenting in various ways of feeding stock, such as pasturing, soiling, ensilage, etc. They see him resort to one kind of farming in preference to another, substituting wheat for mixed farming, or vice versa, and they all have sense enough to know that he must have some reason for what he does. The teacher may easily, informally, and unostentatiously compel to habits of observation by calling attention to actual processes and requiring them to be described to him in minute detail. Similarly he may train pupils by asking them to look into the nature and composition of soils, the changes in the weather, the effects of rain and other kinds of moisture, and of the absence of them, and go on over a wide range of natural phenomena. No text book can be of the slightest use in this stage of the work. The observation must be the pupil's own observation. The facts to be learned are the facts he has seen, and he learns them by discovering them—the only useful way of learning them. The character of the phenomena to be observed will depend very largely on the physical character of the locality where the observation is carried on, and physical characteristics must vary greatly even in Manitoba; they certainly do in Ontario. One feature you have in



THE CANADIAN GROUP OF VICTORIOUS WORLD'S COLUMBIAN SHORTHORNS,
BRED AND OWNED BY J. & W. RUSSELL, RICHMOND HILL, ONTARIO.

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many places is the absence of trees and the presence of peculiarities traceable to that.

The teacher who knows his art will, of course, not stop with observation of facts. These must be compared and classified generally after a preliminary analysis. In this way the useful and the injurious plants are brought into their respective classes, and so are the useful and the injurious animals. In this way soils are classified according to their composition, and also according to their suitability for certain kinds of crops. Breeds of animals are classified from various points of view, such as structure, utility, cost of maintenance, etc. Trees for shade purposes, and for fruit growing, as will lend themselves to classification, but in all cases the grouping must be done by the pupils as the result of their own analytical comparisons. Mistakes will be made by Scientists—even the greatest have misplaced natural objects in trying to find out their true relations to each other. Bacon once put birds and flies together because they both had wings, and the grouping of the strawberry with the apple tree is an idea of comparatively modern suggestion. The teacher can correct the mistakes as he sees fit, but this is his true function as a teacher. His business is not to see that his pupils get correct knowledge at second hand, but to see that they get knowledge for themselves subject to correction from him when they are in error.

Classification of facts leads naturally and necessarily to the drawing of inferences. We generalize from the facts of experience because we cannot make any other use of them. All our spontaneous and deliberate acts are the result of generalizations based on classified facts previously observed. These generalizations will be correct and safe very largely in proportion to the accuracy of our observations and the skill we have developed in detecting resemblances and differences in what we observe. No field of observation affords such excellent opportunities for drawing conclusions as agriculture does. The pupils in rural districts live for the most part on the farm. They can easily ascertain—and should be required to find out—from the farmer himself why he does his work of a certain kind, at a certain time, and in a certain way. He will have some reasons to give, as often as not an erroneous one, and these reasons may be investigated in the classroom. Pupils so trained will soon learn to form opinions as to the kind of farming they see going on in the neighborhood, and the teacher may thus indirectly educate the parents as well as the children.

THE SOCIOLOGICAL VALUE OF AGRICULTURE.

The great complaint from time to time is the tendency of young people to leave the farm for the city life. This tendency is due in part to causes which the teaching of agriculture cannot directly counteract, but in so far as it is due to the want of intellectual interest in agriculture as a pursuit may be greatly lessened by wise treatment on the subject in rural schools. Physical toil is not necessarily drudgery; it becomes so only when it is divorced from real intellectual interest in the work. To teach agriculture out of a text book, however excellent as a manual of information it may be, will assuredly create disgust with the subject, especially if the teaching is to be followed by examination, and promotion is made to depend upon the result. All true culture producing exercise of the intellect is interesting. Else why have we had Darwins, and Huxleys, and Faradays? And in his own humble sphere the farmer is very favorably situated for becoming interested in his pursuit. His farm is a laboratory, in which he is experimenting all summer. He should know a good deal about many sciences—Biology, Physics, Chemistry, Physiography, Meteorology—and he will learn much about them as he goes on if he is only observant. He will learn all the more, and learn it all the more easily and interestingly, if he is taught as a boy to observe, compare and draw conclusions independently.

THE ECONOMIC VALUE OF AGRICULTURE.

It will never do to rest the defence of agriculture in schools simply on the ground that pupils so trained will make better farmers, or that they will make more money by their toil, and yet the industrial and commercial view of the subject is a legitimate one to take. In these days when an increasing interest is taken in industrial education on the greatest of all the industries must be allowed a hearing. It is important that farmers should be intelligent, that they should be skilful, that they should be scientific. The country as well as the individual will benefit by their being so. A pupil at school cannot learn to hold a plough, but he can learn why ploughing is done. He cannot learn to do any practical work in the school-room, but he can learn the reasons for doing many kinds of work, and the conditions under which it must be done in order to be successful. Above all, he can be made self-reliant and original in his reasoning about the process of agriculture and an independent discoverer of the laws in accordance with which the farmer must work.

I need not say any more for the purpose of showing that I fully agree with your contentions. Our school law in Ontario makes the teaching of agriculture obligatory in rural schools, and if it is not taught in every school the trustees are themselves to blame. It will not do to say that they cannot find qualified teachers on the subject. Most teachers know a little about it now, and can easily learn more. They can at least assume the attitude of fellow investigators of agricultural phenomena with their pupils, and this will enable

them to learn much as class after class passes through their hands. They can learn by observing, classifying and generalizing, just as they should require their pupils to do.

I earnestly hope that your propaganda in Manitoba will be entirely successful. I hope this for the sake of our own Province, but also because success there will promote the same movement here and elsewhere throughout the Dominion. I do not know of any more important movement just now in educational work. I believe that agriculture as a school subject will yet have the honor of breaking us off the strong tendency to bookishness, which is the bane of modern education, and which is largely responsible for the practice of "cramming" by dint of mere memorization. We want more of ratiocination, more of the scientific spirit and of scientific methods in our schools, and I know of no better way to secure this in rural schools than the general use of agriculture as a subject for an inductive investigation carried on by the pupils under the guidance of a wise teacher.

Dairying in Manitoba.

BY J. A. RUDDICK, OF THE DOMINION DAIRY COMMISSIONER'S STAFF.

After spending over two months travelling through Manitoba, with one of the Dominion Government Travelling Dairies sent out by Prof. Robertson, holding meetings nearly every day, and coming in contact with thousands of farmers, I think I may venture an opinion as to the future prospects and possibilities of dairying in Manitoba, without any show of presumption. I always tried to learn from those who were doing anything at all in dairying what constituted the chief difficulties met with in carrying on their work. Lack of proper buildings for keeping milk, cream or butter, was spoken of more than anything else. It must be remembered that those who were attracted to our meetings were the men who so far have given the most attention to this branch of farming industry. Of course, I can only speak of that part of the country through which I travelled. Commencing at Winnipeg, we went west to Brandon, where the first meeting was held on May 29th. From there our route took us to the following places: Reston, Souris, Hartney, Napinka, Melita, Oxbow, Deloraine, Morden, Manitou, Pilot Mound, Crystal City, Killarney, Boissevain, Glenboro, Cypress River, Holland, Treherne, Carman, Winnipeg Exhibition, and the Icelandic Settlement on Lake Winnipeg, at Gimli. At all of these places, with one or two exceptions, we had excellent meetings, as many as 200 people being present in some cases, and as there were usually four sessions at each place, the total number of visitors often exceeded that figure. In several instances I learned of people driving 25 and 30 miles to be present.

The first question which should be considered in connection with this subject is this one: Is the Province of Manitoba naturally adapted for the carrying on of dairy work? Space will not permit me to go into the matter very fully, but I hope to be able to show that, in many respects at least, the country is well suited for dairy farming.

CLIMATE.

After my experience of the past summer, I have no hesitation in saying that so far as it effects the handling and keeping of milk and its products, the climate of Manitoba, with its cool nights and dry atmosphere, is a very favorable one indeed. We found that milk would keep sweet rather longer than it will in the East, at the same temperature, and it was not effected as much by injurious fermentations.

FOOD SUPPLY.

At present there are some sections of the country where pasturage and hay is not as plentiful as it is in the Eastern provinces, but I see no reason why, when the farmers turn their attention to this sort of thing, that the natural pastures cannot be very much improved. There is one thing in connection with the question of food supply which will require attention, and I refer to the matter of "weeds."

When judging butter at the Winnipeg Exhibition, I found quite a few lots of butter, otherwise very nice, which had very bad "weedy flavors." Perhaps the worst is the "French weed," but there are some others, although I cannot call them by name. We did not meet with this trouble at all in our Travelling Dairy work, and it may have been owing to the localities, but I am inclined to think it was because we were almost invariably supplied with morning's milk, as the cows are usually "corralled" at night, and away from the influence of the weeds over-night, and long enough for the effects to pass off before the morning's milking. I found that many people knew the "French weed" by reputation only. Every farmer in Manitoba ought to know it in order to stamp it out on its first appearance.

WATER SUPPLY.

A plentiful supply of good pure water is one of the essentials to success in dairying. Except over limited areas, there will be no difficulty in procuring plenty of good water in Manitoba, but of course it

will have to be pumped in many places, as it is in other parts of Canada. The windmill will solve this question. The numerous streams furnish a good supply for a large part of the country. On the whole, it seems to me that the country through which I have travelled is well adapted for the production of good butter and cheese at a reasonable cost, providing the same care and attention is given to the business as is given to it in any other part of the world where it is being made a success. The present system of trading butter at stores is not satisfactory either to the buttermaker or the merchant. During the past summer, farmers have not been getting much over half the real market value of their butter, and yet, owing to the way in which it is handled, I have no doubt but that the merchants have allowed their customers all they could afford to for it. Butter deteriorates so much in value when handled in this way. The practice of paying the same price for all butter, regardless of quality, discourages some from trying to do their best in producing a good article. Of course it is wrong, and I heard many complaints against the merchants for doing business this way, but after all, I wonder if those who have the butter to sell are not as much or more to blame than any other class for the existence of this state of affairs. It is a well-known fact that if the storekeeper offers Mrs. Jones only 10c. per lb. for her butter, while he pays Mrs. Smith 15c., that the former will be offended, and, the chances are, will go somewhere else to trade, consequently the merchant is obliged to protect his business by paying all alike, because the profits on a year's trade are very apt to be more than the loss on the butter would amount to. This sort of thing will exist more or less as long as the selling of butter is mixed up with other trading, and it is only when the butter is bought by an independent man, so to speak, that proper discrimination can be made. These things will all right themselves in time.

CO-OPERATIVE DAIRYING.

Co-operative dairying, where butter or cheese is made in factories, in large quantities of uniform quality, will enable the producer to realize full market value for his goods, and there can be no doubt, where this system is practicable, that it is by far the most satisfactory and profitable way of carrying on the work. One obstacle in the way of the establishment of factories in Manitoba, on a paying basis, at present, is the heavy cost of collecting the milk, the teams having to travel so far among the widely separated farm houses. After all, this obstacle is much more real just now than it ought to be in the near future, for, if farm houses are far apart, the farms are large, and a correspondingly large herd can be kept.

Farmers in Manitoba cannot reasonably expect to start in at once on a par with the older sections of Canada, that have been thirty years in building up a business, yet there are good reasons why progress should be much more rapid in Manitoba than it has been in Ontario and Quebec. In the first place, Manitoba can profit by the experience of the past in those provinces. The people can avail themselves of the information so readily given through the different agencies, such as the dairy associations, the Dairy Commissioner's office, agricultural papers, etc., and moreover, many of the farmers of Manitoba have had more or less experience in the work, either in Ontario or the old countries. It should be borne in mind, however, that some of this experience gained 10 to 15 years ago is not of much value at the present time, for there has been a great improvement in dairy methods since that time. I notice a tendency on the part of some to start in just where they left off many years ago.

In conclusion, I may say that I believe the intelligence and good judgment of the farmers of Manitoba will enable them to adjust themselves to the conditions which they find surrounding them, and in time will be producing large quantities of butter and cheese, greatly to their advantage from a financial standpoint.

The most enthusiastic advocate of dairying dare not claim that there is any prospect of great riches, or chance of making quick fortunes, in following up the work, but he can honestly say that there is almost a certainty of fair remuneration, even in the worst years, and never a total failure.

Take any part of Canada, the United States, or Great Britain, to-day, and it will be found that those sections where dairying is most extensively carried on are the most prosperous.

To the people of Manitoba, it means converting coarse products into more concentrated ones, and thereby saving a large item in freight, besides conserving the fertility of the soil by returning to it the greater part of those elements contained in the grown crops, which, if constantly drawn from it, and nothing returned, soon leave it in an impoverished condition.

A Foreign Method of Utilizing Surplus Horseflesh.

In 1866 the first shop was established in France for the sale of horseflesh as meat. Since that time the sale has grown to enormous proportions. In 1891, 21,231 horses, 61 mules and 275 asses were sold in Paris shops, at about half the price of beef. The French law demands that horse-meat may be sold as "equine," plainly marked as such, and not as bovine meat, and that animals that furnish it are in good health and not aged. It is estimated that about one-third of Persian households use horse-meat almost exclusively.

Noxious Weeds of Manitoba.

In order to call special attention to the evils resulting from allowing noxious weeds to spread, and that the most practical information might be elicited as to the best means of destroying weeds, the Agricultural Department of Manitoba issue a special bulletin.

Mr. Thos. Greenway, Minister of Agriculture and Immigration, kindly offered three prizes for essays on Manitoba weeds and how to destroy them. 1st prize, cash, \$25; 2nd prize, cash, \$15; 3rd prize, cash, \$10.

The contest had the effect of securing 47 essays. The three securing awards are published in full in the special bulletin, and contain information too valuable to be neglected without loss to Manitoba farmers. The first prize essay appeared in the FARMER'S ADVOCATE of July 5th.

As a summary from all the essays received, we give the following valuable points:

LOSS ENTAILLED BY WEED GROWTH.

1. Weeds draw from the soil much of the plant food which would otherwise be utilized by the growing crops.
2. When they grow rank they choke the crops.
3. More power and time are required to cultivate weedy than clean land.
4. A weedy crop is more difficult to cut.
5. More time is required to bind it.
6. More labor and heavy lifting is required in stooking, pitching, stacking, threshing and marketing.
7. Weedy grain is more difficult to dry, and in wet seasons, loss is often caused by the grain being sprouted.
8. It discourages the farmer and brings him into contempt among his neighbors and passers by.
9. If eradication is attempted, the cost is very great indeed.

PRINCIPLES OF LIFE AND DESTRUCTION.

Weeds may be divided into three classes:

1. Annuals, which grow from seed and produce seed each year. Extermination can only be accomplished by securing germination of the seed, and destroying the new plant before it produces seed.
2. Biennials, which grow from seed and produce seed the second year. Means of extermination same as for annuals.
3. Perennials, which are propagated both by seeds and roots. Seeds must first be germinated, and afterwards the plants be prevented from showing leaf above ground. Being thus deprived of the nourishment which the leaf would draw from the air, the roots must die.

AGENCIES OF PROPAGATION.

1. Foul seed.
2. Cleanings of stock and grain cars.
3. Threshing machines and binders, plows and other implements carrying the roots of perennials.
4. Cattle carrying seeds on their feet and in their droppings.
5. Waggon wheels and horses' feet in driving over fields, especially in wet weather.
6. Feeding foul grain whole or unperfectly crushed.
7. Spreading manure which has not been heated.
8. Allowing seeds to mature on manure piles.
9. Birds.
10. Wind.
11. Water, etc.

PREVENTIVES.

1. Never sow foul seed, even if clean seed costs double the price. Count the after cost.
2. Cleanings of cars should be collected and destroyed.
3. No matter on whose farm a threshing machine has been working, see that it is thoroughly swept down from top to wheels, and run empty at least five minutes before coming to your farm.
4. Do not thresh on different spots; have your regular threshing sites, and watch them carefully.
5. Clean down binders and implements before moving from foul to clean fields.
6. If possible, get your farm fenced in order to keep your neighbor's cattle from straying over your fields.
7. See that your waggon wheels and boxes and horses' feet are clean before driving over your fields.
8. Allow no man to drive across your fields, even to secure a near cut.
9. Get all your feed crushed, even though you think it is clean.
10. Never spread fresh manure on your fields nor allow weeds to mature on your manure pile. Watch your water-courses.
11. Never allow weeds to ripen on your farm, and encourage your neighbors to take the same precaution.

MODERATE EXPECTATIONS.

- Owing to the facts:
1. That the means at the command of most farmers are limited.
 2. That our seasons are short.
 3. That the seeds are, in many cases, mixed through the whole cultivated soil, expectations must be at best moderate. Even with the very best care and skill, the work of extermination will take a long time. Add to this the fact that some careless, selfish souls will allow weed seeds to mature, the work of prevention and extermination will be difficult indeed.

DON'T DESPAIR.

At the same time, we would say don't despair. It is a work that must be done; courage for it is essential, and perseverance will secure a fair measure of success, even in apparently hopeless cases.

GENERAL PRINCIPLES OF EXTERMINATION.

1. Secure germination of all seeds lying on the surface before plowing down. Therefore, in the fall cultivate shallow with disc, spade, or cut away, harrow, or three moulded gang plow; harrow well and leave till seeds have sprouted.
2. Do not allow plants to form seed before plowing under, because many of them (such as French weed, mustard and buckwheat) will mature seed under ground.
3. In the case of perennials, never allow a leaf to show above ground. Every time this occurs it is so much labor lost.
4. Observe thoroughness. In the case of summer-fallow or hoed crops, never allow one plant to produce seed. A great many, after keeping their summer-fallow or hoed crops clean till harvest, are tempted in the busy season to neglect them, allow a few plants to mature seed and thus lose the fruits of their whole summer's labor. This may not at first sight appear; but suppose that a given piece of land has 300 weed plants planted on it and all but one is destroyed, but that one escapes and produces 300 seeds, at the beginning of next season the account will stand thus, 300-299=1x300=300, and the cultivator is just where he was twelve months before, except, perhaps, that the weeds are closer together.

DETAILS OF PRACTICE.

Annuals.

Under this head we will deal with French weed, and the treatment suitable for the extermination of this most noxious of noxious weeds will be suitable for all the annual weeds, although with many it will not be necessary to apply it so rigidly.

1. Estimate in the fall how much land can be thoroughly summer-fallowed during the next summer. Do not undertake one acre more than can be done well.
2. Cultivate this quite shallow immediately after and as often as seeds germinate. See that no plants show above ground when winter comes, as these will retain their vitality over winter and shed seeds very early in spring—before you are ready for summer-fallowing.
3. Harrow again first thing in spring.
4. Spring plow and sow all the cultivated land not set apart for summer-fallow, and if it appears that there is rather too much land under cultivation for the available force, seed down a part with grass, which will tend to keep it out of mischief till overtaken.
5. After seeding, cultivate summer-fallow slightly deeper than was done the previous fall, and harrow as often as weeds appear.
6. Now commence plowing, so as to have all plowed before any seeds have formed.
7. Harrow each evening the land plowed during the day, and repeat as often as weeds show above ground. The object of this is to encourage weed growth and to destroy the young plants.
8. The following season sow without any further cultivation and hand pull all the weeds which appear in the crop.
9. Gather the weeds in a sound bag to prevent any seedpods from falling out.
10. Burn all the plants, because if thrown in a pile the under ones will mature seed.
11. In the fall treat as in the fall preceding summer-fallow, and sow the following spring without plowing. On land infested with weed seeds never plow and sow without germinating all the seeds in the surface soil both before and after plowing. Never be deceived by one clean crop. Millions of seeds may be buried below the germinating point and will grow in future years.

Perennials.

