

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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A TYPICAL PAIR OF HEREFORDS.  
THE PROPERTY OF MR. H. D. SMITH, "INGLESIDE FARM," COMPTON, QUE.

## EDITORIAL.

## The Farmer's Advocate Christmas Issue, 1896.

The next issue of the FARMER'S ADVOCATE, that for December 15th, will be a special Christmas Number, with a beautifully-designed cover in colors, and containing a great variety of special articles by eminent writers; also many attractive and interesting illustrations, including a full-page colored live-stock engraving. Partaking somewhat of the spirit of the holiday season, it will, however, in the main be expressive of Canadian agriculture under present-day conditions. We have an abiding faith in the future of agriculture, and this old earth has no better spot on which to farm than the Dominion. We feel assured from the character of the work already completed that the Christmas FARMER'S ADVOCATE of 1896 will meet with an appreciative reception. To make room for all the additional subject matter and illustrations, our usual size will be enlarged upon; but this issue, as usual, will go free to all our regular readers. We would also remind our friends who are pushing the new subscription campaign so energetically at the present time to see that subscriptions be sent in promptly so that all will be sure of securing this attractive number. To facilitate work in our subscription department at this season, we request all at present receiving the ADVOCATE to favor us with their renewals by an early mail. With many new names coming in, we cannot guarantee being able to furnish extra copies of the Christmas Number on orders reaching this office after December 15th, hence our request for an EARNEST EFFORT NOW and an early response in making returns. All subscribing now not only receive the present and the Christmas Number, but all the issues of 1897 at the usual rate. In practical, up-to-date value to farmers and breeders, we feel safe in saying that the FARMER'S ADVOCATE of 1897 will surpass that of any previous year. By attention to the foregoing suggestions our readers everywhere will place us under renewed obligations.

The Chicago "National Horse Show" is in prospect for the latter part of 1897.

Mr. J. B. Muir continues in this issue his valuable series of articles on winter buttermaking, which are being highly prized by practical dairymen.

Mr. Rivers, the well-known Shorthorn breeder, writing us under date of Nov. 20th, 1896, says: "I think I have read every article in the last three issues of the FARMER'S ADVOCATE, and appreciate it more all the time."

The name of Hon. W. D. Hoard, ex-Governor of Wisconsin and editor of *Hoard's Dairymen*, has been suggested as Secretary of Agriculture in the incoming U. S. Cabinet. Mr. McKinley might cast about a good while before he could make as fortunate a choice.

Two or three days spent making openings for the watercourses, especially at the mouths of underground drains, will pay well for the doing. These subterranean waterways, being out of sight, are apt to be neglected except by the ones who had them placed there. The rains that have already fallen will show where outlets are required in all the fields. All culverts and open ditches will be the better of attention.

## The Crow's Nest Pass.

The building of a railroad into the British Columbia mining country, through the Crow's Nest Pass, would prove a great boon to Manitoba and the Northwest Territories. There seems no longer room for doubt that fabulous mineral wealth lies awaiting development, not only in the Rocky Mountains, but also to the eastward between Manitoba's boundary and Lake Superior. One of the greatest drawbacks to successful farming in the western country has been the great distance from markets, but with the influx of people and capital to the mining regions on each side, British Columbia to the west and Northwestern Ontario to the east, it will give an increased home market for agricultural products,

such as flour, beef, mutton, pork, butter, cheese, and eggs. To reach the Kootenay country, a railroad must be constructed through the Crow's Nest Pass from some point on the main line of the C. P. R. Whether this line be built by the C. P. R. or independently is immaterial as long as the interests of the people are safeguarded. If it is necessary for the Government to bonus the work some compensating concessions should be obtained in return. The larger the traffic our great railway receives the greater should be their profits and the sooner should the West be likely to obtain more favorable freight rates to the sea.

## The Transportation of Farm Products.

"The question of railway freight rates, including what seems to be an unfair discrimination, is one of great magnitude and vital importance to the farmers of Canada, and should receive the most careful consideration."

The foregoing was one clause in the report of the Select Committee on Agriculture and Colonization submitted and unanimously adopted at the last session of the Canadian House of Commons. Though noncommittal, it is an index of a conception unerringly taking shape in the public mind with regard to transportation service, and out of which are destined to grow serious problems for the consideration of statesmen. The distribution of the world's food supplies by transportation on land and water is too intimately involved with the general well-being of the country, and railways have received too large subventions in the form of money and land grants from governments and municipalities to be ever regarded as mere private concerns. We apprehend that it is quite within the function of Government, if need be, to see that such service is rendered that the well-being of neither the producer nor consumer will be prejudicially affected. Freight rates are a heavy charge against the products of the soil, and coupled with the cost of many of his absolute necessities, absorb sufficient to touch at a vital point the resources, particularly of the Manitoba and Northwest farmer. Our great transcontinental road was constructed largely in anticipation of the development of Western Canada, and considerable stretches of country through which it passes yet yield comparatively little earnings. We must make due allowance for this, and freely acknowledge the general excellence of its service; but the whole Dominion being in practical partnership with this and other railway enterprises, it is bound to see that agriculture, the basal industry of the country, is never handicapped at any point by undue charges, nor in any other way. The shareholders of railways look to their executive officers for dividends, and the latter naturally do their best to increase traffic returns. We, however, notice by the report of the U. S. Inter-State Commerce Commission that the more important trunk lines in the Republic have been reducing the expenses of management, while they have at the same time maintained the efficiency of their lines and rolling stock. They are, therefore, in good condition to take advantage of the better times now apparently about to open up. Hence, if the farmer is forced to economize (though he is all the while compelled to farm better), railways can surely do likewise.

The experience of the breeders of Canada a year ago in resisting a new but evidently not well-considered freight tariff on breeding stock, that would have been a serious blow to the industry, shows how prudent it is to have some effective remedial machinery to set in motion in such cases, which are liable to arise at any moment. In that particular case there was the law requiring such tariff changes to be submitted to the Governor-in-Council before going into effect, which apparently had not been done. Either the Government or some body to which its powers may be delegated, like the U. S. Inter-State Commerce Commission, must take oversight of these matters.

The Canadian Government is now inaugurating a system of cold storage, and it will be their duty not only to see that it is efficient, but in some way that the charges against dairy products, poultry, fruit, etc., will not be such as to discount the advantages sought. Now is the time to make proper safeguards for the future.

In this connection much has been said regarding the fast Atlantic steamship service, a question to be settled by next session of Parliament, but whatever may be needed for passenger or mail service, we are not aware that speed is the *sine qua non* of getting our products to the British markets, unless, possibly, in the case of some of the more perishable fruits. Lower freights on "animals and their products" would be a substantial benefit not to be derived from speed. We recently published a series of articles describing the remarkable development of Australian butter dairying. Though some 12,000 miles distant from the British market, with the torrid zone to cross, they have built up a splendid

trade, Australian butter selling higher in England than Canadian or American. This was accomplished in the first instance by uniform and superior factory methods, but most of all by a complete system of cold storage transportation so perfect in its detail as practically to overcome time and distance to such an extent that packages of butter for test purposes sent all the way to England and back to the Colony were still found in the choicest of condition. A 20-knot service is therefore not essential to the proper transport of farm products. If they are carried to England in proper condition, with a fair degree of speed and regularity so that our customers will be properly served, that will be sufficient on that point. It will be the duty of the farmer, the dairyman, and fruit-grower to see that an adequate supply of high-class products are forthcoming.

## The Agricultural Conventions at Washington, D. C.

BY PROF. FRANK T. SHUTT.

On November 6th, 7th and 9th the convention of the Association of Official Agricultural Chemists was held in Washington. It was very largely attended and is said to have been the most successful meeting in the history of the Society. Its membership is composed of the chemists of the United States Experiment Stations, and their object in thus meeting annually is to discuss and adopt analytical methods to be used in the examination of cattle foods, fertilizers, dairy products, soils, and all other matters relating to agriculture. The discussions are mainly technical and therefore of little interest to the general reader. The results obtained through the labors of this Association, however, are of the greatest importance to the farmer. They enable him to purchase fertilizers with economy and assist him in the rational feeding of stock, etc. Attendance at this convention impressed the writer with the fact that those who would keep pace with the onward march must avail themselves of that scientific knowledge that day by day is contributing to the solution of agricultural problems.

The officers elected for 1897 are as follows: President, Wm. Frear, Pennsylvania; Vice-President, A. L. Winton, Connecticut; Secretary, H. W. Wiley, U. S. Agricultural Department, Chief Division of Chemistry.

Immediately following the above, viz., on the 10th, 11th and 12th November, the Association of Agricultural Colleges and Experiment Stations convened under the presidency of Prof. S. W. Johnson, Director of the Experiment Station, New Haven, Conn. The attendance was very good, over 150 being present. The programmes of the various sections showed more than forty papers to be read, of which nineteen were on agriculture and chemistry. Many were so interesting that it is to be regretted that this review must be so limited.

In the inaugural address the venerable President referred to the promotion of agriculture by scientific investigation and experiment and by the education of those about to engage in agriculture for a livelihood. In both these channels, he said, America was doing a great and lasting, though perhaps not a brilliant, work. The character and technicalities of college work were then considered by the President, who, in closing, reviewed the chief features in the progress made during the past year by the Experiment Stations towards a better and clearer knowledge on the many different questions with which the farmer constantly finds himself confronted.

Dr. A. C. True, Director of the Office of Experiment Stations, submitted a report on methods of instruction in agricultural colleges in the United States and in Europe. A bewildering variety exists in the United States, and a reasonable uniformity is much needed, one great obstacle to which is a very defective nomenclature. He suggested a tentative scheme for simplifying the nomenclature of agricultural investigation, making five classifications: 1. Agronomy, including climate, soils, fertilizers, crops or plant production; 2. Zootechny, or animal industry, animal physiology, animal production; 3. Agrotechny, agricultural technology, the dairy, sugarmaking, etc.; 4. Rural engineering; 5. Rural economy or farm management.

A most instructive address was given by Prof. Huston, of Indiana, on "Chemistry for Agricultural Students," in which he outlined a course of laboratory work that was at once didactic and practical in its character.

A spirited discussion followed a paper by E. Davenport, of Illinois, on "Implement Testing by Experiment Stations." Several held that this work should not be done, as the results were used as an advertisement by firms who obtained favorable reports. On the other hand, it was urged that reliable information on farm machinery was of the greatest value to the farmer; indeed, that it was just as useful and valuable as any other information given out by the Stations on fertilizers, cattle foods, treatment of land, etc. In this matter it is evident that no cast iron rule can be adhered to, but the discretion of the officer in charge of the work exercised.

Prof. J. H. Waters, of Missouri, presented a valuable piece of research work on "Dynamometer Tests" of broad and narrow tires on different kinds and conditions of roads, and in fields plowed and in grass. The trials compared 6-inch and 11-inch tires. Though there were some instances in which the lighter draft was obtained by the use of the narrow tire, as for instance where the mud was



Rennie, Wick, had the champion animal in his yearling red grade heifer, a half-sister to his heifer shown the year before which was overlooked for the sweepstakes on that occasion. She deserved the place she got. The dairy show was small but select. While there were some grand pigs present, the exhibit in this department was not nearly what it should have been.

In bringing to a close this hasty review of these shows, which I have compressed as much as possible, I cannot refrain from referring to one of the weak points in them, namely, the poor attendance. It has always been a difficult matter to get the general public to take an interest in fat stock shows. In Chicago and New York the managers of such shows have endeavored to solve the problem by tacking them on to horse shows, making the cattle department a secondary consideration, but with doubtful success, however. In Great Britain the interest taken in live stock, from the squire of the parish down to the poorest farm laborer, ensures a fair attendance at fat stock shows; but that interest seems wanting here. Now that the breeders' associations in Ontario have the management of the show in their own hands, it will be their duty to devise means whereby the attendance can be increased and the gate receipts made to yield their proper proportion towards the maintenance of the show.

#### The New York Horse Show of 1896--Its Notable Features.

The twelfth annual exhibition of horses held under the auspices of the National Horse Show Association, in the Madison Square Gardens, New York, is now an event of the past, but, like all its predecessors, it has proved a great success, possibly surpassing any of them, whether looked at from a financial or a horseman's point of view. It is true that the prices realized from the sale of boxes were somewhat lower than those of former years, a fact attributed to the suspense attendant on the presidential election; but so soon as it became an assured fact that Major McKinley had been returned, the rush for seats was so great that, taken in conjunction with the splendid attendance at every performance, the management were very soon able to assert that the total receipts were not only fully equal to those of any former year, but were in a good way to surpass any point as yet attained. The number of entries also was not quite so large, but this was entirely owing to there being fewer classes and to family bereavements, over which the executive had no control. The quality of the exhibit, however, probably surpassed anything ever before seen on this Continent.

The building was simply packed from start to finish. One noticeable feature this year in contrast to former years was the startling simplicity of dress affected by the occupants of the boxes. There was no profuse display of diamonds or brazen exposure of "studies from anatomy" as in former years. Fashion decreed that strict simplicity in dress should be observed, and your female readers will well understand that fashion is a goddess whom all worship and obey. But what was absent from the boxes was present, so far as dress was concerned, in the greatest profusion on the promenade. Every color or shade, from watered reds to simple blacks, were to be found, with capes of white ermine, trimmed with other furs; and as to hats, well— we understood that roosters' feathers were all the go in some Canadian cities where fashion is said to be up to the times, but alas! they were almost conspicuous by their absence, and instead of conceiving one's self in a common Canadian barnyard, one's fancy transported one to the warmer climes of South Africa, where not the domestic cock but the noble ostrich is reared for the sake of its plumage. On the promenade there was ostrich plumage in every degree of quantity and in every manner. Some ladies had only a simple aigrette, but most had from two or three feathers, up to as many as there are in a whole tail—at least we suppose so, for if a bird had any more feathers than were sported on some hats we feel quite sure that when he wished to hide he would only need to raise his tail to be concealed. Another noticeable feature of the show was that the people appeared to be present not so much for the sake of society as for the sake of the show, and it is believed by many that the exhibition has gained a new lease of life, and from being a pampered society pet, it now holds a place in the affections of the populace.

We commend the stand taken by the executive in refusing to allow a variety actress to ride astride of a horse for advertising purposes. Such an exhibition would have meant ruination to the show, and the officers of it have certainly a right to dictate to the exhibitors how they or their attendants shall appear in the show-ring; and in this respect we think that the management could afford to be stricter still. In one class especially we noted a sad want of manners on behalf of the grooms, who, if their masters did not know better, should have been read a lesson by the ring committee. It is a bad habit at any time for a groom to be chewing tobacco, but to be driving his master's horse whilst his mouth is working itself into all kinds of shapes is certainly not in accordance with New York show-ring form, and we all know that N. Y. H. S. prides itself on the knowledge of what is proper.

We must condemn the action of the executive in disqualifying Frills, the half-bred Hackney filly, whose mother was an imported English mare, inspected for and admitted to the A. H. S. B., and by

the thoroughbred Hackney horse, Fashion. Frills was shown in the two-year-old Hackney filly class, and is, as most of your readers know, a phenomenal actor. She beat Lady Sutton (Mr. Stevens' mare), who, despite her past record in England and her excellent conformation, certainly showed very little action at New York. The regulations say nothing about a Hackney being fully registered, but simply demand that they shall be registered in the American Hackney Stud Book. Were such a ruling to prevail, one-quarter at least of the Hackney mares now being exhibited on this Continent would be disqualified, for not being fully registered; and we have no hesitation in saying that it was not for the Horse Show Committee to decide on such a matter without having first consulted the Hackney Society. We must also once more raise our voice against the practice of vetting which prevails at New York. Last year a horse was vetted out of the ring as unsound when not a single veterinarian outside the Horse Show could be got to bear out the official condemnation, so far as we were able to learn. This year horses were allowed to get very close even to champion honors who were going lame, and yet the judges had no power to exercise their own judgment in the matter, because officialdom had pronounced them sound previously. We might also mention that the same punctuality was not observed this year as in former years, with the natural consequence that many of the performances were very protracted. This was partly due to the fact that some of the driving classes had become so large as to be unwieldy, and few of the horses which did not happen to be known got a proper chance to show. A preliminary trial for Hunters has been introduced, and the test is held in the morning. Unless some such trial is also given to the drivers, it is hard to see how a proper chance to exhibit themselves can be given the horses without encroaching on other classes.

Not many Canadian exhibitors were represented in the show-ring, but what there were did well. The number was also diminished through the fact that one well-known stable neglected to send in its entries at the right time. This was a very regrettable mistake, as no doubt had it not been committed several more premier honors would have been brought to this side of the line.

That fine, genial sportsman, Mr. Adam Beck, so well known both in this country and the States, topped the list and, indeed, excelled even himself. In one class he took all the money, a feat probably never before performed. Altogether, he took three firsts, one second, two thirds, and three fourths, besides gaining reserve champion in the light-weight Hunters, his prizes amounting to \$860.

Senator Cochrane was also successful with his well-known three-year-old, Barthorpe Performer, who was first in his class and reserve junior champion. This was a very much improved horse since the Industrial, Toronto. Princess Dagmar secured second place in aged brood mare class, and came near winning first; she likewise was in much better fit. The same owner also secured a third prize with his yearling stallion, Hillhurst Sensation.

Mr. Horace N. Crossley, another successful exhibitor, obtained third with his three-year-old Rosseau Performer and fourth with his bay yearling filly, Rosseau Victoria, no slight feather in the cap of Fireworks, who only has two yearlings in existence, when it is considered that the produce of all the American Hackney stallions were represented in the ring. Amongst the well-known Canadian horsemen at the show were: Mr. Henry Wade, Mr. Robt. Graham, Mr. Munroe, Mr. John Macdonald, Mr. Terrance Brady, Mr. Robt. Bond, Mr. H. N. Crossley, and Mr. Richard Gibson. The latter officiated as judge in the Hackney, Pony, and Carriage classes, and gave very good satisfaction.

#### PRINCIPAL AWARDS.

Hackneys.—Senior championship prize—1st, F C Stevens' Clifton II., by Danegelt; reserve ribbon, A J Cassatt's Cadet, by Lord Derby.

Junior championship prize—1st, A J Cassatt's Patriot, by Cadet; reserve ribbon, Hillhurst Farm's Barthorpe Performer, chestnut, by Garton Duke of Connaught.

Championship prize, open to mares winning first prizes—1st, Fred C Stevens' Kathleen, by Danegelt; reserve ribbon, Fred C Stevens' Applause, by Saxon.

Junior championship prize, open to fillies winning first prizes—1st, Fred C Stevens' Lady Sutton by Chocolate; reserve ribbon, F G Bourne's Indian Princess by Enthorpe Performer.

Stallions, four years old or over, shown with four of their get—1st, A J Cassatt's Cadet by Lord Derby; 2nd, F G Bourne's Enthorpe Performer by Matchless of Londesborough.

Stallions, four years old or over, 15.2 hands and over; winner of the American Hackney Horse Society's challenge cup two years in succession not eligible—1st, Fred C Stevens' Langton Performer by Garton Duke of Connaught; 2nd, Geo Green's Rufus Jr by Rufus; 3rd, J D Cameron's Royalty by Rufus; highly commended, J H Donnelly's Prince Victor II. by Royal George.

Stallions, three years old or over, under 15.2 hands; winner of the American Hackney Horse Society's challenge cup two years in succession not eligible for this class—1st, Fred C Stevens' Clifton II. by Danegelt; 2nd, Henry Fairfax's Danesfort by Danegelt.

Stallions, three years old, 15 hands and over—1st, Hillhurst Farm's Barthorpe Performer by Garton Duke of Connaught; 2nd, E W Twaddell's Prometheus by Rufus Jr.; 3rd, Horace N Crossley's Rosseau Performer by Enthorpe Performer.

Stallions, three years old or over, 14 hands and under 15 hands—1st, Henry Fairfax's Starlight by Glendale; 3rd, Oliver H P Belmont's The Dane by Cadet.

Stallions, two years old (foaled in 1894)—1st, E W Twaddell Rickell by Cadet; 2nd, E W Twaddell's Erling by Cadet; 3rd, George Green's Forest Beau by Rufus Jr.

Mares, four years old or over, 15.1 hands and over; certified to be in foal or to have produced a foal in 1896—1st, H G & R Cheney's Laughing Water by Candidate; 2nd, Fred C Stevens' Nelly by Rufus; 3rd, Mrs Camille Weidenfeld's Pandora by Vigorous.

Mares, three years old—1st, Fred C Stevens' Applause by Saxon; 2nd, Fred C Stevens' Lady Danegelt by Danegelt; 3rd, H G & R Cheney's Nina by Dr Parke.

Mares, two years old—1st, Prescott Lawrence's Frills by Fashion (protested); 2nd, Fred C Stevens' Lady Sutton by Chocolate Jr.; 3rd, A J Cassatt's Polly by Cadet.

Yearling stallions—1st, A J Cassatt's Patriot by Cadet; 2nd, H G & R Cheney's Flash by Dr Parke; 3rd, J D Cameron's Donegal by Royalty.

Yearlings, fillies or geldings—1st, F G Bourne's Indian Princess by Enthorpe Performer; 2nd, A J Cassatt's Sybil by Cadet; 3rd, F G Bourne's Princess Olga by Enthorpe Performer; highly commended, Horace N Crossley's Rosseau Victoria by Fireworks, dam Lady Cocking.

Stallions, four years old or over, registered in any recognized stud book; to be shown with four of their get, the get to have been bred in America, of any age, and out of native inspected or investigated mares; the get only to be considered—1st, Village Farm's Almont Jr. by Almont; 2nd, A J Cassatt's imp. Cadet by Lord Derby.

Stallions, yearlings; must be registered in the American Hackney Stud Book—1st, A J Cassatt's Patriot by Cadet; 2nd, H G & R Cheney's Flash by Dr Parke; 3rd, Hillhurst Farm's Hillhurst Sensation by Heyton Shales; highly commended, Frederick C Stevens' Langton Performer II. by Langton Performer.

Fillies, yearlings; must be registered in the American Hackney Stud Book—1st, Frederick C Stevens' Lady Valentine by Grangasson II.; 2nd, H G & R Cheney's Greta by Dr Parke; 3rd, F G Bourne's Indian Princess by Enthorpe Performer.

Among other important awards may be mentioned the following: Thoroughbred stallion, three years old or over—1st, Brookdale Stables' Fevendale by Sensation; 2nd, S S Howland's Judge Morrow by Vagabond; 3rd, F D Beard's Lazzarone by Spendthrift.

Trotters.—Stallions, to be shown with four of their get, the oldest of the get not to exceed six years; stallion and get considered—1st, Village Farm's Mambrino King (24 year.) by Mambrino Patchen, shown with Dare Devil, King Bird, Sherwood, and Minola King; 2nd, B W Ford's Trevillian by Young Jim, shown with Lady Mary, Impromptu, Prototype, and Consequence; 3rd, Edward Willett's Island Wilkes by Red Wilkes, shown with Redcliff, Carissima, Island Flower, and Ollie Keep.

Stallions, any age; shown in harness or to wagon—1st, E H Harriman's Stamboul; 2nd, Wm N Burgess' Lynne Bel; 3rd, William Pollock's Negro.

Mares, four years old or over, 14.1 hands and under 15.1 hands; certified to be in foal or to have produced a foal in 1896—1st, H G & R Cheney's Laughing Water by Candidate; 2nd, Fred C Stevens' Nelly by Rufus; 3rd, Mrs Camille Weidenfeld's Pandora by Vigorous.

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Stallions, four years old or over, registered in any recognized stud book; to be shown with four of their get, the get to have been bred in America, of any age, and out of native inspected or investigated mares; the get only to be considered—1st, Village Farm's Almont Jr. by Almont; 2nd, A J Cassatt's imp. Cadet by Lord Derby.

Stallions, yearlings; must be registered in the American Hackney Stud Book—1st, A J Cassatt's Patriot by Cadet; 2nd, H G & R Cheney's Flash by Dr Parke; 3rd, Hillhurst Farm's Hillhurst Sensation by Heyton Shales; highly commended, Frederick C Stevens' Langton Performer II. by Langton Performer.

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Stallions, any age; shown in harness or to wagon—1st, E H Harriman's Stamboul; 2nd, Wm N Burgess' Lynne Bel; 3rd, William Pollock's Negro.

#### Finishing Christmas Cattle.

Those who are feeding cattle for the Christmas market will be anxious to have their animals as ripe as possible when the time for shipping or marketing arrives. To this end all that can be done profitably should receive attention in these last two or three weeks. While we readily understand that thin cattle cannot appropriate very rich food, such is not the case when the finishing period is occupying the best efforts of the feeder. An addition to the grain ration of corn meal is not the most profitable, because it adds little to the protein of the diet, while that is the nutrient most needed at this juncture, or, in other words, the ration should be narrowed down to 1 of digestible protein to 5.5 of digestible albuminoids. An addition of oat chop, pea meal or oil cake will serve a better purpose. Of these, oats produce the firmest and most marbled flesh. An English feeder recommends working up oat meal and cold water into the consistency of thick dough and placing before each animal each day three or four balls about the size of a clenched fist. Gradually increase the number, he says, as the time for slaughter draws near to as many as the animals will consume, observing with all that they do not become costive. A little extra of roots or oil cake will correct that condition.

Whether this or some other method be employed, it is especially important that in rapid fattening the animals should be induced to eat as large a quantity as possible of nutritious and easily digested fodder by making the latter as palatable as may be. This alone has an advantage, even though neither the digestibility nor the real nutritive value be thereby increased. The true feeder always studies the likes and dislikes of his animals. He knows that the pleasure of eating has much to do with the thrift of his cattle, so he not only takes into consideration the nutriment that a food contains, but whether the flavor is agreeable to the taste and will be eaten with a relish. Mere flavoring materials that contain little or no nutriment often have a decided influence upon the growth and thrift of animals, and it is based upon this fact that the compounders of condimental foods find a market for their cheap materials at high prices. Scottish feeders especially use large quantities of molasses for this purpose, to good effect in fitting both cattle and horses. The object, after all, is to increase the relish of the animals for their food. Salt should be mixed with the ration to effect the appetizing flavor whether any of the commercial condiments are employed or not. Too much salt, however, is not good, since both the salt itself and the greater consumption of water which it causes increase the consumption or waste of protein and fat in the body, thus hindering the rapid gain of flesh.

After having secured the most suitable food, compounded to best advantage and fed in scrupulously clean mangers with the utmost regularity, the external bodily comforts must not be neglected. A temperature of about 50 deg. Fahr. is claimed to be about right. Much lower than that requires food to keep up the animal heat, while a higher temperature will cause the animals to perspire unduly and to their disadvantage in fattening. With pure, fresh air to breathe, admitted without drafts; dry, comfortable bedding; thorough grooming once or twice a day to keep their skins clean and avoid discomfort by itchiness, together with the other conditions already mentioned, the cattle should gain rapidly and at a profit to their owners.

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Every Copy Highly Prized.

Archibald Oswald, "Hill Farm," Quebec, in sending his renewal remittance for the FARMER'S ADVOCATE, adds: "We would not like to miss a single number."

SPECIAL FEATURES IN THIS ISSUE.

- Review of Former Fat Stock Shows. Agricultural Conventions at Washington. Transportation of Farm Products. The New York Horse Show. A Reform in Provincial Dairy Work. Common Ailments of Dairy Cows. Trouble in the Rape Field. Churning, Salting, and Working Butter. Grape Culture and Pruning-- Illustrated. Prize-Winning "Ingleside" Herefords -- Illustrated. A Case of Milk Fever Cured. Distemper in Fowls Followed by Roup. The Helping Hand-- Illustrated. Practical Questions Asked and Answered. Our Christmas Issue that Everybody Wants.

Our Illustration.

"TWO PRIZE HEREFORDS OF 1896," BRED AND OWNED AT "INGLESIDE FARM," COMPTON, QUE.

The illustration on our front page of this issue is indeed a very good representation of two Hereford heifers, owned by Mr. H. D. Smith, that attracted a good deal of attention at the Toronto Industrial and other leading fairs this last fall. Herefords were out in larger numbers and much better form than we have seen them for some years past. There has been a marked increase in the demand for young bulls of this noted beef breed, and at very satisfactory prices. In fact, the future of Hereford breeders begins to look quite bright again.

But to return to our illustration. The heifer in the foreground is Sylvan 3rd of Ingleside (58495); sire Pinkham of Ingleside; dam Spot 3rd, by Anxiety 4th. She was calved March 26th, 1894, and is a remarkably well-developed heifer, with fine character and carries a great wealth of flesh, weighing 1,330 lbs. as a two-year-old, and winning 1st in her class at Toronto and Montreal fairs. The other heifer is Jessie of Ingleside (63622), calved Oct. 4th, 1894; sire Young Ingleside; dam Jessie, by Magistrate. This is a heifer of extra merit, and was an outstanding winner in the yearling class last fall at Sherbrooke, Toronto, Montreal, and Ottawa fairs. She is one of the finest heifers ever raised at Ingleside Farm, and is of the so-called "big little ones" type, being very low-set, well spread, extra thick, not too blocky, and of good quality and smoothness, with plenty of scale, weighing 1,040 lbs. as a yearling last fall. If this heifer continues to do as well as she has, she ought to make a hard fight for the medal next fall for best female. We are glad to hear that the Ingleside Herefords have gone into their winter quarters in fine condition, and with plenty of good hay and roots wherewith to prepare for next season's battles in the show-ring. It is gratifying to find such uniformity of type and to observe the young stock as they come on at Ingleside, retaining an improving standard of excellence. This is one of the ultimate tests of the really successful breeder, that his work is abiding and perpetuates itself just as we find at Ingleside.

The Farmer's Advocate and Its Premiums.

A LETTER FROM A WELL-KNOWN WESTERN ONTARIO MAN.

Strathroy, Ont., Nov. 28th, 1896.

