

J H Gridale
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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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VOL. XXXIV. LONDON, ONTARIO. AUGUST 1, 1899. WINNIPEG, MANITOBA. No. 483

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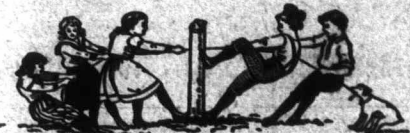
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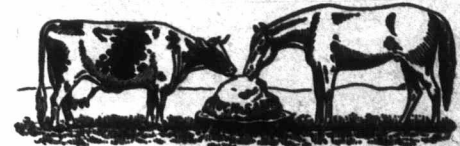


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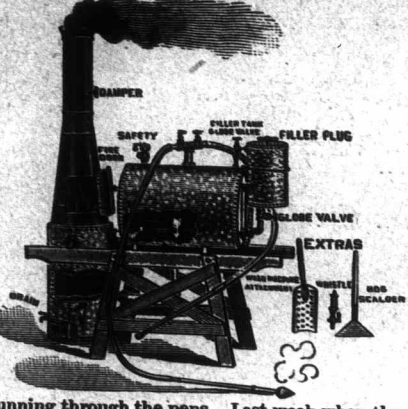
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Gentlemen,—I am in receipt of your letter of January 19th. I would have replied earlier, but I wished to thoroughly test the Cooker before making any statements. I have made a pretty thorough test of it, and I am satisfied that it does all you claim for it. My hogs have done much better since I started using your Cooker. I am feeding ground grain, which I scald and feed while warm. I am also using the Cooker as a means of heating my hog pens, by having steam pipes running through the pens. Last week when the thermometer was several degrees below zero, the pens were quite comfortable, and I saved several litters of young pigs that I am sure would have perished with the cold. I take pleasure in recommending your Cooker.

Yours truly,
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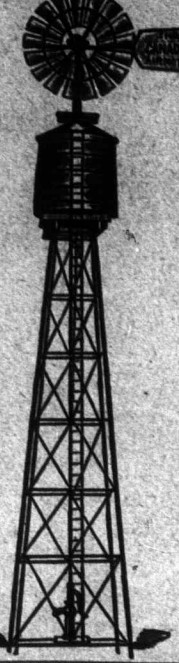
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FARMER'S ADVOCATE

AND HOME MAGAZINE

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

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXXIV.

LONDON, ONT., AND WINNIPEG, MAN., AUGUST 1, 1899.

No. 483

EDITORIAL.

The "Farmer's Advocate" in New Quarters.

The present number of the FARMER'S ADVOCATE is issued from new, handsome, and commodious premises on the north side of Carling street, London, Canada, a few doors west of Richmond street, and quite convenient to the city post office. For over twenty years past the home of this publication has been at 300 Richmond street, but the development and requirements of the paper have entirely outgrown the old quarters, and while we naturally regret to sever the old associations, still, in justice to the paper and our readers and patrons, we find the need for enlarged and improved facilities imperative. Our new business offices are on the ground floor, making them of much more convenient access to the public; and our set of editorial rooms are comfortably located, with a southern outlook, on the floor above. The mailing and binding departments, where a large staff of hands are employed, are to the rear of the editorial apartments. The press and typesetting rooms of the London Printing & Lithographing Company (one of the largest and best appointed in the Dominion), in which the FARMER'S ADVOCATE is printed, are located immediately in rear of our business offices, the artists of the lithographing department being upon the third flat. The fine business offices of the Printing & Lithographing Co. adjoin (one door to the west) those of the FARMER'S ADVOCATE. The whole premises cover a ground-floor area of 33 x 200 feet, five stories in height, and are well lighted and ventilated, supplied with steam and electric power, and are equipped as becomes the representative journal of the very foremost agriculturists of this continent to-day. To farmers, stockmen, and our friends generally, we extend a cordial invitation to call upon us in our new home.

The "Farmer's Advocate" at the Toronto Industrial.

The FARMER'S ADVOCATE will, as in previous years, have an office in the Press Bureau building, situated across the street north-east of the main building, during the two weeks of the Industrial Exhibition, where we will be pleased to meet our friends and patrons.

Mr. John Dearness.

We take pleasure in adorning this page with a lifelike engraving of Mr. John Dearness, for some years past Inspector of Public Schools for East Middlesex, in the Province of Ontario. The portrait will be appreciated by our readers everywhere, as all are familiar with the admirable contributions from his pen upon agricultural education and other subjects which have from time to time appeared in the FARMER'S ADVOCATE. He has just been appointed Vice-Principal of the new Provincial Normal School for the training of teachers, at London, Ont., which will be opened at the beginning of the coming year.

Mr. Dearness was born in Hamilton, Ont., May, 1852, of Scotch parentage, his parents being John and Jane (Linklater) Dearness. His earlier years were spent upon farms in Perth and Middlesex Counties, but having begun the acquisition of an education with marked success, he entered upon the teaching profession in 1870, first in a rural public school and subsequently as principal of the

Lucan and Strathroy public schools, and still later on the staff of the Strathroy High School. In the fall of 1874 he was appointed Public School Inspector for East Middlesex, a position in which he has rendered lasting service to the cause of public school education, his general administration being also uniformly marked by discernment and good judgment, enthusiasm and industry. His addresses before teachers' institutes and associations, and the ability with which he conducted the editorship of the *Ontario Teacher*, at the time the only educational journal in the Province, further enhanced his reputation. He was one of the editors of the *Royal Canadian Reader*, and for several years on the Central Committee, under the Provincial Department of Education, for the examination of teachers. He is an honorary member of the Montreal Historical Society, has been Lecturer on Botany and Zoology in the medical department of the Western University, and twice President of the Ontario Entomological Society. In fact, for several years he devoted considerable time to the practical study of natural science, particularly botany, entomology, and mycology. He has made probably the largest collection of fungi in Canada.



MR. JOHN DEARNESS.

It contains several hundred species new to science. It was in recognition of his attainments in this department of knowledge that he was recently selected by the Ontario Government as a member of the Royal Commission to investigate the subject of the troublesome San José scale and the procedure taken to overcome its ravages upon the fruit trees of the Province. One of the most unassuming of men, the extent and variety of his attainments are a constant surprise to those who enjoy his personal acquaintance. Apart from his pre-eminent general qualifications as an educator, he is one of the few educationists of the day who have grasped the true bearing and the importance of agricultural education. As our readers are aware, this subject is just being placed upon the curriculum of the Ontario public school course, and the Minister of Education was fortunate, in manning the new Normal School, to be able to secure the services of Mr. Dearness to be associated with those upon whom rests the responsibility of training in the art and science of teaching those who will in future be entrusted with the country's public school work, which, to our mind, outranks in importance that of high schools, collegiate institutes or universities, because in the former is laid the educational foundation of the country's youth.

One Judge or More.