CANADIAN THISTLE.

1. Allow to come to blooming time, then cut off with mower about four inches above ground, take off and burn.
2. When a new growth has been made mow again close to the ground. This exhausts the root.
3. Plow about three inches deep, harrow well, exposing all the roots turned up to the sun.
4. By means of harrow, cultivator or plow, keep the young plants under ground, and the roots will die for want of sun light and air.
5. Next season sow thickly. Mark the place with stakes and carefully hoe out any plants which may appear.

COUCH GRASS.

The most satisfactory system is to plow well, late in the spring (but before the grass seeds), and sow with oats, harrowing well. The late plowing gives the oats a start, and if the crop is heavy, it will almost entirely choke out the grass. A second year's treatment will finish it, except when seed has fallen. Summer-fallowing is of no use, especially in a wet season. Couch grass will often be found growing on stony spots where the cultivation is defective.

DIFFICULTIES IN THE WAY.

1st. Want of knowledge on the part of farmers generally (a) as to the appearance and character of our noxious weeds; (b) as to the principles of propagation and growth, and consequently of prevention and extermination.

2nd. Want of appreciation (a) of the probability of our farms becoming overrun with weeds; (b) of the misfortune which the fact would entail both in loss of crop and expense of eradication.

3rd. Utter carelessness on the part of many who allow their weeds to ripen and thus pollute both their own and their neighbors' farms.

4th. Carelessness on the part of officials in carrying out the provisions of the law.

SUGGESTIONS.

1. Have specimens (at different stages of growth) of all noxious weeds collected and placed in secure cases with glass fronts, and these distributed among the country schools and put up in public places throughout the Province.
2. Teach agriculture in our Public schools and teach each scholar whenever he sees a noxious weed to kill it as he would a rattlesnake.
3. Have the provisions of the Noxious Weeds Act carried out, not arbitrarily, but intelligently and firmly. This can only be done by the co-operation of the intelligent farmers and teaching the others to see that the law is framed for their benefit and not to harass them. Here is work for our Farmers' Institutes and agricultural journals. They too can inculcate in the minds of our farmers a spirit of emulation and a desire to be more systematic and careful in their farm operations.
4. From whatever source salaries are to be paid, see that properly qualified weed inspectors are appointed, and see that they discharge their duties faithfully in the following respects: (a) by keeping their own farms clean; (b) by seeing that no weeds are allowed to mature seed, either on their neighbors' farms, on vacant lands, or on the roads.
5. Let farmers and others assist the Inspector by informing him of any localities in which they know that weeds exist. In short, let us have some united vigilant action, for in no case more than in this does the motto apply: "Eternal vigilance is the price of Freedom."

Some of the Many Things I Do Not Know About Shorthorns.

(Paper read before the Shorthorn Breeders' Association by John Idington, Q. C., of Stratford.)

In this Province there are estimated to be about two million cattle; of these the pure-bred Jerseys, Guernseys, Holsteins, Herefords, Polled-Angus, Galloways and Shorthorns form but a small portion. It is not assuming too much, I fancy, to say that pure Shorthorns outnumber all these other pure-bred cattle put together. And it may be claimed, without offence to the breeders of these others, that the grade Shorthorn in a still larger proportion outnumbers the grades derived from all these others. Can this ascendancy be long maintained? Can it be made still more marked in the process now going on of pushing the nondescript scrub out of the field? What hinders and what will help such a result may well come under consideration on this occasion. In making these suggestions it occurred to me to throw into a short paper some of many things I don't know about Shorthorns.

The special purpose cow has very earnest advocates. If we had special purpose farms these men might have, if not the best of the argument, at least enough on their side to command attention. But what are the facts? The census returns of 1881 show for this Province 782,243 milch cows, and 898,061 "other cattle." Assuming same proportion to exist now there are nearly nine hundred thousand milch cows in stock. What classes of people own them? To what use are they put? Are they not chiefly in the hands of the ordinary farmer to supply his family with milk and butter, and a surplus of butter for the market? And are not the other cattle, as distinguished from the milch cows, chiefly in the same hands, and consisting of stock raised from these cows?

The breeding of Shorthorns, under such surrounding conditions, should be viewed in the light of what is needed to render these cattle profitable. Is it for that purpose desirable to breed the sort of Shorthorns that will make for beef alone, regardless of milk and its products? How many farmers make the raising and feeding of cattle for beef the main part of their business? Is it not the case that in Ontario the steer is, as it were, mainly a by-product of the farm? Is this not also true of the old cow, the non-breeding heifer, or the unprofitable cow? What sort of bull will tend to increase the value of these by-products, whilst preserving the main object of getting that fairly good milker these farmers want?

As we have no large ranches solely devoted to pasturage or corn, with which to feed cattle, can our farmers afford to use the Shorthorn bulls that will obliterate the milking qualities of their herd? Have we not been working in this direction? How long can we persist in doing so under the conditions surrounding us without a reaction setting in against our favorite breed? And if that reaction does set in, will there not be a serious danger, not only of the Shorthorn ascendancy being lost, but also of some other breed commanding the field as Shorthorns do now?

We are told on the highest authority that "the longhorn cattle in their native home were suddenly swept away, as if by some murderous pestilence, by the introduction of Shorthorns." Is a recurrence of such a phenomenon at the expense of Shorthorns an impossibility here? How many Shorthorn herds, for example, exist now in the State of New York? Compare what are there now with what were there

thirty years ago or so. Are they either absolutely or relatively, either in numbers or quality, what from their position then might have been confidently predicted for them now? Have they not been largely supplanted by the Jersey, the Guernsey, the Ayrshire, and the Holsteins? And have not the Shorthorns moved West? Will ours move West? Is it desirable they should, and be supplanted by breeds such as so largely supplanted their kindred in New York State? Is that desirable, either for the welfare of this Province or the Shorthorn breeders? If not, can we, and are we doing that which will avert it? How can we avert it? The ordinary farmer buying a bull often knows little of pedigree, and less of the past history of Shorthorns. He follows where the majority of the members of this Association leads. He wants milk and butter, and beef to use or carry to a profitable market. He has been buying, and is yet buying, our stock on the faith of their producing this combination. He knows what he wants, even if he don't understand the pedigree, or what has made, or will come from the animal offered. Are we giving him that animal that will produce it?

Again, the dairy farmers who supply our cheese factories and creameries raise but few calves, and are only concerned in the beef question to the extent of selling to advantage their cows that from age or accident have become unprofitable. The dairy farmers form but a fraction of the great aggregate mass of cattle owners. They are, however, of the best and most prosperous farmers in this country. Their requirements and opinions must have a powerful influence in fixing the judgment, and forming the fashion that will prevail, not only amongst and for themselves, but also all other farmers in regard to the best breed of cattle to use. Can we meet their requirements? The Columbian Fair Grounds, and many an English dairy farm, answer in a way to encourage us to hope that we can. If we cannot monopolize their custom as absolutely as we can that of the ordinary farmer already referred to, can we not at least share it? Can we not make of them friends, if not partisans of our Shorthorns? Are we not coming dangerously near to courting their hostility? My questions may seem to suggest guesses at truth that resemble danger signals. If no need to hoist the signal, sail on as fearlessly as of yore. But if there be rocks ahead, and close at hand at that, how came they there, and how can they be removed or passed?

The high prices of beef cattle, not so long ago, for a considerable time encouraged the breeding of Shorthorns of a purely beef type. The open market of the great corn belt, and the greater ranch ground of the more remote West, seemed to furnish an unlimited market for bulls of the same type. That market is practically closed by quarantine regulations, and even if these be in a few years removed, the market from other causes will not be what it has been. The price of beef cattle has fallen to such an extent that it would be unwise to attempt to force, if we could, farming into the special purpose of raising beef alone. Meantime we have become so much accustomed to admire the fine appearance of a plump, fleshy, nicely rounded, smooth animal, that we keep in much the same old line. Can we afford this to please the eye and gratify the butcher and his customers? I hear that early maturity compensates. Is early maturity a quality that belongs only to this sort of cattle? Even if it is, has the pursuit of early maturity been pure gain? Has the idea of early maturity not been pushed to an unreasonable extent, and in a wrong direction, and by erroneous methods? How much have we lost in its pursuit? Has it, in the manner of its attainment, not tended to beef at the expense of milk in the quality of the animal? Even from a beef point of view alone, have we got nothing but gain in getting early maturity? Can the very early maturity of any breed be brought about without lessening the size of the animal? Has not early maturity in Shorthorns in some cases been attained at the expense of size? Or has reduction in size contributed to early maturity? Or has size been maintained whilst early maturity has been obtained?

Can the breeder profitably do more in this aim at early maturity than eliminate from the structure of his animal such, or reduce so much of the parts thereof as may, under changed conditions of existence, be desirable? The reduction of bone or dropping of horn, for example, may save expense of food. But when the process has gone so far as is consistent with maintenance of size, is there any gain in further reduction?

Is there an early maturity that may be gained by increased food and care, and another that may be gained by reduction of size without increased food? How is the latter got? Does early mating produce it when persisted in for several generations? Is it, when thus got, a desirable result? Have we Shorthorns that, in whole or in part, thus acquired it? When systematic breeding for several generations has reduced a larger to a smaller type, and thereby fixed a small type that has in the process acquired some advantageous qualities, can we expect to use successfully this smaller type by crossing it upon the original larger one? Assume each, in all its parts, equally well proportioned, can a cross either way be prudently adopted?

Is it not extremely probably that in the process there will be a disturbance of the symmetry or proportions of some of the various parts that will tend to destruction? Is this mistake not being made, even in the home of Shorthorns now? What bearing has the length of life upon the quality of early maturity, or the quality of early maturity upon the length of life? Will an animal that carries in it, from birth, life forces destined to bear it along for a period beyond the average life of its kind, attain maturity as soon as one in which the original life forces are such that it will naturally die short of such average life?

Does the breeder not feel more at ease with animals whose pedigrees show in their immediate ancestors an unbroken series of long livers than with a herd whose history is the reverse of this?

Returning from this digression of what may be set down as very heterodox challenges of received opinions, and coming again to our milk supply, what other causes than beef type, by early maturity or otherwise, have operated to deprive our herds of their milking quality? What has the enormously high prices of certain tribes not done to injure their race? Granting that these high prices attracted the enterprise and valuable support of many most desirable friends, and advertised and pushed forward the extended use of the breed in a way nothing else could possibly have done, has there not followed great evil?

Assume that originally a man of genius moulded a cow that surpassed all others in the qualities we now need, are these qualities there now? If there, are they so in as marked a degree as when the master's hand was withdrawn? If not, what contributed to their loss? We often hear and read of inbreeding having wrought, if not disaster, at least loss of many valuable qualities in certain tribes of what were once held to be our best Shorthorns. Is this the so-called cause, or even the main cause, that truly accounts for what is alleged against it? Is it not rather the least forceful source of the evils complained of? Is it not rather the truth that the very excellence of the cattle thus produced laid the foundation of their deterioration, if not of their destruction? This may seem paradoxical, but yet is it not true? The good surpassing qualities brought enormous prices. The enormous prices tempted the owners to use everything that would live and breed. There was no selection, and without selection, either natural or by the directing mind, nothing that lives or grows can maintain a high standard of excellence. The marvelous profits that seemed within the grasp of anyone owning and breeding these cattle tempted men of means, sometimes ignorant of everything that the breeder must, to succeed, know, to invest and embark in that for which they had neither the genius, the instincts nor the training to bring to a successful issue.

The necessity to please the eye tempted the abandonment of milking, or even nursing calves with such precious matrons as these. Could the original good milking qualities be thus maintained or propagated? We are told to remedy these mistakes of the past by selecting the good animals, and then see if the pedigree be right. Both may be found unobjectionable and yet may lead astray. Is it not a fact that Shorthorns have diverged in type to such an extent that the crossing of the extremes of type, even with most excellent individuals, might be the grossest blunder?

What, then, is to be done to meet the present emergencies? Will our masters please rise and tell us? I believe that he who wishes to learn must begin to doubt and to question—no progress is made by unquestioning faith; hence, I have been bold enough, with very limited experience and none of the qualifications of an expert, to submit in this paper much that challenges the work of my superiors in Shorthorn breeding.

If I provoke the discussion of these superiors on many points regarding which, in common with many others, I dwell in ignorance, I shall be amply satisfied. If I ventured to suggest anything, it would be something like this: The common Canadian cow is often an excellent milker. Encourage the selection and use of the best of such for breeding, and the destruction of all else. Encourage their owner to select the milking families of Shorthorns in adopting the Shorthorn cross. Encourage our farmers to believe that Shorthorns are not made for beef alone. Encourage our Shorthorn cows to milk. Encourage our Shorthorn breeders to select from the sort of Shorthorns they have, bulls of the like, but of the best milking families of kindred type of cattle. Encourage the Shorthorn importer to keep his eye in his buying so open to see the animal that will revive and restore the milking qualities of our herds.

And I would say to the young man beginning to breed Shorthorns, that if he devote his life energies to it, there is, if he has the instinct and genius for the business, as rich a field here in Ontario to mould out of broken pieces a harmonious whole as he can wish, and there awaits fame and fortune in the evening of his days.

If oats are crushed or ground for horses, both the grain and chaff digest better, and the indigestible woody fibre of both being broken, admits of the action of the stomach more freely and fully. Whole oats, with rough gritty chaff, act on the stomach so as to be expelled in an undigested state, while those having a soft hull are more or less laxative, which is specially beneficial to breeding animals.

Summer and Fall Fairs of 1894.

Meadow Lea, Oct. 2.
Pilot Mound, Man., Oct. 2 and 3.
Springfield, Man., Oct. 3 and 4.
Souris, Man., Oct. 3 and 4.
Killarney, Oct. 4 and 5.
Gartmore, Man., Oct. 4.
Manitou, Man., Oct. 4 and 5.
Minnedosa, Man., Oct. 5.
Virde, Oct. 5 and 6.
Baldur, Oct. 5 and 6.
Wapella, Oct. 9.
Neepawa, Oct. 10 and 11.
Regina, Oct. 9 and 10.
Russell, Oct. 10.
Oak Lake, Oct. 11 and 12.
Austin, Man., Oct. 3.
Red Deer, Alta., Oct. 11.
Belmont, Oct. 1 and 2.
Austin, Oct. 3.
Saskatoon, Oct. 3 and 4.
Melita, Oct. 4 and 5.
Deloraine, Oct. 2 and 3.
Clearwater, Oct. 11 and 12.
Whitewood, Oct. 12.
Shoal Lake, Oct. 3.
Souris River (Melita), Oct. 3 and 4.
Swan Lake (Lorne Agr. Society), Oct. 4.
Killarney, No. 2 (E. Dagg, Sec.), Oct. 1 and 2.
Oak River, Sept. 28.
Broadview, Sept. 27.
St. Francois Xavier, Oct. 9.
Killarney, E. D. (H. A. Wallis), Oct. 3 and 4.
Cartwright (M. Watts), Oct. 8 and 9.
Carman, Oct. 10 and 11.
Secretaries are requested to send in dates of fairs to the FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS.

Legal.

AGREEMENTS WITH HIRED MEN.

J. D. D. :—"Certain men of this vicinity each make a practice early in the spring of hiring with two or more different parties, and finally go and work for the one who will pay the highest wages. How can I best protect myself against a man going back on his agreement to work for me, and afterwards hiring and working for another?"

[If the man is worth anything financially, he would be held liable for the damages accruing to you by reason of his refusing to carry out his agreement; but generally this remedy is of no value on account of the man having nothing from which any damages can be recovered; and then probably the best way is to have an agreement (in writing, if possible) with him to work for you and expressly agreeing not to work for any other person during the time, and on such an agreement the courts will issue an injunction restraining him from working for another person; or, again, if the man can get some friend of his to become surety for the carrying out of the agreement, you would then have a right to damages from the surety.]

DAMAGES BY A MILL-DAM.

INQUIRER :—"About nine years ago a mill-dam was allowed to get out of repair, and since then has not been in use; but just recently the owner of the dam has repaired it in such a manner as to raise the back water higher than ever before, and the water overflows my land and so causes me damage; nothing was ever paid by the owner of the dam for compensation for the land affected by the water. What are my rights and remedies in law?"

[Probably the owner of the dam had no right to re-erect the dam at all, so as to raise the water to the old level, if the water would then overflow your property, and he has no right to raise the water higher than before, at any rate, and in an action you could compel the removal of the dam, or at least have height of it reduced, and you are entitled to damages for the injury you have sustained.]

ROAD MAINTENANCE.

R. :—"Another farmer and myself reside on our farms, about one and a-half miles from the main road. A public road, however, extends to each of our farms, but this latter road is frequently almost impassable on account of the road being insufficiently drained. Can we compel the municipal council to improve the road?"

[The council is bound to keep its roads in a reasonably good condition, so as to be effective for the ordinary traffic passing over the road, so far as the municipality has the means and the locality will admit. So it follows that what would be a sufficient road in one township, or section, might be very insufficient for another; and the whole state of the roads in the township, and whether the township is an old and well-settled one, must be taken into consideration. If the council does not maintain the road as well as it should do, then it may be compelled to do so by indictment in a criminal proceeding.]

Veterinary.

RHEUMATISM.

JOHN A. MUNRO, Springbank, Alta.:—"Four or five weeks ago one of my dairy cows got very lame in near hind leg, also thin. In about ten days or two weeks the leg got swollen, and gradually the lameness left, leaving a lump on leg about as large as a hen's egg, right on the cords. She seems healthy and all right now. About a week ago another cow, with calf sucking her, got lame in the off hind leg, and failed in flesh rapidly, much worse than the first one. Yesterday there was a large lump on the short rib, on opposite side from the lame leg; she can hardly move at all. Will you please tell me what is the matter? What seems strange to me, they are both cows I bought at different times. I never seem to have the least difficulty with cows of my own raising, although four or five of them are pure-bred Shorthorns, and came from Ontario three years ago."

[The symptoms are those of rheumatism, a disease to which milch cows and young cattle are liable, especially those that have been kept in over-warm and improperly ventilated quarters during the winter, and have been suddenly and unduly exposed to wet weather and cold winds in the spring of the year. Commence treatment by administering a moderate purgative, such as Epsom salts, from twelve ounces to one pound; ginger, one ounce; dissolve in one quart of beer; add half a pound of treacle, and give in one dose. After the physic has operated, give morning and evening for two weeks in bran mash: bicarbonate of potash, and nitrate of potash, of each two drachms. Rub the swollen and sore parts daily with the following liniment: Soap liniment, six ounces; tincture of opium, two ounces. Keep the animal in a comfortable and well-ventilated place. W. A. DUNBAR, V. S., Winnipeg.]

BOGGY HOCKS.

O. WESTWARD, Pendennis, Man.:—"I have a two-year-old colt which has had soft lumps in bend of hind legs and each side of hocks since yearling. Kindly let me know the best treatment for same. Are colts from spavined brood mares liable to have same?"

[If there is no lameness we would not advise any treatment at present, as the "soft lumps" often disappear before the colt attains its full growth. If there is lameness the following blister will be found beneficial: Biniodide of mercury and cantharides, of each one and one-half drachms; vaseline, two ozs.; mix, and apply the whole to both legs by rubbing well in with the fingers. Let the blister remain for forty-eight hours, then wash off and apply vaseline or lard to the blistered surface. Repeat in two weeks, if necessary. Spavined or ringboned mares should not be used for the purpose of breeding, if the disease is known to be the result (as it often is) of faulty formation of the joints. W. A. DUNBAR, V. S.]

FRONT LEG PUNCTURED.