GENTLEMEN,—I am in receipt of the beautiful premium you so kindly and promptly sent me for the small service of securing you three subscribers for the FARMER'S ADVOCATE. This very valuable premium is in the form of a new "Bagster's Comprehensive Teacher's Bible," fully one-third of the volume consisting of a great variety of newly revised "Helps" for Bible students. The whole is on fairly good paper, and is well bound and beautifully finished, in good, clear minion type. I sincerely thank you for the prompt return of so valuable a Thanksgiving present, and shall consider myself as still in bounden duty to do all I possibly can for the advancement and reading of the FARMER'S ADVOCATE in its renewed and very vigorous form amongst the people of our rural districts and towns. I shall be pleased to place this very precious volume upon my desk for daily use and ready reference, to remind me not only of my daily duty, but also of your great liberality and kindness in this regard. Gentlemen, accept my grateful thanks.

Very truly yours, B. GOTT.

FARM.

The Tariff Inquiry.

Most of the evidence given before the Canadian Tariff Commission thus far has been from manufacturers who either desire the duties to remain as at present or, in some cases, increased. Testimony is invited from all classes, and through the Minister of Agriculture, Hon. Mr. Fisher, a special letter of invitation has been sent to all agricultural organizations, such as Farmers' Institutes, Dairymen's and Breeders' Associations, to bring their wishes before the Government Committee, either by resolutions or at conferences to be arranged at an early date.

Results from Fresh vs. Rotted Manure.

For seven years experiments have been conducted under the direction of Prof. Wm. Saunders at the Central Dominion Experimental Farm, with a view to ascertain the relative values of fresh and rotted farm-yard manures. The results are disturbing to some old notions on this subject. With oats grown for seven years, the plots treated with fresh manure gave an average yield per acre of 44 bushels 2 pounds, as against 37 bushels 20 pounds from plots treated to the same weight of rotted manure, which is an average of 6 bushels and 7 pounds in favor of the fresh manure. Barley in the same course of time gave an average of 1 bushel and 26 pounds in favor of the fresh manure. With wheat the rotted manure gave 10 pounds per acre of a better average than did the fresh manure treated plots in eight years' tests. With Indian corn one series of crops gave an average of 2 tons 1,181 pounds per acre in favor of the fresh manure, while another series gave 926 pounds per acre in favor of the rotted manure. These are the averages of eight years' tests. Mangels gave a slightly larger crop from rotted manure, while turnips, carrots, and potatoes gave decidedly better yields from fresh, unrotted manure.

While the above shows a decided advantage in applying farm-yard manure direct from the stables to the land, the superiority of it over rotted manure cannot be thoroughly appreciated without a knowledge of facts regarding the rate at which manure loses weight when allowed to rot in the heap.

On March 7th, 1894, 4,000 pounds each of fresh horse and cattle manure were placed in a shed on tight boards. It was turned and weighed once a month, and the pile carefully watched to see that proper conditions of moisture were preserved. The following is the result of the several weighings:—

Table with 2 columns: Date and Weight. March 7th: 8,000 pounds. April 6th: 5,530. May 7th: 4,378. June 7th: 3,947. July 6th: 3,480.

At this time the manure was in what has usually been considered first-class condition, having that pasty character which would admit of its being cut easily with a spade and mixed readily with the soil. The turning and weighing was continued each month until December 7th, when the former 8,000 pounds of fresh manure had lost weight until it weighed 2,600 pounds—a loss of more than two-thirds of the original weight. When we remember that fresh manure gave better results with most crops than did rotted manure, pound for pound; we must see that thousands of dollars are being allowed to waste in almost every county every year from allowing the farm-yard manure to rot down into that supposed best condition.

There is no doubt but fresh strawy manure will yield better relative results on heavy soils, or those lacking in humus, than upon those already having a good condition of texture, but there can be no soil, except in a garden, that will give as profitable returns from applying manure that has lain in piles heating and rotting for months at a time as when it is applied directly from the stable to the soil. As years go by more farmers are finding this out and are hauling the manure as it is made all through the winter and spreading it upon the fields to be plowed in as soon as possible in the spring.

Storing Potatoes.

Strictly speaking, no one ought ever to store potatoes in the house cellar. But as hundreds of thousands do it every year, and will continue to do so, a word may not prove amiss. And, first, potatoes should be sorted while in the field. It saves the housewife some work, and it saves storage room and the later work of extra handling. Potatoes for the cellar are best barreled, as they are then movable when the accidents of time bring frost or water to the cellar supposed to be proof against both. Above all, potatoes in the cellar should be kept dark. Canvas sacks make good curtains to set off a portion of the cellar and good covers for the barrels. Light will ruin the flavor of all potatoes, and half-light will cause them to sprout far in advance of the season.

"I like your paper," writes one of our oldest readers, "because it is what its name implies—the farmer's advocate. I admire its independence, and must say I have been unable to find in any other journal so much reliable up-to-date matter. Besides this, you do not use up one half your space telling how good the other half is or what you are going to do."

### The Rape Field Again--Questions for Mr. Gibson.

To the Editor FARMER'S ADVOCATE:  
SIR,—In your issue of Nov. 2nd, Mr. R. Gibson, in writing on sheep, mentioned cabbage as being better than rape for feed. Does he pasture the cabbage or is he speaking of winter feed? I would not think of rape as of any service for winter feeding. Would Mr. Gibson explain how he cultivates cabbage in all its stages of growth and how he feeds them in winter time.

I will give your readers my experience with rape. Three years ago we "ganged" four acres of fall wheat stubble and sowed three pounds of rape seed per acre the first week of August, but we had no rain for six weeks and it came too late to amount to anything. Next year I sowed rape on a field of oats. The season being very dry, it did not do much on the high part of the field, and in the lower portions it grew almost too well, for at harvest a good deal of it was cut with the binder. We had no trouble in curing the oats, owing to good dry weather, but had it turned out a wet season it would have been almost impossible to have got them dry. This season (1896) I sowed 48 pounds on a twelve-acre field of fall wheat just after we had done with the spring seeding. We gave it one run of the harrow. It did splendidly. We always cut fall wheat higher than oats; very little of it reached the knife. In the course of a week or ten days we had the field cleared and I turned on the milk cows. There was a good bite and the milk came freely, but the taste of rape came too; so I put the cows in just after milking in the evening and let them remain on the rape all night. We milked early in the morning, then let them run on the pasture all day. That seemed to work all right; only the faintest taste could be noticed. We had some steers, two and three years old, and put them in along with the cows and they did well. We never had such fall feed. So much for profit. But now comes the loss. One night there was just a faint touch of frost, and one of the three-year-olds turned up his heels. I could hardly believe that it was the rape. Afterwards came a very heavy frost, but cows and steers were all right. The next night just a light rind of frost and my best three-year-old was gone too. That made me look blue, for it took the profit out of the rape pretty well. I then turned all of our cattle on in the morning, let them remain until they were well filled, then turned them off until next morning. I have had them on when the plants were nearly covered with snow, and in rain, too. I put them on without any injurious results. I kept the calves and lambs on all the time, but they had the run of a grass field at will and have done splendidly. I intend to see if it will stand the winter and try it next summer for pasture. How would a crop of rape do to plow in on clay land?  
Bruce Co., Ont. "ANTRIM FARM."

### Silo Covering at the O. A. C.

A great variety of plans have been tried for preserving the top ensilage in the silo, such as swamp grass, cut hay, chaff wetted, boards (weighted); others simply tramping down level and leaving without anything additional. John Gould's latest plan was to tramp level, sprinkle with water and then sow heavily with oats. In a short time the oats sprout and a dense mat of vegetation grows over the ensilage so that only about an inch or so of the corn will be spoiled. If any of our readers have a better plan than any of the above or this following, we would like to hear from them:—

To the Editor FARMER'S ADVOCATE:  
SIR,—We have been experimenting at the O. A. C. for some time to find an effectual and cheap covering for the silo to prevent the ensilage from molding on top before it is cured, which takes about a month in the silo. The only successful covering we have yet discovered is factory cotton sewed together, making a sheet the size of silo. Before it is required for use spread on barn floor and give two coats of crude petroleum with a paint brush. As soon as the silo is filled and tramped, cover over the top with the prepared sheet. Then lay 2-in-h planks, 10 or 12 inches wide, around the sides, fitted neatly at the corners for a square silo; and for a round silo, segments will require to be made to fit neatly around the side of silo. The only ensilage we had spoiled was between the planks and sides of silo, which can be prevented by filling the space between planks and sides of silo with salt.  
WM. RENNIE, Farm Supt.  
Ontario Agricultural College.

### Attend to the Foal's Feet.

A point in the care of colts during their first winter is that of keeping the feet trimmed in proper shape. This requires especial attention when they are running in a box stall on deep manure. The feet should receive attention soon after they are housed, and afterwards as often as is necessary. Many colts are ruined for life by allowing their toes to grow too long, thus throwing too much strain upon certain ligaments and in this way weakening and injuring the pastern joints. Many crooked ankles that now exist might have been avoided if a little attention had been given at the proper time.

The success of the FARMER'S ADVOCATE has been in large measure due to the friendly cooperation of our readers in all parts of Canada and other countries. We bespeak a continuance of their support.

### Inflammation from Eating Frozen and Wet Rape.

J. E., Grey Co., Ont.:—"I sowed a field with rape last spring among my oats. After harvesting the oats the rape did remarkably well. About Sept. 20th I turned my sheep on it; they also had a clover field that they could run in at their liberty. After they had been on about three weeks I found a fine ewe dead in the field; she was bloated very much and appeared to have been purged very badly. I then turned the sheep off the rape, as I thought that perhaps she had eaten too much in the mornings when wet and frozen. I left them off for over a week and there was beautiful weather, so I let them on again. They had only been on a few days when I noticed another ewe sick. I at once drove her home and gave her a teaspoonful of spirits of turpentine, but she was dead in half an hour, and seemed in great agony, and, like the first, had purged badly. I then turned them off the rape for good; but when away from home, they broke into the field again and were on for two days. After dinner the third day they were turned off, apparently all right, but about eight o'clock my pure-bred ram was sick, and was dead in an hour after we first noticed him, and he acted the same as the other. My cattle have been on the field during that time and doing well. What has been the cause? I am led to think they have been poisoned by some weed. Would they eat poisonous weeds? Would it be possible to get bad seed in the rape? The seedsman that I bought it from said it was imported from England. Kindly give me what information you can on this subject, and oblige an old subscriber."

[NOTE.—The ADVOCATE has seldom recommended the feeding of rape without attaching a number of necessary cautions which must be observed to avoid loss. The writer may say that because of losses of pure-bred sheep the growing of rape for a number of years was abandoned, and was not resumed again until we saw our way clear to exercise great care and watchfulness over the flock during the rape pasturing season. Sheep must not have frozen rape, and wet rape is not good for them. The treatment given the flock by "J. E." was perhaps about the most dangerous possible, as each time they were allowed in the field they were doubtless hungry, and not having become accustomed to so succulent a food, an extreme bowel disturbance was set up; hence the purging referred to, and finally the inflammation of the bowels or stomach which no doubt terminated the lives of the sheep in question.

The following is the course we have found essential to the welfare of the flock: When first the flock was turned onto the rape the sheep were not hungry and the rape leaves were free from external moisture. They were turned out of the rape each evening for at least a week, and not admitted again in the morning until the dew was mostly gone. After that time, if there was no evidence of frost or rain, we considered them safe to have access to the rape field continually, provided they had a grass field to run in as well. If for any reason the sheep had to be kept out of the rape for two or three days, extra care in readmitting them was always exercised. We always considered white frost more dangerous than hard frost when the leaves were frozen, because they would eat the former more readily. In another article in this issue, upon rape feeding, reference is made to the loss of several steers. We have no hesitation in saying that the losses were due to the same as those already mentioned as killing the sheep. It is seldom, however, that cattle die from such a cause. With regard to the poisoning referred to, it is generally agreed among old shepherds that sheep, above all other animals, will not touch plants of a poisonous nature. In this case poisoning is entirely improbable, as the conditions under which the rape was eaten were conducive to the losses sustained.—EDITOR.]

### Feed Well-Bred Hogs.

It is a question in the minds of a good many whether pedigree or individual merit should be first considered in raising pigs for the market. We would venture to say that the first named should receive the greatest attention, for the reason that it is pedigree which gives prepotency to the type, and consequently a breed that can be relied upon to produce certain results under similar conditions. It is when the feeding and final fattening for market comes on that the value of pedigree shows up. Nondescript animals will consume a great deal more food, and in every respect prove unsatisfactory. For economy in producing pork there is nothing that tells like established pedigree. But while recognizing the great importance of pedigree, the merits of individual animals must not be overlooked. Amongst all pedigree stock there are weeds which must be eliminated, and a strange fact is that the most showy animals do not always produce the best stock of their kind. Therefore, when once a boar is known to produce entirely satisfactory progeny, that animal should be kept as long as possible for breeding purposes; and not less important than the boar is the brood sow, which should also be a carefully selected animal.

One of the main secrets of keeping apples is an even temperature, as near the freezing point as possible, not below it; keep them dry and do not permit any circulation of air.

### Preparing and Feeding Fodder.

Winter feeding has well begun and farmers know just about what amount of food they have on hand with which to carry their stock until nature smiles upon the meadows, bringing forth the verdure of 1897. The experience of years has taught that economy must be exercised in order to meet the requirements of a possible late spring, but too seldom do we study the question of compounding and preparing the food we have with a view to making the most of it. To those who have neglected this part of the question we will refer to a series of experiments conducted by H. J. Patterson, B. S., of the Maryland Experiment Station, in order to ascertain the best methods of preparing and feeding cured corn fodder. The comparison made was between cut fodder fed dry and alone, as hay is fed, and cut fodder wetted and thoroughly mixed with the grain ration. The fodder used differed from that found on most Canadian farms by reason of being deprived of its cobs. It was prepared for feeding by being cut with a machine that split the stocks and shredded the leaves. Nine cows were used for the test, divided into two groups of four and five. It was aimed to give each animal all she would eat, along with ten pounds of a grain ration made up of equal parts, by weight, of corn and cob meal, wheat bran, and gluten meal. In mixing the feed the grain and fodder were thoroughly mixed and wet with water. In cold weather the feed was generally mixed twelve hours ahead. With regard to the food wasted or refused to be eaten, it was estimated that of the fodder fed dry and separate 13 per cent. was left, while with the moistened and mixed ration only 7.3 per cent. was left unconsumed—approximately about one half.

The result based on the yield of milk from the different preparation of rations showed a small total gain in favor of the mixed ration. The condition of the cows as to flesh production from the different foods shows a great advantage in using the mixed moist ration. This portion of the work consists simply of a record of the weights of the animals at the beginning and end of the experiments. The animals were weighed in as nearly the same condition as to the time of feeding, watering, etc., at the different times as possible. In every case there was a gain in favor of the mixed ration, the least being 9 pounds and the most 85 pounds, with an average of 48 pounds for the 9 cows in the periods of 32 days for the dry-fed lot and 25 days for the mixed fodder fed lot. Digestion experiments were also conducted with the same two preparations of fodder with steers, which showed an advantage in mixing and moistening the fodder.

Conclusion.—The results obtained show that by wetting and mixing the shredded corn fodder with the grain ration there is more complete consumption of the fodder (there being but half as much waste matter) than when the fodder and grain are fed dry and separate. The method of mixing produced more milk and kept the animals in better flesh, which is a very important factor in successful dairying.

The wetting of the fodder when fed alone, and also when fed with grain, made it more digestible. The method of feeding the ration as a "mixed feed" gave a larger percentage of digestible matter than any of the methods tested. From these facts it is safe to say that the method of making a mixed feed of a ration is the best method to adopt in order to have the most complete consumption and the best returns for the food consumed.

From the above conclusion it would seem as though the improved palatability and succulence had something to do with the favorable results, and no doubt that explains the preference many feeders have for pulping their roots and cutting their straw and feeding them mixed over feeding them separately. We would do well to remember that the natural and most satisfactory all-round food for our stock is succulent, nutritious grass, which the more closely we imitate the more nearly will the results attained be to those acquired from June pasture.

### Possibilities With Old Fences.

There are many farms bearing old rail fences that their owners have felt for years would be better torn down and rebuilt upon the same or other location. They have been built upon and added to until they contain at least enough good rails to construct a good straight fence. The undertaking is not a big one, and when it is finished the satisfaction of seeing the neat, newly constructed fence, in addition to all the firewood for next summer, will more than repay the farmer for his time and new wire. There is no more favorable time for the moving of rails than just after the ground has frozen and before snow comes. A pair of bobsleighs can be used, even if there is no snow, when the site of the new fence is to be somewhere else than that of the present one. If the ground should be too much frozen to break the crust to set the stakes or posts, everything can be got in readiness to rebuild in the spring, and that will be found a great advantage when the building time does come. The sorting of the rails, cutting and sharpening stakes or preparing posts and sawing up the "done" fence timber into firewood can all be finished in the slack season, and the putting up of the fence will be as nothing in the spring before seeding operations commence, when the ground will be so soft that the stakes can all be driven with a sledge hammer. If possible do not put this work off

another season. The commencement of such jobs that have stared one in the face for years, probably, is more than half the undertaking. The old snake fence is an eyesore and a harbor for rubbish and weeds, while the new straight one will save land and give the farm a tidy, prosperous appearance.

**Lightning Rods on Barns.**

The subject of protecting farm buildings by the use of lightning rods was taken up fully in the *ADVOCATE* a few issues ago. Mr. John Haskett, of London Township, Ont., relates to us his experience, which was decidedly adverse to the use of rods, though the bulk of evidence is certainly in their favor, and "one swallow does not make a summer." His barn, which was a fine structure, some 66 feet long, was rodged at very considerable expense in 1885, and he states that the rods were maintained in good order. In May, 1894, the barn was burned. There were three points on the ridge of the roof, the two outer ones being a short distance from the ends. The rods were made of copper. After midnight, when in bed, he was aroused by a remarkable crash, accompanied by a tearing sound, which others in the locality heard. Though not raining at the time, a storm cloud had evidently passed over or near by. In a short time he got up and looked towards the barn, the roof of which was on fire; the whole upper part being ablaze, but none below, so they were able to get the stock out. His theory was that the rod had attracted a bolt of lightning, but was not sufficient to conduct it to the ground and that it exploded at the roof, igniting a considerable surface of the shingles. One of the points was afterwards found melted in the ruins. This circumstance had the effect of making Mr. Haskett unalterably opposed to rods as far as he was personally concerned, and he told the agent that he would not have them replaced for nothing; in fact, not if the lightning rod people paid him to allow them to do so.

**Curing Pork and Hams.**

A contributor writes: "Side pork is easily handled and can be uniformly cured by cutting it into strips about six inches wide. These should be placed edgewise on the bottom of the pork-barrel, having a layer of coarse salt first spread over it. The skin of the pork should be placed against the outside. When the bottom is entirely covered with pork, cover it thickly with salt. Repeat in the same manner until the barrel is full or pork all in. Cover the top thickly with salt. Allow it to stand about three or four days, then put on a flat stone and pour in enough cold water to cover the pork. A quarter of a pound of best black pepper sprinkled over it at this stage is recommended. Hams should be weighed and for every hundred pounds mix together four pounds of best fine salt, one pound of sugar, and four ounces of saltpetre; mix thoroughly and rub it into the flesh side of the ham and shank, place it on a board, and in five or six days rub in another application of same mixture, and again after another such space of time. A few days after the last rubbing they should be hung up and smoked, when a fine flavored product will be obtained, the large and small hams being cured alike."

**DAIRY.**

**A Reform Needed in Provincial Dairy Work.**

With the advent of winter dairying in Ontario, cheese and butter making have become more closely allied; so much so that the Eastern and Western Dairymen's Associations and the Creamery Association now largely overlap each other. Probably 40 cheese factories, besides a large proportion of the 100 regular creameries, will be making butter this winter. Of the \$7,500 in Government grants received by these organizations too large a sum is eaten up in running expenses and too little comparatively devoted to the work of factory and creamery inspection and instruction, which ought to be their main business. In round numbers, the total receipts, including Government grants, of the three associations last year amounted to over \$12,000, about \$5,600 only of which was devoted to inspection and instruction. By a proper readjustment of the work \$1,500 or \$2,000 more might be devoted to that branch of the work. The liberal grants to that branch must be continued. The Western Association began the system of instruction at factories nearly twenty years ago, and that, coupled with the enterprise of the pioneers of co-operative dairying, laid the foundation of Canada's splendid cheese trade, which is to-day the envy of every other country engaged in dairying. We shall not outgrow this need of instructors. On the contrary, more will be required, possibly on the syndicate plan, so that these officials will have more compact groups of factories or creameries under their supervision. Quebec Province has made creditable strides both in co-operative cheese and butter making, and they have done so by a uniform system of factory oversight, with persistent attention to detail. Ontario dairying is susceptible of improvement at this point also, and the sooner the work is

rearranged and systematized the better will Canada be able to hold its position of pre-eminence and make any advances demanded by popular taste.

The *ADVOCATE* is therefore pleased to note that Hon. Mr. Dryden, the Provincial Minister of Agriculture, has addressed a letter to the officers and directors of the three associations urging a concentration of their forces in order to lessen management expenses and increase the amount available for inspection and instruction. We doubt the advisability at the present time of attempting to unite the three bodies into one association. The main dairy sections of Ontario lie respectively east and west, and their interests will be better served by organizations more closely in touch with them. The Creamery Association has a membership of 100 odd, chiefly in the East, and the Eastern Dairymen's Association something over 175; while the Western organization has about 450. Here, then, we have material for two good, live organizations, which, as the Minister suggests as an alternative plan, might continue as at present. Each would choose their boards of directors to control the general local work, and through an executive of, say, four of their members—two interested in cheese and two in butter—a joint central board would be constituted to deal with matters affecting the general dairy interests of the Province, such as transportation, export, Government inspection, branding, cold storage plans, etc. Such a board could institute uniform methods of inspection and check any overlapping or clashing in the work of Federal and Provincial authorities, to which reference was made in an article published in our last issue, entitled "Federal and Provincial Relations with the Dairy Industry."

As to the large conventions, two will be better than three, as they must now of necessity deal with both butter and cheese making. Makers are now compelled to be posted on both branches, and instructors and inspectors should be qualified accordingly.

One efficient dairy secretary might very well serve the two organizations and the joint board to the advantage of the whole Province, and at the same time effect a very considerable saving to the people, for it is their money that is being spent, and we want proper results to show for every dollar of it.

**Western Ontario Dairy School.**

The Western Dairy School, which made a commencement last year at Strathroy, Ont., too late in the season to expect a very large class, has issued its 1896-7 announcement, which indicates that a great opportunity is now given dairymen in that portion of the Province to obtain a thorough scientific training in the art of milk production and its manufacture into cheese or butter. When we notice that ten weeks of training under the experts that have been engaged to take charge of the various departments can be had free by simply paying a registration fee of one dollar, we are inclined to wonder if the institution will accommodate all who come up for instruction. If we were conscious that every dairymen already knew one half of what there is to know about dairying we could understand that the opportunity would not be so great, but when we are constantly hearing of poor butter coming to market and people keeping poor cows and not half caring for them we are led to believe that the deplorable condition of self-satisfaction must have a great hold upon many who can surely leave home for a month in winter. The Strathroy Dairy School should be crowded this year from the opening till the close.

The first course will begin on Nov. 25th; the second on Jan. 6th, the third on Feb. 3rd, the fourth on March 3rd, and the fifth and last on April 7th, 1897. The number of students is limited to fifteen in each course; that is, fifteen in the butter department and fifteen in the cheese department.

The school, which is under the control of the Ontario Government, has for director, President Mills, M. A., LL. D., of the Ontario Agricultural College, and for resident superintendent, F. J. Sleightholm, B. S. A., while the remainder of the staff is also the same as that of last year, being, for buttermaking, Henry Smith, assisted by J. E. Crealey, B. S. A., and in cheesemaking, Wm. Waddell. In addition to the following subjects: "Business Management," "The Composition of Milk," "The Care of Milk for Home and Factory Use," "The Separation of Cream from Milk," "Milk Testing," "Buttermaking," "The Principles of Cheesemaking," "Feeding and Management of Dairy Cows," and other subjects. Mr. Sleightholm, though somewhat handicapped last season through the building being finished so late, gave the school a splendid start. He is well and most favorably known over the Province by reason of the ability with which for several seasons he has carried on the traveling dairy.

Some time ago permission was given by the U. S. authorities allowing the shipment of Canadian cattle, in bond, to England via Boston (in addition to Portland), but in a very short time after this order was suspended.

Procrastination is the thief of time, money, and knowledge. Moral: Renew your subscription to the *FARMER'S ADVOCATE* to-day.

**The Common Faults of Butter.**

The undesirable properties which are observed in butter are due far more to mistakes in the preparation of it than to the use of unsuitable foods, says W. Fleischmann, Ph. D., in his *Book on the Dairy*.

**Faults in Appearance.**—It may contain milky brine, and be therefore dull and cheesy; if too much worked, opaque and thick; or it may be flecky, streaked or cloudy, results of unskillful coloring or salting, or working in a cold room.

**Defects in Flavor and Smell** are as follows:—Rancid or bitter, dull or greasy. It is referred to as being lardy when it has a weak tallow flavor, or tallowy when there is a strong tallow flavor. The butter is inclined to develop this flavor if the cows eat much young fresh clover or if they be supplied with large quantities of tallowy-flavored oil cake. Furthermore, butter is apt to become tallowy if exposed for a long time to a bright light. Butter, also, which has been frozen and again thawed is occasionally tallowish. A woody flavor is often due to the boards of the kegs in which it is packed being young, damp wood inclined to be musty, and also by not compressing the butter firmly enough into the casks. Sometimes butter tastes of the food, generally bitter, caused by feeding cabbages, damaged beet roots, sour food, distillery refuse, etc. The flavor of the stable is common in bad butter and very disgusting. When dairy utensils are carelessly washed with soap or soda this flavor is apt to be left, or butter kept in damp, poorly-ventilated rooms is liable to become musty.

Other defects mentioned by Dr. Fleischmann as being recognized in the larger butter markets, such as Hamburg, Germany, are: Moldiness, or it is occasionally white, green or red, owing to bacterial growth; oversalting or defective salting, when the finished butter will contain grains of salt; and, lastly, dirty, containing threads, hairs of cows, dead flies, and other indications of dirty handling.

It goes without saying, that every one of these defects in butter can be avoided if reasonable care be given by the dairymen in the manipulation of his business. Had Dr. Fleischmann investigated butter as put upon the weekly and biweekly markets of many Canadian towns and cities, he would have met with perhaps quite as many evidences of carelessness as he found exemplified in German markets. We learn that the more particular class of city customers never think of buying butter upon the market, but invariably pay a reliable grocer a little extra price for what he will guarantee as being of good quality, or else have an agreement with some good buttermaker to supply them once or twice a week all through the year.

**Churning, Salting, and Working Butter.**

BY JOHN B. MUIR.

**Churning.**—We said in our last article that if the cream was cooled to 60 deg. or below the night before, and cold water or ice left around it, it would be down to about right churning temperature in the morning. The right temperature I consider to be from 50 to 53 deg. Some may think this a very low temperature, but there are many advantages in churning at a low temperature; it not only gives more exhaustive churning, but it gives better butter, with less foreign elements in it and with much better keeping qualities. It is necessary to have rich cream or cream containing from 30 to 35 per cent. of butter-fat to enable us to churn at this low temperature, as thin cream cannot be churned below 60 deg. without exhausting a great deal of time and patience. Thin cream also develops acid much faster than rich cream. This is another point in favor of rich cream, as we are better able to control the flavor and ripening process by having cream with a small quantity of milk in it and introducing plenty of good, pure starter.

Cream ripened at a high temperature should be cooled to 52 or 54 deg. about two hours before churning, so that the practice I have recommended of ripening and cooling the night before will be found very convenient by both the creamery-man and private dairy-man, as the cream is ready for the churn first thing in the morning. Scald the churn with hot water, then rinse with cold water before putting in the cream. The cream should always be strained into the churn. The best strainer for this purpose is made of perforated tin; a convenient size for factory use is a round one, about 18 inches in diameter at the top and 16 inches at bottom, 8 inches deep with 2½ inches of tin around the top. If butter color is to be added, do so after the cream is in and before starting the churn; about ½ oz. to the 1,000 lbs. of milk will give about the color suitable for our local markets. If the butter is intended for export, very little, if any, should be used. The churn should never be filled over half full, one-third is better, especially with thick cream at a low temperature, as it is liable to foam and fill the churn, so that concussion ceases. If you should get caught with a foamy churning, the quickest and easiest way out of the difficulty is to remove part of the cream and proceed with churning the balance. When the butter begins to come it is a good precaution then to take the temperature, and if found to be too high, to cool a little by adding some ice-cold water; if the temperature is not too high, sufficient cool water need only be added to keep the butter in granular form until the butter is gathered to about the size of wheat grains, or a little larger. The churning should never be done in less than 45 minutes; from that to an hour will be found about right. Let me here again urge every butter-

maker to test his work, and if losing more than a trace of fat in the buttermilk there is something wrong, which should be looked after at once.

**Washing.**—Washing butter is for the purpose of removing the buttermilk, and the least washing possible that will accomplish this is to be recommended, as too much washing does not give as high a flavored butter as once washing. This is another advantage of churning at a low temperature; it requires less washing to remove the buttermilk. The quantity of water used should be equal to the quantity of cream churned, and should be at a temperature of about 55 deg. The best way to heat the water to this temperature is to have a small steam pipe connected with the water pipe at the churn, and then steam can be turned on and the water heated to the desired temperature. After the water is added, revolve the churn for about two minutes, and draw the water off immediately, as it effects the flavor if left on the butter.

**Salting.**—When the butter has drained for twenty or thirty minutes, it may be salted either in the churn or on the worker. The former method I believe to be the better, as there is no better place to incorporate the salt with the granular butter than in the churn. An even color is more easily obtained, and the texture of the butter is preserved in consequence of less working being necessary. When salting in the churn, put about one half on; then tilt the churn one way and put on half of what is left; then tilt back the other way and put on the balance. When all the salt has been added the churn may be turned over slowly by hand a few times; or, the best way is to have a large wooden fork to mix the salt through the butter evenly. The butter may be either left in the churn or taken out into tubs and let stand for about two hours for the salt to dissolve before working. When salting in the churn, it is best to estimate from the number of pounds of milk required to make a pound of butter. The quantity of salt to use will have to be varied to suit the market for which it is intended. When salting in the churn 1½ oz. will be about right for our local markets, and when salting on the worker, 1 oz.; for export, ¾ of an oz. in the churn and ½ of an oz. on the worker. Salt for butter should have a fine, even grain, and be kept in a clean, dry room, free from any impure surroundings, as it absorbs bad odors very quickly.