The question whether a single judge or a bench of two or three is most likely to give satisfaction to exhibitors in the awarding of prizes in the live stock department of exhibitions, is one that has often been discussed and upon which there is yet considerable difference of opinion. With the single exception of the Toronto Industrial, the leading exhibition associations in Canada have adopted the single-judge system, and, so far as we can learn, with more general satisfaction than was formerly given by committees of two or more. As a rule, the leading fair associations in the United States have, apparently after varied experiences, settled down to the conviction that one good judge can do as good work as three, and do it in very much less time. The most vigorous "kicking" on the part of exhibitors that has been witnessed of late years or at any period in the past has been made under two or more judges. Two judges and a referee has been the favorite tribunal for several years at the principal shows in Great Britain, but Canadian breeders who have witnessed their work have not been enamored with the results of the system, and it is only necessary to refer to the reports of the Royal Counties Show, at Windsor, and of the Royal Agricultural Society's Show, at Maidstone, published in our last two issues, to demonstrate that the system is far from being entirely satisfactory. At both of these events the two-judges differed in several cases, requiring the breaking of the deadlock by a referee, who, as usual, was only asked to decide between the two animals selected by the acting judges, but who might, if he had been given a free hand, have chosen another and a better from the competing list for either first or second place, as our correspondent, a Canadian breeder and a first-class judge, who reported he judging of the Shorthorn class at the Royal Show, clearly indicates that he would have done in one or two cases at least had the matter been referred to him, and it is difficult to see why the third man should not be allowed to choose from the whole list in competition as well as the other two. Of course, if this were allowed another tie-up might occur, and a second referee might or might not put things right if limited to the three animals chosen by as many different men. It will be noted that in all such cases the question is finally settled by the referee—a single judge. There is the further difficulty to be considered that if the expenses of judges are to be paid, as we certainly think they should be, the larger committee is more costly. The expenses of the referee should also be provided for if he is invited to be on hand, though he may not be called to act, and he ought to be appointed by the same authority as the judges. The fact that the Smithfield Club, one of the oldest and most successful societies that hold stock shows in Great Britain, has adopted the single-judge system for its next show is pretty good evidence that the prevailing custom there is not giving satisfaction. Whether it is owing to the growing practice (a proper one, in our estimation) of publishing the names of the judges prior to the date of the show, or to some other cause, it is worthy of note that there have been fewer cases of protest against the single judge chosen than against one of the two or both under the dual system, and the decisions of the single judge have commanded quite as much and as general respect as those of two or more. An English exchange, while recognizing and tacitly admitting the convenience and efficiency of the one-judge system, raises the point that where the entries are numerous and the classes large the work can be more expeditiously done by two or three. To this we decidedly demur, unless it be proposed to divide the work into as many sections, where there is too much work for one man, and that each shall take a separate part, which would, of course, be the single-judge system again, for we are fully persuaded, from experience and observation—and this is one of the advantages of

THE FARMER'S ADVOCATE
AND HOME MAGAZINE.
THE LEADING AGRICULTURAL JOURNAL IN
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PUBLISHED BY
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WESTERN OFFICE:
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LONDON, ENGLAND, OFFICE:
W. W. CHAPMAN, Agent, Fitzalan House,
Strand, London, W. C., England.

JOHN WELD, MANAGER.

1. THE FARMER'S ADVOCATE is published on the first and fifteenth of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
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14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD CO.,
LONDON, CANADA.

the system—that one competent judge who knows his business, and who knows he knows it, can do more work than two or three, and do it in less than half the time, and quite as well, if not better. We have seldom heard a complaint of a single judge being too slow, but we recall many occasions, where, with a committee of two or three, the spectators, the cattle and their attendants were wearied by long waiting for a decision, and the remark has been made that the animals and the men gave evidence in their appearance of having aged under the operation. The objection has been made to a single judge that the man chosen may be prejudiced in favor of a certain family or type of cattle, and may in close competition give the benefit of a doubt, if not more, to his favorites. That class of man is more likely to be accepted under the dual system, on the presumption that his colleague will counteract such a tendency, and our opinion is that a man of pronounced prejudices would be more likely to work for the preferment of his favorite type, if associated with another man, by endeavoring to persuade his partner to agree with him, since he would not have to assume the responsibility alone, but would have another to share it, or on whom to shift it, while if he were acting alone, he would feel the full weight of the responsibility, would be more careful to do exactly what he believed to be the right, and would more clearly realize that his personal judgment and honor were at stake, and that the eyes of breeders who are as good judges as he are watching his work and will form a pretty correct estimate of his competency and his honesty as well. It may be objected that men competent to act singly are not plentiful, but to this the answer is that it takes twice as many to make a competent bench of two, and thrice as many to make a reliable committee of three, and if there are enough good men to fill the bill in the latter cases, there should be little difficulty in finding one who can be trusted.

Australian Frozen Meat Trade.

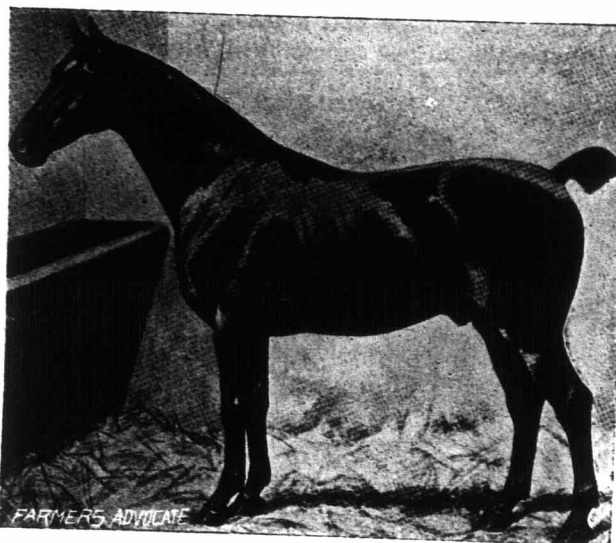
Since frozen beef and mutton from Australia come into competition with the meats from Canada, a glance at the situation as it is referred to by Mr. John Cook, of Melbourne (who has for years been intimately connected with the export meat trade), in a conversation with a representative of *British Refrigeration*, will be of interest.

Owing to three years of severe drought in Victoria, the sheep stock has been reduced from 60,000,000 to less than 40,000,000, with a very poor lambing season this year. In Queensland the late seasons have been patchy, but in New South Wales the weather has been less unfavorable, so that, on the whole, Mr. Cook considers the total number of sheep and cattle will be nearly maintained.

Regarding the system of Government inspection, Mr. Cook expressed his utter opposition to Government inspection, except for the purpose of preventing the treatment of stock found to be unsound or diseased. He finds that it has a restricting influence upon the trade, and that the Government inspectors have neither the skill nor the knowledge possessed by those who make it their business to freeze and export meat.

Regarding trade with the East, Mr. Cook considers its expansion will be very slow with such countries as Japan, China, and India. As to the present moment, there is a fair business being done in supplying the American troops in the Philippine Islands with beef.

As to the practicability of establishing a direct frozen meat trade between Australia and Manchester, Mr. Cook claimed to have sent experimental shipments direct to Manchester, Liverpool, and Glasgow, with only moderate satisfaction, owing, perhaps, largely to the severity of their



HACKNEY STALLION, GRAND CADET 4797.

Winner of champion prizes at the Royal, the Highland, and the Notts Shows.

PROPERTY A. W. HICKLING, ADOLTON, NOTTINGHAM, ENG.

competition in the matter of price and the excessive freight charges.

Mr. Cook, on being consulted on the practicability of changing Australian frozen beef to a chilled beef trade, expressed the opinion that the prospect of a trade in chilled meats between Australia and the United Kingdom are very remote. Firstly, the voyage of 50 to 60 days is too long to admit of the meat being kept sound in a chilled state, and in the second place, Mr. Cook holds to the opinion that freezing does not in any way injure either beef, mutton or lamb; but we believe it is really a case of "Hobson's choice"—that or nothing—with the Australian. Furthermore, the larger space required for the carriage of chilled meat, and the greater attention it would require on the voyage, would necessarily increase the rate of freight beyond the enhanced price received. The few experiments that have been made have been complete failures, and Australian exporting and freezing companies are entirely opposed to any changes in the direction of chilling as contrasted with freezing.