W. D. PAYNTER, Beulah, Man.:—"A few days ago I discovered one of my steers with what seemed to be a puncture on the front inside of left fore leg. The shoulder is swollen down to the knee and along the belly. The swelling seems to be in the tissue close to the skin, and in rubbing has a crackling feel to the hand. Would a hook by another animal cause such symptoms, or is it some disease? The animal is in good heart and condition."

[A wound from the horn of another animal would most likely cause such a condition as you have mentioned. The skin at the wounded part is attached very loosely to the flesh, and in consequence atmospheric air is freely admitted into the surrounding connective tissue, producing the swelling and crackling sensation on rubbing the parts. The treatment consists of fomentation with warm water, and dressing the wound, once daily, with the following lotion: Corrosive sublimate, half a drachm; muriatic acid, two drachms; alcohol, four ounces; water, sufficient to make one pint. It is sometimes very necessary to enlarge a punctured wound externally. W. A. DUNBAR, V. S.]

LUMPS FROM DISTEMPER.

JAMES ARMSTRONG, Oak Lake, Man.:—"I have a colt a year old that has something like distemper. This spring he seemed to get over it. I noticed a bunch on each side of the nose, about three inches up from the nostrils, which seemed to be growing larger and becoming quite hard and bony like. I was of the opinion that it might be his teeth, but I notice another colt affected in the same way. Please give me the cause and treatment, and state if dangerous."

[Such swellings as you have mentioned are sometimes the result of a severe attack of distemper, especially when the nasal membrane and internal membrane of the facial sinuses have been the seat of excessive inflammation. We would advise you to paint the enlargements once daily, for three or four days, with a strong tincture of iodine: iodine, five drachms; iodide of potassium, two drachms; alcohol, four ounces. When the scurf arising from application of the iodine has become loose and can be easily rubbed off with the hand, the iodine should again be applied as above, and repeated in the same manner as often as necessary. Give internally, morning and evening, for ten days: iodide of iron, half a drachm. W. A. DUNBAR, V. S.]

DIARRHOEA IN POULTRY.

C. E. MOORE, Dauphin, Man.:—"Can you please inform me what remedy to give my hens for the

chicken cholera, at least I presume it is what they have? They seem to get the diarrhoea badly first, and get mopish and listless, combs lose their red appearance, and they die in a little while. I have lost a great number."

[In the early stages it may be treated successfully by giving twice daily, from eight to twelve drops of the following mixture: Tincture of rhubarb, tincture of opium and chalk mixture, of each half an ounce. Give in a teaspoonful of gruel. Pay strict attention to the sanitary condition of your poultry house and roosts. Give change of diet. W. A. DUNBAR, V. S.]

A DISORDERED UDDER.

H. GLENDENNING, Dundalk, Ont.:—"I have a cow three years old, first calf from whom we have found it impossible to make pure butter. The milk is apparently all right, and free from any taint, but if the cream is allowed to stand for three or four days, a peculiar odor is noticeable, as well as a disagreeable taste. The cow is apparently healthy, has a good appetite, and sound in every way, with the exception of one teat, which sprays when milked. The smell and taste of the cream resembles that from decaying vegetable matter. Kindly say if you have ever heard of a similar case, and state remedy?"

[In answer to your enquiry, there are probably two factors as cause; the milk undoubtedly is affected by some decomposing material, and most likely from the quarter from which the milk spray issues. Are you quite sure that the cow cleansed properly at her calving, or was any of the placental membrane left, which is now being absorbed, giving rise to the condition? I am inclined to think that the cow has some organic change in the udder, and would recommend hot fomentations and the application of some simple, stimulating liniment to the parts, milking the teat separate until the milk vessel resumes its normal condition. A milk syphon will often relieve the condition of spraying. These cases are not uncommon amongst the dairies in Gloucestershire, England, and are invariably due to the condition of the udder. Milk is so very liable to contamination that a great variety of causes have to be looked at. I well remember a case that puzzled all the experts as to why at a certain period the butter was invariably spoiled, and my preceptor located the cause at the period when the cow was in season. DR. MOLE, M. R. C. V. S.]

MARE WITH DISTEMPER AT LARGE.

SUBSCRIBER:—"My neighbor has a mare which he keeps apart from his other horses, and he allows it to run on the public road and it comes on my farm. I am afraid the mare has some distemper which may be communicated to my horses. What had I better do about it?"

[In most of the townships in Ontario there is a by-law prohibiting horses from running on the highways, and in those townships, or in any Province where the law provides that horses shall not be allowed to run at large on the highway, any animal found at large upon the highway may be impounded, and in any case when any horse is allowed to stray upon the land of another, whether any damage is caused or not, it may be impounded, and any damage done may be recovered from the owner.]

Miscellaneous.

TREATMENT OF SANDY SOIL.

MR. GEO. F. SIMMONS, Korak:—"I would like to learn your advice with regard to treatment of sandy soil?"

[The question before us has very little to work on so far as giving a definite answer is concerned. There are many grades of what may be termed sandy soil, and many lines which may be followed regarding its treatment. We will suppose that the farm is a moderately level one, tolerably light, and on which mixed agriculture is to be followed. Such sort of land is perhaps as remunerative as any, when properly handled, as it is early, easily worked, and readily gives up in the form of crops what is given to it in manure. To keep a good supply of humus in the soil is very important, because of its ability to retain moisture as well as its fertilizing influence. If a light soil is poor, it is a good plan to sow a crop for green manure, to which a nitrogenous fertilizer can well be supplied with advantage, as a very luxuriant growth will then result, to supply the needed humus. This can be done in the fall, after a crop of barley or fall wheat, or even after any spring cereal crop has been taken off, but it should be sown at the earliest moment. Buckwheat is largely grown for this purpose, but rape will answer equally well in a good growing season. The following year the rotation may commence with spring wheat, barley, or short-strawed oats, with which the field should be seeded down to clover and grass, or clover alone. If clover and grass, it may be allowed to lie for two years, but if clover alone, it should be ploughed the first year, immediately after the hay is taken off, or left till the aftermath has made a good growth, the latter preferred when a spring crop is to be sown. For a fall grain crop, rye does well on light soil, and will yield a good crop of straw as well as grain. Fall wheat may do all right, but is not so certain a crop on such land. For a spring crop there is nothing better than peas; being leguminous, will assimilate nitrogen from the air, and will leave the soil in a splendid loamy condition. The peas may be followed by oats, and they by a hoed crop of roots, or corn, the latter preferred. The land should re-

ceive a good dressing of farmyard manure in the fall or spring previous to the growing of the hoed crop. This will end a rotation, which should keep a light soil in a fertile and clean condition. We would advise feeding most of the crops to dairy stock, as by that method little or no fertility leaves the farm. Should this method not be found practicable by Mr. Simmons, we would say by all means grow as many leguminous crops (such as clovers, etc.) as possible, as they, and they alone, have the power of utilizing the free nitrogen of the air through microbes which exist in tubercles growing upon the roots.]

MILLET FOR ENSILAGE.

J. H. ESDON, Curry Hill:—"When well grown, would Japanese millet make up in ensilage the elements lacking in corn, or would it in any way assist as beans and sunflowers do in Prof. Robertson's mixture?"

[Mr. Esdon sends us a magnificent sample of millet, measuring about five feet in height, grown by a neighbor. It was not specially selected, but simply a fair sample of the field. Corn fodder in itself has a wide nutritive ratio, which is made narrower or approaches a perfect ratio by the addition of albuminoids of horse-beans. The fat, too, is relatively increased by the addition of sunflower heads. Millet, in a condition fit for ensilage, would not increase the albuminoids, nor fat, much beyond that already contained in corn ensilage. At the Ontario Experimental Farm, last fall, while one of the silos was being filled with corn, an occasional cart-load of millet was run in. When the silage was taken out it was found that the millet moulded at almost every layer. Had the millet been thoroughly mixed with the corn, no doubt the results would have been better.]

According to analysis made at the Mass. Agricultural College, fodder corn ensilage contains 8.66% albuminoids, or muscle forming element, 3.80% fat, and 54.28% starchy material, while Japanese millet contains 8.72% albuminoids, 2.83% fat, and 49.00% starch and sugar.

TURNIPS BLIGHTED AND ROTTING.

JAS. H. ESDON, Curry Hill:—"What is the matter with my purple top turnips? They seem to be struck with blight, quite a per cent. are dying, and when pulled up are rotten, and in most instances full of worms. As to the condition of land in which they are growing, I might say that it is a nice friable loam, was in pasture three years, ploughed up last August, disked and cultivated twice last fall, top dressed while in pasture with fine, rotted manure, and before planting the field was given about 40 bushels of unleached ashes per acre. When the blight struck them the leaves of all the turnips turned yellow and dried up. About 20 per cent. are rotting. Two of my neighbors' fields are effected the same way. I have given my turnips plenty of cultivation, and hilled them up. They seem to be recovering to some extent, as the tops are growing up from the heart again. There may be half a crop yet. White turnips sown two months later are not the least effected, but four drills of white late turnips sown beside the Swedes are as badly effected as the purple tops."

[I may say that the same trouble you refer to as effecting turnips at Curry Hill, Ont., was noticed in a field of turnips at the Experimental Farm two years ago, and was also noticed in several places in this immediate vicinity. The plants were carefully examined here at the time, and specimens were sent to one or two specialists in the United States for examination. We were unable to determine the disease exactly, but from its character and general appearance believed it to be of bacterial origin. It was very severe in one field at the Experimental Farm, and practically caused the loss of the whole crop. All the diseased turnips were collected and buried in a pit. Care was taken not to replant on the same soil, and since that time it has not appeared. It would seem, from our experience, to be the outcome of peculiar soil and climatic conditions. It is undoubtedly a contagious disease, probably of bacterial origin, and should, therefore, be treated in such a manner as to prevent its spread. All diseased plants should be carefully separated from those unaffected, and should be destroyed or buried. I am of the opinion that soil treated with a heavy dressing of barnyard manure would be more favorable to the spread of this disease than the same soil treated with some form of chemical fertilizer. With regard to the worm infesting the decaying roots: we found the rotten turnips infested with dipterous larvae, which breed in all forms of decaying vegetable matter.]

JOHN CRAIG, Dominion Horticulturist.]

At the Tring Agricultural Show of England was conducted a milking and butter test. Fifty-nine animals arrived in the yard for competition. All competed except two, which became sick. The animals were weighed and divided into their respective classes. The class below 900 pounds consisted, with one exception, of Jerseys. In the heavy class there were thirteen Shorthorns, four Jerseys, one Dutch and seventeen cross-breeds. Summarizing, the results were per day:

Thirteen Shorthorns gave an average yield of 47 lbs. 4 1/2 ozs. of milk—1 lb. 11 1/2 ozs. butter.

Thirty-three Jerseys, 32 lbs. 9 1/2 ozs. milk—1 lb. 12 1/2 ozs. butter.

Eight cross-breeds, 41 lbs. 1 1/2 ozs. milk—1 lb. 11 1/2 ozs. butter.

Care of Horses' Shoulders.

Although horses' shoulders are toughened and tanned at this season of the year, there is great danger of collar galls. A collar that will answer very well in cool weather, when there are no flies, will often cause trouble in the fall ploughing season, when the ground is hard, weather hot, and flies troublesome. It goes without saying that a collar should fit a horse well at any season, but if careful scrutiny of collars and sweat-pads is more necessary at one time than another, it is now.

A collar should fit so that there is no room for moving from side to side on the neck, neither should it be too full at the portions resting on the points of the shoulders. The linings should always present a smooth, soft, but firm surface. Brushing, drying and beating into shape with a smooth, flat piece of wood should be carefully attended to. It is no uncommon thing for horses that have been used on the binder to commence ploughing having a sore neck, which, if present, or a tender spot on the shoulder, care should be given to relieve the affected part of further abrasion. There is no part of a horse, when at all sore, from which he will shrink more readily from pressure than the top of the neck. Fidgety horses sometimes become even dangerous to treat when the trouble is long continued. With an animal so disposed, a twitch should be used from the first evidence of resentment, which will attract his attention from the bottle, which he would otherwise soon become so much to dislike. A zinc pad is sometimes all that is necessary to effect a cure, as it is healing in nature and at the same time smooth and cooling. A good ointment for skin wounds is composed of one ounce of sugar of lead, or zinc sulphate, to eight ounces of lard. This is especially useful in cool weather, when there is danger of further chapping by the wind, and also, when there is no dust likely to get into the wound to cause grinding by the movement of the harness. For use in warm weather there is nothing better than "white lotion": sugar of lead, one ounce; sulphate of zinc, six drachms; soft water, one pint; apply to sore shoulders and neck with a sponge every few hours. Its action is to remove inflammation and dry the wound. If found to be too drying, apply a little carbolized or zinc ointment.

Selling Honey.

BY JOHN MYERS.

Now that the season for gathering the delicious nectar is over, and we know about how much honey we shall have to place upon the market, the thought that next takes possession of our minds is how shall we dispose of our crop to the best advantage? It does not always follow that in getting the highest price for our honey we make the most profit; it depends altogether on how much (valuable) time it takes to get the higher price. What I mean by valuable time is this: If, after having my honey all taken off the hives and getting it into suitable shape for the market, I have plenty of work to keep me going until next spring, making preparations for another season, and am receiving fair remuneration for the time spent at this work, then it would be far more profitable for me to send my honey to a commission agent, and receive 7 or 8 cents per pound for it, than it would be for me to spend my time trying to retail it here and there, providing that by so doing I could get 10 or 11 cents per pound for it. On the other hand, if, after having my honey ready for the market, I have plenty of time in which I could dispose of my crop for the higher price by retailing it, then I should say by all means do so. The next question that comes to us (providing we have the time) is what method or methods shall I adopt by which I shall be able to receive the best price for my honey? In the first place I would say, don't be afraid to let the people know you have honey for sale. If you are living in the country, on a main road leading to a town or city, put up a sign with the words, "Honey for Sale," on it. If you are living in a town or city, put up your sign and let the people know you have something to sell. You will be surprised how many customers will be attracted and induced to buy honey that would never think about it if they had not seen your sign. To illustrate, I will show you how the sign worked with me: Some three years ago, when I first removed on to the premises on which I am now situated, and after having disposed of what honey I could at the stores and elsewhere, I had about 400 pounds left, and it was getting rather late in the season, and I was at my wits' end to know how to

dispose of the balance. I conceived the idea of putting a sign up in front of my workshop; action followed the thought, and up went a sign with only those words on it: "Honey for Sale," and in less than five weeks after my honey was all gone, and it went to a great many who would never have thought of buying honey if their attention had not been called to it by that sign; and I might add that my business in retailing honey has increased every year, and the sign still hangs over my shop door. Another point: Commercial men, who are always travelling through our country, have in several instances been attracted by the sign, and have purchased large lots of honey at wholesale. Sometimes a notice in the newspaper has a good effect in helping one to dispose of his crop, and there are many other ways in which we can draw the attention of the people to what we have to sell. I desire to call attention specially to this point: that unless we do call the attention of the people to the fact that we have honey to sell, there will not be more than nine out of every ten persons that will inquire for it of themselves. Honey has not yet become a staple article, like butter, eggs, sugar, etc. (I hope we will see that day), and unless we take some means of drawing people's attention to it, we will not be so likely to succeed in selling it. Therefore, what I said before, I would say again: don't be afraid to let the people know that you have "Honey for Sale." Some time ago a bee-keeper called on me and asked how I succeeded in selling my honey, and if I was successful in disposing of my crop each season, for, said he:

"I am sure I could make a success of the bee business if I could only dispose of my crop each season; but, to be candid, Mr. Myers, I have honey at home that is three years old, and I cannot get rid of it."

"Well, now," I said, "Mr. C., that seems very

A Cheap and Modern Poultry House.

At the present time, when farmers are finding out that it is the little things about the farm that gives the sure profit, there is a demand for cheap, convenient and durable poultry houses. We herewith give a plan reproduced from "Low Cost Poultry Houses," by J. W. Darrow, and published by The Fancier's Review, Chatham, N. Y., which seems to fill the above requirements very well.

When more than one breed is desired to be kept, it will be necessary to arrange for a building having partitions. The accompanying illustration represents a building 18x24 ft., inside view, which can be substantially put up for a small sum. It is arranged with a door entering into a hallway, which runs full length of the building, and is three feet wide, giving ample room to run a wheelbarrow in to clean out the various compartments; also a drop door is left on the nests, the back part of which extends into the hall, and allows you to remove eggs or examine nests without entering into the compartment where the fowls are. The nests may be made movable, so as to be easily taken out and renovated when necessary. The roosts are suspended near the centre of each pen by wires at the four corners, with a hook, making them portable and very easily taken out and renovated. At the right-hand corner of each pen is shown a dusting place, 2x2x3 feet. They are immediately beneath

the large windows, where they will be kept warm and dry by the sun's rays. A six-inch board runs through the entire length of the building, cutting off four feet from each pen to contain litter of straw or leaves to furnish exercise by way of scratching for grain, which may be thrown among it. Soft feed boards are shown on diagram of each pen, which are made 2x6, and lathed 18 inches high, roof shape all round, leaving the laths wide enough apart so that the fowls can get their heads through to eat comfortably. This prevents them from tramping and spoiling the feed; this is made portable and easy to clean.

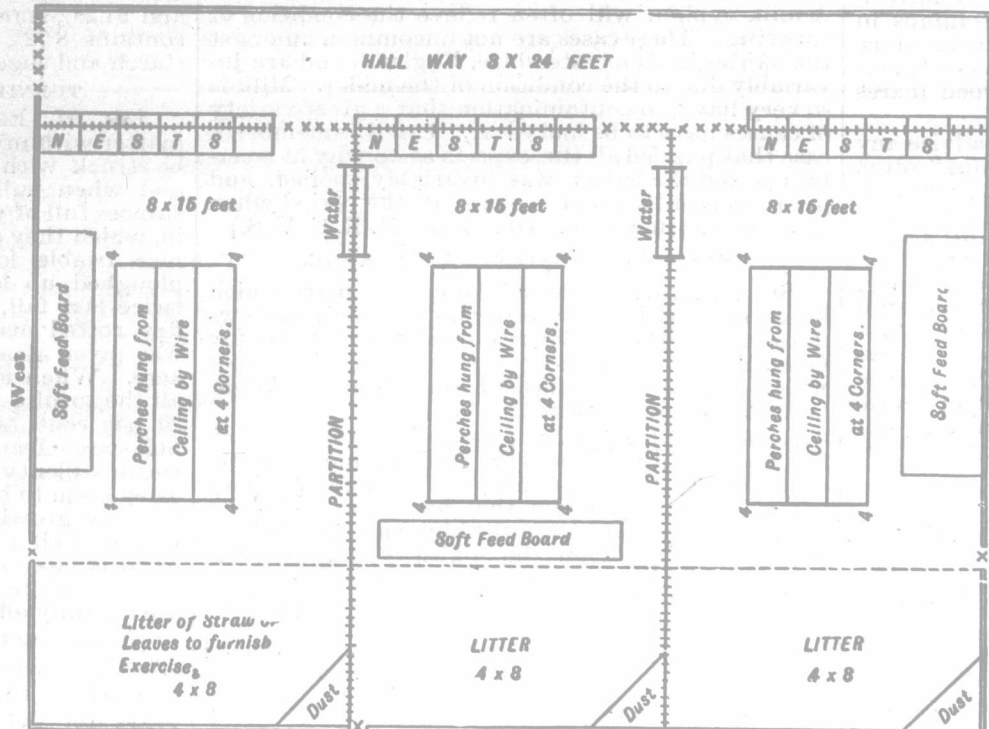
The partitions are boarded tight; 18 inches high, the remainder being lathed with lath or wire. The water troughs are made to slide under the partition, which of itself forms a fence to keep fowls from getting any more than their heads in to drink. The height of front to eaves is nine feet; a one-foot board can be run up past, which will add to the appearance of the building. The back is six feet high, which allows

a drop of three feet in eighteen, amply sufficient to run off water. Material required: 480 feet common boards, 600 feet ship caps for sides and ends, 40 pieces 2x4, 12 feet; 10 pieces 2x4, 18 feet; 3 large windows, 3 small windows, 100 lbs. tar felt, 30 feet wire netting, 4 feet wide; 5 bunches lath; nails and lock.