**Working the Butter.**—The object of working butter is to rid it of the surplus moisture, to distribute the salt, and to unite the granules and give the butter consistency; and it should not have any more than will accomplish this. One of the advantages of salting in the churn and allowing the butter to stand until the salt is wholly dissolved is that much working is not required, as the butter only requires to be worked until the color is uniform, or when the streaks caused by the salt disappear. About twelve to fifteen turns of the worker will be found sufficient. When the butter is salted on the worker, and is only going to be worked once, the worker should be given twenty-five revolutions to thoroughly mix the salt, and if there is an excess of moisture it will require a few more turns. The working should never be done when the butter is at too low a temperature (there is not much danger of having it too high during the winter season), as it injures the grain; 55 deg. will be found about right.

#### Have We Done Our Best?

John Gould, of Ohio, asks the dairymen readers of an American paper some pointed questions which many of our subscribers can well afford to ponder and apply to themselves. We should not be discouraged and consider that we are failures until we have exhausted the resources at our command. John Gould's questions and remarks are the following: "Has the dairyman made as good progress in his methods to reduce labor and reduce cost, and still supply a yet better article of produce? Did he cull out the poor cows last season, and get better ones? Did he build that silo and save the corn crop without loss, and the expense of husking, grinding, going to mill, and the like? Did he fix the cracks in the stable and shut out the cold air, and were there any better facilities made for watering the cows? Politicians either 'make hay while the sun shines' or 'saw wood between elections,' and it would be a great example if this fashion would break out among thousands of dairymen. Have you studied up the balancing of a ration and found out what you have in the way of feed, and how it can be best proportioned to get the best results? Cows would live on all corn fodder, but they would do a great deal better if oats, oil meal or bran were added to the ration—something to make blood and muscle instead of all heat. Prosperity can come nowadays only by persistent effort and bringing the resources at command into order and developing them, and getting all possible out of each, and now, after election, is the time to go at this matter as never before, and bring prosperity, by first, confidence in one's business, and then bringing 1896 business methods to bear. Put the dairy industry in the front, where it belongs, and should be ever kept."

According to the annual report of the U. S. Secretary of Agriculture, Hon. Mr. Morton, 72 per cent. of the farms in the United States are absolutely free from mortgages or other encumbrances. Out of each 1,000 farms but 282 are mortgaged, and three-fourths of the money borrowed was for purchase or improvements.

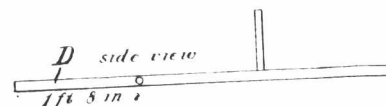
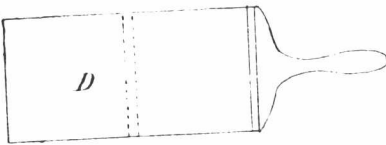
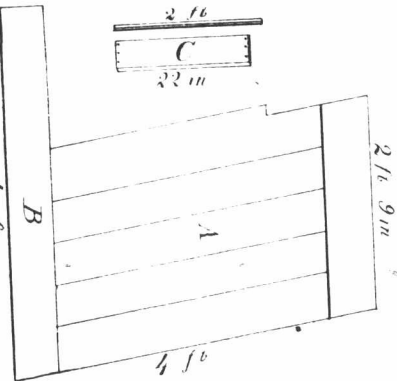
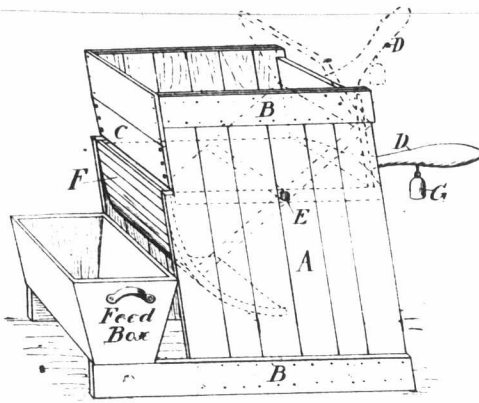
### THE HELPING HAND.

#### Handy Farm Contrivances and Methods.

Upon almost every farm there are some handy original devices, or improved methods and practices not generally known, which, if given to the public, could be utilized by others in rendering farm management more economical and remunerative. This department is intended to bring out such information for the benefit of our readers, and is to be maintained by them in holding out a helping hand to their fellow-workers by the interchange of descriptions of labor saving tools and contrivances, particular ways of management, original and successful experiments tried, or any other feature in connection with farming not generally known.

To encourage subscribers to contribute to this department of the FARMER'S ADVOCATE, we offer a cash prize of \$2 for the best, and a second prize of \$1 for the next best, contribution received prior to the 15th of each month. These and other contributions deemed of sufficient merit will be published as rapidly as our space will permit, but will not necessarily appear in order of merit. Compensation according to our standing offer for accepted matter will be allowed for suggestions published but not awarded a prize. The decision in every instance will be final. Descriptions must be written upon one side of the paper with pen and ink, and must bear the contributor's full signature and address. They must be as short and concise as possible, 100 words being just as good or better than 500 if they tell the same story. Where an illustration will assist in making a description clearer, a rough pen sketch should accompany it on a separate sheet from the written matter. Every contributor must be a subscriber to the FARMER'S ADVOCATE. These contributions must not be mere reproductions of what have been published elsewhere. What we want is original matter. Plan sufficiently ahead so that the contributions will be as seasonable as practicable.

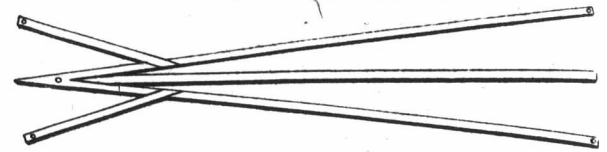
#### Cheap Root Slicer.



WM. MOUNTAIN, Perth Co., Ont.:—"This homemade root slicer is easy to work, rapid, strong, durable, and cheap, put together with hammer and nails. Make two sides (A) out of 2-inch plank, cut off the square about 1 in. to 1 ft., nail on battens (B) to hold planks together, making bottom batten 1 ft. 3 in. longer than top. Set sides up and put on knife (C) and stay to keep in position. The 22 in. knife to be put on with wood screws or bolts; cutting edge (the bottom) to be about 1 ft. or 1½ ft. from top. Nail a board above the knife and below, where the lever will be when down on back side, and also on top of projection on bottom battens. Keep it perfectly square. Make lever of 3 in. hardwood plank, 4½ ft. long, 18 in. wide, or just wide enough to work freely; bore hole through side plank and through lever, 1 ft. 8 in. from knife, and put through iron rod (E), ¾ in. iron, 2 ft. long, with key holes at each end. Make drum segment (F) with strips 1 by 2 in., nailed in evenly, so that they may be almost touching lever end. Knife: An old saw-blade, sharpened on lower side, with holes for bolts, should be 4 to 6 in. wide, adjusted to cut different thicknesses of slice by packing with leather; weight on lever behind knife (G) any iron to keep down the lever solid when hopper is full of roots. The lever, which is the hopper bottom, must strike the cutting edge of knife, and the distance projecting past knife will be the thickness of slice. Any blacksmith can make machine blade out of an old saw. The whole can be made in a day. Cost of material from \$1 to \$1.50.

How to do your neighbors a good turn and secure some of the valuable premiums offered on another page: Send us your subscriptions for Canada's best agricultural paper—the FARMER'S ADVOCATE.

#### Handy Farm Wagon.

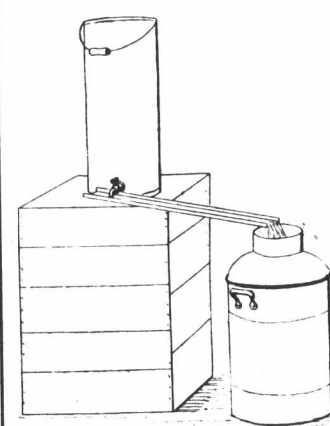


JOSEPH H. WOOLEY, Norfolk Co., Ont.:—"The accompanying illustration represents the frame of a wagon platform which I have used two years and find it the most convenient wagon on my farm for hauling fodder corn, manure, plows, harrows; in fact, everything that has to be drawn from place to place.

"The frame should be of 3x4 inch oak or 4x4 inch pine, bolted together. The frame is 6 feet wide, 14 feet long, and covered with matched lumber fastened to frame with wire nails. I prefer matched lumber for the platform in order to keep the wheels, etc., perfectly dry and shaded when not under cover. At each corner of the platform is a square hole [round in cut] to receive stakes to hold bulky loads. At the sides beneath the platform, which is movable so as to be easily lifted off. The wheels are just 23 inches high and the platform 30 inches. It is necessary to have side boards with stakes nailed at ends to enter the corner holes, and end boards rodded in position as with an ordinary wagon box. The truck wheels should have rims and tires not less than four inches wide. Mine are six. It will be seen that by having the above described platform and an extra set of truck wheels one may have the handiest possible farm wagon."

[Mr. Wooley does not mention how or where he procured his low wheels, but no doubt he, like a number of farmers of our acquaintance, had old wagon wheels cut down by a wagonmaker and rerimmed, or, as we have seen, wheels sawed from buttonwood logs or some other tough material. The logs were cut the length of ordinary wheel hubs and fitted with boxings of old wheels. These need not be more than 15 or 18 inches high, which will run much easier than one would expect because they will not cut into the ground.—EDITOR.]

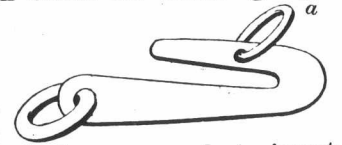
#### A Cheap Aerator.



F. W. C., Middlesex Co., Ont.:—"Bend up the edges of a piece of tin 30 inches long. Place a creamer can upon it on a box, strain the milk into the can and let it run slowly through a small hole at the bottom in a thin sheet over the tin and into large can. It may be gauged to run all the time after the first cow is milked until all the milk is treated."

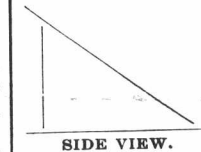
#### Attachment to Grab Hook.

R. E. BIRDSALL, Peterborough Co., Ont.:—"This sketch represents a grab hook to be attached to whiffletree for use with chain for skidding logs. The improvement on the ordinary hook is the ring A, which is placed through the hook a little nearer the back than the point. It should be made large enough to insert your hand conveniently and yet not large enough to allow it to fall over the point or back of the hook. Its purpose is to lift the whiffletrees about by and to hold the hook in position while the chain is being attached. It will save the hands."



#### A Handy Device for Holding Bags.

JAS. A. VANCE, Durham Co., Ont.:—"Take an inch board, 3 feet long by 14 inches wide, and slant it as shown in picture. Then take two slats, 3 inches wide and 3 feet long, and nail them upright to the board about 5 inches from the top to serve as feet. Drive a wire nail through each corner of board and turn them up a little to hook the bags on. Nail the board down at the bottom, and one man can fill and tie the bags as fast as two men can clean the grain."



SIDE VIEW.

"Fresh Eggs from China" is a sign in the windows of the Chinese stores in Chicago. Most of these eggs are duck eggs, and about 30,000 of them have arrived in Chicago during the last three weeks. Each egg is wrapped in a mass of black mud that retains its puttylike consistency for months, even when exposed to the air. They come in boxes holding twenty-five of a Chinaman's dozen, which is ten. Everything that comes from China is purchased by tens. The eggs are said to be as fresh as if laid yesterday. Peeling the coating from them, the faint blue tint of the shell is disclosed.—E.C.



POULTRY.

Whole vs. Ground Grains for Laying Hens.

At the Geneva (N. Y.) Experiment Station, Wm. P. Wheeler conducted a series of experiments with two pens each of Leghorns and Buff Cochins hens, with a view to ascertain the relative merits of whole and ground grains as food in the production of eggs. The pens of Leghorns were numbered 1 and 2, and the Cochins 3 and 4. The two pens of each breed were alike, so far as breeding, maturity, etc., were concerned. The experiment was extended over two years of the same feeding, the observations as to relative profits being made the second year.

**The Foods.**—Pens Nos. 1 and 3 (one of each of the breeds) were given for the morning feed each day a mixture of ground grain moistened. As much of this as they would readily eat was fed warm in cold weather and cool in hot weather. Later in the day some kind of whole grain was fed, scattered in the clean straw.

Pens 2 and 4 were fed whole grain of different kinds, with the single exception that corn was cracked. This was scattered in straw on tight wooden floors, and none was left uneaten.

All the hens were fed twice each week all the cut fresh bones they would eat. Either green alfalfa, cabbage, corn silage, or soaked chopped hay was fed at noon, the moistened hay being fed warm to pens 1 and 3. Plenty of stone grit and oyster shells were kept always in each pen. The mixed grain fed to pens 1 and 3 was made to correspond closely to the combination of whole grain which was fed at the same time to pens 2 and 4. The foods used were wheat, cracked corn, oats, barley, buckwheat, flaxseed, cabbage, corn silage, alfalfa (green) and hay, skim milk, and fresh bone, compounded so as to form a well-balanced ration. These foods were not all being fed at the same time, as for instance flaxseed was fed only during the latter part of the year when the hens were moulting, and skim milk was fed during another portion of the time.

For the pen of Leghorns No. 1, having the ground grain, the amount of water-free substance in the food taken per day per fowl, on the average of the whole year, was 2.83 ounces. For pen No. 2, having whole grain, the average was 2.94 ounces, an excess in consumption of about four per cent.

For pen No. 1 the cost of food per hen for the whole year was 84.27 cents. The average number of eggs was 92.91. The food cost for every dozen eggs was 10.88 cents. The market value of eggs laid per hen was 133.86 cents, exceeding the cost of food by 58.8 per cent.

For pen No. 2 the cost of food per hen for the whole year was 85.56 cents. The average number of eggs was 77.03. The food cost for every dozen eggs, 13.33 cents. The market value of eggs laid per hen was 111.51 cents, exceeding the cost of food by 30.3 per cent.

For the pen of Cochins No. 3, having the ground grain, the amount of water-free substance in the food taken per day per fowl, on the average for the whole year, was 3.41 ounces. For pen No. 4, having whole grain, the average was 3.50 ounce, an excess over the consumption of No. 3 of only about 2.6 per cent.

For pen No. 3 the cost of food per hen for the whole year was 102.22 cents. The average number of eggs was 47.51. The food cost for every dozen eggs 25.8 cents. The market value of eggs laid per hen was 75 cents, being 2.66 per cent. less than the cost of food.

For pen No. 4 the cost of food per hen for the whole year was 103.33 cents. The average number of eggs was 63.72. The food cost for every dozen eggs 19.44 cents. The market value of eggs laid per hen was 110.76 cents, exceeding the cost of food by 7.3 per cent.

Although all the hens were fed liberally, the average for the year shows that those having the ground grain were satisfied with less actual dry matter in the food. The cost of the ground grain ration was also somewhat less. These differences, although noticeable, were not so pronounced as similar ones observed during the first year.

The Leghorns having the ground grain laid over 20 per cent. more eggs than those having only whole grain, and showed nearly twice as great difference between the market value of the eggs and the cost of food. On the average for the year, 22 per cent. more food was taken by pen No. 2 for the same egg production than by pen No. 1.

**Summary.**—(1) Two pens of laying hens, one of a large and the other of a small breed, having a ration the grain of which was whole, ate during their second year somewhat more food at little greater cost than two similar pens having a ration in which half the grain was ground and moistened.

(2) Cochins having the whole grain ration laid much better than those having the ground grain, although neither lot laid at a profitable rate during the second year.

(3) Leghorn hens having a ration in which the grain was whole consumed on the average for two years over 20 per cent. more food for the same egg production than did similar hens having half the grain in their ration ground and moistened. The hens having whole grain had on the average for two years 6.4 pounds of water-free food for every pound of eggs produced. Those having ground grain had on the average for the two years 5.3 pounds of water-free food for every pound of eggs produced.

Poultry for Market.

The supply of poultry for Christmas and New Year's is usually very large, and the demand chiefly for the very finest grades. Stock intended for holiday trade should therefore be prepared with extraordinary care, that it may present as handsome and attractive an appearance as possible.

It is best to fast the birds from 12 to 24 hours before killing, but during this time the poultry should have plenty of water. In case any fowl should be found to have food in the crop after killing, it should be removed by making a clean-cut incision in the back of the neck and the full crop worked out under the skin.

There are two methods of dressing—dry picking and scalding. As a general rule the chickens, fowls and turkeys which command the highest price are dry picked, but by no means do all dry picked lots sell higher than scalded. Lean poultry always looks much thinner when dry picked than when scalded and plumped, and thin poultry commands more when scalded than when dry picked. For this reason chickens and turkeys should be dry picked only when very fat and of fine quality. Ducks and geese should always be scalded.

No poultry should be killed for market which is not of reasonably good size and in good condition. Small, thin, framy turkeys, such as are often sold very early in the season, are always a drug in the market and are unprofitable. Spring ducks should be kept back until almost full-grown.

One of the most essential points in dressing poultry so as to carry well is to get all the blood out of the body which can possibly be withdrawn. The manner of killing affects the flow of blood materially. All kinds should be killed by cutting through the roof of the mouth to the brain with a sharp-pointed knife. But if the fowl is "stuck" very hard and deep so as to cause instant death the blood will not flow freely and the feathers will be set so as to be difficult of removal, especially if dry picked. The proper killing is an art that requires practice and judgment. Just the right thrust of the knife will reach the brain and paralyze the fowl, relax all the muscles so that the feathers may be afterward easily removed, and permit a free flow of blood before the fowl is actually dead. Free bleeding is so important that too much care cannot be taken in acquiring just the right method of killing.

**Scalding and Picking.**—Boiling water is too hot, but just a little below that point will give good results if the operation be carefully done. The birds should be immersed by holding the legs and head, lifting them up and down several times. Guard against over-scalding, as it causes the outer skin to rub off, giving the fowls a bad appearance. Chickens and turkeys should be plucked cleanly immediately after scalding, without breaking the skin. After scalding ducks and geese, they should be wrapped in a cloth for about two minutes, when the down will come off with the feathers. All scalded poultry should be "plumped" after picking, by dipping for about two seconds in very hot water. Then it should be placed in cool water for about twenty minutes, when it may be wiped and allowed to dry before packing for market.

Put Your Flocks on a Paying Basis.

BY J. E. MEYER.

The time is at hand when we will find it necessary to confine our fowls to their winter quarters. The great mistake made by over nine-tenths of the farmers is to crowd too many birds into their houses. No more costly mistake can be made in handling poultry than to crowd them, because a small flock kept in good roomy quarters will lay far more eggs in proportion than a large flock kept in the same pen, and eat very much less. We at first made the mistake of keeping from 30 to 40 birds in a pen 10 x 12 feet, in which we now keep only half that number, with the result that we every winter get far more eggs than we originally did from double the number, at a far less expense.

Another mistake far too commonly met with, and one that is greatly to blame for the "no-money-in-poultry" cry of so many, is that of huddling birds of ages ranging everywhere between say two months' old "peepers" and croaking old "biddies" of ten years. Some birds in a flock of this kind will, no doubt, lay under decent management, but a much larger number persist in doing nothing but eat under any kind of care you choose to give them. Such flocks never pay, and now is the time to kill off all the drones, leaving all the young hens that have moulted out nicely, are looking ruddy, and are in good condition. Also keep only those pullets that are well-grown and in good condition; those that are heavy and well-matured. Now, you may have only a few such hens and pullets, but there is no use expecting to make anything from your flock unless you keep only those that will give you a return for the food given them. Far better have only ten birds that lay a fair number of eggs this winter when they are worth most money than have twenty, ten of which eat up all the profits you obtain from the ten good ones. It does not require a philosopher to see the point. By culling your flock in this manner you will in a short while learn that there is some money in poultry when they obtain the same careful management you give the other stock of the farm.

Distemper in Fowls Followed by Roup.

SUBSCRIBER, Kent Co.:—"Some time ago a young cockerel caught a disease which caused him to sneeze constantly. Since then it has spread until the whole flock is affected. Generally they get better, but in some cases worse. Two have died, and upon examination we found a plug of yellow, cheesy matter, about an inch long, in their windpipes; otherwise they appeared healthy. Please give cause and cure, and oblige."

[Evidently the trouble is distemper, followed by "roup" and "canker." We have visited a great many poultry yards this fall, and we have noticed a great many birds with distemper, owing, no doubt, to the cold rains and changeable weather the latter part of September and October. At this season of the year fowls are moulting and require more attention than at any other time. Fowls that are allowed to roost in trees or open sheds, or chickens allowed to sit on damp ground, or filthy quarters, are more or less subject to this disease.]

**Symptoms.**—Very red in face and comb; face often swollen so as to close one or both eyes; eyes watery, a discharge from the nasal passages, frequent sneezing, with fever. The fever's progress and intensity of the disease are in a great measure dependent upon the condition of the fowl when attacked. If the fowl has tubercle in the system it is very quickly deposited in cheesy matter in the glands about the throat, especially around the windpipe and at the corners of the mouth, and the fowl becomes ropy. If not arrested the disease slowly and surely advances, attacking in blotches the mucous membranes of the nose, throat, and windpipe. Sometimes these patches are in appearance like a collection of fine points, which coalesce and a false membrane forms, completely covering the underlying mucous membrane. At other times the growth is in appearance like a fungus. Inflammation of the mucous membrane is set up by the disease, and if at this stage it is not checked sloughing takes place, and owing to this and the thickening and decomposition of the natural secretions of the parts attacked the fowl becomes ropy; hence the term "diphtheric roup." When the disease has attacked the windpipe a lot of froth sometimes hangs about the mouth and nostrils, and when the nasal passages are blocked up it is forced through the lachrymal glands into the corners of the eyes. This disease sometimes assumes a chronic form, when there is no discharge, and may be termed "dry roup." Fowls in this condition are sometimes considered by their owners as in perfect health, and probably sold as such, and coming in contact with healthy fowls after a time an outbreak of this disease will be found and the owner is at a loss to account for it.

**Treatment.**—In the first place, isolate the birds affected, placing them in warm and dry quarters, free from draft. If only one or two birds, and not valuable ones, I would advise the use of the hatchet and turn your attention to the rest of the flock. If valuable, give opening medicine, such as castor oil or Epsom salts, and I have given a little kerosene oil in the drinking water. Clean out the nasal passages, using a lotion made by adding a fourth part of an ounce of sulphate of copper to a pint of rain water. I used Dr. Hess' Panacea with good results, as have several others in this section. It can be purchased at the leading seed stores. The directions will be found with each package.

L. G. JARVIS,

Manager Poultry Dept., O. A. C.

MR. MEYER'S MODE OF TREATMENT.

We think there is no doubt that "Subscriber's" fowls have distemper or cold, which, being neglected, is turning to roup, although he has said nothing about eyes swelling or discharge from the nostrils.

**The cause.**—Exposure to cold drafts or dampness has caused some of the weaker members of the flock to take cold, and it has spread as it always does when neglected.

**Treatment.**—The moment we find a bird breathing heavily or sneezing we remove it to a closed coop where it will be warm, free from drafts, and away from the rest of the flock. At once pour down its throat (we use a small oil can) say ten drops of coal oil. We never measure the quantity. Inject a little coal oil into each nostril, and by holding the mouth shut and the head up force it to breathe through the nostrils and the oil to run through them. Dust the bird thoroughly with insect powder, feed it well, and in a day or two, without any further treatment, it will recover. Repeat the oil if necessary at night each day. When the head is swollen sponge it with a mixture of equal parts of vinegar and water.

If the disease becomes general, as it has in the case of "Subscriber," besides the above take a tablespoonful of lard, half a tablespoonful each of ginger, cayenne pepper, and mustard; mix them thoroughly with flour enough to work into shape. Roll out into slugs one inch long by three-eighths of an inch in diameter. Give each affected bird one each night. Add bromide of potassium to the drinking water for the whole flock in the proportion of two grains for each fowl for three or four days or until cured. All birds that do not improve after a few days' treatment had best be killed and buried. Do not forget to treat for lice. The coal oil need not be injected into the throat when the slugs are given, but do your best to keep the nostrils free and all cheesy matter removed from the throat and nostrils. J. E. MEYER.]

### Poultry-raising from a Farmer's Standpoint.

BY E. BEDFORD, GLENCROSS, MAN.

No doubt raising poultry would yield more pleasure and more profit if every farmer had a good henhouse and a first-class flock of birds, but I have found by experience that both pleasure and profit may be derived from the care of poultry under very ordinary circumstances. Our henhouse is a log one adjoining the south side of the cow stable, and has a sod roof through which the water sometimes drips in a very provoking manner, being neither good for the fowls nor yet for their caretaker's temper. Then our buildings are close to the bush, and the prairie wolves are ever on the watch, ready to run off with any unsuspecting bird that may wander very far from the yard. Surely any person might begin with as fair a chance of success! Yet, with a little care and perseverance, our hens return us a higher percentage than any stock on the farm.

By feeding a hot mash each morning, sometimes boiled potatoes with skim milk, sometimes hot skim milk mixed with shorts or crushed barley, and sometimes a hot cake (baked expressly for themselves), with plenty of warm water or milk to drink, and a feed of grain in the afternoon, which, by the way, is scattered on dry chaff, I have no difficulty in getting eggs through the winter months when the prices are high, and then the hens that lay during the winter months always hatch early in the spring and the chickens are ready for the early fall market. By exercising care in the preparation of the marketable birds and shipping to Winnipeg we have realized satisfactory prices.

Last year I kept a daily account of the eggs gathered and find that my hens averaged over ten dozen eggs each. There were but five days during the twelve months on which I did not get an egg.

Our flock is a cross of Plymouth Rocks, in number, about sixty. Though there may be better classes of hens, I like them best, as I know more about them. I find the work very interesting and am constantly learning more about my birds. To insure the henhouse being free of weasels we keep a cat in the cow stable and have an opening from it into the henhouse. To prevent scaly legs I sometimes wash my hens' feet with coal oil, and once in a while I dust insect powder through their feathers, and in one corner of their house keep sand and gravel, with an occasional pan of ashes.

### Preserving Eggs.

To the Editor FARMER'S ADVOCATE:

SIR, - I notice in the ADVOCATE for Nov. 2nd several suggestions for keeping eggs fresh. For the benefit of your numerous readers, I give you my plan. Put say half a dozen at a time in a cotton bag or wire basket and dip them quickly three times in boiling water. A scientific friend of mine says it has some action on the lime of the shell, making it impervious. When using there is a thin white film inside the shell. The eggs after being dipped are simply packed in a box or basket and kept in a cool place. Nothing more is necessary. I have tried this plan several years and it works admirably. "HOUSEKEEPER."

### GARDEN AND ORCHARD.

#### Packing and Shipping Apples.

To the Editor FARMER'S ADVOCATE:

SIR, - I notice in the Nov. 16th issue of the ADVOCATE that Mr. John Craig, Dominion Horticulturist, calls the attention of fruit-growers to the fact that the Minister of Agriculture wishes to obtain their views in regard to the best means of preserving and transporting our fruit product, with the desire of rendering whatever assistance lies in the power of the Government. This is certainly an important subject to Canadian fruit-growers; but there is a point in connection with the packing and shipping of apples to the British markets to which I wish to call attention, for I am convinced that some farmers and packers are doing an injury to our trade through selfish interests that neither cold storage, rapid transportation, or any other government assistance can wipe out. Never before in the history of Canada has there been such an opportunity for growers and shippers to raise the standard of our fruit in the eyes of the British people. But I am sorry to state that, to my positive knowledge, this opportunity in many cases has not only not been taken advantage of, but rather abused. The quantity of our apples was so great and the quality generally so good that every demand might have been supplied with fruit of perfect form, color, and size; but I have personally observed packers at work who first double-lined the barrels with the choicest specimens, then placed in a basket of "seconds," after which the barrels were filled up with small, unripe and imperfectly developed fruit. But the fault lies not so much with the packers as with the growers, many of whom are standing in their own light, as the future cannot fail to show. They appear to think that everything gathered should be placed in the barrels, and in some instances packers have been ordered off the premises when they failed to comply with such demands. Such growers appear quite delighted when a gang of men is found who are so indifferent to the interests of their employers and our national reputation abroad as to fill up the barrels with

whatever they find before them. Such a gang of packers were recently at work in this vicinity, and I was told by one farmer that in his orchard little green Baldwins, no larger than a walnut, such as he would not care to eat himself under any conditions, were placed in the barrels. Another farmer stated with the utmost satisfaction that he would rather sell at 40c. per barrel to the employer of these men, and have his fruit packed by them, than receive 60c. from another firm who were buying, apparently otherwise quite satisfied so long as the fruit was off his hands and the money received in exchange, never giving a thought as to future results. All such shortsighted and dishonest methods are suicidal to the interests of both grower and shipper, and they will suddenly awaken to a realization of the fact when buyers and consumers on the other side eventually become disgusted with such dishonesty and we find our fruit practically shut out from their markets when an ever-increasing trade might have been built up.

For my own part I have seen but little fruit left in our own orchard by buyers or packers that I would care to place in the barrels were I shipping myself. By the method now practiced of paying equal prices for superior and inferior fruit, a premium is placed upon negligence and carelessness, and the painstaking grower who trims, sprays and carefully gathers his fruit is made to suffer for the wrongs of his less thrifty neighbor. But there is a certain remedy for this within reach of the progressive grower, which is for him to ship his own fruit, and by careful gathering, culling, and branding, build up a trade for his particular brand which will eventually supersede dishonest shipments, for "truth is mighty and it will prevail."

ELLIS F. AUGUSTINE.

Lambton Co., Ont.