Australia is competing successfully with Argentina in sending fortnightly shipments of frozen meat to South Africa, which Mr. Cook considers will be only a temporary market, since there is a probability of the Cape herds becoming restocked within a few years. Shipments of live cattle have been tried to that country, but with losses by mortality during the voyage of some 60 per cent., so that Mr. Cook reasonably concludes that the frozen will always beat the live cattle trade between Australia and the Cape.

STOCK.

Our Scottish Letter.

THE HIGHLAND SHOW, A GREAT EVENT.

We have been having a great week of agricultural enthusiasm in connection with the show of the Highland and Agricultural Society, which has just been held in Edinburgh. H. R. H. the Prince of Wales is President for the year, and he attended the show during most of two days—Wednesday and Thursday—when enormous crowds entered the field and took part in the proceedings. There has never been an agricultural event like this in Scotland, and during the four days that the show lasted the drawings amounted to about £10,195 10s. 6d. The third day (Thursday) established a record, the drawings for that one day amounting to £5,033 15s. 9d., of which £4,296 15s. 5d. was paid at the gates. The Prince was guided during his visits by Sir John Gilmour, of Montrave, Bart., the famous breeder of Clydesdales, who is chairman of the Board of Directors for the current year. The weather throughout has been superb—a good job, as with wet weather the ground on Prestonfield, where it was held, would have been little better than a morass. However, all's well that ends well, and 1899 will forever be memorable in the history of the National Agricultural Society of Scotland.

The feature of this great exhibition has been

THE HORSE SECTION,

and especially the *Hunting and Hackney* departments. Strenuous efforts were made by gentlemen and organizations interested in these breeds to have a large entry, and extremely liberal prizes were offered. The pick of the hunting stables of England, Scotland and Ireland were sent forward, with the result that Scotland was shown to be far behind in this class of stock. The best hunting horse in the country, Mr. G. J. Kidston's Passionist, which has frequently led all the shows in the country, failed to get a ticket, and champion honors went to a lovely chestnut gelding named Gendarme, from Mr. T. D. John's stable at St. Lagan's, Cardiff. This is a very handsome, sweet, well-trained horse, but in common with others we had a great fancy for a gray gelding named Tattoo, owned by Mr. J. J. Morebray, Naemoor, Dollar. He is up to a heavier weight than Gendarme, but is, perhaps, scarcely as fast. All the same, he would probably sell for quite as much money as the champion, weight being a supreme point in a hunter. The Hackney classes filled splendidly, and both championships went south, Sir Walter Gilbey taking the male championship with his renowned London winner, Hedon Squire, and Mr. Harry Livesey, Rotherfield, Sussex, the female championship with that lovely mare Orange Blossom, the champion of the Royal, and frequently first as well as champion at the London spring shows. In the Roadster class the supreme honors went to another Welshman, Mr. Arthur Evans, Bronwylla, for his very fine mare Sonata; and the pony championship also went south to a Yorkshire lady for a mare named Love Letter. Lord Londonderry, who is leaving his famous stud farm in the Island of Bressay, Shetland, bred almost all the prize-winning animals of this miniature breed, and secured the championship with a sweet but stout little pony stallion named Gondolier—a tiptop one and a great favorite on the parades.

In the *Clydesdale* section the entries were numerous and the display more than an average. The best classes were the younger ones, especially that for yearling fillies and colts—and, indeed, the three-year-olds and two-year-olds of both sexes were a very fine lot. The weakest class, taking away the first prize winner, was that for aged stallions. The older mares were a level and highly-creditable lot. The championship in the male section went to Mr. John Pollock's famous horse Hiawatha 10067, which won the Cawdor cup in 1898 and 1899, and was brought out for this show in great bloom. Hiawatha is a distinctly Scottish horse; that is to say, he possesses almost in perfection the qualities of feet and limbs which Clydesdale judges will insist on. First prizes in all the other classes for stallions, and a very large proportion of the other prizes in the same classes, were won by Messrs. A. & W. Montgomery, who exhibited strongly, and that with animals of outstanding excellence. Their winning horses were the three-year-old Watchword, the two-year-old Drumflower, and the yearling Blacon Baron. Watchword and the last were got by the renowned breeding horse Baron's Pride 9122, and his gets formed by far the largest proportion of the firm's exhibits and of the prize animals. Drumflower is a son of Macgregor, and in a Canadian showyard would, we imagine, win "hands down" as the best horse exhibited at the show. He was bred by Mr. Robert Frederick, Drumflower, and is a horse of great substance and strength, with the best of feet, and being out of a Prince of Wales mare, he has good action. Amongst the females, the champion honors went to Mr. Herbert Webster's Glasgow champion, Lady Victoria, bred by Mr. Wm. Nicholson, Bombie; and thus for the first time she turned the tables on Mr. Smith's Empress, also bred at Bombie and out of the grandam of Lady Victoria. Both were got by Baron's Pride, as were nearly all the prizewinning animals in the other filly classes. Mr. Smith's first two-year-old from Blacon Point is named Jeanie Deans, and is a

splendid filly, with bones of the right-wearing kind, legs planted rightly beneath her, and a very fine mover. She was champion at Kilmarnock, and to our thinking is the best young Clydesdale mare of the present day. Second to her was placed Mr. Guild's Maid of Athens, which last year was unbeaten. She is a very bonnie one, with grand fore end and legs and feet, but a little faulty behind. The yearling prize list was, with one exception, composed of daughters of Baron's Pride, which have nearly all been prominent in their own classes at previous shows. Mr. Guild's first Topsy Pride is unbeaten. Mr. Sinclair Scott's second was not shown before. Mr. Marshall's third was first at Glasgow, Mr. Murdoch's fourth was well forward at Kilmarnock, Mr. George Alston's fifth was highly placed at the west county shows, and Mr. Smith's is a newcomer, placed seventh. The one break in the continuity of this triumph was furnished by Mr. William Park's Lady Helen, a Londonderry filly by Lord Stewart, which was placed second in spring, and has been winning strong in the eastern part of the country. The reserve female champion was Mr. Lumsden's Balmie Queen Mab, first prize yield mare, and one of the sweetest and truest Clydesdales shown. She was second last year as a brood mare at Kelso, and we should have thought the award right which would have made her female champion this week. She was got by Royalist 6242, and takes a lot of beating. Sir John Gilmour had the first prize brood mare in Montrave Rowena, a fine type of Clydesdale, with a grand fore leg. Mr. McKeich's champion mare Lady Raffan, by Sir Everard, was second, and led a trio of the daughters of that fine horse.

CATTLE.

Cattle of all breeds cultivated in Scotland were strongly represented. For some unaccountable reason, the one breed somewhat disappointing in numbers was the Galloway. This is all the more surprising from the fact that the Duke of Buccleuch, whose guest the Prince of Wales was, owns one of the best herds of Galioways in the country.