"Canadian" Creamery Butter.

"A new trade," says the British Dairy World, "has been inaugurated by Messrs. Marples, Jones & Co., of Liverpool, who have commenced operations with their first consignment of mild Canadian creamery butter. It is as nearly as possible of the same texture and character as Danish creamery butter, and is clean, sweet and uniform throughout. The consignees are selling it at 88s. to 90s., packed in kiels or 56-lb. boxes. There will henceforward be regular weekly shipments from Ontario and Quebec. The venture should be not only a successful but a popular one, for traders should prefer colonial to foreign produce. Canadian cheese sells largely now in this country, and there is no reason why Canadian creamery butter should not have an equally large sale, and why the enterprising firm who are introducing it should not 'do' thousands of packages a week."

In consequence of continued internal dissensions, the Board of the Iowa Agricultural College recently demanded the resignation of four professors: H. C. Wallace, G. E. Patrick, D. A. Kent and F. A. Leighton, and ordered Prof. Curtis to sever his connection with a paper on which he has been engaged.



queer; but do you try to sell your honey?"

"Yes, he said," "I tried every way I know how, but I cannot succeed in selling it."

"Well, Mr. C., you will excuse me, but will you please state to me the methods you use in trying to sell your honey?"

"Yes," he said; "I go around to the stores and sell all I can for cash, and where I can't get the cash I take trade; and then my neighbors come and get some, and in this way I sell quite a lot, but not nearly the quantity I can raise."

I said, "Have you a sign up to let the people know you have honey for sale?"

"No!"

"Do you take pains to see that your grocer always keeps your honey in view?"

"No!"

"Do you ever go around and try to sell your honey through the country, and in your neighboring towns and villages?"

"No!"

"Have you ever put an advertisement in your town paper?"

"No!"

"Well, Mr. C., you have not gone far enough. Now, when you go home, get a small sign and fasten it on your honey-house, or where the passers-by can see it, and try hard in all the ways that I have stated, and if you do not succeed in selling all your honey, then come to me and I will buy all the honey you have left."

I need hardly say that I never had to buy a pound from him. The difficulty is that most honey-producers think they ought to be able to sell their honey the same as they do any other kind of produce; but, as I said before, honey has not yet become a staple article, and until it does we will have to bend all our energies to the different methods of attracting the attention of the people, and by so doing induce them to buy our product.



Chats Upon the Porch.—III.

Sunset again, and the flush of it fell all yellow across the group upon the porch, lighting the City Woman's brown hair until it shone in golden threads, and brought forth wondering exclamations of admiration from the Young Girl.

"Won't you tell us how you keep your hair so soft and glossy? Mine gets so hard and frowsy," she said.

The City Woman smiled. "You can't alter the nature of your hair," she answered. "Its quality is a matter of inheritance and temperament very largely. But you may modify or improve the natural condition by care and applied knowledge."

"Well, give me the knowledge, and I'll apply it," urged the Young Girl, saucily, running her fingers lightly through her wavy locks as she spoke.

"In the first place," she said, "do not wash your hair too often. Let me see; you have washed it once a week since I came a month ago. That is far too often."

"Saidie Smith washes her's twice a week, and puts soda in the water as well, and it is always pretty and fluffy," announced the Young Girl, defensively.

"Then Saidie is a very foolish girl," asserted the City Woman. "Very soon her hair will become brittle and broken. It will grow weak and thin—'dead,' as the hair-dressers say—and will need to be helped out in the dressing with that inartistic evil—a switch."

"I had not supposed that this misuse of soda and ammonia as a hair wash had reached the country. In the city we have far too much of it, and my own hair-dresser tells me that to it, more than any other thing, may be attributed the early coming of grey hair."

"I remember, as a little girl, that a young face beneath grey hair was sufficiently rare to cause comment; and it was generally attributed to some nervous shock or disease. But now it is so common a thing that no one deems it necessary to account for it in any way."

"I number among my acquaintances a dozen women under thirty, each of whom have hair more or less touched with grey; while among those between thirty and forty, it is the exception to find one with locks unpowdered with the dust of Miller Time."

"I don't want to grow grey early," said the Young Girl, in an alarmed tone. "No, one would marry a girl with grey hair."

There was a little bubble of laughter from the group upon the porch at the maiden's sincerity of speech. It floated across the lawn to where the old white hen was clucking her chicks under her wings. She shook her red comb in alarm, and turned her bright eyes to the porch; until being satisfied that no evil was intended, she fell to preening her feathers and pecking the little yellow heads that poked out from their warm nesting-place.

"I so often wonder," continued the City Woman, "that women do not take more care of their hair. It is such a beautiful thing, and such a mystic thing also. You know, do you not, that the hair has a wonderful vitality; that it grows rapidly after death, and remains imperishable long after every other portion of the body has crumbled to dust."

"Isn't it Browning who tells the story of the girl with the golden hair,

'Hair a wonderful flax and floss,
Meshes of gold and floods of it too,'

Who, vain of this one beauty, begged that at her death it might not be cut off, but buried with her:

'Leave my poor gold hair alone,'

And how, many years afterward, when, in repairing the church, her coffin was disturbed, it broke apart to discover a heap of golden coin.

"It is the same poet, too, who talks of the Venetian women:

'Dear dead women, with such hair too,
Nothing can destroy its gold.'

"Browning evidently preferred the 'fair, fair, with golden hair' type of women. But many of us delight rather in the pretty, rich chestnut or glossy black. For my own part, I think nothing so effective as a certain blue-black hair, that is rather rare and not often poetized either by poets or lovers."

"Since we have no hair-dressers in the country, could you not give us a few hints concerning the care of the hair," asked the farmer's wife, smoothing her thin locks lightly.

"I can only tell you what I have discovered by experience, and in chats with a few skilled hair-dressers," said the City Woman. "But, since my own hair is somewhat troublesome, being naturally both fine and weak, I have given considerable study to the subject, and know whereof I speak."

"First, then, do not wash the hair oftener than once a month. It does not do to deprive it of its natural oil by frequent washing."

"Do not use artificial heat to dry the hair, if it can be avoided. Use a linen towel lightly in the earlier stage; then take the hair between the hands and rub it; also rub the scalp well with the fingers—it stimulates the roots. Strong, thick hair is not injured by rougher treatment, but fine hair should be dried very carefully in this manner."

"Do not put ammonia or soda into the water. This is emphatic. It makes the hair brittle and dry. Use white of egg or a pinch of borax—the first is better."

"When you go into town once a month, let the hair-dresser trim the ends of your hair. Any ordinary hair-cutter can do this. And once in three months, if possible—at least, once in six months—have the hair singed. This can only be done by the professional hair-dresser. This will keep the ends from splitting and stimulate the growth."

"Brush the hair night and morning, but not enough to irritate the scalp."

"If the hair is inclined to be too oily, use bay rum two or three times a week, rubbing it in at the roots with the finger tips. This is also very good for dandruff or heated scalp. And once a week take a little coal oil at night and rub it into the scalp with the finger tips. It is better than all patent hair washes for stimulating the growth."

"The secret of the whole matter is that the scalp should be treated like the rest of the body, and whatever tends to cleansing, to coolness and soothing, to allaying any unnatural heat of the head and preventing disease of the scalp, may be considered safe application. If the scalp be kept in good, healthy condition, the hair will require little attention beyond regular brushing, and occasional clipping and singeing."

"A good head of hair is often hereditary, but, like other inherited good things, it requires to be taken care of."

"What about bleaching the hair?" queried the Young Girl.

"I think no really nice woman—one of delicate perceptions—would care to bleach her hair; although it is often effective and not necessarily harmful, if done by a hair-dresser. An amateur should never attempt it."

"But if a woman has flaring red hair, and chooses to give it just the little deepening tint that makes it a glorious Titian or auburn, I should not condemn her. A touch of these tinting preparations—they are hardly dyes—add much beauty to many a woman's hair, that would otherwise remain an inartistic feature. Remember, I do not advise it, since the less of artifice in a woman's adorning the better. But, since artificial teeth and switches are granted permissible, why condemn the touch of artificial grace to the hair that nature has denied."

"Now, little maid," and the City Woman leaned over to smooth the Young Girl's wavy locks, "don't you begin bleaching or tinting, but let your hair alone. Wash it once a month, shake it out in the sunshine, brush it a good deal, and then rest content that it will not grow grey, even if you delay marrying until forty."

—MINNIE MAY.

Recipes.

CUCUMBER PICKLES.

One hundred green cucumbers about two inches long will fill four glass quart jars. Soak twenty-four hours in rather strong brine, then pour off the brine and rinse in cold water. To this number of cucumbers use three quarts of pure cider vinegar, one cup of sugar, one ounce of whole cloves, one ounce stick cinnamon, one ounce small black peppers, and a few small red peppers. Scald the cucumbers in the vinegar. As soon as the vinegar is scalding hot dip them out, fill the cans, and then pour the vinegar over them till the can is full. Seal hot.

TOMATO PRESERVES.

Make a rich syrup; when it is boiling drop in small tomatoes which have little water and few seeds; when they begin to grow soft add small pieces of lemon rind. If wanted rich, cook till all is a thickened mass. If you want to seal, they need not be cooked that length of time.

PUMPKIN PIE.

Put the pumpkin in small pieces, cover with water and a little salt; boil slowly till the pulp is dry; rub through a colander. For one pie take two tablespoons of the pulp, one cup of milk, one egg, half cup sugar; spice with nutmeg and ginger.

CHILI SAUCE.

Thirty ripe tomatoes, ten onions, six green peppers, two cups sugar, five tablespoonfuls salt, one pint vinegar; peel tomatoes and cut; chop onions; boil two hours.

STUFFED TOMATOES.

Twelve large, smooth tomatoes, one teaspoonful salt, a little pepper, one tablespoonful butter, one of sugar, one cupful of bread crumbs, one teaspoonful of onion juice. Arrange the tomatoes in a baking pan. Cut a thin slice from the smooth end of each; with a small spoon scoop out as much of the pulp and juice as possible without injuring the shape. When all have been treated in this way, mix the pulp and juice with the other ingredients, and fill the tomatoes with this mixture. Put on the tops and bake slowly for three-quarters of an hour. Slide the cake turner under the tomatoes, and lift gently on to a flat dish. Garnish with parsley and serve.

GREEN CORN PATTIES.

Twelve ears sweet corn grated, one tablespoonful salt, one teaspoonful pepper, one egg beaten in two tablespoonfuls flour. Mix, make in small cakes and fry in butter or sweet lard.

The Way of It.

This is the way her youth went:
Care and love for a motherless brood
Drained her heart of its fiery blood;
Small denials, unfinished things,
Blunted ador and clipped her wings.
That is the way her youth went.

This is the way her love went:
There came the hope which maidens prize,
A woman's longing for closer ties,
Then love adopted, though close it be;
But duty spoke, and she made no plea.
That is the way her love went.

After a season of pain, 'twas done,
The calm, pale face in its coffin lay;
But far and wide in the realms of day
The angels shouted to greet her home,
And Heaven was happier now she had come.
That is the way her life went.

Good Housekeeping.

Kisses.

"Kiss me softly and speak to me low."

There is a story told of an old Scotch deacon who courted a girl for a good many years, but never found courage enough to ask her to marry. One day, after they had been "keepin' company" for about ten years, he ventured to solicit a kiss.

"Let me first ask a blessing," he said, and falling upon his knees, he implored the divine benediction.

He next, with due circumspection and Scotch deliberation, possessed himself of the kiss, when, with a sounding smack, he exclaimed:—"Eh! woman, but it was good! Let us return thanks."

A Lost Pearl.

I do not know where I lost it,
For it slipped from a broken string,
And far away from sight to-day
It lies a neglected thing.

Or worse, since it may be another
Is wearing my pearl of price,
And the gem that was mine, with its lucent shine,
May be set in some strange device.

I do not know when I lost it;
It was just when the dawning burst
Through the crystalline bars of the lingering stars
That with sorrow I missed it first.

I never dreamed half how precious
Was my beautiful pearl to me,
Till the grief of its loss, a heavy loss,
I bore over land and sea.

You marvel! You do not divine it!
I have lost what I could not lend,
What I'll mourn while I live; for no art can give
To my heart the lost heart of my friend.

Margaret Sangster.

A lady, writing from Japan, says:—"Housekeeping here has no trials. The worn and vexed spirits of American chateaines ought to rest in Japan after death. Capable and faithful servants are plenty and cheap. Our establishment boasts of five, and for these we pay about what two would cost in New York. I do not visit my kitchen once a month, never give an order outside of a spoken wish, yet the domestic machinery moves with an ease and perfection unattainable at home by almost any effort on the part of the mistress. The manners of the servants are amusing, not to say startling, to an American accustomed to the cheerful familiarity of her native help. Every night at bedtime our five retainers appear, prostrate themselves in succession to the earth and retire. This is to wish me good-night and to renew their testimony of profound respect and pleasure over the privilege of serving me. It was difficult at first to preserve the necessary dignity for the ceremony, but now I am as majestically gracious as any other potentate. The other day, on one of my rare visits to the kitchen, a hairpin became loosened and dropped without my notice. I had been seated in my own room only a few moments when my houseman entered, bearing a small salver, which he presented to me with many genuflections. Fancy my surprise to see a little hairpin upon it, and to learn from my proud but embarrassed servitor that it had fallen to the kitchen floor from my head. Afterwards I found there had been a discussion as to who should pick it up, and almost a quarrel as to whom belonged the inestimable honor of bearing it to its owner!"

Life's Compensations.

Two small chaps mos' allus meets
'Bout school-time in the up-town streets;
One is the little Rob Ragged boy,
An' the other is rich young Fontleroy.
The rich little man wears velvet clothes,
An' his pa's worth—oh, nobody knows!
But I guess he wishes 'at he could play
Like little Rob Ragged does all day—
Tag!
You's it.

'Cause little Rob Ragged, he looked at him,
A-marchin' home, all starched and prim,
With a wonderin' glance of mild surprise,
An' a plying look in his bright blue eyes,
As much as to say, "Well, I wouldn't trade,
Ef my pants be patched, an' my coat home-made
But the little heart under the velvet coat
Sort o' jumps an' sticks in the rich lad's throat,
An' he sez to himself, "Oh, I wish I could play
Like little Rob Ragged does all day—
Tag!
You's it.

THE QUIET HOUR.

"Only for Jesus."

Only for Jesus! Lord, keep it for ever,
Sealed on the heart and engraved on the life!
Pulse of all gladness and nerve of endeavour,
Secret of rest and the strength of our strife.

"The Dove in the Heart, or the Perfect Peace of God."

(Continued from page 329.)

The Peace of God keeps also the will, whose unrest is found in unfixed and vacillating purposes. No man can be at peace until his choice settles finally and fixedly on God and goodness. As well try to get a magnetic needle to rest until it settles steadily toward its pole, as to seek rest for a human will until its resolves center upon Him who is the Pole of all true decision. The best human resolution, without God, fails at the critical point of temptation and trial, as the seven green withes and new ropes failed to hold and bind Samson. All history is full of broken pledges, and the pavement to perdition is a mosaic made of their fragments. What is temptation but an appeal of sin to the will? And when the temptation is mighty enough to subdue and overcome the resolve, it turns the whole man about as the bit turns the horse, or the rudder the vessel. How and where shall we find stability of determination? What shall hold us firm in the hour of trial when all our best resolves are put to the proof? Let us learn from the Psalmist: "O God, my heart is fixed, my heart is fixed" I fixed on God, fixed by God, fixed in God. That is the secret both of man's victory and the devil's defeat. . . .

What rest for the restless will; to wind about the throne of God, to root itself in the Rock of Ages; to make one final choice of God, so that no room remains for doubt or hesitation! There is the secret of peace—to settle with one's self and with God, forever, that He is my Master, whose I am beyond recall, whom I serve without ceasing or attempting compromise with any other master! The greatest saints have at some time come to this, the crisis of final surrender. Some have written out their full commitment, their last will and testament, in which all things are absolutely given up and handed over to God, spirit, soul, body. But whether in form or fact, that self-surrender, that final commitment, that last resolve, is necessary to the perfect peace of God. So long as one inch of doubtful or disputed territory remains, Satan has a foothold and advantage ground. There is no greater peril to a believer than the neutral territory where doubtful indulgences lie, where duty and inclination dispute for supremacy, where no final decisive battle has yet been fought that makes that no longer neutral ground. . . . From the hour when a child of God says, "Henceforth I am wholly the Lord's, nevermore to find any pleasure save in Him, nevermore to leave open any door of doubtful self-indulgence," all compromise with conscience is at an end. The peace of a will fixed on God is ours, for no chance of a parley with sin and self remains. Here, in the territory of fixed resolve, where God's will is so supreme that even doubtful indulgences are treated as sins, or at best as "weights" to be "laid aside"; here is the great defeat-ground of the devil, and here the days of heaven come down to earth to bless the true followers of Jesus with the perfect peace of God.

Perfect peace is in this song of salvation linked inseparably with perfect trust. "Thou wilt keep him in perfect peace, whose mind is stayed on Thee, because he trusteth in Thee. Trust ye in the Lord forever!" Trust is simply *faith in action*, perfect trust is faith making a full and final committal of everything to God. . . . The nature of trust is hinted in the etymology of the word, which is closely akin to the word *true*. True, truer, truest.—TRUST. What is trust but reliance upon the truth of another? and because God is the truest of all beings, we trust Him implicitly and absolutely.