[NOTE.—Beginning with the able article by Mr. E. D. Smith in the September 1st issue of the ADVOCATE, repeated warnings have been given on this very point, so that apple-growers who read are without excuse. We are in hopes that the cases mentioned by Mr. Augustine are isolated, not general. We are not sure that his remedy will cure all, because men who connive with reckless packers could hardly be expected to be very scrupulous if packing on their own account, but experience will certainly teach the lesson, though it may be a very expensive one. It is an exceedingly difficult matter to reach such cases by any legislative enactment or inspection system. Our apple trade this season attained great magnitude, up to the middle of November nearly 780,000 barrels being shipped to Great Britain from Montreal and Halifax, 40,000 more than were exported from the United States. At Liverpool, Canadian apples sold from 25c. to \$1 more this year than American, but the unprecedented supplies had a ruinous effect upon prices.—EDITOR.]

### Grape Culture.

BY MARTIN BURRILL, LINCOLN CO., ONT.

"The history of the grape is almost as old as that of man," wrote Charles Downing in 1845. There is a good deal of history to be written about the grape, however, since Downing's day. People are not generally aware of the fact that commercial grape culture, of at all a successful kind, is a very modern affair on this Continent. For two hundred years or so vineyardists were continually planting and experimenting with the European grape (*Vitis vinifera*), and meeting with failure after failure. In 1629 a settler in Massachusetts wrote home: "Excellent vines are here, up and down in the woods. Our governor has already planted a vineyard, with great hope of increase." Here is an early notice of the native grape, but it was not till well on in the present century that the potentialities of the native grapes were realized and any serious or general attention given to their development. Since then viticulture has gone by leaps and bounds, and to-day we have an embarrassment of riches in the way of good varieties of the American grape.

Twelve or fifteen years ago, when ten cents per pound was an ordinary price for grapes, there was lots of fun and money in the business. Now, with about four millions of vines in bearing in Ontario alone and the price down to zero, no wonder there is wagging of heads and a certain amount of pessimism. But this year was a genuine exception. Hard times and a vast apple crop helped to demoralize the grape market, and things are more likely to be better than worse another season. Anyway, grapes have come to stay—it is an indispensable fruit—and heaps of people are in the business for keeps. As in everything else, there is room "at the top," and the successful grower will be the man who reduces the cost of production, studies carefully the environment of the grape, and combats all adverse conditions.

**Soil.**—The best soil for the grape is a rich, deep loam, loose and friable. Gravelly soil is excellent, as it is for nearly all fruits. The vine, however, will do well in almost any soil with proper care, from sand to clay, providing always that suitable varieties

are selected and that the soil is well drained. In the case of clay the best results cannot be obtained without underdraining. On light, sandy soils it will be necessary, of course, to apply more manures, but while the vines will on such soil make a more rank growth, they will be more subject to disease and the fruit itself will not reach the high flavor of that grown on the heavier soil, though this last is a disputed point. The grape loves warmth and a dry, rich soil. For this reason underdraining is important in nearly all cases, for it not only carries off the excess of water, but allows the air to penetrate and circulate through the soil, thereby raising the temperature of the subsoil and improving the mechanical texture. It is easier and cheaper to put the land for the vineyard in good shape before



FIG. II.

planting than afterwards. Plow deeply, following with a subsoiler if possible. Land that will grow a first-class crop of potatoes or corn will do well for a vineyard. When the land is ready for planting it should be in as good shape as the seed bed for fall wheat. It will pay to have it that way when you come to staking out and planting, to say nothing of after benefit to the vines.

**Planting.**—When not cramped for room eleven feet each way is a good distance for the strong-growing varieties. This gives room to work a light harrow or almost any tool or wagon comfortably. Some of the weaker-growing varieties might be planted much closer in the rows—eight feet or so. Some growers plant very closely, with the intention of cutting out every other vine as they grow older. A fairly good plan—if they cut them out; but when it comes to the pinch it seems a too heroic business for them, and—they don't cut. Vines are cheap, and good, fibrous, two-year-olds are best to plant. Plant deeply enough and prune down to two buds. Cut off any bruised and broken parts, and if the roots are long and destitute of branching fibers, prune back to about eighteen inches. This will incite the main root to throw out quickly new feeders. Remember, it is not the

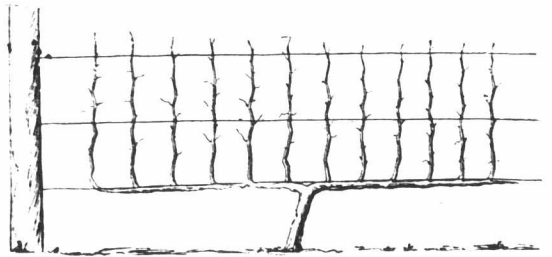


FIG. III.

length of the root that determines the quality, but the condition. It is a good plan to mix a handful of bone meal with the earth when planting.

**Cultivation.**—Cultivate thoroughly and often; success lies this way. Never let the ground get baked. Don't wait till you think the weeds are big enough to bother with; that's a small part of the business. The prime necessity is to keep the surface soil mellow and loose all the time, thus conserving as much moisture as possible. After the vines are in bearing do not plow too deeply; the whole ground will be full of fine feeding roots, and a shallower cultivation is profitable. In working away from the vines in the spring we find a grape hoe invaluable. A steady horse and careful man will, with this tool, save the work of three or four men with the hoe.

**Fertilizers.**—As to the manure question, if the ground is rich enough when planting it will carry the vines through to the third season. If, however, you grow other crops between the rows the first two years (and absolutely nothing but "hoe" crops should ever be grown), manure accordingly. When the vines come into bearing and are making abundance of wood, it will be better not to dress too heavily with barnyard manure. Compared to other crops, grapes remove more phosphoric acid and potash from the soil than they do nitrogen. Apply these two elements, the former by bone meal and the latter in the form of unleached wood ashes or muriate of potash. Directly you think the vines are not making vigorous growth, give another dressing of barnyard manure.

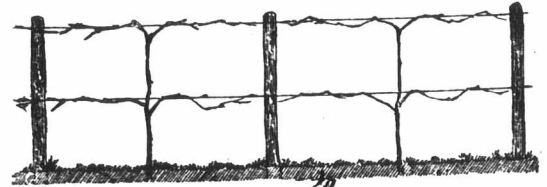


FIG. IV.

**Pruning and Training.**—In many respects this is the most important feature of grape culture. There are any number of systems, but the control of the growth of the vine within proper limits and the proper production of well-ripened wood and buds that will ensure a good crop of fruit are the principles that underlie all systems. In cold districts where vines have to be protected during the winter, what is called the low two-arm or "arm and spur" system is probably best. When planting, cut back to two buds; the second spring cut

FIG. I.—  
Arm and Spur,  
Second Fall.

everything away but one cane, and cut that back to two buds. In the fall the vine will be as in Fig. 1.

Peg the canes down for winter and cover with earth; then next spring train them along the first wire of the trellis, as in fig. 2, pruning the arms back to about three feet long. Each bud will produce a fruiting cane, which should be tied up perpendicularly. In the third fall the vine will be pretty much as in fig. 3. In November cut back these upright canes to one bud each, which will produce fruiting canes for the following season. Then plow a light furrow far enough away from the vine to lay the two arms in. Peg down and cover with plow, finishing up with spade or hoe if necessary. In a small vineyard it would be a good plan to nail boards from post to post in every other row to hold the snow, or scatter brush around for this purpose. When the vines do not need burying for the winter, the two systems generally adopted are the "Kniffin" and the "fan," or modifications of these. Both have advocates. In the Kniffin system cultivation is somewhat more easy, and one wire is saved. In

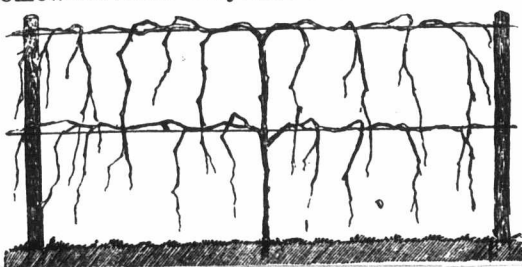


FIG. V.

the "fan" method of training, the wood can be renewed with greater ease—a big advantage with some varieties, such as Delaware, Moore's Early, etc. In the Kniffin system two wires are used, the lower about 3 ft., the upper about 5½ ft. from the ground. The first two seasons prune to two buds; the third spring one upright cane is tied to the top wire. In the fourth spring and summer the vines will be as in figs. 4 and 5 respectively. After that the vine is pruned as in fig. 4, the aim always being to select good healthy canes, springing from the main trunk as nearly as possible. In the "fan" system three wires are used. Prune for first two seasons in same way as above. In the third spring leave one or two canes, but not more, three feet or thereabouts in length. From the fourth season and on, fig. 6 will give a general idea of the shape of the vine. The constant aim is to leave well-ripened, strong canes, cutting out from time to time the older portion of the trunk. With regard to summer-

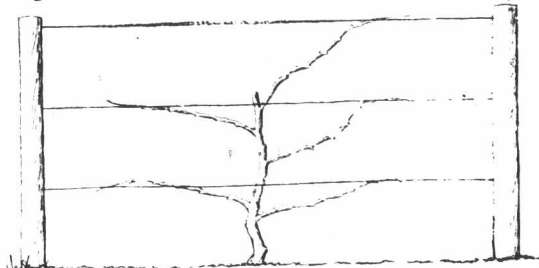


FIG. VI.

pruning, in these days of cheap grapes one cannot afford to spend more time or labor in the vineyard than absolutely necessary. With the exception of checking a too luxuriant growth by pinching back, and thus at the same time facilitating the work of cultivation, little can be done profitably from a commercial point of view. Not more than five pounds of grapes should be allowed to mature on the vine in its third season. When in full bearing from 30 to 40 buds are sufficient to leave for a good crop—this is enough. One of the best crops I ever had was in 1895. After a pretty close pruning, a frost on May 13th took a third of the new shoots—*verbum sap.*

VETERINARY.

Treatment of Punctured Wounds.

Punctured wounds are perhaps more treacherous to treat than those which go little deeper than the surface, for the reason that there is more danger of foreign particles being withheld in the former. Perhaps the most common location of a punctured wound is in the shoulder, breast or thigh, by reason of the animals running against sharp obstacles. The foot, too, is the frequent seat of a puncture by stepping upon nails or other pointed objects, or by the horse or his mate treading upon it with a sharp calk.

With the body or foot wound the first thing to do is to remove all the foreign substances. When a stick has caused the wound it should be carefully probed to be sure that no splinters remain. A proper treatment is first to stop excessive hemorrhage, if such exists, by an application of chloride of iron applied with a syringe. It should then be left alone for twenty-four hours, when it should be cleansed with simple warm water, using a syringe for the operation. When all clotted blood is removed inject a solution of one teaspoonful of carbolic acid to a half-pint of soft water. Inject the carbolized solution daily until the wounds heal from the bottom.

The common practice of filling the puncture with tar or pouring in some hot liniment does more harm than good. The healing at the bottom first

is very important, so that the outside may not heal over first and cause deep-seated abscesses, which may cause serious trouble in the form of a fistulous wound, or, perhaps, death from blood poisoning.

Wounds made by the entrance of a calk just inside the top of wall of the hoof should, after thorough cleaning, be filled with a mixture of pine tar and melted butter, half of each. This will keep the dirt out and cause rapid healing if the animal is rested and given a clean, comfortable box stall.

A common cause of lameness which often fools a careless horseman is the puncture of a nail in the sole of the foot. It is not enough to pull out the nail and trust to a cure, because the hole through the sole usually closes, keeping the blood or matter inside, which often becomes purulent, destroying all tissues with which it comes in contact, separating the sole from its attachments, till at last the matter will work out at the heel or other location. This can all be avoided by paring away the sole, making quite a large opening clear through to the sensitive sole. This will allow the escape of blood and make cleansing of the wound quite easy. The next thing to do is to insert into the hole a piece of cotton saturated with carbolized oil. This should be replaced daily by a clean piece until the wound heals from the bottom, when new horn will soon fill up what has been cut away. In case this treatment has been neglected and matter has formed and it is oozing out from the heel, and the frog of the foot is severed, and the sole also, then there is only one way, and that is to cut away all detached parts of the sole of the foot and frog, even if it take the whole bottom of the foot. Sound horn never will grow until that matter is removed and the cankerous effects it has produced. The only quick way of doing it is to cut away everything that hinders antiseptic dressings from reaching the cause of the disease. All that is necessary is to remove the dead horn and wash the sole of the foot with a carbolic solution composed of carbolic acid, one part; soft water, fifty parts, and to apply a dressing composed of carbolized oil made by mixing one part of carbolic acid in ten parts of olive oil and adding two parts of oil of tar. The oil of tar is used simply to stimulate or aid nature in quickly forming new horn.

Common Ailments of Dairy Cows.

DISEASES AND ACCIDENTS PECULIAR TO PREGNANT COWS AND IMMEDIATELY FOLLOWING PARTURITION.

(BY V. S.)

(Concluded from page 479.)

**Mammitis.**—Another very serious condition attacking cows is mammitis, or inflammation of the mammary glands or udder, which, if severe, is attended with great pain, high fever, rapid loss of flesh and sometimes life. The causes of mammitis are numerous, such as exposure to cold drafts, drinking cold water too soon after calving, not emptying the bag when milking, obstructions in the teats not allowing the milk to escape, injuries, and too abundant an allowance of rich food.

**Symptoms.**—The udder becomes hard and hot, increased in size, the animal is feverish and restless, shows signs of pain when being milked (which, if any, is very slightly secreted), surrounding vessels become distended.

**Treatment.**—In order to treat this condition successfully it is necessary that prompt measures be adopted, and no time should be lost in emptying the udder of every available drop of milk with as little force upon the teats as possible. Constant application of warm water and constant stripping will in time succeed. The diet should be restricted, a warm place provided for the cow. If these measures fail, then the case has reached a stage where medical aid is required. A cathartic and diuretics administered, the application of hot poultices and a good application of camphorated oil would be of great benefit.

Prevention is of greatest importance in heavy milkers. Do not allow access to cold drinks. See that the udder is properly emptied at each milking, which should be three times a day for a few days, or until the secretion is modified, and restrict the diet previous to calving; a milking tube will be found advantageous in such cases.

**Retention of the Afterbirth** is a common attendant of parturition, and, strange to say, that of all animals, the cow is most frequently and least effected by this condition; in fact, it is not uncommon to see a cow six, eight or even ten days after parturition still retaining her foetal envelopes, and appear as lively as if nothing whatever was abnormal. About the only symptom present is the existence of a portion of the membrane hanging from the vulva; the odor being very offensive after the third day, especially in hot weather; and if the membrane is allowed to decompose in the womb, febrile symptoms may be looked for, as the irritation produced in the womb being sufficient to produce inflammation (metritis), a condition which is serious and often fatal. There is also risk of septicæmia (blood poisoning), or even under more favorable conditions there remains a chronic discharge.

**Causes.**—Retention frequently occurs after abortion, or when birth occurs some days before the proper time. It occasionally follows long and proper labor, sudden drafts either during or immediately after delivery, cold drinks too soon. Numerous causes are responsible in producing this result, but need not be mentioned, as the accident will and does occur in all kinds of management.

**Treatment.**—In the cow, afterbirth retention of itself is never dangerous unless it give rise to other complications, and should be left entirely to nature for at least two days; if on the third day no progress is being made, assistance should be rendered, and the membranes detached from their connections (cotyledons) by the hand of a careful operator. Great care is necessary in the operation, as excessive hemorrhage will follow if a cotyledon is torn off, and your case complicated. There are drugs said to possess virtue in removing the membranes in such cases, but the above described method in the hands of a careful operator being by all odds preferable. The womb may be washed out daily for a few times and a weak antiseptic employed; but when uncomplicated, little attention is necessary beyond removal; the hands and arms of the operator being immediately washed and antiseptics employed. Nothing better than carbolic soap can be used, and no wounds on other animal should receive attention from such men for a period of several days; too much stress cannot be laid upon this.

**Inversion of the Uterus.**—Following difficult parturition we occasionally meet with cases of inversion of the uterus; the cow again heading the list in frequency in this accident. Little time should be lost in replacing the organ, and great care should be employed in cleaning and handling, so as not to unnecessarily injure it. In the absence of an experienced man, it is wise to secure the organ in a clean sheet and not allow it to hang. Many appliances are used to retain it, but the simpler the better, as long as they retain the organ in proper position until straining subsides. Some employ an ordinary pint bottle, inserted bottom first into the vulva and secured by the neck by strong cords and bound to the cow.

Astringent solutions not having irritating properties are also useful, such as a strong solution of alum. The parts should be kept clean, and antiseptics employed in the event of any inflammation.

A Case of Milk Fever Cured.

To the Editor FARMER'S ADVOCATE:

SIR,—In reply to your request for our treatment of "Calamity Jane" for milk fever, I enclose a recipe given by Dr. McIntosh, V. S., of the University of Illinois (who said he never lost a case since adopting the remedy), which I clipped from an American paper over two years ago and have had the medicine on hand for all that time. Fortunately, we did not need to use it before, but it came very serviceable in this case. A leading breeder in Illinois State also reports using this remedy with the best of results for years. He keeps a supply of this medicine constantly on hand and has no dread from this commonly called fatal disease. I can claim no credit for the treatment, but can endorse it from our experience. The only credit I can claim is in having sense (for a wonder) to profit by my reading. This is important. There are none too many good cows—never will be. Many will read this, say it looks sensible, and forget about it till he loses a cow, then will be sorry for it. Reader, you had better cut this treatment out. Right now. It may save you many dollars and a favorite cow some day, as it has us. Here it is:

"1st. Give one and one-half pounds Epsom salts and one ounce powdered ginger in one-half gallon of water.

"2nd. Mix together ten ounces aromatic spirits ammonia and twenty ounces of spirits of nitrous ether, and immediately after giving the first give three ounces at a dose in a pint of cold water and continue every half hour until five doses are given, then give three ounces every hour until balance of medicine is used.

"Also take one pound of ground mustard, mix with hot water and rub in well along the back; cover well to keep up the heat; when mustard is dry it will rub off."

As symptoms somewhat vary, I will briefly state our experience. Cow calved on a Friday afternoon. Udder was not very full (at least, not for her) and cow not in high condition, as she had only been dry four weeks. She appeared to be doing very well; in fact, so much so that we neglected to give a big dose of salts, as is our custom. On Sunday morning found the cow, though able to rise, unable to stand any time, as her hind quarters seemed stiff. Knowing this to be milk fever, I lost no time in giving her a pound of salts (all I had) and at once commenced giving the ammonia and ether, and then applied mustard to back. After giving four doses went to town for more salts and to consult our veterinary surgeon; got back with V. S. at 11 a. m. Cow had been given a dose while away. As the doctor thought the medicine was in rather strong doses, gave her two pounds more of salts and a longer interval between doses. She appeared very bad and in great pain at 12, which attack might not have occurred if we had given the medicine as often as directed. Gave more medicine and cow soon got into a comatose state. At 1 p. m. V. S. thought there was not much chance for her pulling through. After this we could only keep her body as warm as possible with blankets and cold cloth on her head. V. S. came again at 10 p. m. and relieved her bladder, then thought she would live. At 1 a. m. Monday commenced to show a brighter eye and improve, till at 7 a. m. she ate a bran mash. Got up two days after; hind part still cramped and unable to stand any time. Third day could stand all right; leg still stiff, which has now

nearly wore away after two weeks. On account of swelling and stiffness in hind legs have had to keep her on a limited ration. Has eaten all given her and, though thinner than usual, is now giving three (3) pails of milk daily.  
A. & G. RICE.  
Oxford Co., Ont.

[NOTE.—"Calamity Jane," referred to above, was the Holstein-Friesian cow that won the sweepstakes prize in the dairy test at the Guelph Fat Stock Show of 1895, under the rules of the British Dairy Show; also capturing the FARMER'S ADVOCATE special trophy for best pure-bred dairy cow.—EDITOR.]

## QUESTIONS AND ANSWERS.

### Legal.

SUBSCRIBER, Muskoka and Parry Sound:—"1. A goes before a J. P. and lays information against B for hunting deer on the water under the Ontario Game Laws. B is found guilty and fined on one charge, the other is dismissed with cost on A. Is that justice, and is A compelled to pay it by law? 2. A rents a house from B; lives in it for some time, then leaves without paying the rent, but left all his furniture, promising to come and settle for the rent. A also left a sewing machine with C as security for debt contracted with C. A was to settle in a couple of weeks or so. That was eight months ago, and the stuff is still here. What must B and C do to collect what is due them off the goods?"

[1. The effect of the dismissal of the one charge with costs is that A pays the extra costs of the proceedings, if any, which were occasioned on account of the dismissed charge. 2. B and C, if possible, should get A to consent to a sale of the goods or get A to release all claims on them. If, however, this cannot be got, then B and C simply hold liens on the goods for the rent and money lent, due to them respectively, and can only continue to hold the goods till the liens are paid, or enforce payment by an action and get an order of the court directing a sale of the goods for the payment of the liens and costs. B cannot now even seize and sell under landlord's warrant, the tenancy having expired. If C actually lent money directly upon the security of the machine, he is, perhaps, liable to prosecution for a breach of the "Pawnbrokers' Act.]"

### Veterinary.

#### THUMPS IN YOUNG PIGS.

MR. R. REYCRRAFT, Middlesex Co., Ont.:—"Three weeks ago my sow farrowed nine beautiful pigs. The sow was in good condition, and I kept her well in a comfortable pen. At about two and a half weeks old the young pigs began to get dumpish, pant and cough, and within a few days most of them had died. What was the cause, and how could the trouble have been avoided?"

[The trouble and its cause are indicated on the very face of Mr. Reycraft's letter. Such cases are quite frequent, and always occur with sows in good condition and too closely confined. The trouble is doubtless what is frequently called "thumps." The little pigs usually do well—in fact, become quite fat—when all at once the panting and coughing commences, and death soon relieves the sufferers. We have never met a case of "thumps" where the sow had the roaming of fields or the barnyard up till farrowing time and a roomy pen with an outdoor run after farrowing. The trouble is doubtless a physiological one on the part of the sow, due to a lack of earthy matter, which she would have found for herself in the soil had she been given an opportunity. Mr. Theodore Louis recommends the following condiment for pigs of all ages that are confined to pens: Six bushels of charcoal broken into the size of hazelnuts, six pounds of salt, and a bushel of wheat shorts. Put these on the floor and mix with a shovel; then dissolve a pound and a quarter of copperas in a large pail of water, and sprinkle it evenly over the charcoal mixture; then mix thoroughly and put in a box. Keep a quantity of this mixture where the hogs can get at it, and they will keep their systems in healthy form by eating it liberally. If plenty of sods are thrown in to confined hogs, much the same results will be realized as when the charcoal mixture is eaten. When the sow's system and food lacked necessary elements for the animal economy her milk could not be perfect, which would cause the young pigs to go wrong, especially when their heart and other internal organs become surrounded with fat. The remedy lies in prevention by allowing the sow plenty of exercise and free access to earthy matter, by feeding roots or other green food liberally, and by giving the young pigs plenty of sunlight and room to run around.]

### Miscellaneous.

#### TOP-GRAFTING STOCK FOR CLAY LANDS.

A. E. J., Cobden, Ont.:—"I would like some information regarding the best stock to use in planting apples in low clay lands, with a view to top-grafting."

[The question of the most suitable stock for planting in heavy clay soil with a view to top-grafting in the future is a most interesting one. While we have nothing absolutely definite in the way of actual experiments on this subject, yet from stray bits of experience collected here and there I am led to believe that the Hyslop crab makes one of the most satisfactory stocks for this purpose. While the Transcendent crab grows here and there in small gardens along the St. Lawrence,

in Quebec, which is undoubtedly a district of heavy clay soil, the Hyslop seems to do rather better in these soils than most other crabs, and very much better than any variety of apple that I know of. It might be planted out at two years of age and top-grafted the second year after setting it out in orchard. In this way, while I would not recommend this as a method for starting a commercial orchard, yet I think in this way sufficient quantity of apples could be grown for home use, and perhaps for small local market purposes.  
JOHN CRAIG,  
Dominion Horticulturist.

#### Central Experimental Farm.]

#### HEDGES AND VARIETIES OF APPLES.

W. J. K., Beachburg, Ont.:—"For a small hedge which is best, purple or Thunberg's barberry? Can Pewaukee, Ben Davis, and Salome apples be planted here?"

[Purple barberry certainly makes a beautiful hedge, but is naturally a taller and stronger grower than Thunberg's barberry, but may be kept down by frequent pruning. Thunberg's is naturally a dwarf grower, and in this respect is very desirable. It is very beautiful at this time of year with its crimson foliage and berries. Perfectly hardy.

Pewaukee and Ben Davis apples are, I think, profitable varieties to plant in Brockville or west of Brockville. The former could be safely planted at Beachburg; I fear the latter would not prove hardy. Of Salome I am unable to speak from very extended personal experience. In this locality it has thus far succeeded very well and is bearing heavily every year. It is one of our longest keepers, but the fruit is neither high in quality nor attractive in appearance.  
J. C.]

#### APPLE APHIS FUNGUS.

J. N., Charlottetown, P. E. I.:—"I enclose you specimens of apple twigs affected with some disease."

[I have examined the specimen and have also shown it to the Entomologist of the Farm, Mr. Fletcher, and we both agree that it is a form of fungus called "black mold," nearly always seen on apple trees which have been infested with aphids. I think that if you will examine the young twigs or any leaves which yet remain upon your trees you will find them to be more or less covered with small green or black plant lice. This fungus (*fumago*) nearly always accompanies the presence of these insects and may be considered a secondary effect and in itself not nearly so injurious as the insects which bring about its existence.

Probably the best treatment you could give your trees would be to spray them at once with a solution of copper sulphate in water. The proper proportion is one pound to fifteen gallons of water. This, I think, will not only have the effect of destroying the fungus but also of killing the eggs and insects resting upon the twigs. This strength can only be used where the trees are bare of foliage. In Bulletin No. 23 you will find a course of summer treatment for the extermination of these troublesome pests. Kerosene emulsion, which is mentioned in Bulletin 23, will clear your trees if carefully and perseveringly applied. Trees will not make a healthy and vigorous growth while they are infested with these injurious sucking insects.  
J. C.]

#### CREAM RIPENING WITH A STARTER.

SUBSCRIBER:—"I am about starting butter-making for the winter with twelve cows—some strippers, others fresh in milk. Will raise the cream by deep setting; expect to churn twice or at most three times per week, and would like advice as to the latest and best mode of ripening my cream. Should I use what is called a 'starter'? How is it made and used? An early reply in the ADVOCATE will oblige."

[Yes, use a "starter." Take skim milk and heat it to 158° F. by placing a can or part of a can of the skim milk in a tub of boiling water. Keep the milk stirred until it comes to the proper temperature, then remove the can (we use a shotgun can, 8½ inches in diameter and 20 inches deep) from the hot water and allow it to stand for 20 minutes in a warm place. Then put say a pint of buttermilk or sour skim milk of good flavor into this milk after it has cooled down to about 80° or 90°. Do this in the morning, and next morning add of this thickened milk or "starter" 10 per cent. to the cream which is to be ripened. It will be better to skim off the top of the "starter" and throw it away, as some bad bacteria are likely to be found at the top. It is also a good plan to stir the "starter" well and get it smooth and free from lumps before adding to the cream. We practice straining the starter into the cream by means of a buttermilk strainer. This prevents lumpiness in the cream.

The ripening temperature of the cream will depend upon the temperature of the room in which the cream stands, the richness and ripeness of the cream, etc. Add sufficient starter and have the temperature high enough (say 65° to 70°) to produce smooth, glossy cream, slightly acid, in about 20 hours. The alkali test for acidity of cream is a good thing for beginners.  
H. H. DEAN,  
Professor of Dairying,  
Ontario Agricultural College.]

#### RATION FOR DAIRY COWS—TOWN MILK SUPPLY.

T. W., Wingham, Ont.:—"Once more I must ask for a ration. Last winter you were kind enough to give one that was first-rate. I enclose prices and want something that will suit my cows. I send milk to town, and want as much of it as possible. At present I feed three pounds pea meal

and three pounds bran and as much cornstalks as the cows will eat twice a day. The cows don't do very well. It seems too strong, as it were, and I fear I haven't got it balanced. The cornstalks will soon be done and I will have to fall back on hay. Prices of food: Hay, \$10.00 per ton; straw, \$7.00 per ton; bran, \$10.00 per ton; oats, 20 cents per bushel; peas, 40 cents per bushel; barley, 35 cents per bushel."

[Would recommend a ration as follows for cows weighing 1,000 pounds and in full flow of milk. Feed more or less according to size and appetite of cow and according to her response at the milk pail: Clover hay, twenty pounds; bran, two pounds; oats (ground), two pounds; peas (ground), three pounds. N.R., 1.5; cost, 14 cts. per day, not including cost of grinding grain. A few cornstalks (6 to 8 pounds) and 15 to 20 lbs. of mangolds could be profitably added, as the nutritive ratio is "narrow"; but I would not advise widening it with straw at \$7.00 per ton. At the prices given, one pound of bran, oats and peas would cost about the same. One pound of each of these contains digestible nutrients as follows, and it will be seen that the peas furnish more digestible matter than the others:

Food.	Albds.	Carb.	Fat.	Total.
One pound bran.....	0.128	0.440	0.025	0.593
One pound peas.....	0.188	0.586	0.005	0.779
One pound oats.....	0.090	0.423	0.039	0.552
One pound barley.....	0.096	0.608	0.019	0.723

I have added the composition of barley, and it will be noticed that in total digestible matter it is very close to peas, but the matter is largely carbohydrates, which are not considered so good for milk production, although scientists are not yet agreed on the point. One pound of barley, at the price given, would cost about .7 of a cent and a pound of peas .6 of a cent, and I would take the peas in preference for milk production, even though my ration already contained plenty of albuminoids.  
H. H. DEAN.]

#### APPLES FOR COWS—THE CURRYCOMB.

W. C., Lincoln Co., Ont.:—"1. Are apples good for producing milk? I have heard that feeding them dries a cow up. How much ought I to feed at a ration? 2. Will currying a cow help to increase the milk; if so, will an ordinary horse currycomb serve the purpose?"