Shorthorns were a fine lot of cattle, and although certain of the Maidstone champions were forward, the chief honors went north. The best bull and the best animal of the breed was declared to be Mr. A. M. Gordon's Corner Stone 68406, from the Newton herd of Inch, Aberdeenshire. This is a roan bull, three and a half years old, got by Touchstone 60073, from the famous prize cow Butter Scotch. He had a tussle with Sir John Gilmour's Brave Archer 70018, which got somewhat hard lines at Maidstone, for first place in his class, but on the whole Corner Stone was entitled to the premier position on the score of symmetry and style. This is the second year in succession for Mr. Gordon's herd to provide the breed champion, last year's winner being Star of Dawn, a beautifully level bull, which went to South America. The Maidstone winner, Mr. Harrison's Count Beauty 72267, bred by Mr. Duthie—a good square bull, but having rather too long a horn—led the two-year-old class. Both Her Majesty the Queen and the Prince of Wales were successful exhibitors of Shorthorn bulls. The Queen was first with a yearling and second with a two-year-old, and the champion female, the yearling heifer Cicely, was also owned by Her Majesty. This heifer was female champion at Maidstone, but she had a hard job winning the championship this week, her great opponent being a fine two-year-old heifer named Lady 17th, bred and owned by Mr. C. M. Cameron, Balnakyle, Ross-shire, who has one of the best herds in Scotland. An umpire was required to decide which of these heifers was to be champion, and he gave the honor to the royal herd. Mr. Cameron is to have a great sale in autumn, when Canadian buyers should look in. He has fine cattle. There was a brisk demand for Shorthorn bulls at this show, and many were sold for foreign export.

Aberdeen-Angus cattle were led for champion by the magnificent old bull Equestrian 9953, bred at Ballindalloch, and breed champion at Perth in 1896, as well as first at Dumfries in 1895. He is gay and handsome, and showed himself, in spite of his seven and a half years, as gaudy as a two-year-old. Apart from Equestrian, whose owner is Colonel Smith Grant, of Auchorachan, the champion of the bulls was Sir George Macpherson-Grant's Prince Ito 12869, a wonderfully well-fleshed bull, greatly improved since last year, when he was hardly in the running. He was champion all round in 1897. Another fine bull was the two-year-old Diaz 14272, bred at Aldbar, and owned by Mr. W. S. Adamson, Careston Castle, Breebin; and Mr. Hugh Urison, Milton, of Noth, had first with his yearling Hengist of Pitpointie, which stood first at the Perth sale in spring. The champion cow was Mr. Smith's Petalite 22270, bred by Mr. Simpson, Kirk-side, Banff, and from Powrie. McClement Stephenson and the Earl of Strathmore were, as usual, very hard to beat in the younger classes. The former had first and second for two-year-olds, and the latter, for the fifth year in succession, had first for yearling heifer. She was got by the famous bull, Boaz of Ballindalloch, and is simply perfect in her hind quarters.

Amongst the Galloways, Sir Robert Jardine's fine herd at Castlemilk provided both male and female champions, the breed championship going to his cow, Nancy Lee 2nd of Castlemilk, a beauty. The Athotfold was providing the champion of Highland breed in the three-year-old bull, Calum Riabhach II, 1325, which carried off the same honor

a year ago; and amongst the Ayrshires champion honors were worthily bestowed on the famous Mid-Ascot herd of the Messrs. McAllister in Bute. They showed splendid milk stock, which fittingly represented their high-class herd.

THE SHEEP.

Amongst sheep, the extraordinary feature was the success of Mr. Charles Howatson, of Glenbuck, with Blackfaces (he was first in every class, and took many other prizes), and of Mr. Robert Wallace, Auchinbrain; Mandeline, another Ayrshire man, with Border Leicesters. The championship of this breed, however, went to an Angus man—Mr. David Hume, Barreilwell, Brechin, for a beautiful grimmer of surpassing merit.

"SCOTLAND YET."

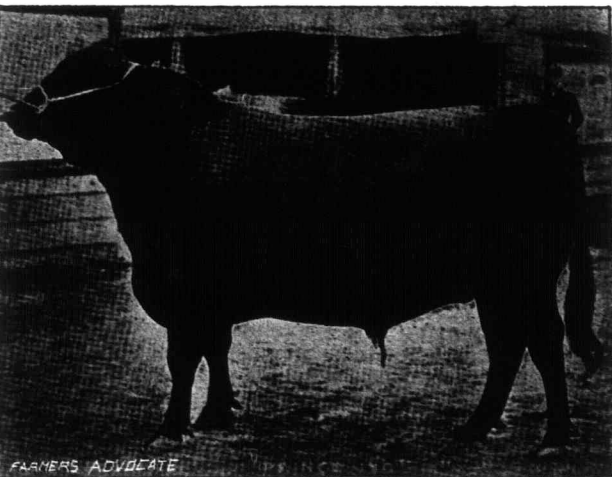
Larger Clydesdales Wanted.

To the Editor FARMER'S ADVOCATE:

SIR,—Mr. David Burns' letter in your last issue, on "Mares and Foals on Pasture," is a timely and practical one, and from which very little exception can be taken. His statement "that a great many Clydesdales of the present day are becoming finer and smaller and taking too long to mature" requires more than a passing notice, as this is unfortunately too true, and it is just possible that inbreeding may have done its share and carelessness played its part. However, my belief is that the craze of late years for quality, even at the loss of size and weight, has been the principal cause, until to-day we have plenty of animals weighing from 12 to 14 cwt., but few reaching 16 cwt. or more. This is to be deplored, as the latter class are worth almost anything the breeder or farmer may ask for them.

What is the remedy? Is it by using an outcross such as the Shire suggested by Mr. Burns, or quietly drifting back to the use of such stallions as we were so proud of 25 years ago—larger and somewhat rougher though they were.

The Clydesdale of to-day has all the useful characteristics of the heavy horse, except weight



ABERDEEN-ANGUS BULL, PRINCE ITO 12869. Winner of first and special prizes at the Highland Show, 1899. PROPERTY OF SIR GEORGE MACPHERSON GRANT, THE CASTLE, BALLINDALLOCH, SCOTLAND.

and size, but I would hesitate long before using any such cross as the Shire, especially such stallions as have been imported into Canada. I would urge: think less of quality and go more for the stronger, even if rougher, pure-bred Clydesdale stallions. We should not longer hesitate, as the difference in price between the medium and heavy weight is too great to continue in the old way.

Ontario Co., Ont. WM. SMITH.

Raising Foal on Cow's Milk—Cure for Sprain.

To the Editor FARMER'S ADVOCATE:

SIR,—I have seen in July 1st ADVOCATE about raising a colt by hand, and I don't agree with the advice given. I will now give you my experience with one which is now just one and a half months old. Its mother never got up after foaling. I feed it six times a day on cow's milk (cold), without any water. I sweetened the milk with maple syrup for a while. I used about one gallon of syrup, and then weaned it from that. The syrup is to regulate its bowels. If too loose give it a little less, as you see it needs it. It is doing just as well as it would on its mother. It is now starting to eat a little hay. I keep it in all the time, either in a box stall or in the yard. It has a small rupture at the navel. I would like to know if it would be better to do anything for it. The reason I tried the pure cow's milk cold with syrup, I have seen three or four children raised on it. The mother never warmed the milk, and the doctor could hardly believe till he saw how well the children grew.

I will now give you a cure for a sprain. Take spirits of turpentine and salt butter, equal parts. Allow it to simmer on the stove in an earthen vessel, and when cold enough rub the joint well. Then saturate a woolen bandage with it and roll round the joint. You never tried a better cure.