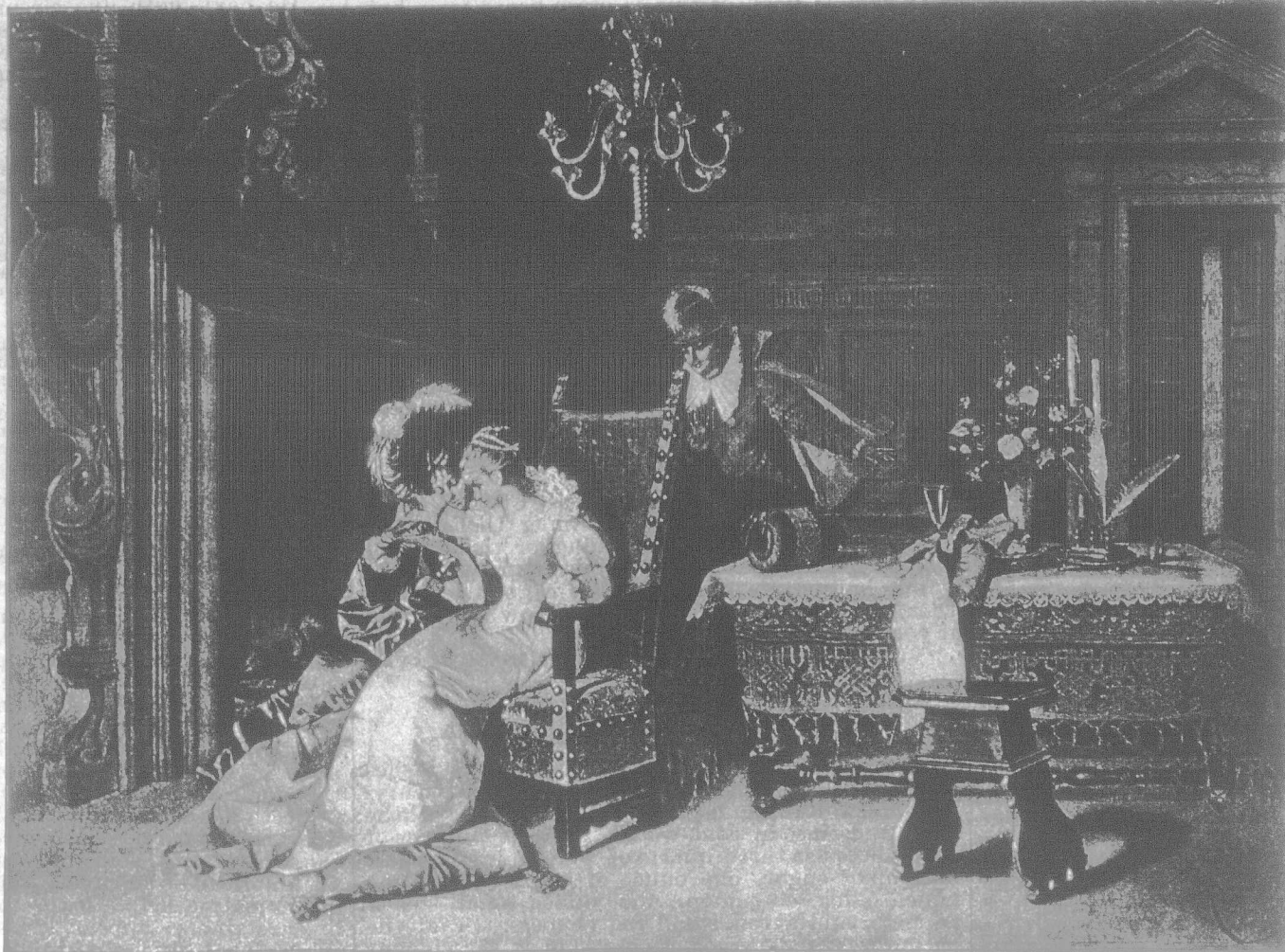
It becomes a question of the utmost importance, therefore, how our trust in God may be so perfected as to perfect also our peace in God. The secret of perfect trust is very simple, yet but few learn it.

We seek by many mistaken ways an increase of faith, and find only disappointment. Our greatest mistake is *looking within* rather than without. Mrs. Fletcher tells of a convert's dream: how he seemed to be deep in a well, and looking up could see through the narrow rim of the well's mouth a star that seemed to let down silver lines of light to lift him up. If he looked up steadily, he felt himself rising; if he looked down into the well, he felt himself falling; and by simply keeping his eyes fixed upward he rose out of the well. The dream is a parable: if we look up, we go up; if we look down, we go down. Faith is never perfected by a morbid introspection, but by "looking away unto Jesus, the author and finisher of our faith." To get our eyes off self and on Him, that is the simple secret of increase of faith. He is the Rock of Ages. The feet that stand on that Rock have a sure resting place, immovable, eternal; and amid the wreck and ruin of all that can be shaken, this Rock is found to be unshakable. Thus, stayed on Thee, O God, the mind is kept in perfect peace, because in perfect trust.

O my soul, wouldst thou have the perfect peace of God, the Holy Dove, in thy secret chambers? Then must thou trust Him even in the darkest hour, and whatever His will be, say, "Thy will be done?"

REV. A. T. PIERSON, D. D.

"Take my life, dear Lord, and use it;
Wholly Thine, so let it be!
Filled each moment from Thy fullness,
Moulded, guided, ruled by Thee.
All the mingled, broken story
Of the past Thou readest well;



THE CONFIDANT.

All the changeful shade and sunshine
Of the future Thou canst tell,
Glad and free with Thee I leave them,
All my longings lost in one:
Higher, closer, nearer, draw me
To Thyself till years are done."

To be dependent on others for sympathy and comfort makes you weak; to be self-dependent makes you weaker still, for that fails you in the day of your greatest need; to become *independent* is a dream of your pride, for no such thing is possible; to become dependent on God makes you strong—yea, clothes you out of His own Almightyness, and draws you up into His safety and refuge.

E. H. SEARS.

The child-like faith that asks not sight,
Waits not for wonder or for sign,
Believes because it loves, aright,
Shall see things greater, things divine. Keble.

Welcome Laughter.

Learn to laugh. A good laugh is better than medicine. Learn how to tell a story. A well-told story is as welcome as a sunbeam in a sick room. Learn to keep your own troubles to yourself. The world is too busy to care for your ills and sorrows. Learn to stop croaking. If you cannot see any good in the world, keep the bad to yourself. Learn to hide your pains and aches under a pleasant smile. No one cares to hear whether you have the earache, headache or rheumatism. Don't cry. Tears do well enough in novels, but they are out of place in real life. Learn to meet your friends with a smile. The good-humored man or woman is always welcome, but the dyspeptic or hypochondriac is not wanted anywhere, and is a nuisance as well.

UNCLE TOM'S DEPARTMENT.

The Confidant.

FROM THE ORIGINAL PAINTING BY PIO RICCIO.

Common to all feeling human hearts is the sentiment of the old Latin saying that "Of no worldly good can the enjoyment be perfect, unless it is shared by a friend." Truly

Friendship's another element of life:
Water and fire not of more general use,
To the support and comfort of the world,
Than friendship to the being of our joy.

But friendship is for the sharing, and thereby the lessening of sorrow, as well as for the fellowship, and thereby the increase of joy: for it is a notable and blessed ordinance of human nature that in our hearts the emotion of joy is enlarged and that of pain diminished by mutual participation. What may, in the best sense of the word, be called sentimental friendships, are perhaps most common among the gentler sex, and prevail especially in young life. And very beautiful are such fusions of being. The twin spirits are never happy apart; all their occupations, their duties, their pleasures, their reading, their studies—everything that admits of companionship is pursued in common, and all the while the deepest as well as the most trifling thoughts and feelings are exchanged and become equally the property of both. The friends are "like a double cherry, seeming parted, but yet a union in partition, two lovely berries moulded on one stem, with two seeming bodies, but one heart." Such would be an ideal instance of maiden friendship.

The young ladies of our picture we may fancy to be bound by a tie of this nature. One of them has received an epistle that gravely concerns her happiness, and is now sharing the secret of its contents with "her other self." The frilled and feathered gallant in the background betrays rather an unseemly curiosity with reference to the subject of the confidence, —so much so that we cannot help suspecting that he has a personal interest at stake. Possibly jealously may prompt him to discover who has been writing so seriously to the lady in whose estimation he would fain stand first; or, more probably—for his expression is almost too complacent for that of a jealous person—he is himself the author of the epistle, an amorous valentine, and he desires to learn its effect upon her whose charms it celebrates, and whose sweet pity it invokes. His clandestine behavior in the circumstances may be justified on the plea that "all's fair in war," for if he is a lover not yet

accepted, he is practically laying siege to his lady's heart, and may be pardoned for the use of all current military expedients to insure its capture.

The artist has bestowed particular care upon the accessories of his picture. The rich and stately furniture of the apartment and the elegant draperies have received masterly treatment at his hands.

A Late Eclipse.

On the morning of the late eclipse, Captain Von S—, of the Fusiliers, issued the following verbal order to his company, through his sergeant-major, to be communicated to the men after forenoon parade:

"This afternoon a solar eclipse will take place. At 3 o'clock the whole company will parade in the barracks yard. Fatigue jackets and caps. I shall explain the eclipse to the men. Should it rain, they will assemble in the drill shed."

The sergeant-major, having set down his commanding officer's instructions in writing, as he had understood them, formed the company into hollow square, at the conclusion of the morning drill, and read his version of the order to them, thus: "This afternoon a solar eclipse will take place in the barracks yard, by order of the captain, and will be attended by the whole company in fatigue jackets and caps.

"The captain will conduct the solar eclipse in person.

"Should it rain, the eclipse will take place in the drill shed."

Newmarket, Ont.

A. R.

Uncle Tom's Letter.

MY DEAR NEPHEWS AND NIECES:

The merry holidays are over, and the quiet schoolrooms are again astir with the busy hum of children studying, some of whom have gladly returned to work. But I see among the number assembled, some whose faces wear a look of discontent, as if they thought life should be one continual holiday. And among children of a larger growth the same sentiments are plainly discernable. All of you have been either visiting or receiving visitors and having a very pleasant time, and now you feel as if you cannot be content to go back into the old groove.

But life has been likened to a piece of Mosaic, which each one of us must build, and we must mingle the dark with the bright, the sombre with the gay, or our work will be but imperfectly done. These cheery visits to or from our friends are the bright parts, but our everyday duties must be thrown in as a relief, lest even the brightness should grow monotonous. The present is all we can claim; the past is gone, the future uncertain; and even if it were certain,

"We cannot count on ravelled threads of age
Wherewith to weave a fabric; we must use
The warp and woof the ready present yields,
And toil while daylight lasts. When I bethink
How brief the past, the future, still more brief,
Calls on to action, action!"

And so I hope that you are all benefited by your vacation, and ready to resume your work with renewed ardor.

Even old Uncle Tom has been enjoying some relaxation. On my return from a pleasure tour I found that some friends had preceded me, while more followed soon after. All remembrance of infirmity, and also the sense of what was becoming to a man of my years, seemed to desert me as I saw the gay young faces fitting about, and I joined in all the romps and enjoyed them as much as anyone. Music, laughter and merry chatter held sway in every nook of the quiet old home, but this morning the last of the guests departed, and I found myself unconsciously singing a verse from Moore:

"I feel like one
Who treads alone
Some banquet hall deserted,
Whose lights are fled,
Whose garlands dead,
And all but he departed!"

I felt so lonely I hated to think of returning to work, for still that sad refrain kept ringing in my ears; but ere long another and a wiser voice spake to me in the words of Adelaide Proctor, and said:

"Rise! for the day is passing,
And you lie dreaming on;
The others have buckled their armor,
And forth to the fight have gone."

And thus encouraged, I said good-bye to melancholy and bravely took up my work, the heavier part of which is for to-day completed, and I embrace with pleasure this opportunity of having a quiet chat with my boys and girls, whom I now espy returning from school. But what makes the boys hasten so? They appear to be pursuing something, and so they are, for they have found a frisky little squirrel perched on the fence top, and who ever heard of a boy who could resist such a temptation?

Speaking to a teacher not long ago, of the Band of Mercy, I asked: "Do the children keep their pledge?" "Oh! yes," she replied, "I think they keep it very well, except, perhaps, in the case of a squirrel. I could trust boys with anything but that country boys, especially." The same lady met with an amusing incident with two of her very small boys who belonged to the Band. One came in crying, and on being interrogated, said his brother had struck him. The teacher said, "Jacky, why did you strike your little brother?" "Well," answered Jacky, "he was chasing the hens, and you know we're not to hurt dumb animals."

But, joking aside, I think it an excellent idea to have Bands of Mercy established in every school, and I am sure it will do much to inculcate kindness among children. I remember well, when at school, one big fellow used to climb trees and take young birds out of the nest and destroy it. I thought him very cruel then, and to this day I consider any boy who uses his power over helpless birdlings, or other innocent creatures, in this manner, to be at best a coward, and unworthy of being trusted. Do you not agree with me?

Ceres has emptied her wealth into the coffers of men, and now fair Flora wears a sorrowful smile, as if regretting that her gifts for this year are so nearly at an end, but Pomona beams graciously upon us, as she holds out to us her hands overflowing with panned pippins, luscious grapes and many other treasures. These bright, cool days are an agreeable change from the sultry weather of mid-summer, and we anticipate with pleasure the coming long evenings and the opportunity for reading that accompanies them.

Perhaps we may then read a pleasant book together and exchange opinions thereon, as we did some years ago with Longfellow's beautiful poem, "Evangeline."

The sun has dropped behind the Western trees, and reminds me that time is fleeting. UNCLE TOM.

[P. S.—Uncle Tom offers a prize of \$1.00 to the boy or girl sending the best description of any fair or exhibition held this year, article not to exceed one column in length. Competition closes Oct. 8th.]

A Scotch dominie, after relating to his scholars the story of Ananias and Sapphira, asked them "why God did not strike everybody dead who told a lie?" After a long silence one little fellow got to his feet and exclaimed: "Because, sir, there wadna be onybody left."

Caring for What the World Says.

Why will you keep caring for what the world says? Try, O try, to be no longer a slave to it! You can have little idea of the comfort of freedom from it—it is bliss! All this caring for what people will say is from pride. Hoist your flag, and abide by it. In an infinitely short space of time all secret things will be divulged. Therefore, if you are misjudged, why trouble yourself to put yourself right? You have no idea what a great deal of trouble it saves you. Roll your burden on Him, and He will make straight your mistakes. He will set you right with those with whom you have set yourself wrong.

Here I am, a lump of clay; Thou art the potter. Mould me as Thou in Thy wisdom wilt. Never mind my cries. Out my life off—so be it; prolong it—so be it. Just as Thou wilt; but I rely on Thy unchanging guidance during the trial. O, the comfort that comes from this!—Gen. Gordon.

Puzzles.

1—"PI."
Sler! ofr het ayd slaspnig,
Nad oyu ile amerndig no;
Ech hoies eahy culekrd ethir amruo,
Nda rhtof ot teh gthi rea nogo.
A peela ni eth karn asitwa oyu
Chea nma ash msec apr of ylap
Het Ptas dan het Freun rae ghntio
Ni hte ocea fo het retsn ta-oyd. "GLOUCESTER."
2—ENIGMA.
Sometimes I'm on water, sometimes I'm on land;
Sometimes I am lying, but sometimes I stand;
Sometimes I am moving, sometimes I am still;
Sometimes I defy you, sometimes at your will;
Sometimes I am short, sometimes I am long;
Sometimes with the old, sometimes with the young;
Sometimes in the day, sometimes in the night;
Sometimes I amuse, sometimes I affright;
Though you can touch me, yet feel me you can't if you try;
Then answer, dear cousins, and say what am I!
MORLEY SMITHSON.

3—ANAGRAM.
When Adam and Eve together dwelt,
In Eden's lovely garden,
There was a tree grow there, I'm told,
Whose fruit they were forbidden.
But one day they from it did eat,
Although they said they never.
Then from that "earthly paradise,"
The Lord CAST ADAM FOREVER.

4—CHANGED HEADINGS.
A many-headed monster
You may call me if you please,
When with my FIRST I am arranged
You'll find me in the seas;
Change, and with me, in mirror true,
You'll find you are bedeck'd;
My THIRD head on, I nestle close
To many a lady's neck;
When you go for your morning walk
My FOURTH head's at your feet;
Now change this for the FIFTH and I
Shall be a seasoning meet;
My LAST head tells, should you enter in,
What you desirous are to win. ADA ARMAND.

Answers to August 1st Puzzles.

1—Vile, evil, love, vell. 2—Man. 3—It is the mind that makes the body rich. 4—Montreal. 5—Pedestrian.

ROYAL GROWN SOAP HAS NO EQUAL! Beautiful Picture for 25 Wrappers. ROYAL SOAP CO'Y, Winnipeg.

CONDITION POWDER FOR HORSES. This Powder is very strongly recommended for producing a fine, smooth skin, and for bringing horses into general good condition. HARRISON & CO., Pharmacists, Neepawa, Man.

GEO. CRAIG & CO. 522, 524, 526 MAIN ST., WINNIPEG. THE MAMMOTH DEPARTMENT STORE. SHOE SALE.—Some \$15,000 worth of boots and shoes being slaughtered at special low sale prices, as announced in previous issue of this paper: Men's harvest boots, at \$1. Good boots, in lace or Congress, at 95c., \$1.25, \$1.50, \$1.75, \$2; any one of these is good value for 25 per cent. more money. All tan goods clearing on basis of 30 to 50 per cent. discount. 24 pairs men's \$4 Russian calf, at \$2. Goods at this store are sold out clean each season. Each season, therefore, stands its own profits or losses. 33 pairs \$3 American boots, best kid, now \$4; \$3.50, now \$2.50. The best wholstock, best made, man's boot for \$2; no superior in Canada. 15 bales Grey Cotton, at 5c., sold in a month; good 8c. value. 150 dress lengths, at \$1.25, worth \$2.50. Out of the 512 dress lengths, at \$1, now left only 210; superb value. Brussels carpet, real good, at \$1. (Can't send carpet samples—could not give pattern, you see.) At 25c., good Tapestry; at 35c. is about the regular 50c. goods. Men's suits—tremendous sale—real good \$10.50 suits at \$6.50. Call in and save a good deal of money at Craig's absolutely cash store. No credit. One price to all. This big business built up within eight years. It's in the buying this store excels. Try a sample order. Once a customer here, always one. GEO. CRAIG & CO., THE GOLDEN LION. R. J. PHIN, SHORTHORN BREEDER. A few choice young Bulls for sale. MOOSOMIN, 54-2-7-m ASSINIBOIA.

Dispersion Sale OF THE LINDEN FARM HERD OF SHORTHORN CATTLE Friday, Sept. 21, '04. Owing to serious loss through fire, I have decided to sell, by Public Auction, on above date, at Linden Farm, 4 miles north of London, my entire herd of Shorthorns. The cows are all in calf to Royal George, which now stands at the head of the herd, a very sure and superior sire, whose dam won three silver cups in Scotland. He is a Kinnellar-bred bull, imported by Mr. Arthur Johnston, Greenwood, Ont. Kinnellar, Rosedale and Wimple families are well represented in this herd. That noted heifer, Wimple Birdie, shown at Chicago by Mr. Cockburn, is a sample of the sort to be sold. She is due to calve in November. A few choice young bulls, also a number of high grades, and one pure-bred Berkshire boar, bred by Arthur Johnston, will be sold. The stock are all in nice breeding condition. Remember the date, the last Friday of the Western Fair. Catalogues on application to this office, or John Gillson, London. 3-y-om

IMPROVE YOUR STOCK FOR SALE —A THOROUGH BREED— Shorthorn Bull Calf (A BEAUTY). TOOK FIRST PRIZE AT WINNIPEG INDUSTRIAL IN COMPETITION WITH 6 OTHERS. ALSO A NUMBER OF IMPROVED YORKSHIRE PIGS. THOS. GREENWAY. 13-14-m Crystal City, Manitoba. "RAVENS CRAIG" STOCK FARM DAVID MARWOOD, PROPRIETOR. Breeder of Holstein Cattle and Improved Large Yorkshire and Red Tamworth Swine. A grand lot of young pigs in April and May at low prices. Orders now being booked. Correspondence solicited. 67-y-m

PIONEER HERD OF SHORTHORNS WALTER LYNCH, Prop., Westbourne, Man. Fifteen first and one second herd prizes in sixteen years. A choice lot of young bulls for sale. 40-3-y-m JAMES BRAY, Oak Grove Farm, PORTAGE LA PRAIRIE, Man. STOCK FOR SALE AT REASONABLE PRICES. A few high-bred Jersey Bulls and Heifers at reasonable prices. Correspondence solicited. 50-2-y-m EMPEROR OF CANADA 5589 R. MCKENZIE, High Bluff, Man., Breeder of Pedigree Holsteins and Large English Berkshire Pigs. Numerous first prizes at Winnipeg and local shows. One young Bull for sale; sired by Emperor of Canada, out of Vida Rooker (Imp.) Will now receive orders for shipments of spring pigs; pairs supplied not skin. Correspondence solicited. 60-

ADVERTISE IN THE ADVOCATE

NOTICES.