[1. Yes, apples are good for cows if fed in moderate quantity. Put the apples through a pulper and mix with cut hay and straw or cornstalks and they take the place of roots. Do not feed them whole, as cows are liable to choke. Sweet apples are best. This year a large portion of the apple crop might be profitably fed to milch cows. Commence with about a peck of apples per day to each cow and increase gradually until the cow is getting all she can profitably use. Do not feed over one-half bushel to three pecks per day per cow along with dry feed. The apple juice will soften the hay, straw, etc., and make it more palatable. Look out for "cider" flavor in the milk and feed carefully so as not to impair the health of the cow. 2. Currying is good for a cow, especially while she is tied up during the winter months. The currycomb takes the place of licking, rubbing, wind, rain, etc., which free the skin of dust and dirt in the summer while on pasture. Anything which tends to make the cow more comfortable will cause an increased flow of milk if she is the right kind of a dairy cow. An ordinary horse currycomb will serve the purpose if the cow is short and fine in the hair and has thin, mellow skin. For longer haired and thicker skinned cows use a cattle currycomb.  
H. H. DEAN.]

NOTE.—Some men who have let their cows into orchards to eat apples at will have had trouble this season. One dairyman in Middlesex Co. did so after a heavy, soft snow. They gorged themselves and a dozen of them were prostrated, one nearly dying.—EDITOR.]

#### OIL MEAL AND COTTON-SEED MEAL FOR HOG FEEDING.

R. E. OSBORNE, Durham Co., Ont.:—"Will it pay to feed oil cake to hogs; if so, in what quantities? At what age in pigs will it give the best results? What is the difference between oil cake and new process meal? Should oil cake be ground fine or coarse for best results? What is the relative feeding value of cotton-seed meal and oil cake?"

[Oil meal has been comparatively little used as a ration for hogs, and it is impossible to obtain any satisfactory or conclusive information regarding some of the questions involved. Minnesota Experimental Station reports an experiment in feeding hogs barley meal vs. a mixture of nine-tenths barley meal and one-tenth oil meal, but the results are somewhat contradictory and would indicate that little was gained by the addition of oil meal. In other cases it has constituted as high as one-fifth of the meal ration, but it is questionable whether it will ever prove an economical ration for fattening hogs. For young hogs it is sometimes used as a substitute for skim milk, and in such cases may constitute about one-tenth of the meal ration. A small amount of oil meal has also been found satisfactory for breeding sows when suckling pigs and even before farrowing.

From old process oil meal the oil has been removed by pressure, while in the case of new process oil meal the oil has been removed by means of chemical solvents. Old process oil meal contains more fat than the new, but analyses differ regarding the relative amounts of protein (nitrogenous or

fresh-forming matter). The following figures are taken from Bulletin 64 of Cornell Experiment Station:

Table with 3 columns: Item, Digestible protein, Digestible carbohydrates, Digestible fat. Rows include Old process, New process, Cotton-seed meal.

These figures indicate that cotton-seed meal is a much more concentrated food than oil meal, and, according to its composition, is worth, approximately, from one-seventh to one-sixth more than oil meal.

G. E. DAY, Agriculturist, Ontario Agricultural College.

OLD OATS FOR SEED—WHITE MUSTARD.

M. M., York County:—(1) My oats this year are light, but I have a considerable quantity of heavy oats left over from last year.

(1) If the old oats have been kept perfectly dry I should have no hesitation in using them in preference to the new, light oats.

(2) White mustard has been grown more or less at a great many experiment stations, and I cannot find a single station that recommends it for the purpose stated above.

SILVER WYANDOTTE STANDARD OF PERFECTION—FEEDING GREEN BONES.

T. B., Middlesex (South Co.), Ont.:—“1. Would you state in next issue of the FARMER'S ADVOCATE what sort of ground bones are best for hens, and about what quantity should be fed per day?”

[Green bones as they come from the butcher, cut in a regular bone-cutter, make the best form of cut bones for poultry.

Waterloo Co., Ont. 2. Standard weights—Cock, 8 1/2 lbs.; hen, 6 1/2 lbs.

The Male.—Head: Short, crown broad, plumage close, silvery-white, with a black strip extending to a fine point; beak well curved, dark horn-color, shading to yellow at point; eyes clear, bright bay; face bright red.

Neck: Short, well arched, with abundant and flowing hackle; plumage silvery-white, with a clear black strip through the center of each feather to a point at or near the extremity.

Back: Short, broad, and flat at shoulders; plumage silvery-white; saddle broad full and rising, with a concave sweep to the tail; plumage silvery-white, with markings same as feathers in the hackle, which may have a tapering, diamond-shaped center of white, under color dark slate.

Breast: Broad, deep, and well rounded; plumage, under color slate, web of feathers black with large white centers, which taper to a point near the extremity, the black lacing to be lustrous black and sharply defined.

Body and Fluff: Body short, deep, and well rounded; plumage, under color slate, web of feathers black or black slightly frosted with white; fluff full feathered and well rounded; color dark slate, powdered with gray.

Wings: Of medium size, well folded, and not carried too high or too close; primaries black, with lower or outer web edged with white; secondaries black, with lower or outer half of the lower web white; wing coverts, the upper web black, the lower web white with a narrow black strip along the edge, which widens as it approaches the tip, forming a double spangled bar across the wing; wing slate, web white.

Tail: Well developed, well spread at the base, black; sickles of medium length, gracefully curving over the tail, the ends projecting slightly, glossy

black; tail coverts glossy black, the lesser coverts black with an edging of white, the same as in the saddle.

Legs and Toes: Thighs short, stout, well spread, and well covered with soft feathers; color black or powdered with gray; shanks rather short and stout, free from stubs or feathers, and in color bright yellow; toes straight, well spread, and in color the same as shanks.

Female.—Head: Short, crown broad, plumage silver-gray; beak, eyes and face same as that of male; comb same as that of male, but smaller; wattles and ear lobes same as those of male, except less pendant.

Neck a trifle shorter, and more compact than that of male; color same.

Back: Short, broad, and flat at shoulders, slightly cushioned; plumage abundant, under color dark slate; web black with medium white centers, the black to be free from outside white lacing; the white must be free from black or brown penciling; the black lacing to be sharply defined.

Breast: Same as that of male down to web of feather, which is white, each feather distinctly and evenly laced with black; the white centers to be large and free from black or brown penciling; the black lacing to be free from white edging.

Body and fluff same as that of male.

Wings: Same as those of male, except that the wing and shoulder coverts have under color slate; web white, heavily laced with black, the black lacings growing wider over the wing bow.

Tail: Well defined, well spread at the base, solid black; greater coverts black, lesser coverts black or black with narrow white centers.

Legs and toes same as those of male.

DISQUALIFICATIONS.—Any feathers on shanks or feet; solid white ear lobes; combs other than rose or falling over to one side, or so large as to obstruct the sight; wry tails; deformed beaks; crooked backs; shanks other than yellow in color; solid white breasts.]

LIVE STOCK MARKETS.

Toronto Markets.

The number of animals on the market for the week ending Nov. 21st:—Cattle, 1,906; sheep, 2,304; hogs, 3,445; about 56 loads to-day—25 cows.

Export Cattle.—A day winds up the season's export business, with few regrets. A more unprofitable year has never been experienced.

Butchers' Cattle.—The demand was a little more active and prices a trifle better.

Stocks and Feeders.—A few good feeders changed hands; quite a number of farmers in the province.

Calves.—The season is over and they are not enquired for. Only really good calves sell at from \$3 to \$6 per head.

Sheep and Lambs.—Good supply of better quality, and sold at 2 1/2c. to 3c. per lb. for sheep. Lambs are worth from 3 1/2c. to 3 3/4c. per lb.

Milk Cows.—Quite a run on milk cows; all sold: market steady; \$15 to \$40 per head. We heard of one deal at \$45. A few springers wanted.

Hogs are steady; unchanged at 3 1/2c. per lb. for lean bacon hogs. Thick fat not in much demand.

Dressed Hogs.—Deliveries of dressed hogs were free. Four dollars and a half to \$5 for choice farmers' loads; \$5.15 was paid in one instance.

Hay.—Twenty loads of hay on the market. Thirteen dollars to \$15 per ton. One load of straw—\$11.

Eggs.—Demand keeps up well; market steady. Export shipments have been large this season and still continue.

Wool.—The market is unchanged, steady, and prices are advancing slowly. Dealers are paying 20c. to 21c. for fleeces. Offerings very limited.

Butter.—A very large quantity of poor samples of butter was on the market to-day. Best dairy rolls declined, 18c. to 14c. per lb.; tub, pail, and crock, 11c. to 14c. per lb.

Wheat.—On the street market to-day wheat sold at 84c. to 85c. bushels at 83c. for white, 87c. to 88c. for red, and 65c. to 65 1/2c. for pauc.

Barley.—Most unexpected was the drop in barley. Six thousand bushels at 28c. to 34c. per bushel.

Oats.—Twelve thousand bushels of oats at 21c. to 23c. per bushel.

TORONTO STOCKS IN STORE OF GRAIN.

Table with 3 columns: Item, Nov. 21, 1896, Nov. 23, 1895. Rows include Hard Wheat, Fall Wheat, Spring Wheat, Grose Wheat, Barley, Peas, Oats.

Horse Market.

The most important sale of Thoroughbred horses ever held in Canada was conducted in Toronto on Nov. 18th. A large proportion of the animals contributed were consigned by Mr. J. E. Seagram, M. P., Waterloo.

Mr. Harrison, of Owen Sound, consigned six Thoroughbreds. The best of these realized \$105.

A large consignment of heavy drafts by Mr. Sheridan left the Clyde stables for the Old Country market, and we predict for them a favorable reception.

Chatty Stock Letter from Chicago.

Following are the current and comparative prices for the various grades of live stock:—

Table with 4 columns: Item, Present Prices, Top prices two weeks ago, 1895, 1894. Rows include CATTLE (1500 lbs. up, 1350 @ 1500, etc.), HOGS (Mixed, Heavy, Light, Pig), SHEEP (Natives, Western, Lambs).

There is a better demand for cattle, and the choice grades are scarce in all parts of the country. The range of prices between good and poor cattle seems to be widening.

Canadian shippers are said to have engaged space for 7,000 sheep from Boston. A Boston man is said to have bought 1,000 sheep recently in Canada at prices about 75c. per 100 lbs.

J. & C. Coughlin, the Canadian exporters, bought some choice fat cattle at \$4.50 to \$5.00; fat stags at \$1.00 to \$1.25; and 1,382-lb. still-fed bulls at \$3.50. These cattle are being exported by way of Boston and Maine railroad.

Only a few weeks ago dealers were predicting 4-cent hogs, but now that it is about a 3-cent market for heavy packers some of the same dealers are betting that "droves" of heavy packers will be bought before Jan. 1 at \$2.75.

A horseman who has just returned from England says: "The best demand over there is for good brougham and carriage horses. Number one's are now selling at about \$300 to \$500 per head."

Table with 3 columns: Item, Poor to fair, Good to choice. Rows include Draft horses, Draft horses, Chunks, Streeters, General use, Carriage teams, Saddlers, Plugs and rangers.

Receipts at Chicago thus far this month, 152,800 cattle, 450,100 hogs, and 197,700 sheep, against 162,836 cattle, 690,372 hogs, and 199,300 sheep a year ago.

Table with 3 columns: Date, 1896, 1895, 1894. Rows include July 11, July 18, July 25, August 1, August 8, August 15, August 22, August 29, September 5, September 12, September 19, September 26, October 3, October 10, October 17, October 24, October 31, November 7, November 14, November 21.

WANTED.—Good reliable agents in every township, to obtain new subscribers to the FARMER'S ADVOCATE. Send for sample copy and terms to advocates.



## THE HOUSE ON THE MARSH.

A Romance.

BY FLORENCE WARDEN.

(Continued from page 488.)

"Mr. Rayner; and Mrs. Rayner, won't she be anxious too?"  
"Oh, Mrs. Rayner is never anything! At least—I mean,"  
said I, annoyed at having spoken without thinking, "she is so reserved that—"

"That you like Mr. Rayner best?"  
"Oh, yes!"  
He drew himself up rather coldly.

"So do most ladies, I believe."  
"One can't help liking a person who talks and laughs, and is bright and kind, better than one who never speaks, and glides about like a ghost, and looks coldly at you if you speak to her," I burst out, apologetically. "I ought not to talk as if I were ill-treated. I am not at all. If she would only not be quite so cold!"

"Perhaps her own troubles are very heavy and hard to bear."

"Oh, no, they are not!" I replied confidently. "At least, she has a kind husband and a pretty home, and everything she can wish for. And I think it is very selfish of her to give herself up to brooding over the memory of her dead child, instead of trying to please her living husband."

"Her dead child?"

"Yes. She had a boy who died some years ago, and she has never got over it. That is why she is so reserved."

"Oh! How long ago did this boy die?" asked he, in a curiously incredulous tone.

"About five years ago, I think Mr. Rayner said."

"Oh, then it was Mr. Rayner who told you?"

"Yes."

"And Mrs. Rayner has never got over it?"

"No. It seems difficult to believe, doesn't it, that a brilliant woman who wrote books and was so much admired should fade like that into a kind of shadow. I wonder she doesn't write more books to divert her thoughts from brooding over the past."

"Oh, she wrote books! Did she tell you so herself?"

"No—Mr. Rayner."

"Oh! Did Mr. Rayner tell you any more?"

The irony in his tone was now so unmistakable that I hesitated and looked up at him inquiringly.

"I am sure he must have told you that he is a very ill-used man and a very long-suffering husband, and asked you to pity him. Didn't he, Miss Christie? Ah, I see he did! he cried."

"I could feel the blood rushing to my cheeks; but I was indignant at having to submit to this catechism."

"Mr. Rayner never asks impertinent questions," I said severely.

"Miss Christie," he began nervously, "I am afraid I have offended you. Won't you forgive me for being carried a little too far by my interest in a lady who is away from her friends for the first time and not very happy?"

"I could not resist such an appeal as that; I looked up smiling, with tears in my eyes."

"Oh, I am not at all offended! But I should like to know what reason you have for thinking so ill, as you seem to do, of Mr. Rayner."

"Perhaps I am wrong. I really have no proof that he is anything but what he wishes every one to think him—a light-hearted, accomplished man, of idle life and pleasant temper. It is not his fault that, with all his cleverness, his ease of manner is not quite the ease of a gentleman."

"I considered for a moment, and then said rather timidly: 'Won't you tell me anything more? I want all the knowledge I can get of the people I live among, to guide me in my conduct.'"

He seemed to debate with himself for a moment; then he said very earnestly:

"Seriously, then, Miss Christie, I would advise you to leave the Alders as soon as you possibly can, even before you have got another engagement. You are in the midst of more dangers than you can possibly know of, more probably than I know of myself, more certainly than I can warn you against."

His voice was very low as he finished, and, while we both sat silent, he with his eyes intently fixed on my face, mine staring out fearfully at the sky, a dark figure suddenly appeared before us, blocking out the light. It was Mr. Rayner. Mr. Reade and I started guiltily. The new-comer had approached so quietly that we had not heard him; had he heard us?

### CHAPTER IV.

In spite of the rain and mud, Mr. Rayner was in the brightest of humors; and his first words dispelled my fear that he might have overheard the warning Mr. Reade had just given me not to stay at the Alders. He caught sight of me first as he came under the roof of the dark shed.

"At last, Miss Christie! It was a happy thought of mine to look for you here. But how in the world did you discover this place of refuge?" Then, turning, he saw my companion.

"Hallo, Laurence! Ah, this explains the mystery! You have been playing knight-errant, I see, and I am too late in the field; but I shall carry off the lady after all. My wife noticed that you started without your ulster, Miss Christie, and as soon as service was over, she sent me off with it to meet you."

He helped me on with it, and then I stood between them, silent and rather shy at receiving so much unaccustomed attention, until the rain began to fall less heavily, and we seized the opportunity to escape. We all went as far as the park gates, where Mr. Reade left us.

"Nice young fellow, that," said Mr. Rayner, as soon as the other was out of earshot. "Handsome too, and good-natured. There's not a girl in all the countryside who hasn't a smile and a blush for Laurence."

"I did not think this so great a recommendation as it seemed to Mr. Rayner, but I said nothing, and he went on:

"He is worth all the rest of his family put together. Father—self-important, narrow-minded old simpleton; mother—ill-dressed vegetable, kept alive by a sense of her own dignity as the penniless daughter of an earl; sisters—plain, stuck-up nonentities; young brother—dunce at Eton. But they haven't been able to spoil Laurence. He may have a few of their prejudices, but he has none of their narrow-minded pig-headedness. You don't understand the rustic mind yet, Miss Christie. I assure you there are plenty of people in this parish who have condemned me to eternal punishment because I am fond of racing, and, worse than all, play the violin."

"Do you play the violin? Oh, I am so fond of it!"

"Are you? Poor child, you had better not acknowledge the taste as long as you remain in this benighted spot; they class it with the black art. I believe I am popularly supposed to have bewitched the Alders by my playing. Some of the rustics think that the reeds round the pond play all by themselves about midnight, if they are accidentally touched."

"Oh, Mr. Rayner, aren't you rather hard upon the rustics?" I said, laughing.

"Not a bit, as you will find out soon enough. However, if you are not afraid of being bewitched, too, you shall hear my violin some evening, and give me your opinion of it."

We were within the garden gates by this time, and as we walked down the path I saw a woman's figure among the trees on our right. The storm had left the evening sky so dark and she was so well hidden that if I had not been very sharp-sighted I should not have noticed her. As it was, I could not recognize her, and could only guess that it was Mrs. Rayner. The idea of those great weird eyes being upon me, watching me, just as they had been on the evening of my arrival, made me uncomfortable. I was glad Mr. Rayner did not look that way, but went on quietly chatting till we reached the house. He left me in the hall, and went straight into his study, while I, before going up-stairs to take off my bonnet, went into our little schoolroom to put my church-service away. The French window had not been closed, and I walked up to it to see whether the rain had come in. The sky was still heavy with rain-clouds, so that it was quite dark indoors, and while I could plainly see the woman I had noticed among the trees forcing her way through the wet branches, stepping over the flower-beds on to the lawn, and making her way to the front of the house, she could not see me. When she came near enough for me to distinguish her figure, I saw that it was not Mrs. Rayner, but Sarah, the housemaid. She was only a few steps from the window where I stood completely hidden by the curtain, when Mrs. Rayner passed quickly and caught her arm from behind. She did not turn or cry out, but only stopped short with a sort of gasp.

"What were you doing in the shrubbery just now, Sarah?" he asked, quietly. "If you want to take fresh air in the garden, you must keep to the lawn and the paths. By forcing your way through the trees and walking over the beds you do damage to the flowers—and to yourself. If you cannot remember these simple rules, you will have to look out for another situation."

She turned round sharply.

"Another situation! Me!"

"Yes, you. Though I should be sorry to part with such an old servant, yet one may keep a servant too long."

"Old! I wasn't always old!" she broke out, passionately.

"Therefore you were not always in receipt of such good wages as you get now. Now go in and get tea ready. And take care that she glared at him with her great black eyes like a tigress at bay, but she did not dare to answer again, but slunk away cowed into the house."

The whole scene had puzzled me a little. What did Sarah, the housemaid, want to stand like a spy in the shrubbery for? How had Mr. Rayner seen and recognized her without seeming even to look in that direction? Was there any deeper meaning under the words that had passed between them? There was suppressed passion in the woman's manner which could hardly have been stirred by her master's orders to keep to the garden paths and not to burn the toast; and there was a hard decision in Mr. Rayner's which I had never noticed before, even when he was seriously displeased.

That night I pondered Mr. Reade's warning to me to leave the Alders; but I soon decided that the suggestion was quite unpractical. For, what reason could I offer either to my employers or to my mother for wishing to go?

And what a bad recommendation it would be to have left my first situation within a month! And what could I say I did it for? So I decided to pay no attention to vague warnings, but to stay where I was certainly, on the whole, well off.

The next morning I could not help noticing how much better Mrs. Rayner's pleased contemplation of my altered appearance, I went down-stairs. Mr. Rayner was already in the dining-room, but no one else was there yet. He put down his newspaper and smiled at me.

"Come into the garden for a few minutes until the rest of the family assembles," said he; and I followed him through the French window on to the lawn.

"Looks pretty, doesn't it?" said Mr. Rayner.

"Pretty! It looks and smells like Paradise! I mean—"

I stopped and blushed, afraid that he would think the speech profane and blotted.

But he only laughed very pleasantly. When I raised my eyes, he was looking at me and still laughing.

"You are fond of roses?"

"Yes, very, Mr. Rayner."

"But don't you think it was very silly of Beauty to choose only a rose when her father asked what he should bring her?"

"Poor girl, think how hard her punishment was! I don't think if he had married the prince, I could ever have forgotten that he had been a beast, and I should have always been in fear of his changing back again."

"The true story is, you know, that he always remained a beast, but he gave her so many diamonds and beautiful things that she overlooked the reason. Now, if you were Beauty, what would you ask papa to bring you? A ring, a bracelet, a brooch?"

"No, Mr. Rayner. I should say a rose, like Beauty—a beautiful Marshal Niel rose. I couldn't think of anything lovelier than that."

"That is a large pale yellow rose, isn't it? I can't get it to grow here."

We had sauntered back to the dining-room window, and there, staring out upon us in a strange fixed way, was Mrs. Rayner. She continued to look at us, and especially at me, as if fascinated, until we were close to the window, when she turned with a start; and when we entered the room she was her usual lifeless self again.

At dinner-time Mr. Rayner did not appear; I was too shy to ask Mrs. Rayner the reason, and I could only guess, when tea-time came and again there was no place laid for him, that he had gone away somewhere. I was sure of it when he had not reappeared the next morning, and then I became conscious of a slow but sure change in Mrs. Rayner's manner. Instead of wearing always an unruined stolidity, a faint tinge of color would mount to her white face at the opening of a distant door or at a step in the passage.

On the second day of Mr. Rayner's absence, Sarah came to the schoolroom saying that a gentleman wished to speak to me. In the drawing-room I found Mr. Laurence Reade.

"I have come on business with Mr. Rayner; but as they told me he was out, I ventured to trouble you with a commission for him, Miss Christie. It is only that two of the village boys want to open an account with the penny bank. So I offered to bring the money."

He felt in his pockets and produced one penny.

"I must have lost the other," he said, gravely. "Can you give me change for a threepenny-piece?"

I left him and returned with two halfpennies. He had forgotten the names of the boys, and it was some time before he remembered them. Then I made a formal note of their names and of the amounts, and Mr. Reade examined it and put the date, and then smoothed the paper with the blotting-paper and folded it, making, I thought, an unnecessarily long performance of the whole matter.

"It seems a great deal of fuss to make about twopence, doesn't it?" I asked, innocently.

And Mr. Reade, who was bending over the writing-table, suddenly began to laugh, then checked himself and said:

"One cannot be too particular, even about trifles, where other people's money is concerned."

And I said, "Oh, no! I see," with an uncomfortable feeling that he was making fun of my ignorance of business matters. He talked a little about Sunday, and hoped I had not caught cold; and then he went away.

Nothing happened after that until Saturday, which was the day on which I generally wrote to my mother. After tea, I took my desk up-stairs to my own room; I liked the view of the marsh between the trees, and the sighing of the wind among the poplars. I had not written many lines before another sound overpowered the rustle of the leaves—the faint tones of a violin. At first I could distinguish only a few notes, then Schubert's beautiful "Aufenthalt" rang out clearly and

held me as if enchanted. It must be Mr. Rayner come back. When the last long sighing note of the "Aufenthalt" had died away, I shut up my half-finished letter hastily in my desk and slipped down-stairs with it. The music had begun again. This time it was the "Ständchen." I stole softly through the hall, meaning to finish my letter in the schoolroom, where, with the door ajar, I could hear the violin quite well. But as I passed the drawing-room door, Mr. Rayner, without pausing in his playing, cried "Come in!" I was startled by this, for I had made no noise; but I put my desk down on the hall table and went in. Mrs. Rayner and Haidee were there, the former with a handsome shawl, brought by her husband, on a chair beside her, and my pupil holding a big wax doll, which she was not looking at—the child never cared for her dolls. Mr. Rayner, looking handsomer than ever, said, without stopping the music:

"I have not forgotten you. There is a *souvenir* of your dear London for you," and nodded toward a rough wooden box, nailed down.

I opened it without much difficulty; it was from Covent Garden, and in it, lying among ferns and moss and cotton-wool, were a dozen heavy beautiful Marshal Niel roses. I sat playing with them in an ecstasy of pleasure, until Mr. Rayner put away his violin and I rose to say good-night.

"Lucky Beauty!" he said, laughing, as he opened the door for me. "There is no beast for you to sacrifice yourself to in return for the roses."

I laughed back and left the room, and putting my desk under my flowers, went toward the staircase. Sarah was standing near the foot of it, wearing a very forbidding expression.

"So you're bewitched, too!" she said, with a short laugh, and turned sharply toward the servants' hall.

And I wondered what she meant, and why Mr. and Mrs. Rayner kept in their service such a very rude and disagreeable person.

### CHAPTER V.

The next day was Sunday, to which I had already begun to look forward eagerly as a break in the monotonous round of days. Old Mr. Reade was not at church, and his son sat in his place with his back to me. Instead of sitting his elbows on his knees through the prayers as he had done on the Sunday before, he would turn right round and kneel in front of his seat, facing me, and I could not raise my eyes for a minute from my book without having my attention distracted in spite of myself.

After service, I heard Mr. Rayner telling the doctor and two of the farmers about the races he had been to the week before, and of his having won fifteen pounds on a horse the name of which I forget; and he took out of his pocket a torn race-card, seeming surprised to find it there, and said it must have been that which had caused his thoughts to wander during the sermon. He asked Mrs. Reade whether her husband was ill, and did not seem at all affected by the cool manner in which she answered his inquiries.

On that afternoon I was scarcely outside the gate on my way to church when he joined me.

"No, no, Miss Christie; we are not going to trust you to go to church by yourself again."

I blushed, feeling a little annoyed, though I scarcely knew why.

"Don't be angry; I spoke only in fun. I want to see Boggett about some fencing, and I know I shall catch him at church. But if you object to my company—"

"Oh, no, Mr. Rayner, of course not!" said I, overwhelmed with terror at the thought of such impertinence being attributed to me.

The heat so distracted my attention that I scarcely heard a word of the sermon. But then it was the curate who preached on that afternoon, and his discourses were never of the exciting kind. I just heard him say that it was his intention to give a course of six sermons, of which this was to be the first; and after that I listened only now and then; and presently I noticed that Mr. Rayner, who always looked more devout than anybody else in church, was really asleep all the time. I thought at first I must be mistaken; but I looked at him twice, and then I was quite sure.

When service was over, he stayed behind to talk to Boggett, while I went on alone. He overtook me in a few minutes; but when he said the sermon was good of its kind, I had to turn away my head that he might not see me smiling. But I was not quick enough for Mr. Rayner.

"I didn't say of what kind, Miss Christie. I may have meant it was good as a lullaby. Are you shocked, Miss Christie?"

"Oh, no, Mr. Rayner!"

"You wouldn't take such a liberty as to be shocked at anything I might do; would you, Miss Christie?"

"Certainly not, Mr. Rayner."

"Where did you pick up a sense of humor, most rare gift of your sex, and why do you hide it away so carefully, Miss Christie?"

"Indeed I don't know; and I don't mean to hide anything," I answered rather foolishly.

"And how did you like the sermon?"

"I wasn't listening much, Mr. Rayner."

"Not listening! A religious little girl like you not listening! I'm surprised—I really am."

His manner grew suddenly so grave that I felt called upon to make a sort of profession.

"I'm not really religious," I said hurriedly. I hope some day I shall be better. I do pray for it," I ended, almost in a whisper.

Mr. Rayner took my hand very kindly.

"It will come, child, it will come," he said, gravely and quite paternally. "Go on quietly doing your duty as you do, and the blessing will come in due time."

He said it so simply, without any attempt at preaching, that I felt I looked up to him more naturally than even to a clergyman, being quite sure now that he acquitted me of any intention to be hypocritical. And when, after tea, he played me to accompany his violin on the piano while he played Mozart's Twelfth Mass, the fervor which he put into the beautiful music inspired me with a corresponding exaltation of feeling, such as no sacred music had ever woken in me before. At the end of the evening Mrs. Rayner wished me good-night and glided softly from the room before I had finished putting the music in order, as Mr. Rayner had asked me to do. When I rose from bending over the canterbury, still flushed with the excitement caused by the music, Mr. Rayner held out his hand with a grave smile.

"You are the best accompanist I have ever met; you catch the spirit of this sacred music perfectly. Good-night, my dear child."

And he bent down to kiss me. But I shrank back slightly, and so evaded him, trying at the same time to make my movement seem unconscious; and, with a smiling "Good-night" I left the room.

As soon as I had done so my heart sank within me. What had I done? Probably offended Mr. Rayner beyond recall by what must seem to him an absurdly strained piece of prudery. But if Sarah or Mrs. Rayner, neither of whom seemed to like me very much, had suddenly come in and found Mr. Rayner kissing me, she might have mistaken, in a way which would have been very unpleasant for me, the feeling which prompted him to do so. So I comforted myself as well as I could with the thought that, after all, I had done only what was right and prudent; and, if he was offended, well, there was no help for it.

The next morning, to my great relief, his manner was just the same as usual; of course what had caused so much thought and anxiety to the girl of eighteen had seemed but a trifle to the man of three-and-thirty. But at tea he was much pre-occupied, and told Sarah that a gentleman would be coming to see him presently, who was to be shown into the study.

(TO BE CONTINUED.)

THE QUIET HOUR.

Small Things.

I shaped a marble statue, the image of a thought—  
A thought so pure and perfect, it thrilled me as I wrought;  
And when I saw my task complete, and joyed it was so fair,  
Alas! alas! when next I looked an ugly rent was there.

In strains of music, then, I told of sweetest joy and love;  
And, out and in, the harmony in rich, soft chords I wove;  
When, lo! a wild, weird discord that would not die away;  
I'll hear it evermore, through life, unto my dying day.