Huntington Co., Que. WILLIAM BROWNLEE.

Herefords at Home.

THE HEREFORDSHIRE AND WORCESTERSHIRE SHOW.

This annual show is one at which one generally finds the Hereford cattle in their greatest force and strength. This reputation was fully maintained at the meeting of this society which took place on June 13th to 15th last at Stonebridge. There were four classes for bulls, five for females, and one family class—i. e., for bull, cow and offspring. In this latter class—a small one, but of good merit—Mr. E. White secured first place with Tedstone President, Dorothy 3rd and her calf by the aforementioned bull; Mr. J. Tudge, a name well known amongst Hereford men, being second with Viscount Rupert, Ruthem and her calf by the aforementioned bull; Mr. P. Baldwin being third; and W. H. Davies, E. N. In the open bull calved in 1898, a very good, even class, Mr. A. E. Hughes was to the front with Prosperous, by Albion 15027; Mr. W. Tudge being second with Goldsmith, a capital bull; whilst third honors went to Maximilian, a first-class bull of Mr. R. Green's; the same exhibitor also being R. N. with Climax. Messrs James Edwards, A. R. and G. W. Firkins and Capt. E. A. L. Heygate were winners in the local class. Two-year-old bulls—a small entry, of uniform merit and good quality—were headed by Nonpareil from Mr. A. E. Hughes' noted herd; Earl of Coventry being second with a very even-fleshed bull, Miser; and Mr. Laughton Moore third with Earisfield. The old bull class was also one of very considerable merit, Messrs. A. E. Hill and E. J. Lewis being rightly placed first with Newdigate, a grand bull, bred by Mr. J. H. Arkwright, by Pearl Cross, out of Lively 18th, by Hilarity; Iron King, from Mr. E. Yeld, coming in for second honors; and Admiral, from Mr. W. A. Andrews, was third. An even and good class of yearling heifers were headed by Mr. R. Green's Lady Help, by Diplomat 13323, her closest competitor being Waterweed, owned by the same exhibitor and got by the same sire; the third entry from this herd, Red Rachel, by Block Test, being R. N.; whilst the exhibits of Mr. S. H. Armitage and Mr. P. Gordon were placed respectively third and fourth in the award list. In the two-year-old heifer class Mr. W. Tudge, with a beautiful heifer, Leinthall Beauty, by Rupert (16366), led the way, followed by a pair of meritorious heifers, of grand type and character, from Mr. J. Tudge's herd at Duxmoor—i. e., Lady Duxmoor, by Lord Letham 13037, and Wilton Star, by Forest King 18364—came in for the second and third awards. In the cow class Mr. R. Green came first with "Cedar," a four-year-old; Mr. R. D. Cleasby second; with Dora, from Mr. J. Tudge, R. N. The pair of heifers class was a really good one, in which were some very excellent yearling heifers, the first place being filled with a grand pair from Mr. W. Tudge's herd, New Year's Gift, by King George 18422, and British Beauty, by Goldbox 15339; Mr. W. T. Bamely's pair being second; and Mr. John Tudge third.

There was a capital lot of Shorthorns shown, and Messrs. R. Stratton, John Handley, George Harrison and J. Deane Willis were the leading winners.

Nature Study.

The Agricultural Department of New York is doing a work through the public schools of that State which is worthy of emulation everywhere. Leaflets, designed only for the eye of the teacher, are issued, giving instructions as to how to train the pupil in perception and develop its appreciation of the processes of nature which are constantly within the range of its view. The teacher is told to avoid technicalities beyond the limits of necessity, and to burden the pupil very lightly with definitions and classifications, leaving the child to supply as far as may be these omissions. Leaflets already issued bear these titles: "How a Squash Plant Gets Out of the Seed," "How a Candle Burns," "Four Apple Twigs," "A Children's Garden," "Some Tent Makers," "What is Nature Study?" "Hints on Making Collections of Insects," "Leaves and Acorns of Our Common Oaks," "Life History of the Toad," "The Birds and I," "Life in an Aquarium," "How the Trees Look in Winter," "Evergreens and How They Shed Their Leaves." A tactful teacher finds an immense field of possibilities just here, and can invariably enliven a dull hour or concentrate flagging attention by giving a lesson from nature. In no direction is popular education moving more steadily than toward the essentially sensible and practical.

Winnipeg Industrial Exhibition.

The Winnipeg Industrial Exhibition, from July 10th to the 15th, was a great advance on all its predecessors, the attendance surpassing all previous records. The weather was beautiful.

Among the many distinguished visitors to the fair were: H. F. Brown, the well-known Shorthorn breeder and exhibitor, of Minneapolis; Capt. Thomas Robson, of Ilderton, Ont., breeder of Shorthorns and Lincoln sheep; Wm. Graham, the celebrated horseman, of Claremont; Henry Wade, Registrar of Dominion Live Stock Records; Dr. Jas. Fletcher, Dominion Botanist; J. X. Perrault, Dominion Commissioner to the Paris Exhibition; and the stock judges, Messrs. John Davidson, Ashburn; Wm. Hendrie, Jr., Hamilton; Dr. Willoughby; D. B. Charles, Galt; Wm. Watt, Salem; Wm. Stewart, Menie; J. C. Snell, London; Sharpe Butterfield, London; and Prof. Haecker, of the Minnesota Agricultural College.

On succeeding pages we give complete reviews of the leading departments of the show:

HORSES.

In accordance with the upward move of the horse business, the interest in the horse exhibition is increasing, especially in the heavy draft, general purpose, and carriage classes. These classes appeal more directly, and properly so, to the farmer breeder. The number of exhibits was not large, yet the visitors to the ringside and the stalls were quite numerous.

CLYDESDALES.

Clydesdales were the first class to face the judge, Mr. Jno. Davidson, of Ashburn, Ont. Macmillan's (Brandon) Burnbrae, Cartwright's (Russell) Golden Hero, Ross' (Cypress River) Aberdeen, composed the ring of aged stallions, and were a good line. The competition was very keen between the two first-named horses. The great bone, good feet, legs

is a fairly good mare, but could stand more bone for the draft class (3-year filly). In two-year-olds, D. T. Wilson's bay Queen won 1st. She is a beauty, having good bone and feet, and plenty of substance. The Prince of Eastfield filly, belonging to Stewart (Dugald), is a good one, but had to be content with the blue ribbon. Only one animal was shown in the yearlings, a very fair bay filly of Wilson's. In foals, a sorrel filly belonging to Cummings won 1st, Cartwright's colt foal, Harry, getting 2nd place. The draft teams excited a lot of interest among the bystanders. Lawson (Thornhill) got 1st, with a very good, blocky team. Wilson's team were 2nd; being young, and hardly used to team work, hence were fidgety. They will make a good pair later on. The 3rd prize team belong to the Lake of the Woods Milling Co., and are of Percheron stock. The sweepstakes mare, any age, went to Wilson. This is a good mare. Feet and limbs pretty good. Many judges, however, would have placed the Thornhill mare 1st. She is a very good mare, with lots of action.

Inkster getting the red ticket with a foal out of Fi Fa. The stallion progeny prize and special went to Sharper.

ROADSTERS.