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

THREE HOME SEEKERS' EXCURSIONS

To all parts of the West and Northwest, via the Chicago, Milwaukee & St. Paul Railway, at practically half rates. Round trip tickets, good for return passage within twenty days from date of sale, will be sold on September 11th and 25th and October 9th, 1894. For further information apply to the nearest coupon ticket agent, or address A. J. Taylor, Canadian Passenger Agent, Toronto, Ont.

We are in receipt of the Assiniboia Agricultural Society Prize List, the eleventh exhibition of which is to be held at Regina, on October 9th and 10th, 1894. The special prize offered by the FARMER'S ADVOCATE, for the best bushel each, of wheat, oats and barley—wheat, Red Fyfe, oats to be judged from milling, and barley from brewing standpoint—a handsome clock, value \$15.00, may be seen at the establishment of A. Daykin, Watchmaker and Jeweler, Regina.

In a recent letter received from D. Fraser & Sons, breeders of Poland-China swine, Emerson, Man., they state the following: "Our young boar Jesse B. which just arrived on the Saturday before the opening of the Winnipeg Industrial Exhibition, and which could not, therefore, be exhibited, having to go into quarantine for twenty-one days, purchased from the farm of Berry & Boyd, Rushville, Indiana, U. S., of World's Fair fame, is an exceedingly fine pig, and we consider one of the best pigs of any breed ever imported into Canada."

To any one living in or around the city of Winnipeg the name of J. R. Cameron is familiar. He is the enterprising head of the firm of J. R. Cameron & Co., who are an old and well-equipped tailoring establishment. Mr. Cameron is a pioneer in the tailoring business here, being in the Province twenty years, and during which time, by his energy and straightforwardness, he has pushed himself to the front, and is known as one of Winnipeg's leading tailors. To any of our readers requiring tailoring done, we have no hesitation in recommending this company, as members of our staff have had work done by them to their complete satisfaction. This firm always carry a heavy stock of Scotch and English worsted goods, serges and overcoats, and will make up what you want at prices to suit the times.

"The Modern Home Cook Book," issued by the Royal Crown Soap Co., contains many excellent cooking recipes, including numbers of nice breakfast dishes, soups, meats and poultry, fish, vegetables, salads, pickles, jellies and jams, puddings and pies, cakes, confections, ice cream and summer drinks, also a Home Physician Department, giving sound advice on many matters everyone ought to know, antidotes for poisons, and valuable information on almost all the ills flesh is heir to. "The Toilet," "Laundry," and "Hints and Helps" departments of this work would be of value in every home, and when introduced would be very reluctantly parted with. This valuable book is given free to their customers. They simply require that anyone desiring it send, with their address, 25 Royal Crown Soap Wrappers.

The trade in knitting machines has been seriously handicapped because of the complicated structure and high prices of the machines usually put upon the market. The People's H. S. Improved Knitting Machine, advertised in this issue, is both simple and cheap. The variety of work that may be done, both fancy and plain, is limited only by the skill of the operator, and it will do the work as well and as rapidly as any of the high-priced machines. The knitting is claimed, in every respect, to be equal to hand work. One of the great beauties of the H. S. Knitter is the ease with which it can be operated. Every person of ordinary intelligence, who can read the instructions, can learn to knit in a short time. A sample of the work done will be sent any one sending the Dundas Knitting Machine Co., Dundas, Ont., 15 cents.

GRANGE WHOLESALE SUPPLY CO.

Good farming is the secret of large crops, good produce of all sorts, and superior live stock, from the sale of which the farmer derives his income; but if he fail in the matter of buying his supplies aright, his operations may still prove a failure. From time to time it has afforded us great satisfaction to note the success of the Grange Wholesale Supply Co., of Toronto, under the prudent and enterprising management of Mr. R. Y. Manning. He is to be congratulated, and also those associated with him in this large and growing business, upon the results accomplished and the prosperous condition in which it has been placed. As our readers are all aware, it is a farmers' chartered co-operative store, and the goods being sold at wholesale prices, and the catalogue, embracing clothing, boots, shoes, groceries, harness, sewing machines, patent medicines—in fact, almost anything a farmer ordinarily needs—has certainly been a revelation to many. The prices of the articles, their superior quality and the promptness and faithfulness with which mail orders are attended to, have all been factors in firmly establishing the Grange Wholesale Supply Co. in the confidence of the public. Drop Mr. Manning a post-card for a copy of their catalogue. "The proof of the pudding is in the eating."

We herewith publish the testimonial of one who has tested the "Casey Diamond Grip Wire Fence" and has not found it wanting. See advertisement in this issue:

Hyde Park, May 11th, 1894.

Dear Sirs,—Thinking you might desire to know how I like your fence, which you built for me some time since, and known as the "Casey Diamond Grip Wire Fence." I would say that I consider it to be the best wire fence on the market, for the following reasons: 1st. For convenience, ease and speed in building. 2nd. Using straight wire in the horizontal and perpendicular, thereby not cracking the galvanize; preventing and keeping the metal from the weather; hence, a rust preventive. The peculiar form of the grip, which, when tightened on the wires properly, positively prevents the wires from slipping. In the shape of a wire fence I know of no other that will thoroughly stand every test so well as yours. Wishing you every success with your fence, which you certainly deserve, I remain, yours, etc.,

GEORGE DICKIE.

MAPLE GROVE HERD

HOLSTEIN-FRIESIANS

The Prize-Winners of the West.

Females of all ages, also young bulls for sale at bottom prices. Nearly all the most popular families represented. The diploma bull Poma 3rd's Clothid at head of herd, whose eight nearest female ancestors have better records than average 22 lbs. 4 oz. each in seven days.

Also Bred Improved Large Yorkshire Pigs.

Address—**W. J. YOUNG, Emerson.**

11-m

WILLIAM CHALMERS

Wishes to inform the public that he has 3 choice young Durham Bulls for sale. Also a number of prize-winning Yorkshires at the Brandon summer fair, of both sexes, bred from prize-winning stock. Write for particulars to

1-y-m **WILLIAM CHALMERS, Hayfield, Man.**

D. FRASER & SONS,

Emerson, Manitoba.

Breeder and importer of Durham Cattle, Shropshire and Southdown Sheep, and Pure-Bred Poland-China Pigs a specialty. Young stock for sale.

9-y-m

REGISTERED

IMP. LARGE YORKSHIRE PIGS

I send out nothing but the best. Made a clean sweep in thoroughbred pigs last fall at Fort Qu'Appelle, Indian Head and Regina fairs. Prices low. Address,

B. WOOLHOUSE,

Loon Creek, N. W. T. 67-m

HENSALL FARM

Shropshires and Berkshires.

JAS. ELDER, Virden, Man.

Young pigs for sale. As the proprietor intends going into dairying, he will sell off the lot of Shrops cheap. Some are imported.

65-1f

POLLED-ANGUS CATTLE & TANWORTH PIGS.

Young Bulls and Heifers from imported stock. Spring pigs from imported stock. Pairs not related. Prices low.

J. D. McCREGOR, Brandon, Man.

16-y-m

ALL MY PRIZE-WINNING BREEDING

Pens of Turkeys, Ducks, Rocks and Wyandottes For Sale at low figures. Must be sold this month to make room for young stock. Write for particulars. Also a grand lot of young stock, cheap.

M. MAW,

61-y-m **Winnipeg, Man.**

450 Chicks for Sale of the Following:

G. S. Hamburgs, Langshans, G. and S. Wyandottes, Blue Andalusians, Barred P. Rocks, Black Minorcas, W. & R. Leghorns, Pit Games, Indian Games, Black and Brown Red Games, and Bronze Turkeys.

Our stock are from prize-winning birds, and those who have competed with us in the show room realize the fact that our birds lead, never follow.

Orders for early shipment accompanied by cash. Book now.

AUSTIN POULTRY FARM

AUSTIN, MAN.

A. E. SMITH, Mgr. W. JONES, Prop.

63-v-m

BOUNDARY : ST. : POULTRY : YARDS.

Single Comb Brown Leghorns won 6 prizes; 3 firsts at Winnipeg Industrial, 1891, '92, and '93, also 1st on Breeding Pen at the Manitoba Poultry Show, 1894. The 1st prize cockerel and pullet were also from my stock.

Eggs—S. C. B. Leghorns \$2 per 13
" L. Brahma 2 " 13
One P. Rook Cook 4 " 13
Orders promptly attended personally. No circular. Send stamp. Address, A. WILLIAMS, Boundary St., WINNIPEG, MAN. 67-y-m

FORT ROUGE POULTRY YARDS.

Has for sale 200 early chicks, also some fine 1-year-old birds in Wyandottes, Rocks, Light Brahmans, Langshans, and Pekin and Rouen Ducks, and Pekin Turkeys, also Rabbits. The above includes several prize-winners at Winnipeg Industrial, and will be sold cheap to make room. They are first-class stock. Good chance to secure winners for the coming fall fairs. Write

10-y-m **S. LING, WINNIPEG**

H. A. CHADWICK, St. James Man.

High-class poultry for sale. Send stamp for catalogue.

16-y-m

ANDERSON'S

DOUBLE ACTING

Force - Pump

(FOR HAND POWER OR WIND-MILL.)

The Pump proper that forces the water, is placed near the bottom of the well; is always primed and lubricated; cannot possibly freeze. Has no leather suckers of any kind, no stuffing box, no rod working inside the conducting pipe—all of which add weight and create friction; but, instead, we give you a DOUBLE ACTING SUBMERGED PUMP, so constructed that the working parts are completely balanced at any depth; will wear a lifetime. The water does not settle back on the valves between strokes, but is kept in continuous motion, producing a continuous forced stream. The best and most durable Pump in the market. For full information, write

W. A. PEIRCE, Or F. GRAYDON,

Winnipeg, 16-m **Melita, Man.**

Will Pay

FOR

TO ATTEND THE WINNIPEG BUSINESS COLLEGE,

For either a Business or a Shorthand Course. No one should expect to succeed without a good business training. Announcement free.

17-m **C. A. FLEMING & Co., Winnipeg, Man.**

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HAYING...

APPARATUS.

This Hayrack Unloader and Stacker is both cheap and durable, and performs its work rapidly and well, and is easily operated. Time required to unload and place anywhere on stack, from 1 to 3 minutes. No fork or poles required. Will pay for itself in short time. Send in orders at once and secure one for this season. Will be on exhibition at Winnipeg and Portage La Prairie. Address

JOHN BUTCHER,

589 Main St., 14-d-m **Winnipeg.**

HIDES & SKINS

HIGHEST PRICE AT THE ...

Tannery.

Robes and Furs of all kinds nicely dressed by the best process.

CHRISTIE & CO.,

62-y-m **Lombard St., WINNIPEG.**

Farmers!

Do you find the hard work of the farm wearing you out? Yes. Why not strengthen up on some of the Extra Porter produced from the Barley you have raised? Nothing but the finest Manitoba and Northwest Barley used at the

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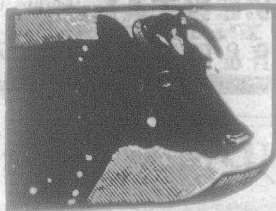
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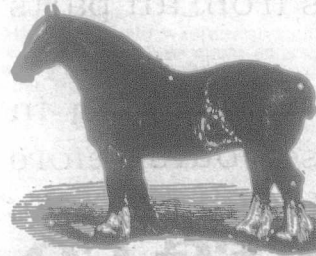
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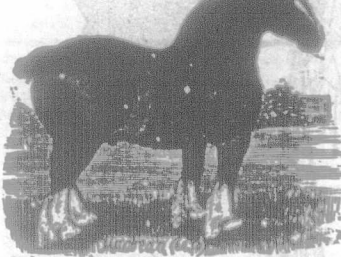
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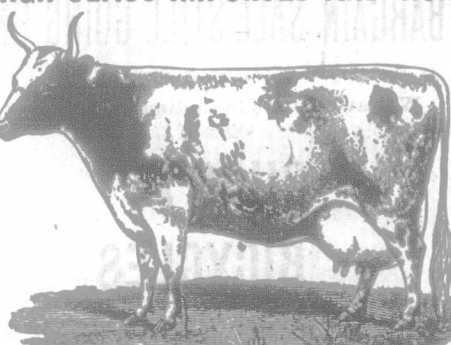
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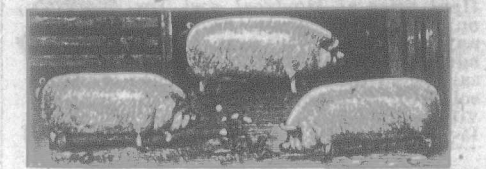
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H. J. DAVIS, Woodstock, Ont. Breeder of High-class Large Berkshire and Imp. Large White Yorkshire Swine, Short-horn Cattle. - A grand lot of young pigs ready for shipment of both breeds; also boars fit for service from prize-winning stock.

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THE OXFORD HERD OF REGISTERED POLAND CHINAS. Our herd of Improved Poland-Chinas won 26 first, 18 second and 6 third prizes in 1893, including the Herd prize at Montreal and Toronto, for best boar and two sows, any age.

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Registered Improved Chester White Swine & Dorset Horned Sheep are my specialties. Cleveland (Imp.) No. 320, whose sire won sweepstakes at the World's Columbian Exposition, heads the herd.

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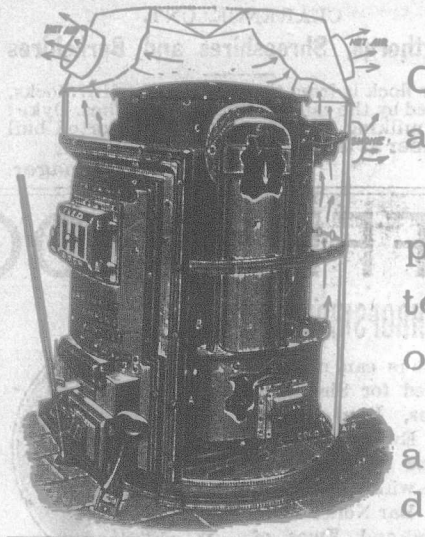
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WILKIN POTATO DIGGER. Has twenty quick-moving prongs, and shakes potatoes out clean.

Intending purchasers would do well to place their orders at once. Write for Gun and Bicycle Catalogue. Mailed free to any address.

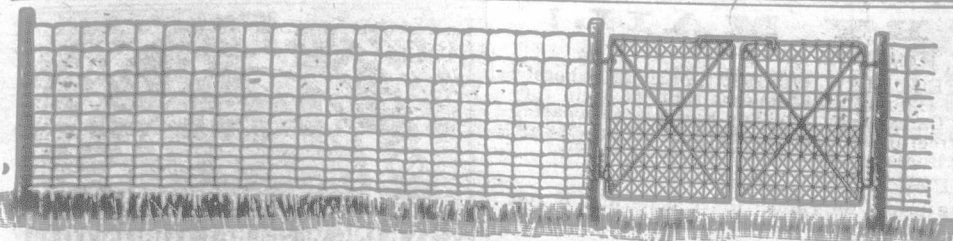
The High Speed Family Knitter Will knit 10 pairs socks per day. Will do all work any plain circular knitting machine will do, from homespun or factory yarn.

Agents for Manitoba and N. W. T. The above shows the action of the cream when in operation.

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WILLIAM BRIGGS, Publisher TORONTO.



STOPPED THE ENGINE!

That's What a String of Page Woven Wire Fence Did.
Brought it to a Dead Halt.

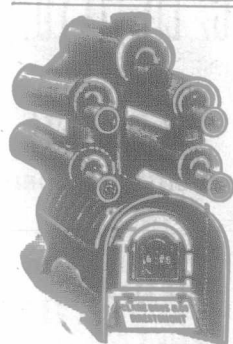
THOROUGH TEST OF THE COILED SPRING UNDER THE MOST TRYING CONDITIONS

The fame of the Page coiled spring fence has traversed the continent, and its many excellent features have won for it a first place in the realm of fencedom. Its elasticity and spring have been tested in many ways. The "royal bunter" was a strong barrel heavily loaded with rocks or metal, suspended from three high poles and swinging in such a way that it could be swung back and let go against the fence with force enough to knock down a barn. It was a great test, but the Page people are satisfied with nothing that admits of a shadow of a doubt as to the efficiency of their product to withstand and keep in place anything from a bantam chicken to a wild western tornado. The last effort of the Company to test the staying qualities of the fence was made on a vacant lot on Beecher street Tuesday afternoon. At this time nothing short of stopping a steam engine would suffice. An eight-foot section of the regular eleven-bar farm fence was stapled to two trees and the engine turned loose and run into it. The engine was managed by Benjamin Tayer, an experienced engineer, and was a twelve-horse power traction machine and weighed 9,000 pounds. It carried one hundred pounds of steam, and the throttle was thrown wide open. The engine had been timbered on the front so that it would strike the wires even. The first test was not a fair one, as the workmen in putting up the fence failed to secure it sufficiently at the ends and it pulled loose. The second lot of fence was put up so that the wires wound twice around the trees, and were stapled carefully thereto. This time the full power of the engine was hurled against the coiled spring, and it moved the fence about ten or twelve feet out of line, but was brought to a dead standstill. The wire was pulled out straight, the celebrated coiled spring disappearing from view, but when the engine was backed away from the fence the wires gathered up much of the pressure of a twelve-horse power engine over four and a-half tons in weight was tested to its utmost capacity and that nothing further was needed. But the Page people never do anything by halves. They brought out a roll of nineteen-bar chicken-tight fence and carefully stapled it to the trees. Then the engine was backed off about two rods, and there was blood in the eye of engineer Tayer as a full head of steam was turned on, and bang the traction machine went into the fence, about the centre of the panel, backed by one hundred pounds of steam to the square inch, and a man at the throttle who knew his business. But it was no go. The engine was not in it with the coiled spring. It ground its toes into the hard, dry sod, tore up the ground to the depth of several inches, but the coiled spring winked its eye and closed down on the mogul with a dull, sickening thud. It pushed the fence about ten feet out of line, pulling out the spring, but couldn't budge another inch. It was a thorough and complete test, and the most severe to which the fence was ever exposed. Even the most sanguine scarcely believed that the fence, with all its capabilities, was able to stand so great a strain, and the Page people were more than pleased with the result, as they had the right to be. The test was made under the direct supervision of the officers of the Company, and artist Keats was on deck with his camera and took several views of the fence when under the greatest strain. It was a great day for the coiled spring, and one that added another big feather to the Page cap.—*African Evening Telegram.*

AT THE TORONTO EXHIBITION you can see the "royal bunter" test mentioned above and learn all about the Page fence. WE WILL GIVE FREE TO EVERYONE a copy of our monthly paper, containing three photo-engravings, one showing how the fence stopped the engine, the second our famous Page fence bridge over the Don, and the third a farm scene. CALL ON US AT TORONTO AND EXAMINE THE PAGE FENCE.

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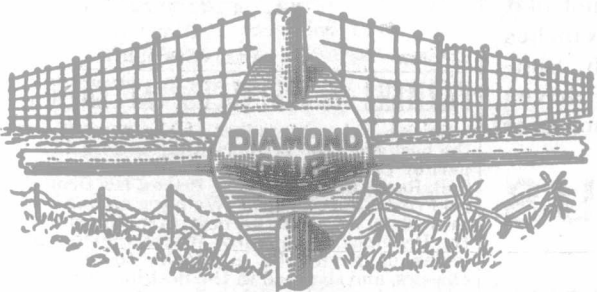
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Also Double Lock

Farm, Garden and Boulevard

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Agents wanted (farmers preferred) in every township.