Aweary of my failures, I sought the haunts of song;  
Esayed to cull sweet flowers where with to charm the listening throng.  
Anon a warning voice I heard that stayed my eager hand:  
"No soul but one by sorrow tried may join the minstrel band."

I found a weary traveller, at noontide, by the way;  
His brow was deeply furrowed, his locks were thin and grey.  
"Can I do aught for you?" I asked. "I am athirst," He said.  
I gave a cup of water; He drank and raised His head.

A strange and wondrous change I saw, transfigured was His face.  
His form was full of majesty, His eyes of love and grace.  
"Well have ye done; we'll have ye spent that gift of charity;  
Albeit ye knew it not," He said, "ye did it unto Me."

Great works are for great souls; high thoughts for those whose minds can soar;  
Sweet music for the ears that catch the notes from Heaven's bright shore.  
Strong words that move the multitude are not, my child, for thee;  
Thine are the hidden ways of love and quiet charity.

Disagreeable Duties.

We naturally incline to shirk them. We elect to perform nothing but the agreeable ones. But God will not humor our inclination. He will not encourage our weakness. He knows that the performance of nothing but agreeable duties would leave excellent elements of our character uncultivated, uneducated, undeveloped. Hence, He calls us to perform disagreeable duties, even very repulsive ones. And how many times we have thanked Him for the results! Even in the very act of doing them we have come upon choice revelations. We have discovered in ourselves possibilities and powers of which we had not dreamed. We have gathered lessons of inestimable value. We have taken on richer strength, added treasures to our wisdom, and gained an experience which will continue to serve us through life.

"You must live each day at your very best;  
The work of the world is done by few;  
God asks that a part be done by you,  
Providing others to do the rest.

"Say oft of the years as they pass from sight:  
'This is life with its golden store;  
I shall have it once, but it comes no more,  
Therefore, I must work with my strength and might."

Duty and pleasure may be antagonistic, or they may harmonize and coincide. If we look upon duty as a hard task, we are not likely to find pleasure in the doing of duty. But if we look at duty as our privilege and opportunity, we shall find that the doing of duty brings pleasure as an inseparable incident. What gives more pleasure to a loving heart than the doing of a duty toward a loved one? All duty ought to be prompted by love—by love to God or by love to God's dear ones. And thus prompted, every duty is an added pleasure; for love is the fulfillment of the law.

"Up and be doing the work that's given!  
You'll finish your task on the other side,  
When you wake in His image, satisfied,  
Amid the glorious bliss of heaven."

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MINNIE MAY.

Christmas Cake.

Four pounds raisins; 1 lb. currants; 1 lb. almonds (blanched); 1 1/2 lbs. butter; 2 lbs. sugar; 1 doz. eggs; 1 lb. mixed peels; 1/2 pint black molasses; 1 wineglass wine; 1 wineglass rose water; 1 teaspoon soda mixed in half a cup of sour cream; flour to stiffen; brown the flour.

Raeburn.

Among all the children of Art, no one was ever more widely respected than Sir Henry Raeburn, nor do we know of one more deservedly popular. All the duties of a good citizen were thoroughly and conscientiously discharged by him. He was candid and modest, always ready to assist merit and to give a helping hand to genius in Art. His charming manner, at once easy and unaffected, with an occasional touch of humorous gaiety, made him a most delightful companion, and as a raconteur of Scotch stories he was inimitable.

As a portrait painter his merits are very great. He aimed at elevation and dignity of style, his great object being to bring into prominence the mental qualities of his sitters.

Though he enjoyed life too much to be very eager about either fame or wealth, at the age of thirty-three he was at the head of his profession in Scotland. He loved to make long excursions amongst the romantic woods and glens of his native land, making sketches for his backgrounds, and was sometimes absent for weeks at a time refreshing his eyes with the sight of nature. It was no doubt during one of these summer rambles that the subject of our illustration—Lochiel—was sketched. Where the sunlight has found an opening through the trees the ripples of the loch flash like living diamonds; the water is of the clearest golden-brown, in which are reflected the overhanging branches of the tender green foliage.



LOCHIEL.

Raeburn was an ardent and skillful angler, and many a trout did he land when fishing in the adjacent streams. His house at Stockridge, overlooking the water of Leith, was a most romantic place. The steep banks were finely wooded, the garden grounds varied and beautiful—Raeburn being an expert gardener as well as an enthusiastic florist; thus he enjoyed all the seclusion of the country without its remoteness.

He was methodical in all his habits, rose at seven, took breakfast at eight, and at nine walked down to his studio in George street, where he remained till five o'clock, when he walked home and dined at six.

The result of this regular system of work was a vast number and variety of paintings and a considerable income, but as Raeburn had a rooted objection to keeping either a list of his works or an account of his earnings, it is impossible to mention with any accuracy either the number or names of his numerous works; but in the course of forty years' systematic labor he must have painted many hundreds. At an exhibition of his works, held at the Academy Galleries, Edinburgh, in 1876, no less than four hundred portraits were collected, to say nothing of his numerous landscapes, many of which have appeared at different times at the "old Masters" exhibitions.

The practical agricultural news of the day you'll find in the FARMER'S ADVOCATE—and more of it than in any other way for so small an outlay.

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES,—

"Yes, the year is growing old,  
And his eye is pale and bleared;  
Death, with frosty hand and cold,  
Plucks the old man by the beard."

sings Longfellow in a doleful tone, which is rather unusual for him, and with which we have no sympathy when "hearts are light and health is on the wind" and our much loved Xmas so near that we can almost scent the savory odors of roast turkey and plum pudding. We are not in a hurry to say good-bye to a friend who has been so good to us, but as true hospitality bids us "welcome the coming, speed the parting guest," we will not sadden the departure of '96 by useless regrets, but rather mourn the dead by better serving the living. Dear swift-winged '96, how quickly you are speeding to your goal, soon to join your many brothers, peacefully slumbering in the arms of the Past.

But '96 has not yet left us; there still remains one bright month, and in that month what may not be done? How many kind words and kinder acts may be spoken and done by which to make this December a joyous memory to ourselves and to others. Have you ever noticed how a trifling act or word will revive the happiness of another? A few flowers given to one who has none, a cheery word to a heart-weary friend, a bright letter to one who is lonely, or any little service rendered with good-will—what are they? Mere trifles, and yet each has the power of giving much happiness—a power which, if we realized the full value of it, would surely make us more prodigal of those gifts, which even the least of us may bestow. And if we have hitherto failed in this respect, what more appropriate time can we find to begin than now, when we are almost within hearing of that angel-chanted anthem: "Peace on earth, good-will to men."

"Standing on what too long we bore  
With shoulders bent and downcast eyes,  
We may discern—unseen before—  
A path to higher destinies.

"Ner deem the irrevocable Past  
As wholly wasted—wholly vain—  
If, rising on its wreck, at last  
To something nobler we attain."

But, dear me! how those little tots gather about an old fellow, clamoring for a story. "Just one, uncle, please; it's near Christmas, you know"; and, bless me, who ever could refuse those bright-eyed young rascals! But just one, remember—a legend of the snow, of which you are all so fond.

Once upon a time (that's the proper way to begin, is it not?) Mrs. Summer had all her garb dyed in various shades of red, yellow and brown, and though it looked pretty for a while, the colors began to lose their brilliancy and poor Mrs. Summer to long for her emerald-tinted robes once more. So she went to the Wind and requested him to sweep away all the leaves from the trees and the blossoms from the flowers, as she meant to refurbish her wardrobe. So the Wind went to work with a will and soon accomplished his task, and then demanded his pay. Imagine the dismay of our friend, Mrs. Summer, when she found (after this account was settled) that she was short of funds with which to purchase her new suit!

Womanlike, she would not be discouraged, but determined to do the next best thing, so she set off for the sky (which, by the way, was where she did her shopping) and there she saw an inexpensive, but very dainty, ermine-like material (we call it snow) for sale. So she purchased a large quantity of it, and in its graceful folds enveloped every tree, shrub and flower-stalk, even the old stumps, stones and rail-fences, but being suddenly called upon to visit another country, she engaged Jack Frost to keep house in her absence, and so faithful is he that on any sharp morning you may see his merry little elves sparkling every where.

Now, that is one story of how the snow comes to us, and we are very glad to have it, even though it was purchased because it was cheap. But when Mrs. Summer has finished her work in that other country she will have saved enough to buy her favorite robes again and will return to us in her usual garb. So there now, you hungry little urchins, you have had your story, and I have some preparations to make for the coming of that ever-welcome guest—old Christmas.

"No wonder Christmas lives so long,  
He never knew but merry hours,  
His nights were spent with mirth and song  
In happy homes and princely bowers;  
Was greeted both by serf and lord,  
And seated at the festal board,  
While every voice cried 'Welcome here,  
Old Christmas comes but once a year."

Hasten thy coming then, good old friend, and bring heartfuls of joy to one and all of my dear nephews and nieces. Your loving, UNCLE TOM.

## Puzzles.

All matter for this department should be sent direct to ADA ARMAND, Pakenham, Ontario.

## 1-CHARADE.

The old man placed his son upon  
His faithful two, and bade him ride  
Unto the nearest market town,  
Where food in plenty was supplied;  
And there procure, if he was THREE,  
Some meal to make their daily bread.  
The youngster rode away in glee,  
Nor thought of trouble on ahead,  
But when he reached a river fleet,  
No ferry waited him to cross;  
The ford was swollen and COMPLETE;  
Nor help was there; so at a loss  
He slowly turned about for home,  
When all at once another lad,  
A little FIRST, in sight had come,  
And struck the two upon the head.  
It bounded off with all its might;  
The boy was thrown from off his seat;  
And there I found him in a plight  
That made my heart with pity beat.

CHARLIE S. EDWARDS.

## 2-CHARADE.

Insert the letter "s" between first and second to obtain complete.

Hurrah! hurrah! good puzzlers all!  
Our Lily's back (the treasure!)  
The flower, blowing in the fall,  
Gives greatest joy and pleasure.

Now is the time when Bryant sings  
Of gloomy days and weather;  
But one bright Day we have which brings  
Us happily together.

Then, puzzlers all, with me rejoice,  
And start the bells a ringing;  
To joys and hopes exert your voice,  
With shouting and with singing.

Come all ye mystic-loving crew,  
Pronounce a loud acclaim.  
LAST hail FIRST virtue working "shoe."  
Which sent us Lily's name!

Then give three cheers for Cousin A.  
And three for Uncle Tom;  
But a COMPLETE for Lily Day,  
The flower of the Dom.

CHAS. S. EDWARDS.

## 3-SQUARE WORD.

The FIRST's a famous battle field,  
The FOURTH is what some men do wield,  
The SECOND's a genus of fresh water fishes,  
The THIRD is delighted by savory dishes.

CLARA ROBINSON.

## 4-ENIGMA.

FIRST, SECOND and TOTAL mean 'bout the same,  
Beloved by young and old as they;  
Youth, beauty and fame would be but a name,  
Beret of all that makes life gay.

CLARA ROBINSON.

## 5-ANAGRAMS.

Names of books.

We went to the library one day,  
You'd think it had a disease,  
Some one with it had DEALT SO ILL  
'Twas as though it were drenched with LATE SEAS.

TED WANTED a road to SILVER WIT.

I BADE DAME Dorset get one,  
And I ask to A DORN LONE Olaf,  
But LOGIE SEL'D it for fun,  
We got no books, but went away,  
And I haven't been back there since that day.

A. P. HAMPTON.

## 6-DECAPITATION.

I am composed of five letters; behold me and I become  
insects, noted for wisdom. My WHOLE is the name of a  
county in the Dominion.

HATTIE MACDONALD.

## Answers to November 2nd Puzzles.

1-Royal-Loyal. 2-Victoria.  
4-SIRIUS 3-Large, lager, glare, regal.  
IDOLS 5-Melon-lemon,  
ROLL Once-cone,  
ILL Emil-lime,  
US Lame-Elma,  
S 6-Pat-Ella (patella, the kneecap).

SOLVER TO NOVEMBER 2ND PUZZLES.  
Clara Robinson.

## The Bagster Bible Premium Pleases Every Recipient.

Should any of our readers who have earned the new Bagster Teacher's Bible not receive the same within a reasonable time after sending in their list of names and remittance, we desire them to advise us promptly. When this or any other premium reaches you, please acknowledge promptly. The following shows that not only was the recipient more than pleased with the Bible, but the new subscribers were delighted with the FARMER'S ADVOCATE:

Bonaventure Co., P. Q., Nov. 16th, 1896.

DEAR SIRS,—I am in receipt of your card. I have just received the Bible and I am highly pleased with it. I had no idea that it was such a beautiful book. I have shown it to my friends and they all think it very nice. I shall do my best to obtain some more subscribers to the ADVOCATE. The subscribers are much pleased with the ADVOCATE.

Thanking you very much for the beautiful Bible, I remain,  
Yours truly, L. M. SHEPPARD.

Mr. G. Brown, of North Oxford, one of the very first to earn the Bible premium, was so satisfied that on receipt he at once set about another canvas and earned a second one, the receipt of which he acknowledges thus: "The beautiful premium Bible received to-day in good condition. Many thanks. Respectfully, GEORGE BROWN."

## THE CHILDREN'S CORNER.

## "Jes' 'Fore Christmas."

Father calls me William, sister calls me Will,  
Mother calls me Willie—but the fellers call me Bill!  
Mighty glad I ain't a girl—'d ruther be a boy,  
Without them sashes, curls an' things that's worn by Fauntleroy!

Love to eat green apples an' go swimmin' in the lake!  
Hate the horrid castor oil I sometimes have to take!  
Most all the time the hull year roun' there ain't no flies on me—  
But jes' 'fore Christmas I'm as good as I kin be!

Got a yellow dog named Sport—sick 'im on the cat;  
Fust thing she knows she doesn't know where she is at!  
Got a clipper sled, and when us boys goes out to slide,  
'Long comes the grocery cart, an' we all hook a ride!

But, sometimes when the grocery-man is worried and cross,  
He reaches at me with his whip, and larrups up his boss;  
An' then I laff and holler: "Oh, you never teched me!"  
But jes' 'fore Christmas I'm as good as I can be!

Gran'ma says she hopes that when I git to be a man  
I'll be a missioner like her oldest brother Dan,  
As wuz et up by the cannibls that lives in Ceylon's Isle,  
"Where every prospect pleases an' only man is vile!"

But gran'ma she had never been to see a Wild West show,  
Or read the life uv Daniel Boone, or else I guess she'd know  
That Buffalo Bill an' cowboys is good enough for me—  
Excep' jes' 'fore Christmas, when I'm good as I kin be!

Then old Sport he hangs around, so sollum like an' still—  
His eyes they seem a-saying: "What's the matter, little Bill!"  
The cat she sneaks down off her perch, a-wonderin' what's  
become  
Of them two enemies of hers that use to make things hum!

But I am so perlitte an' stick so earnestlike to biz,  
That mother sez to father: "How improved our Willie is!"  
But father, havin' been a boy hisself, suspicions me,  
When, jes' 'fore Christmas, I'm as good as I kin be!

For Christmas, with its lots an' lots of candies, cakes, an' toys,  
Wuz made, they say, for proper kids, an' not for naughty boys!  
So wash yer face, an' brush yer hair, an' mind your p's an' q's,  
Don't tear your Sunday pantaloons an' don't wear out yer shoes;

Say "yessum" to the ladies, an' "yessir" to the men,  
An' when there's company don't pass yer plate for pie again;  
But, thinkin' of the things you'd like to see upon that tree,  
Jes' 'fore Christmas be as good as you kin be! E. F.

## Uncle William's Present.

On Christmas Day Uncle William received a card inscribed as follows: "William Bunting, Esquire, J. P., debtor to his nephews, Alexander and Lancelot, and to his nieces, Norah and Dorothea, for moneys expended in his behalf—\$0 14." Uncle William paid the money at once, but he wrote to say that he should like to know how it happened that he owed us one-and-four. It was Alexander who had sent the bill in—for a boy of twelve he really is most businesslike—and we got him to answer Uncle William's letter. He replied that the one-and-four was the sum spent in excess of the sum subscribed by Alexander, Lancelot, Norah, and Dorothea for the purpose of giving Uncle William a Christmas present. Then Uncle wanted to know how it happened that he never got the Christmas present. Alexander said that he did not feel inclined to go into any further details. He sent Uncle William the bill, properly receipted, and a little note to say that the correspondence on this subject must now terminate. Perhaps the thing does seem a little strange, but the explanation is perfectly simple, and I will give it. I am Norah; Alexander and I are twins. The other two are quite young. It was I who first had the notion that we ought to give Uncle William a Christmas present. When any of us has a notion she (or he) calls a meeting of the others in the schoolroom. That was what I did. I said that Uncle William was always giving us presents and yet we never gave him anything. He said nothing about it, but I was sure that he must feel it. Christmas was now near, and it would be a good opportunity for us.

This was agreed. Alexander and I each contributed ninepence—threepence more than Lancelot or Dorothea. Thus the total sum was half-a-crown, for which a very good present might have been bought.

We did not decide what the present was to be at once, because Alexander said that would have been grossly irregular: we were to have committee meetings every day about it and discuss it thoroughly. Lancelot was appointed treasurer of the fund—he put it all in a waistcoat pocket and got me to sew the pocket up for him in case of accidents.

At the next meeting Dorothea suggested that we should buy chocolates (French) in a box. It was objected that Uncle William never ate chocolates. "No," said Dorothea, "he doesn't, but he sometimes gives them away. Then, next time he wanted to give anybody any, he wouldn't have to buy them." Lancelot thought it would be dishonorable to give chocolates, and we agreed with him. We then decided to buy a tobacco pouch, which certainly would have been a suitable present. There are very few shops in our village, so Alexander and I took the train next afternoon to Allistone, the nearest town, in order to buy the pouch. Alexander was to pay everything and to be reimbursed out of the fund.

The two return tickets were eightpence, and we had refreshments at the station, which came to another sixpence. Alexander said that this was usual, and committees always had refreshment. We were left with one-and-four to spend on the pouch. However, we found that we could get very good pouches for a shilling each. I wanted to get a black one, and Alexander wanted brown; so we decided not to buy either yet, but to take the votes of the whole committee on it. We spent the odd

fourpence on a white Java mouse. We felt sure Uncle William would like it. The man in the shop said that people often came in offering as much as a shilling each for mice of that particular kind. When we got back—the mouse traveled in Alexander's pocket—we at once held another committee meeting.

Dorothea said that if Alexander and I had refreshments the rest of the committee ought to have them also. So we had almond-rock—two pennyworth. We agreed to purchase the black pouch. Lancelot suggested that there was just a possibility that Uncle William would not care about the mouse. Alexander said that he would telegraph about it, and did; this was the telegram—

"Bunting, Malden. Do you like white Java mouse? Tame; eats anything. ALEXANDER."

In about an hour the answer came back—

"Most certainly not."

This caused us some consternation. It was thought better to go to Allistone again on the morrow, and see if the man in the shop would take back the mouse. In the meantime Lancelot's pocket was unpicked, and the entire fund handed over to Alexander in order to reimburse himself. Alexander said that he would keep accounts, and if there was anything over he would get some very cheap present—perhaps a card. The pouch was, of course, now impossible.

He and I went together as before. While we were having refreshments at the station he did his accounts.

"They don't come out very well," he said rather dolefully. "But perhaps we shall be taking the mouse back just when someone is wanting to give a shilling for a real Java one."

He felt in his coat pocket as he spoke. And then he looked more doleful still. The mouse had escaped during the journey. The accounts were thus:

	s.	d.
Allistone. Expenses of first visit.....	1	2
White Java mouse.....	0	4
Almond-rock.....	0	2
Telegram.....	0	6
Allistone. Expenses of second visit.....	1	8
	3	10

"We are one-and-four to the bad," I said, "and we haven't got any present. The refreshments have come to so much this time."

"All committees and delegates of committees have refreshments," said Alexander dictatorially. "It doesn't matter. I've paid the deficit so far; but Uncle William will have to make it up. It's all his fault. If he hadn't been there we shouldn't have wanted to be generous to him."

So we sent Uncle William the bill. He is still rather puzzled about it. Lancelot and Dorothea think the thing was mismanaged. I don't; no more does Alexander.

## Holy Land Flowers.

It is indeed gratifying to know that our selection of book premiums especially are being so well received, because we appreciate the value of a refined and high-class library. Copies of "Pressed Flowers from the Holy Land" are going out lively, which, indeed, they should when so favorably offered. The following letter is from a subscriber who sent us the name of a new-subscriber together with one dollar:—

Peel Co., Ont., Nov. 14, 1896.

DEAR SIRS,—I received your letter and also the book of "Pressed Flowers," and I am more than delighted with it, and it will be quite a novelty to show to my cousins and friends this winter. Accept my thanks. Yours truly,  
S. E. ACKROYD.

I will try to get more subscribers.

[We are not surprised that our correspondent was delighted with the book. We all enjoy seeing even paintings of rare flowers from such a historic place as the Holy Land; but when the flowers themselves, retaining all their natural color and form, are placed within our reach so that one may handle them, we have something that the painter's brush can never aspire to. Among the most beautiful of the pressed specimens is that of the "Lily of the Field" (*Anemone coronaria*), spoken of in Matthew, vi., 28. The bloom is of a deep carmine, very handsome and graceful. During the early spring it is said to adorn every valley, highway and hilltop of Palestine. No wonder it was said of them, "Solomon in all his glory was not arrayed like one of these." We find ourselves so utterly incapable of describing justly the beauty of the pressed specimens we leave the matter to each subscriber to secure one by hunting up a new subscriber and thus win a free copy.]

## English Plum Pudding.

One pound of raisins, quarter pound of flour, one pound of suet (chopped fine), one pound of currants, three quarters pound stale bread crumbs, half nutmeg (grated), quarter pound brown sugar, five eggs, grated rind of one lemon, half pint of brandy, half pound of minced candied orange peel.

Clean, wash, and dry the currants; stone the raisins. Mix all dry ingredients together. Beat the eggs, add them to the brandy, then pour over the dry ingredients and mix thoroughly. Pack in greased small keetles or molds (this will make six pounds), and boil six hours when you make it, and when wanted for use serve with hard or brandy sauce.



FOR SALE!

A GRAND FLOCK OF - B. Plymouth Rock Cockerels and Pullets, beautifully marked: all from imported cock, and are large, robust and healthy birds. For prices write to W. C. SHEARER, Bright, Ontario.

J. G. CLARK, Woodroffe Stock Farm, Ottawa, Ontario, HAS FOR SALE -

Three Clydesdale Mares

Weighing from 1,650 to 1,800 pounds, and their colts from 1 to 3 years old.

CHOICE YOUNG YORKSHIRES (BOTH SEXES)

CARGILL HERD OF SHORTHORNS.

Six young Bulls, and as many heifers as you want, all bred in the purple. Come and see them or write. H. CARGILL & SON, Cargill Sta. & P.O. Station on the farm. 11-y-om

SHORTHORNS!

I have four beautiful young Shorthorns due to calve in Jan. to Perfection's Hero - 20981 -; also three grand red heifer calves, which I will sell at the very lowest possible living price. Also an A 1 Berkshire boar, ten months old. See stock notes.

Wm. Rivers, 13-1-y-om Springhill Farm, WALKERTON, ONT.

Shorthorns, Berkshires.

Young Bulls and Calves for sale at very moderate prices; also a splendid lot of Boars from spring litters, and a number of fall pigs.

JOHN RACEY, Jr., - Lennoxville, Que. 17-1-y-om

THE GRAND VALLEY STOCK FARM

G. & W. GIER, Props., Grand Valley, Ont., Breeders of Shorthorns and Imp. Yorkshires. We offer for sale young bulls, cows and heifers of choice breeding and quality at very low prices; also choice young Yorkshires of both sex. 13-y-om

Willow Bank Stock Farm

1855 to 1896.

One of the oldest established herds in the Province, heavy milking qualities being a special feature of the herd. A number of choice young bulls and heifers for sale at reasonable prices. Address: 21-1-y-om JAS. DOUGLAS, Caledonia, Ont.

IN SHORTHORNS AND LEICESTERS

WE BREED THE BEST.

Bull Calves of extra merit, shearing Rams and Ewes, Ram and Ewe Lambs for sale at Ample Shade Stock Farm.

E. GAUNT & SONS, St. Helen's, Ont. Lucknow St'n, G.T.R., 3 miles. 13-1-y-om

W. G. PETTIT, BREEMAN, ONTARIO,

BREEDER OF Shorthorns, Shropshires, and Berkshires Offers for sale a choice lot, consisting of eight young bulls, 40 one-, two- and three-year-old ewes, sixteen yearling rams, and twenty ram lambs, and a choice lot of Berkshires. Big bargains will be given for the next thirty days, as I want to reduce stock before winter. 15-y-om

SIMMONS & QUIRRE.

Shorthorn Cattle, Berkshire Swine - Money-making Sorts. The imported bull, BLUE RIBBON - 17095 - (63736), by ROYAL JAMES (54972); dam ROSE-LINTY, by GRAVESEND (46461), heads the herd. Female representatives of the celebrated Mina, Strathallan, Golden Drop and Mysie families. The Berkshires are choice prize-winning stock. Easy to feed, quick to sell. Stock for Sale. C. M. SIMMONS, Ivan P.O., Ont. 11-y-om JAMES QUIRRE, Delaware, Ont.

MAPLE LODGE STOCK FARM.

Fifteen splendid young Shorthorn Bulls for sale, and a few Leicesters. JAMES S. SMITH, Maple Lodge P.O., Ontario. 9-y-om

W. H. & J. O. FIELD, VANESSA, ONTARIO, Breeders of Shorthorn Cattle, have for sale a fine two-year-old bull at \$60.00; also a choice eight months' old bull calf at \$50.00, winner of eight firsts. These bulls are of choice quality and breeding. 23-1-y-om

4 Scotch Shorthorn Bulls for Sale

Two to thirteen months old, from Duchess of Chester, Lovely, and Nonpareil dams, and sired by imported King James. 11-y-om H. I. ELLIOTT, Danville, P. Q.

ADVERTISE IN THE ADVOCATE

Arthur Johnston,

Greenwood P. O. and Telegraph Office,



HAS FOR SALE AT EXCEEDINGLY LOW PRICES

17 EXTRA GOOD SHORTHORN BULLS 17

fit for service; also an equally good lot of

Cows and Heifers,

the best we ever offered.

Send for Catalogue and prices. Enquiries answered promptly. Claremont Stn., C.P.R. or Pickering Stn., G.T.R. Our motto: "No business, no harm." 5-1-y-om

Shorthorn Bulls

Two Yearlings, Six Calves.

First class Color. First class Form. First class Pedigree. THIRD-class Price.

Full particulars cheerfully given.

Address: JOHN DRYDEN, 19-b-om BROOKLIN, ONT.

SHORTHORN BULLS

I have six young bulls, got by Aberdeen (imp); good ones. One is a full brother to the champion heifer at Toronto and Ottawa fairs this fall; also some fine young heifers. Write for prices, or, better, come and see them.

JOHN MILLER, Markham, Ontario. Stations - Locust Hill, C.P.R. Markham, G.T.R. 10-om

HAWTHORN HERD

OF DEEP MILKING SHORTHORNS.

FOR SALE - Four young Bulls, three reds and one roan; also Heifers, all got by Golden Nugget - 17548 -; and from A1 dairy cows. WILLIAM GRAINGER & SON, 13-y-om Londesboro, Ont.

LAST CHANCE

To obtain a young JERSEY BULL from the famous Belvedere herd. As my whole herd now goes to Prince Edward Island, I have reserved for my customers

Six Splendid Young Bulls

Four months to eighteen months old. Sure prize-winners. Reasonable prices to immediate buyers. These are the best I have ever offered.

MRS. E. M. JONES, Box 324, BROCKVILLE, Ont., CAN.

BRAMPTON JERSEY HERD.

FOR SALE - A grand reg. Bull, two years old, bred direct from imp. stock. Three reg. Bull Calves; a number of high-grade heifers, bred to Sir Ollie; also Berkshire Pigs and Barred Plymouth Rocks. Prices low. Write us. B. H. BULL & SON, BRAMPTON, ONT.

MAPLE CITY HERD OF JERSEYS.

For Sale - Bull dropped July 20th, 1895; solid color, black points; sire Massena's Son 17608, dam Lady Lill 86164. Bull dropped Aug. 23rd, 1895; solid color, black points; sire Massena's Son 17608 (whose dam made 902 lbs. 3 ozs. of butter in one year), dam Forest Fern. 3-1-y-om WM. W. EVERETT, Box 552, Chatham, Ont.

A. J. C. C. H. R.

Lee Farm Jerseys

For sale: Several young bulls fit for service - prize winners; young cows - soon due to calve, heifers in calf, and calves. This is all first-class stock. Must reduce before winter. E. PHELPS BALL, Lee Farm, Rock Island, P. Q. 17-y-om

GLEN ROUGE JERSEYS.

WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 23-y-om

The Ettrick Herd of Jerseys.

MESSRS. HUMPIDGE & LAIDLAW, PROPRIETORS, LONDON, ONT.

Herd Comprises 35 head of High-class Stock. We are now offering several exceptionally fine young bulls, including grand bull calves and yearlings out of Prince Frank 33972; also a very fine two-year-old bull, and choice heifers. Nothing but choicest quality kept. Can supply show stock. Prices right. Write for particulars. 13-1-y-om

The Don Herd of Jerseys

Comprise the choicest strains obtainable, including St. Lambert, Tennessee and combination blood. Am now offering a few very choice bull calves from imp. and home-bred dams, and sires of best breeding obtainable. Address: DAVID DUNCAN, 9-1-y-om DON P. O., ONT.

A. J. C. G. JERSEYS FOR SALE.

Young cows and heifers in calf, heifer calves, bull calves, from rich and deep milking ancestry. Testing from 5.60 to 9% official test. Prices to suit the times. H. E. WILLIAMS, Sunny Lea Farm, 17-1-y-om KNOWLTON, P. Q.

JERSEYS FOR SALE - Young Cows

Calves and Bull Calves, richly bred, best testing strains, and good color. Also first-class Berkshire Boars and Sows, bred straight from imported stock. Come and see or write for prices.