In Roadsters the competition and quality was fair. Hardy's (Pomeroy) Birdie, a good brood mare, with blood-like character, taking 1st; Preston, of Pilot Mound, got 2nd with a bay; Henderson's (Fernton) mare being 3rd. Two-year-olds were a fairly good class; Moffat's May, by Stanton Chief, getting the red ticket; Brown, a breed-looking colt, by Dr. Hurd, out of a native mare, getting 2nd place. Yearlings were few; Preston, Pilot Mound, getting 1st with a chestnut filly. The foals were numerous, but none of them of surpassing excellence. In the teams there were quite a number of entries. Dr. Hinman won with a very fine black team of stylish-going horses; the others were only average quality. Jas. Bray won 2nd prize in Roadster teams with a pair of nice horses, the get of Thoroughbred Kilburn.

CARRIAGE.

Carriage horses were judged by Wm. Hendrie, Jr., Hamilton, Ont. In the aged stallion class Knittel Bros.' (Boisevain) Knight of the Vale had a walkover. This wonderfully good horse, in spite of a heavy season, came into the ring as good as ever. He is a good type of a horse for the Manitoba farmer to use. Only one animal was brought out for the three-year-old stallions. In brood mares McDermid, Winnipeg, got the red ticket. This mare is a good one, and has won in good company several times; 2nd prize went to Scott's (Atwell) bay mare. A rare good mare, by Western Sprague, came out in the three-year-olds; she is owned by Mullen, Cypress River, and was considered by the judges as being of superlative merit. In the two-year-olds some good colts were shown. Fraser got 1st with a good gray colt, Jack, being hard pressed by Scott's (Atwell) bay Victor, which would have been higher up only he lacked the necessary action required of a carriage horse; 3rd place also went to Fraser. In yearlings Fraser again won; Wishart's colt, by Kilburn, taking the blue ticket. Foals were a fairly good class, Fraser winning 1st, with McDermid 2nd. The Fraser exhibit are the get of Disturbance, out of common mares, and show how useful the Thoroughbred blood may be to the farmer breeder. The carriage teams were not numerous; Stickle, of Carberry, again winning with a big, upstanding pair of bays; McDonald, of Emerson, got 2nd place with gets of Sharper and Wildmont. In the singles Maw got 1st with a good mare, Mabel Sprague, a mare that showed quite a turn of speed; Dr. Simpson got 2nd, and Watson, Pilot Mound, 3rd prize. The 2nd and 3rd prize lack height to properly come in the Carriage class. The Stickle entry was withdrawn owing to a misunderstanding at the time of judging, as it had already been shown as one of a team. Knittel had a walkover with Knight of the Vale in the progeny prize.

HACKNEYS.

Hackneys were judged by D. B. Charles, Galt, and although few in number, yet were good, the 1st and 2nd prize stallions especially so. R. I. M. Power's (Carberry) imp. March Past won out. This is a grand, good horse, especially for use on compact mares; he has great action and size, and owing to his thin condition looked a little long in the middle. Mr. Hendrie stated to the ADVOCATE



PRINCESS. GOLDEN BELLE. CHIEF JUSTICE -2796-. NECKLACE OF POMEROY. EVELINE.

YOUNG HERD OF SHORTHORNS.

The calves won first prize as four bred and owned by exhibitor. They were all sired by Manitoba Chief -3044-. The group of five were the first-prize herd, all under two years old, winning special given by Dominion Shorthorn Breeders' Association.

ALL OWNED AND BRED BY ANDREW GRAHAM, POMEROY, MANITOBA.

and feather of Burnbrae won him the red ticket; yet, so close were the horses that it was no disgrace to take second place. Burnbrae has lots of size and substance, as shown by his present weight of 1,950 lbs., and it is only a pity that there are not more of his type in Manitoba. This horse is of the Macgregor-Darnley blood, so is bred right, even to suit the most fastidious draft horse fancier. Cartwright's horse, Golden Hero, is a good one, and by his progeny, a number of which were on the grounds, proves his right to be considered an All horse and sire. The judge considered the two horses as of extra quality. The balance of the Clydesdale classes showed lack of substance, although there were a number of good individuals. Mr. Davidson's opinion seemed to be that the stallions used of late years have been about two to three hundred pounds too light. In the three-year-olds, Byerley's (Cook's Creek) Gem Prince had it all his own way. He is a sweet colt, with a good middle and limbs, although his hocks might be a little finer. If a little larger, he would make a very strong horse in future competitions. Only one two-year-old stallion appeared, Hamilton's (Coalfields, Assa.) Pride of the Baton, and was awarded the red. The brood mares were good. Thompson's (Hamiota) Lady Almondale again took the red ticket. This is a rattling good mare, and has the essentials of a draft mare—good bone, legs and feet. As a matron she is a success. She has been a winner from foalhood up. Wishart's (Portage la Prairie) Lady Granite is a good one of the right sort, but had to be content with the blue. However, she got her revenge in the foals. Jones' (Atwell) Maud took 3rd place. In brood mare and two of her progeny, we fancy Thompson would have liked competition, as he has the animals to win with. Three-year-old fillies went to Byerley's Lady Ellen. Two-year-old fillies was a stronger class. Purves Thomson's (Pilot Mound) Lady McArthur 2nd is a rare good one, and was able to capture the red. This filly will, barring accidents, make an extra good mare, and should be heard of in the future. Thompson's (Hamiota) Admirer took 2nd, 3rd going to Wishart's Lady Tower. The yearling filly class was fair. The foals were a good class, Wishart's Lady St. Gaten, a very good sorrel filly, out of Lady Granite, winning the 1st premium. J. B. Thompson had to be content with 2nd, with a very promising colt foal; the Jones bay colt foal in 3rd place. Mares of any age was a strong class, and went to J. B. Thompson's Lady Almondale. In stallion and three of his get, Golden Hero was shown. The progeny are of a good, useful type.

SHIRES.

Shires are always weak, numerically, at the Industrial, and were fewer in number than usual. Only two Shires appeared. Woodman's (Rathwell) Blacksmith got the 1st premium. This horse is well known, and still preserves his old-time action, lacking in size, yet, judging from his breeding, which is gilt-edge, his stock should be good. J. A. Macmillan's Shire stallion, Nailstone Morning Star 2nd, was unable to be in the ring, being taken sick at Brandon after a big season. The sweepstakes for aged stallions, Clydesdales or Shires, was Burnbrae's, as was to be expected. The Brandon farmers are to be congratulated in having such a useful horse available.

DRAFT HORSES.