Must be had—men of push and energy. If you are a man of push, write us for terms. Our agents write they are more than pleased, and the farmers highly delighted, and say the Casey Diamond Grip is far superior to all others. Our fence is built on the premises, thus following hill and valley without lapping. Best post turned to order. See our exhibit at Toronto Industrial, also Western Fair, London, Ont. Address

CANADA FENCE COMPANY, Cor. Bathurst and Clarence Streets,
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Ontario Agricultural College

WILL RE-OPEN ON THE 2nd OCTOBER.

Full courses of lectures, with practical instruction, in

**Agriculture, Live Stock, Dairying, Veterinary Science,
Chemistry, Geology, Botany,**

and other subjects required by young men intending to be farmers.

For circular giving full information as to cost, terms of admission, etc., apply to

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Guelph, July, 1894.

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CHATHAM FANNING MILL
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It Cleans Alsike Clover to Perfection; also Harrofat and Black Eye Peas.

1,000 Mills Sold, 1884	More than have been sold by all the factories in Canada put together and doubled.
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COLLARS, Hog skin. Leather lines of full length and good quality. BRIDLES open or blind. BACK BANDS, 3/4 inch heavy strap with TRACER BARRERS and BELLY BANDS attached. MARTIN-GALE and BREAST CHAINS for neck yoke. HAMBES, best white oak, 3 loops and overtop. Warranted to satisfy.

Single Harness, same Quality. \$6.50

This harness will serve as well, and last longer, than a \$4.00 harness.

Address, THE SUPPLY COMPANY, Niagara Falls, Ontario.

400—Helderfeld Fruit Farms Nurseries—400
(Four Hundred Acres in Extent.)
Established 1882.

There is no place in Canada where the season is longer than here. Hence we get trees brought to the fullest maturity, capable of withstanding the severest cold. Having one hundred acres in fruit, from which cuttings, buds, scions, etc., are taken, I can safely guarantee the purity of my stock to be equal, if not superior, to any other nursery. The soil is specially adapted to produce vigorous, hardy trees, a grand lot of which are now growing and for sale. All the leading sorts of both old and new varieties deemed worthy of propagation. Catalogues free on application. Agents wanted in every township. 13-1f-1m E. D. SMITH, Winona, Ontario.

100 Rods BUCHANAN FENCE CO. SMITHVILLE \$35.00

8-L-om

STOCK GOSSIP.

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

T. H. Medcraft, Sparta, Ont., writes:—"My Shropshires are doing well. My yearling rams are an exceptionally fine lot. My crop of lambs of both sexes are of fine quality and large enough. I have a dozen male lambs for sale also a few ewes, same age. In Yorkshires I have a few young pigs yet on hand. My imported sows are due to farrow very soon."

R. H. Harding, Thorndale, Ont., writes:—"I hope to meet many friends at the Toronto Industrial and Western Fair, London, where I intend exhibiting a pen of Canadian-bred Dorsets (lambs and yearlings). Will also have two crops of lambs in one year on exhibition; have also a stronger exhibit of Chesters than formerly. I have found trade in swine so brisk that I have very few early pigs left for fall trade."

Mr. A. E. Mansell's annual sale at Harrington Hall, England, took place on August 13th; 41 rams and 58 ewes were disposed of at good figures. The best prices were as follows: One shearing ram, 200 guineas; one, 110 gns; one, 80 gns; one, (Lot) 38 gns; one, 30 gns; one, 28 gns; one, 18 gns; one, 15 gns; one, 12 gns; one, 10 gns; one, 8 gns; one, 6 gns. The highest price was paid by Mr. H. Stubber, Queen's County, Ireland; the second by Mr. E. Nock. The average price for rams was £30 17s 4d; for ewes, £2 2s 9d. Great spirit characterized the sale throughout, and proved that really good and well-bred animals readily find buyers at remunerative prices.

RIDEAU STOCK FARM.

At a recent visit to the Rideau Stock Farm we found the genial proprietor, Mr. F. A. Folger, out timing some of Dr. Carver's colts, which were being tested on the track. Among them we would mention Aileen of Rideau, sired by Dr. Carver, dam Lady Louise, by Bellwood. This is a very promising young mare, that has already won a number of races. Another animal that is bound to make a record for himself is a thirty-three months old stallion, also by Dr. Carver, out of Cigarette, by Gen. Stanton. Another speedy youngster is Black Carver. This colt holds the Dominion record for a two-year-old pacer. The Holsteins were all looking well, and Mr. Folger reports business in the Black and White as being especially good this season.

MRS. JONES' JERSEYS.

On a recent trip through the vicinity of Brockville, we had the pleasure of paying a flying visit to the renowned Jersey herd of Mrs. E. M. Jones. Among the celebrated animals which we saw were the well-known bull, Canada's John Bull; the silver medal and sweepstakes cow of Canada, Hugo Beauty; and also Old Massena, who, though nineteen years of age, is due to calve in about two months. This cow has a record of 664 pounds of butter and 8,000 pounds of milk in a year. A visitor to this herd is at once struck with the scarcity of young animals fit for sale. The reason of this state of affairs was readily explained by Mrs. Jones, who said that the demand has been so great that frequently two or three bought the same animal, and she has had to give it to the buyer whose letter she received first, and return the money to the others, simply because she had not stock to fill the orders. As an evidence of the high favor with which her Jersey butter is looked upon, she said that she has a standing offer of the high price of 35 cents per lb. for 700 lbs. a year, from the O. P. R. dining cars and the Rideau Club of Ottawa. The unparalleled success of her book, "Dairying for Profit, or the Poor Man's Cow," is shown by the fact that the Hon. John Dryden at first gave an experimental order of 5,000 copies for gratuitous distribution; then a short time afterwards another order of 15,000, and at the time of our call Mrs. Jones had filled an order for 30,000 more. Both the English and Australian press have made very flattering references to this book, and Mrs. Jones had just received a letter of inquiry from an Australian gentleman who wishes to introduce it into that country.

AMPLE SHADE SHORTHORNS.

Ample Shade Stock Farm, the property of E. Gaunt & Sons, is located about three miles from Lucknow, a station on the Kincairdine branch of the G. T. R. This farm comprises about 300 acres of choice, well-watered grazing land, and is indeed rightly named, for the numerous maple trees afford ample shade in the fiercest summer heat. The Messrs. Gaunt are confining their attention to the breeding of Shorthorn cattle and Leicester sheep, in which lines they are meeting with the greatest success, as is shown by the many prizes which have fallen to them at the leading exhibitions. As space will not allow us to mention all of the many good things seen on this farm, we will merely draw attention to a few. The stock bull in use at the present is the Earl of Moray, -16188-. He is one of the fashionable, rich cherry red color. His sire was Solipse dam Lady Fanny (imp.); she by the Earl of Moray, the bull that gained—both as a yearling and two-year-old—first at Huntley, Banff, and Royal Northern, at Aberdeen. He also traces back to Knickerbocker, the bull which won 10 first prizes, one cup and two gold medals. The Earl of Moray is a very hard-ome animal, and is proving himself an excellent stock-getter. In the stable we were first shown a pure Scotch bull, thirteen months old, which should make a good record for himself, Aristocrat by name, and he has been rightly named, for he certainly has an aristocratic bearing in every sense of the word. He was sired by the Earl of Moray, dam Melody, from imported President. He is a wonderfully even bull, and carries a wealth of flesh for so young an animal. His stable mate, though scarcely so old, is a good bull. He is also by the Earl of Moray. Another plum is a four-months old bull by Earl of Moray, out of Lady Lovell, by Lord Lovell. In another pen were three good heifers by Lord Lovell. The cows were all of the thick, fleshy kind, sired by a bull previously used in this herd, Lord Lovell, by old Barmpton Hero, and a Matchless cow. We were particularly struck with a beautiful yearling heifer, got by the Earl of Moray, and dam by Lord Lovell. This is a calf of great promise, being a heifer of pure Scotch breeding of great substance, wonderfully smooth and even of stylish appearance, and we will be greatly mistaken if she does not give a good account of herself this fall. In Leicesters the Messrs. Gaunt report a good crop of lambs, and certainly those which are being fitted for show will be a hard lot to beat.

STOCK GOSSIP.

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

Mr. R. R. Sangster, Williamstown, has purchased for use at the head of his herd, the fine young yearling bull Royal Gloucester, bred by Arthur Johnston, Greenwood. He was sired by Indian Chief, dam 34th Duchess of Gloucester. Mr. Sangster reports sales as being very satisfactory, and he had sent four young bulls to Duocan Stewart, Inverness, Que., and had just received a letter stating that the purchaser was well pleased with them.

LINDEN STOCK FARM DISPERSION.

Mr. John Gillson (London), having sustained a severe loss through fire, has decided to sell his entire herd of Shorthorns, on Friday, Sept. 21st. At the head of the herd, which Mr. Gillson displayed great energy and good judgment in bringing together, stands the Kinnellar-bred bull, Royal George, imported by Mr. Arthur Johnston. All the cows are in calf to Royal George. His calves are coming most satisfactorily; in fact those that have already made their appearance more than reach the high standard of quality and substance which Mr. Gillson has kept steadily in view. The females in this herd are of a very high order, including such celebrated Kinnellar families as the Rosedales and Wimples. Wimple Birdie, secured by Mr. Gillson at the Cookburn Dispersion, was considered by many judges to have been the best heifer of her class at the World's Fair. She is due to calve in November. There will also be a few young bulls. The stock is all in nice breeding condition. A few high grades will be offered at the same time. Mr. Gillson is now at work on the catalogue. Further announcements will appear in the next issue of the *Advocate*. Breeders and others desiring to secure some of this stock will do well to bear the date of the sale in mind—Sept. 21st. Mr. Gillson's farm is located a few miles north of London.

A PROMISING HERD OF SCOTCH SHORTHORNS.

Mr. H. J. Elliott, of Danville, P. Q., has, in a quiet way, been building up a herd of excellent Shorthorns of the most approved Scotch breeding. This very select herd is at present headed by the capital imported two-year-old Cruickshank bull King James (84219), of the grand old Maid of Promise family, a family as famous for their milking qualities as for their propensities to put on flesh. He is a big, growthy bull of his age, on short legs, deep, straight and even. Though not by any means fat, he carries a great covering of the smoothest and evenest-laid on flesh. He was sired by Mr. Cruickshank's Royal James (54972) and out of Maid of Promise 34th, by the great old Cruickshank bull Gravesend (46461), a grandson of the famous Bampton (37763) and a great-grandson of the still more famous Champion of England (17526). The females in the herd include two of Mr. Cruickshank's richest bred Duchesses of Gloucesters, one of which was sired by the well-known imp. Indian Chief, and out of imp. 34th Duchess of Gloucester. The other is a beautiful daughter of this richly-bred heifer, and sired by imp. King James, (described above). Following these are two year-old Nonaerial sort—a sort that were favorites at both Sittytton and Kinnellar as long as the herds remained. There are two of the almost equally well-known Kinnellar-Claret sort—one a heifer sired by imp. Indian Chief, and out of imp. Clara, and the other a daughter of this splendid heifer, and sired by imp. King James. They both do credit to their grand ancestry. There are two of the late Mr. James Bruce's Princess of Wales tribe, a tribe held in high repute and at high prices, by the late Mr. Bruce, for their great milking record, as well as for their flesh-forming propensities. Following these, and quite as long favorites, come two of Mr. Bruce's Sunflower family, viz., imp. Mimosa, and her capital yearling heifer sired in Scotland by the Cruickshank lovely bull Sittytton Yet (61833). There are also two of Mr. Bruce's Rosebud tribe, perhaps equal in quality and breeding to any of the foregoing; they are imp. Rosella and her very pretty heifer calf by imp. King James. The herd has recently been enriched by the addition of one of the Kinnellar Minas, a red yearling, sired by the famous Indian Chief, and a granddaughter of the imp. Royal Northern Society prize cow imp. Minerva. This is a beautiful heifer, after the true Scotch type. Besides the above, the herd at present embraces various other popular Scotch tribes, of almost, if not equal merit and fame with the ones enumerated. At present the herd is in fine form, though perhaps scarcely in what is now called show form. There are a capital lot of bull calves at present sucking their dams that ought to be good enough to head the best herds in America.

NOTICES.

Persons wishing to lay a foundation for a pure-bred herd or flock of any of the breeds now kept on the Agricultural College Farm, or desiring to add new blood to their present stock, would do well to apply to Mr. William Rennie, Farm Superintendent, for catalogue giving full particulars of the annual sale advertised in this issue. All the stock on the farm are carefully bred and cared for, but never overloaded with fat, so as to render them useless as breeders. There will be a double interest in attending this sale, as it will afford an opportunity of visiting the Farm at a time to view the various sorts of roots in their mature state.

Every one who drives a horse knows the value of a first-class robe, and all who have used the old buffalo skin would, when in need of a robe, gladly pay a high price for one of the old sort. The general testimony is that there is not a skin on the market like it for wear, warmth and fine appearance. There is at Galt, Ont., a robe manufactured which certainly takes the place of the buffalo robe, now a thing of the past. We refer to the Saskatchewan buffalo robes manufactured by Nowlands & Co. in it is the warmest and most durable robe in the market, and is meeting ready sale wherever it has been introduced. They are handsomely lined with a superior quality of lining, also have an interlining of rubber, making them absolutely wind and waterproof. They have stood hard usage for five years by farmers, livermen, doctors and others, and have given entire satisfaction. We would ask the public to take special notice of the exhibit of robes, etc., at the Toronto and London exhibitions.

SHOPPING BY MAIL!

STANLEY MILLS & CO., HAMILTON, ONT.

have perfected, and put into operation, a PERFECT MAIL ORDER SYSTEM, whereby their enormous stocks of general merchandise at Hamilton are brought right to your very doors for selection. No matter in what part of Canada you live, our Farmers' Purchasing Bureau is at your disposal. Write for 64-page (free) illustrated catalogue of all our wares. All prices revised, many reduced, and many new lines of goods added for the fall of 1894.

ARE YOU A THRESHER?

If you are, you will be interested in the following prices for rubber drive belts, and, if you are not a thresher, please do us a kindness by calling your thresher's attention to this advertisement.

RUBBER DRIVE BELTS.

100 ft. 6-in.—4-ply extra star belt (cut).....	\$25 00
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120 ft. 6 " " " " " (cut).....	30 00
120 ft. 6 " " " " " (cut).....	32 00
150 ft. 6 " " " " " (cut).....	40 00
110 ft. 5 " " " " " (cut).....	27 00
110 ft. 6 " " " " " (cut).....	42 00
120 ft. 6 " " " " " (cut).....	46 00
110 ft. 6 " " " " " (cut).....	43 00

The above belts we carry constantly in stock, and if you will send us a telegram we will send you one by express—cash on delivery.

At 50c. per pair (with 10c. extra for postage) we will mail you a splendid pair of threshers' feeding mits. They are made of calfskin, with sheepskin cuffs. Cylinder Teeth for all Separators, only 8c. each.

Do you want a good razor? By that we mean, do you want the very best extra. Hollow Ground Razor you can get? If so, then send us \$1 in a letter and we will mail you (all postage prepaid) to your nearest post office, just such a razor. This is a grand razor. It is made in England and ground in Germany. These razors have the excellent quality of English cutlery, coupled with the fine workmanship of the German cutlery. Price, only \$1 each.

For only 35c. per box we will mail you any number of boxes of Dr. Williams' Genuine Pink Pills for Pale People. Only 35c. per box, post-paid, to all post offices. All of the following Pills sent post-paid at the price mentioned:—Dodd's Kidney Pills, 40c. per box; Carter's Little Liver Pills, 20c.; Ayer's Pills, 20c.; Hood's Pills, 20c.; Warner's Pills, 20c.; Morse's Indian Root Pills, 20c.; Carter's Little Iron Pills, 40c.; Carter's Nerve Pills, 20c.; Pierce's Pellets, 20c.; Mother Siegel's Pills, 20c. All Pills we guarantee genuine.

Now, in regard to watches. You have often said you were going to treat yourself to a watch. Now, here is the opportunity. We mail these watches, post-paid, to your nearest post office. \$2.50 AMERICAN NICKEL WATCH. This is a remarkable watch for the money. It is a stem-winder, and keeps accurate time. It has an open glass face with plain dial. It is a cheap watch, of usual size, and a good watch for boys. Price, only \$2.50 each.

WALTHAM SILVER WATCHES ONLY \$7.50. This is a genuine Waltham, stem-winding and stem-setting silver watch, with heavy glass face, and plain, sensible dial. It has a dust-proof case, and is one of the best watches for farmers' use ever produced. Every one is warranted to have the genuine Waltham works. They keep very accurate time, and give entire satisfaction wherever we have sent them. They are usually sold in credit stores at \$12. Our price is \$7.50, and we pay the postage. Send your money by post office order (which you can get at any post office), and buy one of these genuine Waltham Silver Watches.

Ladies' Silver Stick Pins, 15c. each. Ladies' Silver Brooches, 25c. each. Ladies' solid silver Finger Rings, 35c. each. Ladies' Silver Brooches, 25c. each. Ladies' Rolled Gold Brooches, 25c. each. The following Nickel Silver Goods will be sent free by mail at the prices:—Nickel Silver Teaspoons, small, 75c. per dozen; medium, \$1 per dozen. Large Teaspoons, \$1.25 per dozen. Dessert Spoons, \$2 per dozen. Dessert Forks, \$2 per dozen. Tablespoons, \$3 per dozen. Any number of these nickel silver goods at the same rate as the dozen. All are warranted to always wear white and give satisfaction. Write for our free catalogue, and mention the FARMER'S ADVOCATE, to

17-g-om STANLEY MILLS & CO., 36 and 38 King St. West, HAMILTON, ONT.


YOU HAVE STOCK TO FEED Our Profits

Will be increased and your land freed from foul weeds if you Feed your Stock grain ground by a

WATEROUS BUHR STONE CHOPPER

It grinds everything, even to the finest seeds. Stones last a lifetime. Iron plates chilled 1-16 are not in it with French Buhr Stones six inches thick. Chilled clear through. Simple, durable, fast. Can be driven by wind, water, steam, horse or electricity. Write us.

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The only satisfactory low-priced digger. Will dig potatoes as fast as the team can walk, and is guaranteed to do its work well. Send for circular and prices.

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GREENER'S RENOWNED CLOSE SHOOTING GUNS FOR GAME AND PIGEONS



May be obtained through MESSRS. HINGSTON SMITH ARMS CO., WINNIPEG, or any gun dealer or store-keeper in Canada. PRICES RANGING FROM \$60. These guns are specially noted for their fine shooting qualities and strong breech action, and have won more valuable prizes and made higher scores than any guns in the world.

Before ordering a new gun, read Greener's latest book; 3rd edition now ready; price, 5s.; 270 pages; copiously illustrated. It may be obtained from Messrs. B. & S. H. Thompson, Merchants, Montreal, or from the author.

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THE NEW Chatham and Chautauqua Giant Wagon

With Unbreakable Axles and Unbreakable Arms.

THE BEST MADE ON EARTH. So said the Judges on Vehicles at the

WORLD'S FAIR,

Who awarded us a

GOLD MEDAL AND DIPLOMA

Over the heads of numerous old and extensive builders in the United States and Canada. The axles are unbreakable, because

Van Allen's Patent Giant Arms

Throw all the load directly on the arms, and the arms are also unbreakable, because they are the best refined

MALLEABLE IRON,

Warranted as strong, more durable and lighter running than Steel Skains. Those Giant Arms completely revolutionize the building of wagons. Our 3-inch Malleable Giant Arm Wagon is

WARRANTED STRONGER,

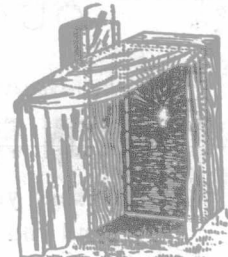
Though less in price, than any ordinary 3 1/2 to 4-inch cast-iron arm wagon, and our 3 1/2-inch Malleable Giant Arm Wagon is warranted stronger than any ordinary 3-inch cast iron arm wagon, and less in price.