J. C. SNELL, - Snelgrove P.O., Ont. R. R. Station, Brampton, G. T. R., and C. P. R. 8-y-om

W. F. BACON, - Orillia, Ontario,

CHOICE REGISTERED JERSEYS

Young bulls and heifers of the best blood for sale. Write me for prices and particulars. 19-1-y-om

"Gem Holstein Herd."

NAP! \$75.00 CASH

Sir Archibald Mascoot, No. 353, C. H. F. H. B., 4 years old 8th of October, 1895; was never sick a day; is very active, and a splendid stock getter, and is in every respect a first quality bull. We have used him as our stock bull with the very best results. Only part with him to change breeding. He was a prize winner three years in succession at Toronto Industrial Exhibition.

ELLIS BROTHERS, BEDFORD PARK P.O., ONT. Shipping Station, Toronto. 7-y-om

HOLSTEINS!

WE now offer young stock that have won prizes, and calves from our show herd, from one month to one year old, whose dams have large records - any age or sex - FOR SALE, at very low prices to quick buyers. Also some Poland-China Pigs, 1 and 6 months old; same quality (the best).

A. & G. RICE, Brookbank Stock Farms, CURRIE'S CROSS-ING, Oxford Co., Ont. 18-y-om

MAPLE HILL HOLSTEIN-FRIESIANS.

FOR SALE - Yearling Bull, Sir Aggie Barrington; fine dairy form, good color, and in good condition. His granddam, imp. Kaatje DeBoer, is now making, in 12 years old. The bull resembles her very much in form and markings. Price, \$40.00. 11-y-om G. W. CLEMONS, St. George, Ont.

HOLSTEINS

None but the best are kept at BROCKHOLME FARM, ANCASTER, ONT.

Write me for prices if you want first-class stock at moderate figures. Holsteins in the advanced registry. Yorkshires all recorded. 12-y-om R. S. STEVENSON, Prop.

HOLSTEIN-FRIESIANS FOR SALE - A few

good young Bulls and Heifers of choicest breeding, being from imp. Cows from the famous herd of B. B. Lord & Son, N. Y., or directly descended therefrom. Address: JNO. TREMAIN, Forest, Ont. 10-y-om

Springbrook Stock Farm. - FRIESIAN

CATTLE AND TAMWORTH SWINE. Four extra choice, rich-bred bulls ready for service. Write at once for bargains. Other stock for sale of best quality. A heavy stock of Tamworths on hand, bred from imported stock. 7-1-y-om A. C. HALLMAN, New Dundee, Ont.

GOSSIP.

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

Note the change in W. C. Shearer's advt., offering a beautiful lot of barred Plymouth Rock fowls.

The U. S. Shorthorn, Hereford, and Aberdeen-Angus Associations have all voted to duplicate prizes won by steers of their respective breeds in open competition at the proposed Chicago Fat Stock Show in 1897.

Messrs. R. Morgan & Sons, Kerwood, Ont., writing regarding their fine flock of Cotswolds, state that they went the rounds of the fairs this season, winning no less than 53 first prizes, 27 seconds, and 11 thirds, also 5 pen prizes - certainly a most creditable record.

At the annual meeting of the American Clydesdale Association, called for Nov. 18th, at Chicago, the attendance not being large, the reports of the Secretary-Treasurer were received and the same officers continue their work; Shire Horse Association, ditto.

At the New York Live Stock Show last week Mr. Noel Gibson, of Delaware, Ont., was the winner in the sheep-shearing contest. Time, 23m. 40s. He took more time than the second prize winner, but won on the excellent style in which he removed the fleece. "Dan" Taylor, of Millbrook, N. Y., was second, in 21m. 30s.; and N. Frederick, of Tarrytown, N. Y., third, in 21m. 24s.

H. I. Elliott, of Danville, Que., in writing us to change his advertisement, claims that the beef breeds seem to be on the turn for better things, judging from the increasing inquiries for Shorthorns. He states that his Glosters, Lovelies, and Nonpareils are in fine thriving condition. His stables can easily spare a few good things that many other stables would be much the better for having.

Prof. C. F. Curtis, Director of Animal Husbandry, Iowa Experiment Station, whose valuable lamb-feeding experiment was described at length and illustrated in the FARMER'S ADVOCATE, has now under way another feeding test - in most respects a duplication of the last. Prof. Curtis writes us that they are in the habit of duplicating much of their experimental work in order to verify results and make their reports more valuable.

At a meeting of the American Association of Fair Managers the following dates were agreed upon for the leading U. S. agricultural shows next year: Eastern Circuit - New York, Aug. 23 to 28; Ohio, Aug. 30 to Sept. 4; Michigan or West Virginia, Sept. 6 to 11; Indiana, Sept. 13 to 18; Wisconsin, Sept. 20 to 25; Illinois, Sept. 27 to Oct. 2; St. Louis, Oct. 4 to 9; Western Circuit - Minnesota, Sept. 6 to 11; Iowa, Sept. 13 to 18; Nebraska, Sept. 20 to 25; South Dakota, Oct. 11 to 16; leaving Sept. 27 to Oct. 2 and Oct. 4 to 9 for Illinois and St. Louis.

Mr. D. McCallum, manager of Isaleigh Grange Farm, Danville, P. Q., writes that their stock has done exceedingly well since their return from the show circuit. At St. John, N. B., one of the big shows visited this season, where they exhibited Guernseys, sheep, and swine, they won almost every first prize competed for. Isaleigh Grange has had a most successful show season, winning in all over \$1,000, including several medals and diplomas.

At the Montreal show, where the Guernsey competition was keen, the Isaleigh Grange herd proved its excellence by winning the first prize for herd bred and owned by exhibitor. The Yorkshires from this farm continue to hold an estimable place wherever they come into competition with other good stock. The Montreal official prize list gave Mr. Featherstone, of Streetsville, Ont., credit for having won first for best sow and three of her offspring bred and owned in Quebec - obviously an error. We understand Isaleigh Grange was the recipient of that award.

R. HONEY'S HOLSTEINS, YORKSHIRES, AND COTSWOLDS.

Mr. Honey's farm is located about four miles north of Warkworth, Ont., and six miles south of Hastings. While due care and attention is given to the other pursuits of the farm, the breeding of pure-bred stock is a specialty with Mr. Honey, the special lines taken up being as stated above, the heavy-milking Holstein-Friesians, large Improved White Yorkshires, and Cotswold sheep. Among the Holsteins some of the best we noticed were such individuals as Minster Maid - 77 - a winner of several first prizes. She was bred by E. Macklin & Sons, Fenella, Ont.; is now four years old, and doing good service in the herd. She was sired by Woodland Prince - 348 - and had for her dam Miss Stapel 728. She has tested 57 lbs. of milk per day, containing 42 per cent. butter-fat. A nice yearling daughter of hers (Rose of Minster Farm 1897) was seen, sired by (Spring Valley Prince 8678, and having the appearance of maturing into a very useful cow. At the head of the herd is the yearling bull, Duke of Streetsville 988, bred by Hugh McCaugherty, Streetsville, Ont., and sired by Alpha 381, his dam being Clara A 288.

The Yorkshires are headed by Jock - 2064 - a lengthy, useful boar, bred by Alex. Hume, of Furnace. Jock is a yearling son of one of Mr. Featherstone's (M. P.) good sows, aptly called Featherstone's Choice - 1025 - his sire being Prince - 1578 - of Mr. Brethour's stock. Among the sows a few of the choice ones are: Lady Percer - 918 - a very prolific and successful breeder, generally throwing 13 and 14 pigs at a litter, which always turn out well. Lady Percer was sired by General Gordon 2nd - 327 - and has never been beaten at local shows. Blenheim, another of the bred sows and a daughter of the above sow, by Holywell Hastings - 571 - has also always been a successful breeder. Holywell Hastings was bred by Mr. Featherstone, and had for his sire imp. Lancaster Lad, his weight at sixteen months old being 609 lbs.

The stock of Cotswold sheep was founded some twenty-four years ago, and has been improved from year to year by the use of good rams. More recently a few choicely bred individuals have been added to the flock from the stock of the well-known breeder, Wm. Thompson, of Uxbridge. The two-year-old ram now heading the flock was bred by Mr. Thompson, and headed his first prize pen as a yearling in 1891. Mr. Honey is also a fancier in horseflesh, and three or four nice thoroughbreds were pointed out to us, and we were informed that he would be able to supply any of the above breeds at prices in keeping with the times.

TO ANY OF OUR SUBSCRIBERS FURNISHING THE REQUIRED NUMBER OF NAMES WE WILL SEND PER MAIL OR EXPRESS, AS MOST CONVENIENT, THE FOLLOWING . . . . .

**PREMIUMS!  
PREMIUMS!!  
PREMIUMS!!!**

**CHARGES  
PREPAID**  
ON ALL . . . . .  
**EXCEPT  
ANIMALS.**

**Pressed Flowers**

FROM THE **Holy Land.**

AN EXQUISITE PREMIUM FOR HOLIDAY TIME.

SUITABLE FOR A **Birthday,**  
**Christmas,**  
or **New Year's Gift.**

HIGHLY INTERESTING TO SUNDAY-SCHOOL WORKERS AND LOVERS OF FLOWERS.

Contains a collection of beautiful flowers, gathered and pressed in Palestine, by Rev. Harvey B. Greene, together with description of each and Scripture references. Mr. Greene has frequently visited Palestine, and gathered and assorted with his own hands these specimens, which he offers to the Christian world.

The acting U. S. Consul at Jerusalem, Palestine, Mr. Herbert Clark, writes Mr. Greene under date of April 20th, 1896:

"Dear Friend,—I am sorry I shall not have the pleasure of seeing you again before you leave for home, laden with those thousands of beautiful flowers you have culled and preserved during the last three months.

"Yours sincerely,  
"HERBERT CLARK."

The flowers are beautifully preserved with all their natural tints, and are attached to extra finished heavy chromo paper, specially

made for the purpose, with description on the page opposite to each specimen.

It is neatly bound in antique finish cover; title, "Pressed Flowers from the Holy Land," embossed in gold on front page.

**HOW TO GET IT.**

By special arrangement we have secured a supply of these volumes, and are able to offer a copy to any subscriber sending us the name of ONE new yearly paid-up subscriber.

**THE SILO AND ENSILAGE**

NEW BOOK PREMIUM.

How to build, fill, and feed from a Silo. Most complete work yet issued.

**HOW TO SECURE A COPY.**

Any subscriber sending us one new subscription and \$1.00 will receive a copy, paper bound; or, for two new subscriptions and \$2.00, a copy well bound in cloth. Price: paper, 50 cents; cloth, \$1.00.

**SHEEP -- BREEDS AND MANAGEMENT.**

By John Wrightson, M. R. A. C., F. C. S. Most complete and up-to-date work on Sheep-rearing. Twenty-three full-page illustrations.

FOR THREE NEW SUBSCRIBERS.

**"CANADA'S GLORY"**

OUR NEW PREMIUM PICTURE!

A beautiful engraving representing eleven of the grandest light horses in Canada. Should adorn the drawingroom of every lover of the horse. Is a life-like and popular work of art, unequalled in live stock portraiture.

**HOW "CANADA'S GLORY" MAY BE OBTAINED.**

Any subscriber sending us one new subscription to the FARMER'S ADVOCATE, accompanied by \$1, will receive a copy. Price, 50c. Copies of

**"CANADA'S PRIDE"**

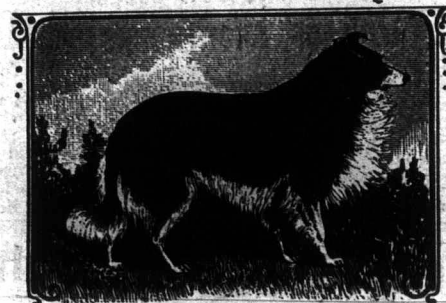
**"CANADA'S**

**COLUMBIAN VICTORS"**

OR may still be obtained by sending us the name of one new yearly subscriber for each. Price, 25 cents each.

HOW TO GET A

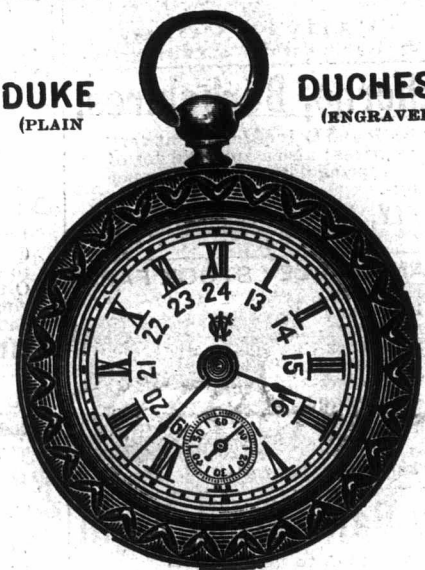
**FIRST-CLASS COLLIE.**



To any subscriber sending us the names of 10 new yearly paid-up subscribers we offer a young Collie, six weeks old or over, eligible to registration, and bred by Mr. R. McEwen, Byron, Ont.

**DUKE**  
(PLAIN)

**DUCHESS**  
(ENGRAVED)



A thoroughly reliable 18 size watch with a Genuine American lever movement. Runs over 30 hours. Total weight, only 4 1/2 ounces. They are perfect time-keepers.

These watches have taken well and given good satisfaction for years. This watch, with chain and charm, will be given to any subscriber sending us the names of three new yearly paid-up subscribers.

HOW TO GET THE

**"FARMER'S ADVOCATE" FREE.**

To any one sending us the names of three new subscribers and \$3 we will send the FARMER'S ADVOCATE free to January, 1898.

**Handsome Gifts** Sent Post Prepaid

For obtaining New Subscribers to the FARMER'S ADVOCATE. See terms and description below each ring. Subscriptions must be new and for one year at \$1.00 each, and cash accompany orders.

To find the size of ring required, take a narrow strip of paper that will draw tightly around the finger, forward same to us, and we will assure you a perfect fit.

**CHILDREN'S OR MISSES' REAL STONE SETTING.**

- No. 1—Price, \$1.25. 1 Pearl, 2 Garnets. 2 New Subscribers.
- No. 2—Price, \$1.25. 1 Garnet. 2 New Subscribers.
- No. 3—Price, \$1.50. 3 Pearls. 3 New Subscribers.
- No. 4—Price, \$2.00. 1 Pearl, 2 Garnets or Coral. 3 New Subscribers.

**LADIES' REAL STONE SETTING.**

- No. 5—Price, \$3.50. 2 Pearls, 3 Garnets. 5 New Subscribers.
- No. 6—Price, \$3.50. 2 Garnets, 5 Pearls. 5 New Subscribers.
- No. 7—Price, \$3.50. 1 Garnet, 2 Pearls. 5 New Subscribers.
- No. 8—Price, \$2.00. 3 New Subscribers.

Agents Wanted in Every Locality. Balance 1896 and all 1897 for

Liberal Cash Commission Allowed if Preferred. **\$1.00.** Payable in advance. Send for Free Sample Copies.

The WM. WELD CO., Ltd., London, Ont.

**A Crayon Portrait**

**FREE.**

WE have made arrangements with the leading Portrait Company in Canada, and are in a position to give our subscribers a rare opportunity of securing a magnificent portrait, size 16 x 20. Any subscriber to the "FARMER'S ADVOCATE" can obtain one of these crayon pictures by securing for us four new subscribers to the "FARMER'S ADVOCATE" and forwarding same to us together with \$4.00 in cash. In the case of any of our old subscribers failing to secure the necessary number of new subscribers, a portrait will be furnished for \$1.50. Any new subscriber sending us \$2.50 will receive a portrait, and the "FARMER'S ADVOCATE" for one year.

THE KIND OF PICTURE WE COPY FROM.—Portraits will be copied from photographs, cabinets, or tinctypes. Do not send a dim or faded picture. All pictures copied Bust (head and shoulders). Where picture contains more than one head a charge of 50 cents extra will be made for each additional head ordered, and if full or half length figure is required, 50 cents extra.

NO FRAMING CONDITIONS.—You are not obliged to buy a frame. The portraits are made for us by artists of national reputation and who produce ONLY the highest grade of work.

HOW TO ORDER YOUR PORTRAIT.—Suggest as few changes as possible from the original photograph, as a portrait can be copied much better with few changes. Your photograph will be returned in as good condition as it is received. Write your name, Post Office address and nearest Express Office on the back of the photograph.

GUARANTEE TO SUBSCRIBERS.—The portraits are the work of first-class artists. They are natural and as finely finished as portraits sold from \$1 to \$6. They are truly a work of art. Each portrait is finished by hand in crayon and Indian ink, and will not fade.

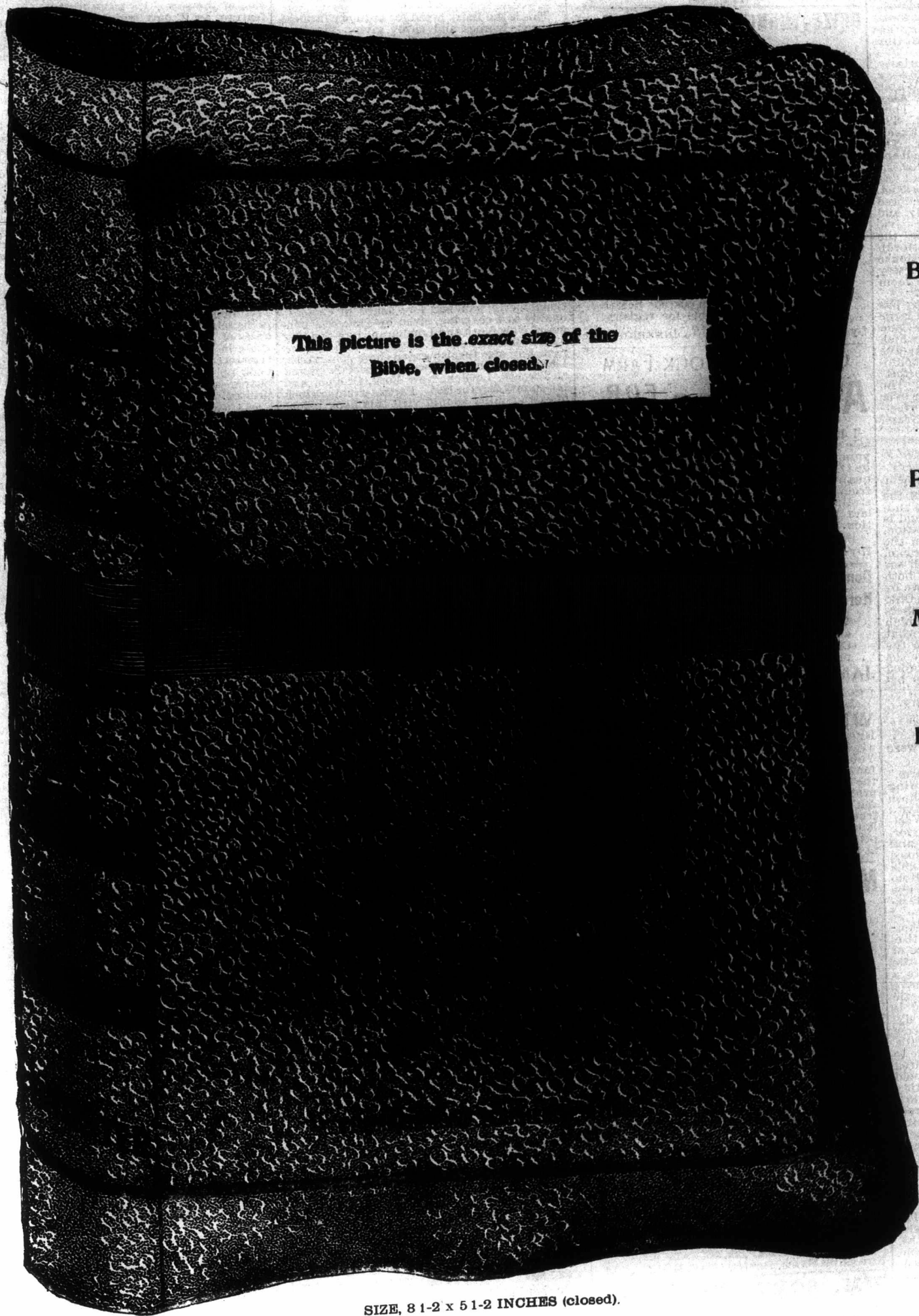
SEND IN YOUR ORDERS QUICKLY.

Portraits, in all cases, will be sent by express to insure safe delivery, and in perfect order.

# A Grand Premium!

## BAGSTER'S NEW COMPREHENSIVE TEACHER'S BIBLE

CONTAINING THE OLD AND NEW TESTAMENTS, ACCORDING TO THE AUTHORIZED VERSION, TOGETHER WITH NEW AND REVISED HELPS TO BIBLE STUDY—A NEW CONCORDANCE AND AN INDEXED BIBLE ATLAS, WITH SIXTEEN FULL PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.



This picture is the exact size of the Bible, when closed.

SIZE, 8 1/2 x 5 1/2 INCHES (closed).

### Binding—

Strong, durable, flexible American Seal (best material), improved circuit cover, round corners, red-under-gold edge.

### Paper, Type, etc.—

Of superior quality, clear and distinct, easy to read.

### Maps (with index)—

Revised and brought down to January, 1896.

### Helps—

Covering nearly 2,000 subjects—contain all features so popular in the past, and an endless amount of fresh matter, including concordance on new and improved plan, dictionary of proper names and places, with pronunciation and meaning.

**How to Obtain this Handsome and Valuable Bible** (WHICH ORDINARILY WOULD RETAIL AT FROM \$4 TO \$5):

WE WILL SEND (CAREFULLY PACKED, POST PREPAID) THIS BIBLE TO ANY ONE SENDING US THE NAMES OF THREE NEW SUBSCRIBERS TO THE "FARMER'S ADVOCATE" AT \$1.00 EACH.

SAMPLE COPIES OF "FARMER'S ADVOCATE" SENT FREE TO INTENDING CANVASSERS.

THE WM. WELD CO. (Ltd.), London, Ont.

**The Farmers' Binder Twine Company.**

The fourth annual meeting of the above organization was held in the Court House, Brantford, Ont., on Wednesday, Nov. 11th. There was a large gathering of representative farmers, mainly from Ontario and Quebec, each of them representing many proxies of small stockholders from their various localities, as the capital stock of \$100,000 is carried in small shares by thousands of farmers throughout the Dominion, the business also being strictly co-operative.

Hon. Thos. Ballantyne, President, occupied the chair; Mr. Wm. Irwin, Secretary. Practical and interesting speeches were delivered by the retiring President (Hon. Thos. Ballantyne), Vice-President (Mr. W. S. Campbell), General Manager (Mr. Joseph Stratford), Mr. T. O. Currie, and many other stockholders. Notwithstanding the poor harvest in many localities and the short crop in Manitoba, together with the severe competition meted out to them by different elements and the large proportion of American twine that found its way into the market, the Company has gone ahead and declared for the fourth time their usual dividend.

The old Board was re-elected in its entirety, as follows: Hon. Thos. Ballantyne; Messrs. W. S. Campbell, Joseph Stratford, C. H. Waterous, Robert Beith (M. P.), T. O. Currie, Alexander Robertson, William Roddick, Thos. Brooks, Jacob Mott, and Fred Chalcraft. The acting officers of the Company and the Executive Board stand the same as last year. The shareholders' auditors (Messrs. R. S. Schell and Thomas Good) were again appointed for the ensuing year, and the financial statement and auditors' report were accepted and approved.

A cordial resolution of thanks was tendered the old Board, embodying many kindly and appreciative remarks toward the Executive, the President (Hon. Mr. Ballantyne), and the General Manager (Mr. Joseph Stratford). Thanks were also voted the Court House officials and the county judge for his courtesy in withdrawing court to permit of the room being occupied by this farmers' meeting.

It is pleasing to record that the factory has run full time since its organization. A large addition has been recently built to this Company's property, the main building of which now stands three hundred and twenty-five feet in length, and further preparing machinery is being put in with the object of perfecting the twine output for future harvests. The McCusker property has also been taken over by this Company for office purposes, so perfecting their whole block adjacent to the Grand Trunk tracks.

**Poland-China Records.**

Editor FARMER'S ADVOCATE:  
SIR,—I see in the Nov. 2nd ADVOCATE the review you gave of the "Standard Poland-China Record" volume, which is good and is appreciated. I wish to call your attention, however, to a little difference between the Standard Record and the Ohio and American. By looking through our Vol. 10 you will see that we use consecutive numbers for both boars and sows, the difference being shown by (-) around sow Nos. Now, look at the Ohio Record and you will see they use odd numbers for boars and even numbers for sows, which makes actual pedigrees recorded half that the numbers show. We think we have the best record for Poland-Chinas, as we are the only one that can trace every animal recorded in it to its foundation. Please read our by-laws enclosed.  
Geo. F. Woodworth,  
Secretary.

**GOSSIP.**

According to the census of 1891 there were 408,700 farmers in Canada.  
Joseph Yuill & Sons, "Meadowside Farm," Carleton Place, Ont., write:—"The following is a list of our last month's sales: Eclipse Meadowside, to W. R. Fould, Annapolis, Ont.; Tam O'Shanter, to Francis Smith, Westmeath; Roy Meadowside, to J. H. Taylor, Keene, Ont.; Lady Stanley Meadowside and Edith M., to H. Keise, Chancelan; Leonard Meadowside, to A. Burnett, Renfrew; Mabel 2nd of Meadowside, to Hon. W. Owens, Montreal; Seth Meadowside, to Dennis Hurley, Vankleek Hill. Also twelve head of Berkshires and six Shropshires."  
Wm. Rivers, of Springhill Farm, Walkerton, Ont., in sending in a change of advertisement, writes as follows:—"In consequence of having only one Shorthorn bull calf for sale this season (a good one to the breeder), I have decided to offer a few choice females for sale at astonishingly low prices, as the herd is increasing fast. Those offered include a six-year-old cow (a beauty), three-year-old cow (winner of first prize at the Northern this fall), and two heifers rising three years, all due to calve in January. The latter three are sired by Barmpton Hero—324—, a good son of old Barmpton Chief—14386—, a good son of old Barmpton Hero—324—. Also three very tidy heifer calves—neat, thick-fleshed, and low down, with thick, mossy coats of hair, all red, one of them winning a first and a second prize. No reserve animal in the herd; any for sale at equally low prices. Now is the time to buy, as good Shorthorns are coming more into favor all the time, and prices are going to be better. Come and see or write for particulars."

**MR. JOHN FULTON'S TAMWORTHS.**


Some three or four miles from Brownsville, Ont., is the farm of Mr. John Fulton, Jr., who has established a fine herd of Tamworths, numbering some thirty head, founded from the late Mr. Rowe's stock. Among the breeding sows probably the choicest one, and the foundation of the present herd, is Jennie—149—, dam Dorchester Heroine (imp.), by The Swell (1637). This sow is now nursing a litter of eleven fine youngsters by a boar of choice quality and breeding. Another very fine sow was noticed—of prime quality and breeding—also nursing a litter of beauties by Deredham Dandy, a very large, lengthy sixteen-months-old boar that heads the herd. He is sired by the imp. boar, Delwin—206—. Mr. Fulton offers for sale, in our advertisement columns, choice young pigs of all ages and choicest breeding.

Choice Ayrshires of deepest milking strains. Largest and oldest herd in Ontario. We have choice young stock of both sexes sired by Leonard Meadowsdale, sweepstakes bull at Ottawa. Also choice Shropshires, and a fine lot of Berkshire pigs for sale. Visitors met at Queen's Hotel. Give us a call.  
J. YUILL & SONS, CARLETON PLACE, ONT.



**AYRSHIRE CATTLE and RED TAMWORTH SWINE**  
A grand lot of each on hand, including a nice lot of in-calf heifers, and eight bulls six to eighteen months old. Write us now for bargains. Prices away down.  
CALDWELL BROS., Briery Bank Farm, Orohara, Ont. 23-1-y-om

**PRIZE-WINNING STOCK FOR SALE**  
AYRSHIRE BULLS fit for service; one out of Ada No. 882, winner of first and two special prizes at Provincial Dairy Test, Guelph, Ont., 1895. Imp. POLAND-CHINA pigs of all ages.  
W. M. & J. C. SMITH, Fairfield Plains, Ont. 19-1-y-om



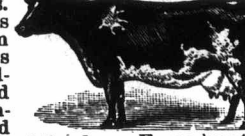
**THE GLEN STOCK FARM**  
Our stock comprises Clydesdales, Ayrshires, and Shropshires. High-class Ayrshires a specialty. We are making a special offering of ten very promising young bulls, and a number of very choice cows and heifers of the heaviest and richest milking strains, any of which will be sold at very moderate prices. We also have Rough-coated Scotch Collies for sale, eligible for registry.  
WHITEBROS., INNERKIP, ONT. 7-y-om

**OAK POINT STOCK FARM**  
**Ayrshires FOR SALE.**  
I have now for sale a choice lot of young bulls and heifers of fine quality, and bred from best milking strains. Particulars on application.  
J. B. CARRIERS, Kingston, Ont. 17-y-om



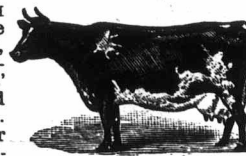
**Dominion Prize Herd of Ayrshires**  
We have the oldest established, largest and best herd of Ayrshires in Canada. Choice young stock for sale at liberal prices. Satisfaction guaranteed.  
JAMES DRUMMOND & SONS, 1-1-y-om PETITE COTE, MONTREAL, P. Q.

**WM. WYLIE,** Breeder of high-class AYRSHIRES. Young stock always for sale; bred from the choicest strains procurable. Breeding stock selected from the most fashionable strains and prize-winning stock of the day. Farm located at Howick, Que. 5-1-y-om



**Maple Cliff HERD OF... Ayrshires**  
Are noted for their successful show-yard career. Choice quality and heavy milking families. A few exceptionally choice young animals of both sex now for sale. Prices in keeping with the times. For particulars address:  
ROBERT ROBERTSON, Prop., 16-2-y-om COMPTON, QUE.