In draft horses, Wilson, of Assissippi, was again on deck with a lot of good stock. The brood mares with foals were an average exhibit, Cummings' (Lone Tree) Sorrel Daisy winning 1st. Cartwright's Kate

animal should be clearly defined. It is not advisable to allow progeny, which were shown either as draft or carriage, to again come before the judge as general purpose stock. The judge was placed in an awkward position, and had he withheld the prizes in that section, it would doubtless have been more correct, and more satisfactory. The brood mares were only three in number. Wishart won with the stylish bay, Lady Coleridge. This mare has capital feet and limbs. Cartwright's mare was 2nd—a good mare, with clean limbs and good action. The 1,350-lb. brood mare class had only one exhibit, a stylish gray mare, belonging to Fraser. Brood mare and two of her progeny brought out some good stock. Wilson got 1st with his sweepstakes mare and two of her progeny—three very good animals. Her colts were draftlike in character; in fact, had won in that class. Cartwright took the blue ticket, with a gray mare and progeny. They were good individuals, but not in as good shape as the others. Fraser took 3rd place with his gray mare and two carriage colts. Cummings (Lone Tree) had it all to himself in the three-year-olds. Two-year-olds were a good class, the red going to Russell's (Madford) roan mare, Queenie, a very nice mare indeed; has the size, action, and quality necessary for her class. She was an outstanding winner here. Bradley got 2nd with a sweet filly, Wilson getting 3rd place. In yearlings, 1st and 2nd went to Wilson, Cartwright taking 3rd place. The quality was only average. In foals, Wishart got the red, with a colt by St. Gaten. The teams were over 2,700 lbs. First prize went to Edwards (Kerfoot), with a cracking good team, having good size, action, and finish. This team was raised in Iowa, and are sired by a Shire stallion. Wilson got second here again. The prize for teams under 2,700 lbs. was won by Wilson. The sweepstakes mare or gelding competition brought out a good exhibit, Wilson winning with his bay mare, Gentle. Had the judge awarded it to Queenie, a grand roan two-year-old, it would have suited equally well. The chances are that the decision would be reversed by another judge. Anyhow, the merits of both are pretty nearly equal, with, we think, the balance in favor of the roan.

STANDARD-BREDS.

Standard-breds were passed upon by Dr. Willoughby. That good old veteran, Sharper, had it his own way, and now sports the red ticket. There were several other good horses, such as John Henry, Stanton Chief, Tagent Jr., and Pathmont entered. In three-year stallions, Hargrave's (Winnipeg) Gordon Sharper won out; Knittel's (Boisevain) Alcalava 2nd, and Moffat's (Souris) Harry Stanton 3rd. Only one yearling stallion was shown—a fair specimen owned by Conley, Winnipeg. In brood mares the Conley mare, Belle W., a breed-looking mare, got 1st, 2nd going to a smooth mare, Fi Fa, owned by C. Inkster, Winnipeg. Moffat's two-year-old filly won in her class,

POLLED ANGUS PRIZEWINNERS.

Chiltern of Brandon, first prize and sweepstakes aged bull; Black Annie, first prize aged cow; Black Prince, first prize bull calf at the Winnipeg Industrial.

THE PROPERTY OF HON. WALTER CLIFFORD, AUSTIN, MAN.

that this is the type of Hackney now being extensively used in England, and that the sire of the high-priced horses at Sandringham sale is of just such a large type. Macmillan's (Brandon) Prince Danegelt is a good horse, and would by many be fancied for 1st place; he is a very compact horse, with lots of substance, good bone, feet and legs, but was faulted by the judge for his lack of action. The 3rd prize horse, Claimant, was outclassed altogether. In the competition for the gold medal given by the Horse Breeders' Association, Prince Danegelt was an easy winner.



THOROUGHBREDS.

Thoroughbreds were quite numerous, and with some good newcomers excited a lot of interest. In stallions four years or over, five horses faced the judge, Wm. Hendrie, Hamilton. Jose Phillips took the red ticket. He is a breedy-looking race horse, and resembles his sire, Great Tony. Besides being a race horse, he has sired such good ones as Clown, Didsbury, Yukon, Pickaninny. Rumpus, a big brown horse, owned by Fulton, Brownsville, Ont., got 2nd place; he is a very rangy fellow, and has a stride like a road horse. Power's Hard Lines got 3rd place, and in spite of a heavy season, appeared in good shape, and was well thought of by the judge. A very interesting and useful competition was for stallions best calculated to improve the common

printed catalogue, so that there must have been fully 150 head of Shorthorns in competition. In addition to these there was a splendid contribution of over 30 head from the famous Prairie Home herd of Hon. Thos. Greenway, the farmer Premier of the Province, which were out for exhibition only and not for competition, and which attracted much attention, and were the subjects of general admiration.

The principal exhibitors were J. G. Barron, Carberry; W. S. Lister, Middlechurch; F. W. Brown, Portage la Prairie; D. Allison, Roland; Andrew Graham, Pomeroy; Purves Thomson, Pilot Mound; Walter Lynch, Westbourne; Thos. Speers, Oak Lake; J. S. Robson, Manitou; Geo. Allison, Elkhorn, and H. O. Ayearst, Middlechurch. Single entries were made by many others, who were, in several instances, successful in winning prizes. Mr. W. B. Watt, Salem, Ont., was the single judge, and he did his work expeditiously, without undue hesitation, with a confidence born of experience in the handling of high-class cattle, with general satisfaction to onlookers, and with little, if any, complaint from exhibitors.

The section for bulls four years old and over included Mr. J. G. Barron's red seven-year-old Topsman, by Stanley, dam Nonpareil Victoria, a first prize winner and champion in former years, and sire of the champion bull at the leading shows in Ontario last year and in several former years. Topsman carries his years easily and is fresh and smooth yet. His levelness of top and bottom lines, width and fulness of crops, thickness through the heart, the perfect setting on of his tail, the length and thickness of his thighs and fulness of twist, and his grand constitution evidenced by his great heart-girth and superior quality of flesh, made him invincible in his class, and carried him safely through in the competition for first honors in his section and the male championship of the breed. In the former case he had to contend with Purves Thomson's doughty Caithness, the red four-year-old who won 1st in the same section and headed the Premier's 1st prize herd last year, and was favorite with not a few this year. His level lines, great scale, massive and majestic appearance and many good qualities made him a powerful rival. He was on this occasion given second place. Mr. Lister showed 16th Crqwn Jewel, a bull of great substance and thickness of flesh, who was first as a three-year-old at Toronto last year, where he was shown in fine bloom; but on this occasion he was rather overfitted and walked clumsily, which was greatly against his appearance. He was placed third.

Three-year-old bulls were headed by F. W. Brown's red Lyndhurst III., by the sire of Gem of Athelstane, the champion female at Winnipeg in 1898. He is a bull of good parts, deep-bodied, level, and of fine quality and character, and was a strong claimant for the championship. Andrew Graham's roan, Robbie O'Day, by the Duthie-bred imp. Prime Minister, and his dam by Challenge, made a worthy second. He shows fine character, and will develop into a grand old bull, while his stock is showing the influence of the good blood that is behind him.

In two-year-old bulls the first place was given to Lakeview Chief, a red, shown by Geo. Allison, Elkhorn; and the second to Mr. Lister's Heir of Parkdale, by Gravesend Heir II. Yearling bulls made one of the most interesting sections in the show. In this were three imported bulls, all good ones, yet only one found a place in the prize list. He is Baron's Pride, imported last year by Messrs. Cargill, and shown by Thomas Speers, Oak Lake. He is a sappy, substantial roan, with a good quality of flesh and hair, and is a thrifty sort. He was awarded 1st honors, second going to Riverside Stamp 2nd, bred by Thos. Russell, and shown by D. Allison. He is of the approved type, low-set, long and level, with deep ribs and flanks, a good head, and fine handling qualities. W. E. Baldwin won third money with Village Duke, a roan bred by Andrew Graham, and sired by Village Boy. It may be surmised that the winners were of no ordinary sort, when Mr. Barron's imp. Nobleman