THE DEMAND for these wagons is so great that though we are turning out 12 per day, we are taxed to the utmost to supply it. Send in your orders early.

TERMS AND PRICES LIBERAL.

CHATHAM MANFG. CO. (LTD.)

CHATHAM, Feb. 9th, 1894.



THE LATEST!
A MUCH NEEDED INVENTION.
THE Fly Trap
WORKS COMPLETE.

Guaranteed to remove and secure nine-tenths of the flies on a herd of cattle at a single stroke, 15 minutes for 30 cows. Township and County rights for sale.

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British Columbia offers at the present time the best field for farmers and settlers in any part of Canada. Beautiful Climate, Productive Soil, Ready Markets, Good Prices, No Drought, No Frosts, Sure Crops. We have on our books over 10,000 acres of the best farming lands in the Province at very low prices, and on easy terms of payments, in blocks to suit purchasers, and situated in the best localities.

Several islands within easy reach of Vancouver, well adapted for sheep and cattle. Settlers settled on Government lands. Call on or address,

MACKINNON, DeBECK & CO.,

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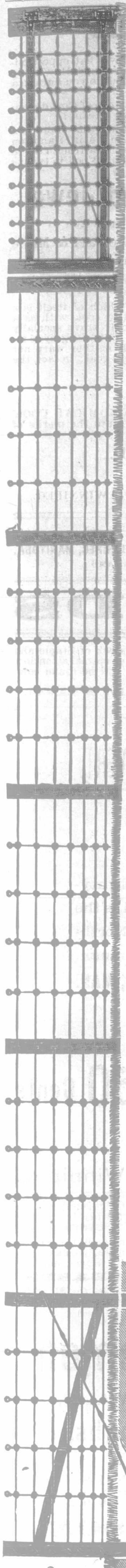
11 Hastings St., 9-y-om VANCOUVER, B. C.

TRADE MARK.



The Belt with the above trade mark is the only successful one made. Used all over the world. Ten years in the market. Not any experiment. Real manufacturer in NIAGARA FALLS, ONT., CANADA; SUSPENSION BRIDGE, N. Y., U.S.A., and DURSLEY, ENGLAND. For Catalogue, etc., apply to

10-y-om **ANTHON CHRISTENSEN & CO.**



THE LOCKED-WIRE FENCE CO., INGERSOLL, ONT.

We will exhibit at all the fairs.

The accompanying cut represents five panels of fence and gate of the LOCKED-WIRE FENCE which is now built with improved corrugated hardened steel stay and Bessemer steel clamp, a combination which is proof against the most unruly stock or designing men.

PERFECTLY—Safe, Stronger, Better AND CHEAPER than any other fence, and without doubt the best fence on the American continent.

All persons having wire fences erected in the past, should use the stays and steel clamps of the Locked Wire Fence Co. on them. The crimp on sumes all the slack, makes the fence tight, and adds over 100 per cent. to its value, at a very small cost.

We desire to inform the farmers and public generally that we are prepared to supply the material or erect this fence throughout the Dominion of Canada.

Recollect, we are the only firm that is furnishing the genuine material in the form of the corrugated hardened steel stay and Bessemer steel clamp.

THE BEST FENCE MADE FOR Farms and Railroads.

Agents Wanted In every Township. Send for circulars and particulars. Address THE LOCKED-WIRE FENCE CO., INGERSOLL, ONT.

Advertisement for 'MAUD'S CONDITION POWDER' featuring a cow's head and text: 'YOU CAN'T AFFORD IT! TO LET A VALUABLE ANIMAL BECOME SICK... HAS A WONDERFULLY GOOD EFFECT IN BRINGING HORSES & CATTLE BACK TO CONDITION... PRICE, 25c. AND 50c. PER PACKAGE. DAVIS & LAWRENCE CO. (Ltd.), MONTREAL.'

FOUR GOLD MEDALS AT NEW ORLEANS EXPOSITION, 1885 SIX HIGHEST AWARDS at WORLD'S COLUMBIAN EXPOSITION, 1893, AND SIX GOLD MEDALS AT MID WINTER FAIR SAN FRANCISCO, 1894.

THE WROUGHT IRON RANGE CO., ON HOME COMFORT STEEL HOTEL AND FAMILY RANGES.



CARVING AND STEAM TABLES, BROILERS, MALLEABLE WATERBACKS, ETC., ETC.

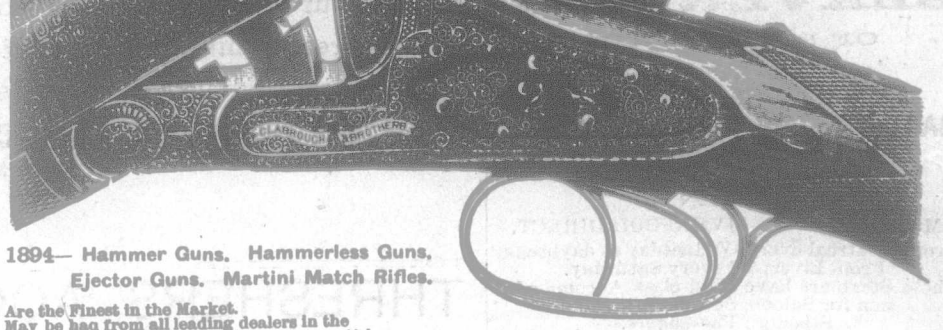
This Style Family Range is sold only by our Traveling Salesmen from our own wagons at one uniform price throughout Canada and the United States.

Made of MALLEABLE IRON and WROUGHT STEEL and will LAST A LIFETIME if properly used.

SALES TO JANUARY 1st, 1894, 277,188.

MADE ONLY BY WROUGHT IRON RANGE CO., MANUFACTURERS OF Hotel Steel Ranges, Kitchen Outfittings and 'Home Comfort' Hot-Air Steel Furnaces. OFFICE, SALESROOM AND FACTORY, 70 to 76 PEARL STREET, TORONTO, ONTARIO, and Washington Avenue, 19th to 20th Streets, ST. LOUIS, MO., U. S. A. Founded 1864. Paid up Capital, \$1,000,000.

J. P. CLABROUGH & BROS. BIRMINGHAM, ENGLAND.



1894—Hammer Guns, Hammerless Guns, Ejector Guns, Martini Match Rifles. Are the Finest in the Market. May be had from all leading dealers in the Dominion.

Farmers: Don't Be Misled! THE MODEL ROOT PULPER Can do More Work with less

Advertisement for 'THE MODEL ROOT PULPER' featuring an illustration of the machine and text: 'exertion, and without danger to the operator's hands, than any Root Pulper made. Those who use it will have no other. If your agent does not supply you, write direct to T. T. COLEMAN, SOLE MANUFACTURER, Seaforth, Ontario.'

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

NOTES FROM GREENWOOD. Mr. Arthur Johnston, of Greenwood, writes to say that Shorthorns, though not as brisk in demand as they have been, are holding their own in public confidence and esteem quite as well as any other breed of cattle, or anything else in the market. Our cattle are looking healthy and well, as well as they have ever done, in spite of hot weather, burnt-up grass, and the abominable flies, the latter of which seem worse in their operations, if not in numbers, than they have ever before been.

H. Bollert, of the Maple Grove Stock Farm, Cassel, Ont., writes under date of Aug. 5th:—'On account of health and other personal engagements I am unable to exhibit any of my Holsteins this fall, for which I feel sorry, as my herd is in better shape than ever before; that is, in point of merit and production. I will, with your permission, quote a few figures of what they are doing upon what they are picking in the pastures without anything else, and you will admit that this has been an unfavorable season for milk production:—Jennie E. gave, in 3 months, 3,929 lbs. (her former record, under more favorable feeding, was 2,916 lbs. in 30 days); Jennie E. 4th, her 2-year-old daughter, gave, in 3 months, 3,974 lbs., 5 oz., being an average of over 44 lbs. per day, and the rest are doing equally well. My poorest 2-year-old (out of 9) gave 4,800 lbs. in 6 months, and is yet milking so evenly that she will give over 7,000 lbs. and produce another calf within the year. I would ask, where is there another herd in this country that can make an equal showing under similar conditions? And I would further ask those who are interested in dairying, to compare these figures with those of the average Ontario dairy cow, and then judge for their selves which is the most profitable sort to keep! My calves sired by Colanthus Abbecker are developing wonderfully fine dairy points, and stamp him as a sire of unusual merit; but it could hardly be otherwise, if the law that like produces like, be true, as every animal in his long pedigree has been a first prize winner at the largest American fairs.'

MR. JAS. COOPER'S SHROPSHIRE. Within half a mile of Kippen station, on the London, Huron & Bruce railroad, are located the fine farm and commodious buildings of Messrs. Jas Cooper & Son. The first importation of Shropshires was made in 1881, and was composed of fourteen head from the well-known breeder, Richard Beach, Ellswick, England. The first venture in this line having turned out very successful, Mr. Cooper made a second importation in 1886 of twenty from the flocks of T. & S. Bradburne, Warwickshire. In 1891 a still larger draft was made upon the flocks of the Old Country. Mr. Cooper visited the best flocks in England and personally selected a number of choice animals, twenty-five of which were bred by T. & S. Bradburne, and the remainder from the well-known Parker flocks. The stock ran in use at present was bred by A. S. Berry, England, and sired by one of the Royal winners. This season's lambs are a wonderfully even lot, being well formed, blocky fellows, and well woolled. Mr. Cooper also has a few choice shearing rams and ewes to dispose of. As the flocks number some 90 or 100, purchasers will be sure of finding something to suit their special requirements, and we need scarcely add, a warm welcome and honest dealing.

GREENHOUSE STOCK FARM, ABERFOYLE, ONT. It was but lately we had the pleasure of inspecting Mr. W. B. Cockburn's 1894 importation of Oxford and Suffolk sheep. We found him busy preparing several for the coming shows. After a look over them we could not but remark that these will make the Oxford and Suffolk classes very interesting at the forthcoming shows, and will, no doubt, give their owner a very high reputation for the quality of sheep imported and bred at Greenhouse. Mr. Cockburn left for England on the 12th of April, and returned on the 10th of June with 72 Oxford and Suffolk sheep—a very select lot drawn from the best known flocks in England: Messrs. A. Brassey, Chipping Norton; G. Adams, Farington, and J. Treadwell, Aylesbury, and the Suffolks from Joseph Smith's flock at Woodbridge, England. A number of these are being fitted, while the remainder of them are quietly feeding in the pastures. They are a very even lot, combining both size and quality. Besides his importation, he purchased ten from Mr. H. Arkell, all of which are imported from Messrs. Brassey, Adams, Barron Rothchild or Fox, and were all winners last year, both in Ontario and also at the World's Fair. We cannot help noticing Doncaster Royal, a 3-shear ram, a really wonderful sheep, bred by Mr. Brassey of Chipping Norton, and was champion ram at Detroit Fair two years ago; also stood at the head of the pen that won first at the same fair for the best pen of ten mutton sheep. Another grand sheep is a shearing, Lord Gloucester, also bred by Mr. Brassey, and a winner at the World's Fair last year in Mr. Arkell's hands. We also noticed a beautiful pen of 2 and 3-shear ewes, and a pen of shearlings; among them is the ewe lamb that won 1st at Chicago last year. In another pen were four ewe and four ram lambs, just landed a few days ago, after having been shown at five different shows in England, with the following result:—At the Oxfordshire Show, both rams and ewes, 1st; at Wallingford, 1st; Bath and West, at Pulford, 1st; Royal Counties Show, at Canterbury, 1st; at the Royal at Cambridge, they were again 1st; also 1st at Norfolk County Show, which is a pleasing record. We noted as pen of Suffolk shearing ewe, also winners at the Royal. They need only be seen to be appreciated. These, with a number of Suffolk lambs, complete the lot in training for the exhibition war-path. After dinner Mr. C. kindly drove us to the Royal City of Guelph, a distance of 7 miles.

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Grange Wholesale Supply Co.
(LIMITED)

YOU CAN ORDER BY MAIL:

Clothing,
Boots and Shoes,
Groceries,
Harness,
Sewing Machines,
Patent Medicines,
... AND ...

ALMOST ANYTHING YOU MAY NEED.

The quality of Everything is guaranteed to be right, and at Wholesale Prices.

Get our Catalogue of prices and terms and co-operate with us, the only farmers' chartered co-operative store in Canada.

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(LIMITED),
126 King St. E., TORONTO.
17-om E. Y. MANNING, Manager.

DON'T INSURE YOUR LIFE

UNTIL YOU HAVE SEEN ONE OF THE

Unconditional Policies

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Every policy issued by this progressive Canadian Company is non-forfeitable after the first year from any cause whatever, and is without conditions as to habits of life or manner of death. Containing some of the most desirable features in life insurance, and issued at the lowest rates on unconditional policy in the Manufacturers' Life, is Canada's best policy.

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THREE DISTINCT SERVICES FROM MONTREAL WEEKLY.

Mail Service to Liverpool, via Quebec, Rimouski and Derry, or via Portland & Halifax in Winter.

DIRECT SERVICE MONTREAL TO GLASGOW

Direct Service Montreal to London.

These steamers are of most recent construction; are of the highest class, and their record for the safe carriage of cattle is unexcelled. Special attention paid to the best methods of stowing and carrying cheese, apples and other farm produce. For schedule of sailings, rates of passage or other information, apply to

18-y-om H. & A. ALLAN, Montreal.

PORTABLE AND TRACTION ENGINES—First-class. Write for Catalogue. N. C. PETERSON & SONS, Sarnia, Ont. 15-f-om

GODERICH ORGAN—High grade, fine tone. Send for Catalogue. Made at Goderich, Ontario. 1-y-om

FALL EXHIBITIONS ENTRY BOOKS DIPLOMAS

JUDGES' BOOKS PRIZE LISTS TICKETS BADGES ETC.

LOW PRICES DESPATCH

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FARMERS! "USE SOMETHING GOOD" ROGERS' PEERLESS MACHINE

TAKE NO OTHER

It's made specially for your use. Saves wear; Machines run easy. (12 GOLD MEDALS.) Hardware and General Stores all sell it. Best General Purpose Oil known. Ask for **PEERLESS OIL**. 14-f-o

SOUTH SASKATCHEWAN LANDS.

500 FARMS FOR SALE (areas to suit investors), all choice selected lands near **SASKATOON**, in that fine district known as "The Temperance Colony," equal to anything on the continent for grain growing or mixed farming. The homesteads are mostly taken up by a superior class of settlers. Every farm is within easy distance of a C.P.R. station. Some of these farms have frontages on the Saskatchewan River. Torrens Titles. No restrictions of any kind. Prices moderate; now is the time to buy. Apply to

C. POWELL, Manager, 6 Victoria St., Toronto, Or to **OSLER, HAMMOND & NANTON**, 21-y-om WINNIPEG, MAN.

CANADA SHIPPING COMPANY. BEAVER LINE OF STEAMSHIPS.

SAILING WEEKLY

BETWEEN MONTREAL AND LIVERPOOL DIRECT. From Montreal every Wednesday at daybreak. From Liverpool every Saturday. These Steamers have First-class Accommodation for Saloon, Second Cabin and Steerage Passengers.

RATES OF PASSAGE MONTREAL TO LIVERPOOL: SALOON, \$40, \$50 and \$60; Round Trip, \$80, \$90 and \$110, according to accommodation. The \$40 Single and \$80 Return per Lake Nepigon and Lake Winnipeg only. SECOND CABIN, \$30; Return, \$65. STEERAGE, \$24. Each steamer carries a duly qualified surgeon and experienced stewardess. The attention of Importers of Horses and Live Stock generally is directed to the fact that these steamers have the highest record for the successful carriage of the same, and a trial shipment is solicited. For freight or passage, apply to **R. W. ROBERTS**, Manager, 21 Water St., 8-L-om **H. E. MURRAY**, General Manager, Montreal.

WINNIPEG DISTRICT FARM LANDS FOR SALE.

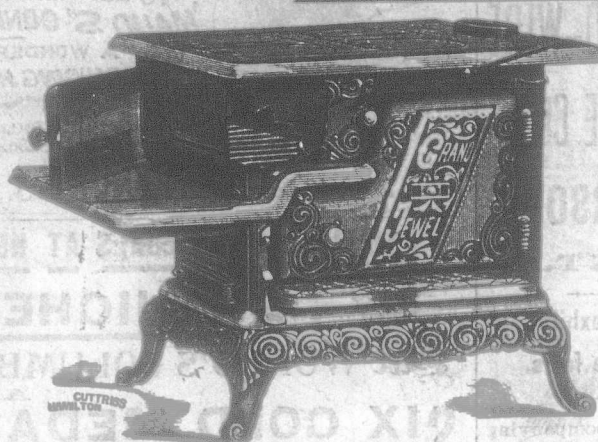
A few good Farms, improved and unimproved, from 7 to 20 miles from the city. Easy Terms. Prices to suit the times.

Now is your time to secure a good Farm near the best market in the Province.

Farmers are realizing that mixed farming is the only farming that will pay. Buy land where you can sell all you can produce for cash. Apply to

G. J. MAULSON, 195 Lombard St., WINNIPEG, MAN. 13-f-om

MISSING!



Do you know what opportunities you are missing? How many cords of Wood do you burn in a year?

How many tons of Coal do you buy in twelve months?

Are you aware that there is a Cook Stove made in Hamilton that will save you from Two to Three Cords of Wood in twelve months? It is the

Grand Jewel

MANUFACTURED BY **Burrow, Stewart & Milne** HAMILTON, ONT.

And sold by all leading dealers throughout Canada.

THIS Stove is fitted with a **STEEL OVEN**, all in one piece, which of itself is a grand improvement, not requiring nearly as much fuel to cook with as a stove of all cast iron construction; besides being the only stove specially adapted for burning **COAL**. The Grand Jewel oven is 23 in. long by 15 in. high, and being made of specially prepared Cold Rolled Sheet Steel, will neither warp nor crack, and it is larger than the oven of any other stove made that will burn coal; in fact, the

GRAND JEWEL

Is, for the money asked, the **CHEAPEST, LARGEST** and **MOST ECONOMICAL COOK STOVE** made in the world. Before purchasing your Cook Stove enquire into the merits of **THE GRAND JEWEL**, for

WHAT WAS MISSING IS NOW FOUND.

Manitoba and Northwest Agents,

ASK YOUR DEALER FOR FURTHER INFORMATION. **Merrick, Anderson & Co., WINNIPEG.**

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FOR 1894

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WRITE FOR SAMPLE.

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Dr. Warnock's ULCERKURE FOR SORES.

Send 10c. for large sample and Dr. Warnock's Treatment of Wounds, to **A. E. WELDON & CO., Calgary.** 12-

Calgary, May 1st. "Ulcerkure has wonderful healing properties." **J. R. SUTHERLAND.**

Sure Cure for Barb Wire Cuts, Galls, Scratches, Cuts, Burns and

SKIN DISEASES. 200 applications in a bottle, for \$1. Sold by dealers, or mailed on receipt of price.

Use:- Queenston:- Cement

FOR BUILDING CONCRETE OR OTHER WALLS, Cisterns, Stable Floors, Hog Troughs, &c.

Write for Prices and Particulars. When parties use our goods, when necessary we will send a skilled man, at our own cost, to give instructions how to build. FARMERS can thus build their walls and save half the cost.

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