**AYRSHIRE CATTLE**  
The bull TOM BROWN and the heifer WHITE FLOSS, winners of sweepstakes at World's Fair, were bred from this herd. Young stock for sale. Also Leicester Sheep and Berkshire Swine. 5-1-y-om  
DAVID BENNING, Glenhurst Farm, WILLIAMSTOWN, ONT.



**AYRSHIRE BULL CALVES**  
for sale cheap, if taken immediately. Three dropped in August, sired by Imp. Glencairn; dams by Silver King.  
D. DRUMMOND, BURNSIDE FARM, PETITE COTE, MONTREAL


**WM. STEWART & SON,** MENIE, ONT., Breeders of high-class Ayrshire cattle; choice young stock of either sex and any age always on hand. Our herd contains a number of Columbian winners. 21-1-y-om

**SHEEP BREEDERS' ASSOCIATIONS.**  
American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEVERING, Sec., Lafayette, Indiana. 3-1-y-om

**Ingleside Herefords.**  
UP-TO-DATE HERD OF CANADA!  
**Bull Calves OF THE RIGHT SORT For Sale.**  
Address—  
**H. D. Smith,** INGLESIDE FARM, Compton, Que. 17-y-om

**GUERNSEYS**  
This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of rich milk. Several fine young bulls for sale at very reasonable prices. A few heifers can be spared.  
Address: SYDNEY FISHER, Alva Farm, Knowlton, P. Q. 17-y-om

**C. & E. WOOD,** Freeman, Ont., Breeders of high-class **LEICESTER SHEEP**  
Choice ewes and rams and ewe lambs for sale at very low prices, considering quality. Write us for prices and particulars. 18-y-om



**HILL HOME SHROPSHIRES**  
We have for sale shearing rams of exceptional merit; ram and ewe lambs of choicest quality and covering, sired by Tinker, a winner at New York and London and now heading our exhibition flock of '96, and an imp. Parker ram. Can also furnish grand show pens, right. Lambs from this flock won all specials offered at Toronto, London, New York, Guelph, and ten county fairs in 1895. Parties wishing stock of extra quality should visit this flock before purchasing elsewhere.  
D. C. MANMER & SONS, Mt. Vernon, Ont. 14-1-y-om

**SHROP SHIRE RAMS.**  
I have a number of registered Ram and Ewe Lambs of first-class quality and breeding for sale; also a few Berkshire Boars, which I will dispose of cheap.  
13-1-y-om W. R. BOWMAN, Mt. Forest.

**F. BIRDSALL & SON,** BIRDSALL P. O., ONTARIO.  
We have a few Registered Oxford Down Ram Lambs left which we will sell at a low figure. 11-1-y-om

**130 first-class registered yearling Oxford Down Rams**  
for sale. Also 80 good RAM LAMBS, at ranchmen's prices.  
HENRY ARKELL, Arkell, Ont. 9-y-om

**To Stockmen & Breeders.**  
**LITTLE'S PATENT FLUID NON-POISONOUS SHEEP DIP AND CATTLE WASH.**

For the destruction of Ticks, Lice, Mange and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc. Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc. Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.

The following letter from the Hon. John Dryden, Minister of Agriculture, should be read and carefully noted by all persons interested in Live Stock:  
"MAPLE SHADE" HERDS AND FLOCKS. BROOKLIN, ONT., Sept. 4th, 1896.  
DEAR SIR,—I cannot afford to be without your "Little's Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested, I have ever tried; it is also an effectual remedy for foul in the feet of farmers and breeders. JOHN DRYDEN.  
Seventeen Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world. Sold in large tins at \$1.00. Special terms to Breeders, Ranchmen and others requiring large quantities. Ask your nearest druggist to obtain it for you; or write for it, with pamphlets, etc. to ROBERT WIGHTMAN, DRUGGIST, OWEN SOUND, Ont. Sole Agent for the Dominion. 7-1-y-om

**DUROC-JERSEY SWINE**  
Our herd at Toronto Fair captured nine first prizes out of a total of eleven, and a like proportion at London. Our brood sows are all of the same individual merit and high standard of breeding. Two first-class imported boars head the herd. Write for what you want. We have everything.  
20-y-om TAPPE BROS., Ridgeway, Ont.

**JNO. FULTON, Jr.,** Brownsville, Ont., Breeder of Tamworth Swine. Choice young pigs for sale at farmers' prices, including several very fine young boars and sows ready to breed. 23-1-y-om

**NOTICE.**

In writing to advertisers please mention the Farmer's Advocate.  
In a letter to this office, Mr. A. C. Hallman, the well-known breeder, of New Dundee, Ont., who recently returned from a tour through the Province of Manitoba, says that he found the FARMER'S ADVOCATE in the hands of nearly all progressive farmers in that country.  
The contrivance of the Folding Sawing Machine is quite in keeping with this inventive age. Had it been made twenty-five years ago the term "sawing wood" would not now proverbially stand for dull, monotonous, muscular labor. Not only does it make the work light, but it saves a man, which renders it a great source of economy. The lightness of labor is accomplished by the operator standing erect, no matter whether the trees are being sawed down or in what position the log lies, and by always sawing the log perfectly square in two, thus preventing any friction on the side of the saw. Its portability is a valuable feature, as it only weighs 41 pounds, and it can be folded up like a pocket knife. See advertisement in this issue, and send for circulars to wood-cutters. Wood-sawing time is at hand.

**BOOK TABLE.**

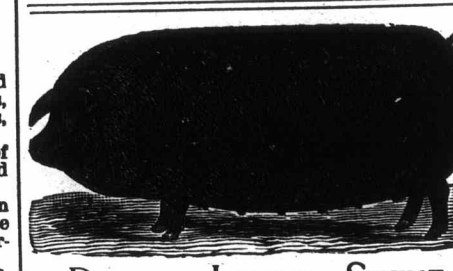
The Canadian Almanac for 1897, published by Copp, Clark Co., Toronto, comes to hand just as we go to press. This is the 50th year of publication and the size has grown to 354 pages. All the old and valuable features, statistical and otherwise, are continued, revised and extended, a complete list of all post offices and railway stations being included. Among the new features are a short history of Canada, giving the main events in Canadian history, chronologically arranged; an historical diary of the years 1895-96, and an interesting article on the King's Loyalists. A copy should be on every man's desk for everyday use.

The Dominion Draft Horse Stud Book of Canada, Vol. C, has been issued by the Society, of which John McMillan, M. P., Constance, is President, and Mr. James Mitchell, Goderich, is Secretary. This volume contains the pedigrees of 142 stallions and 394 mares, including those in the appendix, bringing the number registered in the three volumes of this stud book up to 2,458. The book is well bound in boards, and carefully compiled, indexed, and printed.

The "Proceedings" of the New York Farmers for the season 1895-96, although, like former ones, a very unpretentious volume, bears evidence of the desire of its members to become conversant with the most vital questions concerning agriculture. The subjects taken up at the three meetings reported were: "Country House Sewerage," by Col. George E. Waring, jr.; "Green Manuring," by Dr. E. W. Allen, Director of the Agricultural Department, Washington; and "Tuberculosis—Can it be Eradicated by Breeding?" by Dr. D. E. Salmon, Chief of the Bureau of Animal Industry, Washington, D.C. The report is illustrated and well printed on heavy paper. The officers of the Association are: President, Mr. Frederic Bronson; Vice-President, Mr. Theodore A. Havemeyer; Secretary and Treasurer, Mr. Thos. Sturgis, No. 45 Broadway, N.Y.

**Horse Sales in New York.**

At the Faig & Co.'s sale held in New York on Nov. 18th, Mr. W. Simpson's (New York) pacing world-beater, John R. Gentry, 2:04, by Ashland Wilkes, was sold to Lewis G. Tewksbury, New York, for \$19,900. Mr. Tewksbury is the owner of Robert J. 2:04. Both horses are in the hands of E. R. Bowne, a very successful trainer, who will likely campaign the champions next year. Other high priced numbers at the sale were a black colt by Director, \$4,500; Trevillian (2:17) by Young Jim, \$3,050; Jack Dawson (2:17) by Director, \$1,525; Jane (2:18) by Milligan, \$1,550; and Virginia Bell by Castle Bell, \$1,550. The four figures were reached for several other horses, while the average for the 81 horses was \$872.



**DUROC-JERSEY SWINE.**  
For sale—Spring Pigs not skin, and eight fine fall sows to breed to order. Prices to suit the times.  
PETER LAMARSH, 5-1-y-om Wheatley, Ont.

**IT PAYS TO ADVERTISE**

**FARMER'S ADVOCATE**

**HOME MAGAZINE.**

Leading Agricultural Journal of the Dominion.

Meeting of the American Short-horn Association at Chicago.

Following is a summary of the business transacted at the annual meeting of the stockholders, board of directors, and the executive committee of the American Shorthorn Breeders' Association on Nov. 18th:

RECEIPTS. From Nov. 1st, 1895, to Nov. 1st, 1896. Balance Treasurer's hands... \$ 241 88 Books... 344 00 Pedigrees... \$ 9773 00 Less pedigree ret'd... 776 00

EXPENDITURES. Petty cash items... \$ 121 39 Excess of fees... 45 53 Postage and express... 419 43 Salaries... 3181 60

These receipts include 3,000 pedigrees that have been checked for Vol. 11, but have not yet been printed.

Obituary resolutions were adopted in commemoration of the death of members that have been reported to the office during the year, namely: Hon. Jas. M. Turner, Lansing, Mich.; Col. Lewis P. Muir, Liberty, Mo.

The following named directors were re-elected as their own successors for the term of three years: Mr. A. H. Jones, Delaware, Ohio; Mr. A. Renick, Sycamore, Ky.

Rules of entry were changed by a unanimous vote of the members present so as to admit pedigrees from the English and Dominion Herd Books whose ancestors, in all their crosses, trace to animals recorded on eligible for record in the first twenty volumes of the English Herd Book.

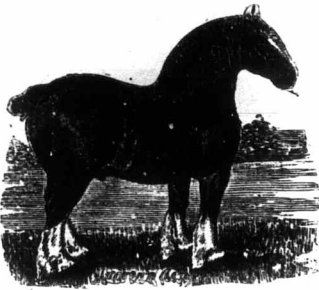
The Secretary reported that the membership of the Association was as follows: One member owned 20 shares of stock; 1 firm, 10 shares of stock; 1 member, 6 shares of stock; 7 members, (4 each) 28 shares of stock; 5 members, (3 each) 15 shares of stock; 29 members, (2 each) 58 shares of stock; 663 members, (1 each) 663 shares of stock. Total, 707 members, 800 shares.

Owing to the large membership scattered over the United States and Canada, with eleven shares owned in foreign countries and quite a number by estates of deceased members, it is found very difficult to keep track of their post office addresses.

Resolved, That members owning one or more shares of stock upon which books have not been drawn, if they sell the same to non-members the purchasers shall be allowed to draw, free of charge, one copy of each volume of the Herd Book, commencing with Volume 31, up to last issue, that the Association has on hand in excess of 100 copies.

Volumes 1, 5, 9, 10, 11, 12, 13 are out of print. The price of the volumes on hand from 2 to 30, inclusive, was reduced to \$1 each to all. From 31 up to last issue the price remains the same, namely, \$3.00 each. It will be remembered

Champion Hackney Stallion, "Royal Standard." Champion Clydesdale Stallion, "The Royal Standard."



We have a number of first-class mares and fillies, of both breeds, in foal to the above stallions. We also have for sale a number of other choice Clydesdale stallions, Standard-bred and Thoroughbreds.

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Cheap! Cheap!! Our aged Ayrshire bull, Sir Colin -1381-; dam Sprightly III., first prize cow at Toronto in 1896. Our stock of prize-winning bull calves: Will take any reasonable price if taken before going into winter quarters.

For Sale Cheap. That grand Ayrshire "HEATHER JOCK" -1212- Stock Bull.

Bred by D. Morton & Son, Hamilton; sire Royal Chief (Imp.) -75- (1847); dam Primrose (Imp.) -1205- (1897). This bull has proven a sure stock getter and can be purchased at a bargain if taken at once.

There is No Doubt About the MERIT of DEHORNING. It cuts both ways, does not crush. One clip and the horns are off close.

Oak Lodge Yorkshires - A specialty of this breed.

Splendid young sows suitable for breeding at once; bred from my best sows. Carefully selected, and possessing quality. A few young pigs two to three months old that would make show pigs for next season.

HERD OF Golden Link Berkshires

Was the sweepstake herd at London, '95 and '96. The famous yearling, Fritz Lee, heads the herd, assisted by Golden Flag and High Cleve's Crown. Young stock of both sexes, all ages, for sale at reasonable prices.

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Quality of the Best. Our leading sows are Carholme Queen, Carholme Lass, and Lady Lightfoot. Choice young stock for sale. Correspondence solicited.

LARGE ENGLISH BERKSHIRES.

My herd won 246 prizes, 10 diplomas, 5 medals; also Prince of Wales prize, since 1888 at the leading fairs in the Dominion. Choice stock of all ages for sale. Pairs supplied not akin. GEO. GARRIN, Stratford Station and Telegraph Office.

Geo. N. Harris, BREEDER OF REG. BERKSHIRES, and Southdown sheep.

Young stock always for sale. Correspondence solicited. 17-1-yo

that the Association did not commence donating books until the issue of Volume 31. The Secretary was instructed to give notice that entries for Vol. 11 should close January 31st, 1897.

It was unanimously agreed that the Association duplicate all prizes won by Shorthorns in competition with other breeds at the American Fat Stock Show, provided it shall be held in 1897.

BOOK TABLE.

Everybody's Medical Guide, published by Saxon & Co., 23 Boulevard St., London, Eng., is a handbook of wise but simple medical information and advice.

"A New Dairy Industry" is the title of a little work recently gotten out by James Fred. Sarg, late of Germany, now of Black Forest Farm, Kampville, Va., U. S. A.

The "Facts of the Case" is a convenient volume of 340 pages, prepared by Mr. F. S. Spence and published by the Executive Committee of the Dominion Alliance for the Total Suppression of the Liquor Traffic.

Perhaps the most exhaustive printed work upon the Gypsy moth (Porthetria dispar) is that prepared by Professors Forbes and Fernald and issued by the Massachusetts Board of Agriculture.

WATCH THIS SPACE, AND WRITE FOR CATALOGUE. CHRIS. FAHNER, Crediton, Ont.

J. F. McKAY, PARKHILL, ONT., Breeder of Poland-China Swine. Choice young stock always for sale at hard times prices; also Bronze Turkeys, P. Rocks and Golden Wyandotte fowl. Farm 4 miles from Parkhill.

OXFORD HERD OF POLAND-CHINAS. Our herd made a clean sweep of all the first prizes (30) at the late Toronto, Montreal and Ottawa Exhibitions.

W. H. JONES, Mount Elgin, Ont.

CANADA: WILKES. Stock hogs of all ages and sexes for sale. Six late spring boars, from \$12 to \$15; fall pigs, weanlings, from \$8 to \$10 each.

CAPT. A. W. YOUNG, Tupperville, Ont.

IMP. CHESTER WHITE and TAMWORTH SWINE. Having won the sweepstakes for the best boar and two sows at Toronto Exhibition of 1895, we are booking orders for spring pigs from imp. stock in pairs not akin.

Reduced rates by express. Drop a card for prices before buying elsewhere. H. GEORGE & SONS, Crampton, Ont., Middlesex County.

**GOSSIP.**

*Write in writing to advertisers, please mention the Farmer's Advocate.*

Short supplies of feeding cattle and abundance of fodder have induced the U. S. authorities to raise the Mexican boundary cattle quarantine, dating from November 15th.

Recent auction sales of Merino sheep at Melbourne, Australia, have resulted in what are called "the best prices that have been ruling for years." Quotations are noted for single animals of 150 guineas, 170, 190, 220, 320, 340, 360, and one as high as 550—\$2,800.

Mr. Clement Stephenson's famous Scottish herd of Aberdeen-Angus cattle received a visit from a South American cattle breeder, who purchased twenty-four animals for shipment to Buenos Ayres. The consignment consisted of five in-calf heifers, five yearling heifers, eight heifer calves, and six bull calves—a fine nucleus for a herd and a few to spare.

In our description of Capt. D. Milloy's new stock barn, in Nov. 16th issue, allusion to the roofing, which is quite in keeping with all the rest of the structure, was inadvertently overlooked. We therefore now hasten to tell our readers that the roofing used was the best Captain Milloy could, to his own satisfaction, procure, viz., the "Eastlake" patent rust-proof steel roofing, manufactured by The Metallic Roofing Co. of Canada, Toronto. It is claimed to be fire, lightning and rust proof, and being galvanized, never needs painting.

Rinderpest is worse than ever in South Africa, having a firm hold in Damaraland, Delagoa Bay, the Orange Free State, and in Cape Colony north of the Orange River. The Cape Times estimates that of the two million cattle in Cape Colony not many will be alive a year from now. It seems almost certain that the disease attacks sheep and goats. It is therefore a bad lookout for the mohair industry at the Cape. The malady is greatly spread by dogs, vultures and flies; also by natives who have been in contact with sick cattle.

A cash sale of fifty pure-bred Shorthorns, owned by H. C. Duncan, Osborn, Mo., and W. T. Clay, Plattsburg, Mo., was effected on Nov. 12th, at the Kansas City Stock Yards. The offerings comprised 36 cows and heifers and 14 bulls of the following families: Rose of Sharon, Young Mary, Josephines, Rubys, Lady Elizabeth, etc. Five females sold for three figures each—one, Scotch Butterfly, bringing \$200; the female average being about \$75. Two hundred and fifty dollars was paid for the bull Champion of Maple Hill 118353, and Chief Violet of Maple Hill 118394 sold for \$220, while Mr. Duncan's nine bulls brought \$120 each.

In the October 1st issue of the FARMER'S ADVOCATE we gave an account of the work of Mr. J. B. McEwan as chief dairy instructor in New Zealand and his new mission as a commissioner to look after the sale and distribution of the dairy products of that Colony in Britain. He recently visited his old friends in Canada, en route for England. Last year New Zealand exported 3,500 tons of cheese and 3,000 tons of butter, and the Government spent \$25,000 in grading and refrigerating before the butter was put aboard the steamships. As far as reaching the British market is concerned, New Zealand labors under serious disabilities compared with Canada.

Mr. Arthur Johnston, of Greenwood, Ont., reports the Greenwood herd of Shorthorn cattle once again in winter quarters, and in most excellent form. The young things of both sex are an uncommonly good lot, probably one of the very best lots we have ever bred. They were mostly sired by Indian Chief, though a few of them were sired by an excellent young bull of our breeding, from a capital old milking strain, a family that has produced some of the very best milkers, either in this country or Scotland. Our young bulls, of which we have at this date (November 20th) seventeen fit for service the coming season, are a well-fleshed, sappy, thriving lot of big fellows. They are not by any means fat, but just in the very nicest form to do purchasers good, either in the breeding line or in the show-ring next fall. The heifers are an equally good lot, and in equally attractive form. There are three of them that we count on to make the three best show yearling heifers we have ever owned—big, fat, and beautiful. They are fatter than the bulls. We have very greatly reduced our prices for both bulls and heifers to correspond with the reduction in value of other farm produce. We are short of room, short of feed, and determined to sell. We have now the very best white bull we have ever owned—a son of Indian Chief, and out of 35th Duchess of Gloster; she out of Imp. Duchess of Gloster 34th, one of the best members of one of the very best families ever bred by the late Mr. Amos Cruickshank. He is now about eighteen months old, and like the two-year-old Cruickshank roan bull, Indian Monarch, has developed into a show bull of the first quality. Send for one of our catalogues, and come and see them. Write or wire us when, and at which station to meet you. "No business no harm" is our motto.

**MESSEURS. TAPE BROS.' DUROC-JERSEYS.**  
The writer recently had the pleasure of calling on the well-known firm of Messrs. Tape Bros., near Ridgeway, Ont., leading breeders and probably the most successful prize-winners on Duroc-Jersey swine in Canada, and on looking over the herd many particularly handsome individuals were seen. Among the breeding sows, of which there is a large number, a few of those valuable breeders and those which draw our special attention are Duchess of Kent 13, Lady Howard, Royal Beauty—91—, Fanny Blossom—20—, Howard Bell, Howard Queen—148—, Blooming Bell 19, Baroness, and other choice ones of equally as good breeding. At the head of the herd is Nimrod—106—, bred by E. H. Small, Norwood, Ill., and sired by his stock boar, Onward—2359—; assisted by Sovereign (imp.)—107—, bred by E. H. Small; Royal Don, and Wellington 24th, the aged boar shown this year, and a winner wherever shown. In fact, this herd was successful this year in capturing a large per cent. of the best honors at Toronto and London. Messrs. Tape Bros. are prepared to supply a choice line of stock bred from the above quoted individuals at remarkably low prices, several of the young boars offered being by the grand old stock boar, Duke of Kent.

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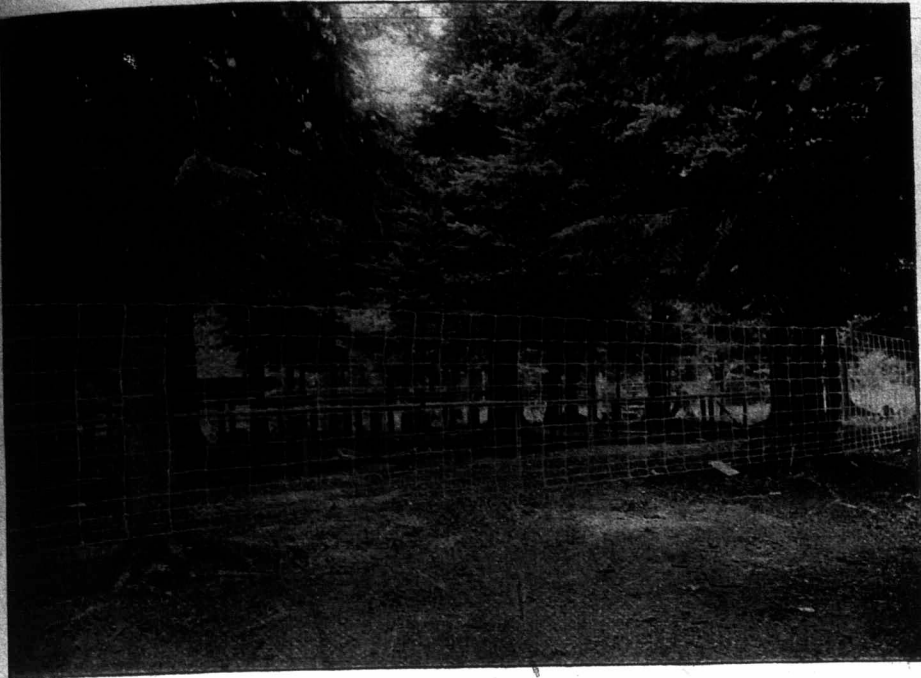
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"broadside on." Yes Sir. Brought him home under a blanket—was ashamed to be seen with him—gave him Dick's Blood Purifier and now after six weeks just see him. Yes Sir—just six weeks—You can't beat Dick's, it simply puts an animal right. Its worth dollars where it costs cents. You can get it from druggists or at general stores but if they don't have it don't let them palm off something else on you—because you can send 50 cents to Dick & Co., P. O. Box 482, Montreal and they will send you a trial package—post paid.

Full Circle Steel Hay Press!

Feed Cutters, Tread Powers, Feed Grinders, Threshers, Flax Breakers.



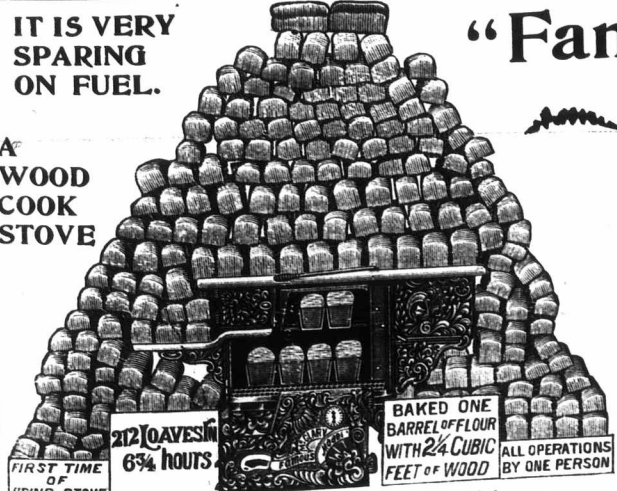
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The best and cheapest mill in the market. Has no equal. Made with and without elevator. Send for circulars and prices to above address. om

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The managers of Dr. Barnardo's Homes for boys are glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to MR. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 214 Farley Ave., Toronto.

ADVERTISE IN ADVOCATE

Stock Breeders' Annual Meetings.

The annual meeting of the Dominion Cattle Breeders' Association will convene in the City Hall, Guelph, at 7.30 p. m., December 7th. Programme: Addresses and Reports of Officers; Reports of Committees; Nomination of Expert Judges; Election of Delegates to Fair Boards; Election of Officers and Auditors.

The annual meeting of the Dominion Sheep Breeders' Association will be held in the same place, December 9th, at 7.30 p. m. Programme similar to above.

The annual meeting of the Dominion Swine Breeders' Association will be held December 10th, at 7.30 p. m. Programme similar to above.

At 7.30 p. m., December 8th, an open meeting will be held under the auspices of the Dominion Cattle, Sheep, and Swine Breeders' Associations, the Guelph Fat Stock Club, and the Dairyman's Association of Ontario. The chair will be taken by Hon. John Dryden, Minister of Agriculture for Ontario. Address of Welcome by J. A. Lamprey, Mayor of Guelph; Response by Dr. James Mills, President of the Ontario Agricultural College, Guelph; Address by Hon. Sydney Fisher, Minister of Agriculture for the Dominion, Ottawa: "The Value of Schools of Domestic Science to the Agricultural Population," Mrs. John Hoodless, Hamilton, President of the Dominion Y. W. C. A., also of the Hamilton Branch of the Y. W. C. A., and of the School of Domestic Science; Address by Chas. E. Thorne, Director of the Agricultural Experiment Station, Wooster, Ohio. The programme will be interspersed with suitable readings by Miss McCallum, Galt, and songs by Capt. Thos. E. Robson, Iderton. F. W. HODSON, Secretary.

The National Lincoln Sheep Breeders' Association will hold their annual meeting in Representative Hall, Capitol, Lansing, Mich., December 15th. The flockmasters from the Western ranges are after all the Lincoln rams they can buy to cross on the range ewes, claiming it makes a very satisfactory cross. One firm in Idaho took 250 rams from Michigan and Ontario to breed on their 18,000 ewes. H. A. DANIELLS, Sec., Elva, Mich.

The annual meeting of the Canadian Hereford Breeders' Association, for the report of business done, the election of officers and transaction of new business of importance, will be held in Guelph, on Thursday, the 10th December next, at 10.30 a. m., at the Commercial Hotel. H. WADE, Sec.

GOSSIP.

The Scotch Ayrshire Cattle Society has resolved that "an animal calved after 31st December, 1895, and which has at least three crosses of fully registered blood, or which has two crosses of fully registered blood in addition to having one of its parents in the appendix, shall be eligible for full registration with a number." Also that "an animal calved after 31st December, 1895, shall be eligible for registration in the appendix which has either of its parents fully registered with a number or which has either of its parents registered in any appendix."

RIVER BOW STOCK FARM comprises some 300 acres of choice farming and grazing lands, located at Crossan, near Thamesville, in one of the fertile districts of the County of Kent, and owned and operated by Hilton Snary & Sons. On our visit to the farm an extensive and varied stock was found, consisting of Shorthorns and Poland-China, Chester White, and Duroc-Jersey swine. Everything was in fine, thrifty condition and good breeding form. The Shorthorn herd was established some thirty years ago, and now contains representatives of the Duchess of Boston, Myrtle, and Plumwood families. The foundation from which a large per cent. of the present stock is descended was the old cow, Duchess of Boston 5th -11537—purchased at from Colonel Mallory, of Wardsville, Ont., at a good long price. Quite a number of the daughters and granddaughters were noticed in the herd and were considered a choice lot, being even, thick-fleshed, mellow handlers, with short legs and good, even quality. The cows and heifers were all out on the pastures and looking exceedingly well. At the head of the herd is the four-year-old bull, Chief Captain—1748—bred by Arthur Johnston and sired by his noted Indian Chief, having for his dam Heliotrope 4th -17145—. The above bull is a lengthy, even, thick-fleshed fellow, with grand quarters and good underlines, while his handsome head gives the finish to his other good qualities. He is proving a capital sire and has given entire satisfaction to his owners, who are now offering to exchange him for one equally as good. One of the Plumwood cows was sired by Aberdeen Duke 2nd, bred by A. S. Armstrong; he by Butterfly Duke, who is of grand show stock. She is also descended, on the male side, from 30th Duke of Oxford, imported Imperial Caesar, and King of the Ocean—all well-known and grand stock bulls. They now have several young bulls on hand and for sale at reasonable prices, sired by the above bull. The herd numbers some twenty-five head in all, and are of the same even type. In buying stock bulls Mr. Snary informed us that they have always been careful to select the best they could get.

Among the swine many very fine specimens were noticed. The Polands are of the improved type and among them we noticed some particularly good individuals, some of the best sows being sired by such well-known boars as Senator -256—bred by J. A. Shipley, Ohio; Prince Elgin -463—, and other noted ones. Stark King, alias Royalty -721—, now stands at the head of the herd. He was bred by Wm. Peterson, Stark, Ill., and was sired by the noted Tecumseh Wilkes, 23921, A. Stark King is assisted by a very worthy son of the great show and stock boar, Darkness Quality.

The Chester Whites are of the best strains available, selections having been made from the most successful prize-winning herds of Canada.

The Durocs are descended from the famous herd of Morton, U. S.; selections having also been added from some of the choice Canadian herds.

A nice flock of Leicester sheep are also kept on the farm and are considered one of the most profitable lines kept. They are descended from the old Kerby stock and a flock once owned by Jno. Miller & Sons, and are noticeable for their fine texture of wool.

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Is the only salt manufactured by the Vacuum Process in Canada, and is much superior to any imported Vacuum Process Salt.

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