and Mr. Lister's imp. Prince Alpine, which are both right good ones, and have gone on well in their new homes, were left unplaced. Bull calves were a strong list, numbering 15, with hardly a weak one in the lot. First honors were won by J. S. Robson, Manitou, with Royal Judge, a rich roan, of fine form and quality, bred by Mr. Greenway, and sired by Judge, the champion bull of last year. Second prize went to Mr. Barron for Judge 2nd, another roan, of similar style and quality, and a close competitor, bred by the Premier, and sired by Judge; while 3rd prize went to Andrew Graham for Chief Justice, by Manitoba Chief, which many would have chosen for 1st—a thrifty, stylish, level, well-proportioned calf, that evidently has the material in him to make a high-class bull. Mr. Lister won 4th prize with Advance, by Gravesend Heir, and showed two other exceedingly good ones, Manxman and Twilight, by the same sire. Walter Lynch showed a quartette of very meritorious calves, the get of Village Hero and What-For-No; H. O. Ayearst, a pair of very promising youngsters, by Gravesend Heir; and Mrs. C. H. Brown, Manitou, an excellent red calf, President, bred by Purves Thomson. Bull calves under 6 months numbered a round dozen, and 1st prize went to Alex. McNaughton, Roland, for Master Butterfly, by Robbie O'Day; 2nd to Mr. Lister for Crocus, imp. in dam, and by Violet Boy; 3rd to D. Allison for Daisy's Pride, a son of Daisy of Strathallan 12th, and by Hillary.

Cows over 4 years old numbered 14 entries, and were a very good collection. Mr. Lister was fortunate enough to win 1st and 2nd prizes with Rosabel, bred by Arthur Johnston, sired by imp. Vice Consul and out of imp. Rosabel, and Indian Princess, by Indian Prince, out of imp. Princess Royal 23rd; both of them of fine character and quality. F. W. Brown got into 3rd place with Gaiety 5th, by Clipper King, bred by the Watts, a lengthy, level roan, with a fine udder, and nursing a very promising calf. Among the other good ones in the section were Mr. Allison's Daisy of Strathallan 12th, bred by Mr. Simmons, the 1st prize cow of last year, shown in prime condition, and displaying an immense breadth of back, strong, and smooth, excepting at the rumps, where she has grown somewhat patchy, but she is a grand good one yet. Mr. Barron's Red Baroness 3rd, by Topsman, is another cow worthy of high commendation, having a capital back and much quality. Seven three-year-old cows lined up for review—an exceptionally good lot; Mr. Barron scoring with imp. Jenny Lind, a lengthy, level roan, bought at John Isaac's sale, a cow of much merit, and worthy of her place. Lister came in for 2nd with Crocus 24th, a straight, smooth roan, imp. by Arthur Johnston. She was handicapped by having raised the 1st prize bull calf under 6 months, or she might have made it more interesting for Jenny Lind, who has not yet calved. Mr. Allison scored in two-year-old heifers, with Jubilee Queen, the 1st prize yearling of last year in the Prairie Home herd, bred by Joe Lawrence, and sired by Indian Warrior. She is a big, strong, smoothly-fleshed heifer, with few, if any, faults in her personal appearance, and was further honored by being made the champion female of the class. Second prize went to Lister's Rose Alberta 3rd, a white daughter of Gravesend Heir, nursing a lusty calf. James Gardner, Cypress River, won 3rd prize with Blossom, a capital red heifer, bred by Mr. W. C. Edwards, and sired by Scottish Knight. Mr. Barron's Baroness 2nd and



CROCUS 24th (Imp.) AND BULL CALF.

Second prize three-year-old and second prize calf under six months, at the Winnipeg Industrial. OWNED BY W. S. LISTER, MIDDLECHURCH, MAN.

stock of the country. Thompson, McGregor, had an outstanding winner in Dermod. This chestnut horse is considered by Mr. Hendrie to be of superlative merit, and of the right sort to beget hunters. He is a well-backed horse, has raced, and is sound. The Carberry race horse, Dr. Hurd, won the blue ticket; while that good horse, Disturbance, had to be content with 3rd place. The three-year-old stallions were a very average class. The yearling stallion, Carberry, a fairly good horse, was alone in his class. In brood mares Shaw's Fulda was 1st over Becketon's Imogene II. The 1st prize mare shows her breeding rather more than her competitor. In three-year-olds and yearlings there was only one entry of each. In foals Becketon got 1st place with a youngster of good racing type, the blue ticket going to the Shaw foal by Dr. Hurd. In stallion and three of his get, Disturbance won out with three capital half-breds, the type of horses that, when properly fixed up, sell well. Dr. Hurd and his progeny had to be content with 2nd place. It is questionable whether half-bred progeny should be shown here. It would be better if the progeny were all to be Thoroughbreds, and the same procedure followed as is done with the cattle classes. In the sweepstakes, Dermod and Jose Phillips came into the ring. Both are cracking good horses, but the younger horse, Dermod, could not be denied the place, and hence is the sweepstakes horse of 1899. He is probably the best light horse on the grounds.

SADDLE HORSES.

In the saddles, V. H. G. Pickering, Minnedosa, won 1st; with McLoig's (Moosomin) Sir William 2nd; Beckton's (Cannington Manor) Miss Fox being 3rd.

In ponies, in the harness class, Power won 1st with Jumbo, Bowman getting 2nd place. Saddle ponies, 12 to 14 hands, went to A. B. Fleming, Pickering 2nd and 3rd. Harness ponies, under 12 hands, went to Woodley, Winnipeg. These ponies were the center of attraction for the children. The horse exhibit as a whole was very fair, but there is yet plenty of room for improvement, especially in the fitting of the animals exhibited. The feet of some of the stock have been neglected in the past, and it will pay the owners to look after such matters in future.

THE CATTLE. SHORTHORNS.

The active demand for beef cattle, the improved prices prevailing for pure-bred stock of this breed, and the commendable liberality of the Dominion Shorthorn Breeders' Association in granting the munificent sum of \$500 to supplement the prize list, practically duplicating the list of the Industrial in all the sections for single animals, aroused unusual interest in this class, and had the effect of bringing out the largest and best display of Shorthorns ever seen in these great western provinces. It is safe to say that never has such rapid progress been made in the introduction of first-class stock into so young a country. The Shorthorns were the largest class in the show in point of numbers, there being over 100 entries of single animals catalogued, besides those for herds and family groups, and some late entries which were not in time to appear in the



PRIZEWINNING AYRSHIRE TRIO.

First and second prize winning Ayrshire cows, Heather Daisy and Jessie Wallace, and first prize bull calf under six months, Cock o' Bendie.

OWNED BY STEEL BROS., GLENBORO, MAN.

Louise, both by Topsman, were among the short leet drawn out by the judge, and are heifers of much merit. Mr. Allison had an outstanding winner in the list of a dozen yearling heifers in Crimson Cloud, a very smooth and shapely red and white, bred by Wm. Shier, and sired by Canada. Andrew Graham had a worthy 2nd in Golden Belle, a handsome red, by Golden Royal, and F. W. Brown, a very good 3rd, a daughter of Village Boy IX. This rating left out Mr. Lister's very handsome and promising imported roan heifer, Caroline II., purchased at Mr. Isaac's sale last winter, and which had grown and kept her form well, but is a little off in her handling.

Walter Lynch came to the front in heifer calves under a year with the twin Gresette (recently illustrated in the FARMER'S ADVOCATE), a comely daughter of old Village Hero. Mr. Graham had

the second and third in his Necklace and Princess, by Manitoba Chief. Mr. Brown had a worthy first in heifer calves under 6 months in a sweet, mellow roan out of Gaiety 5th and by Lyndhurst III. Mr. Borron won 2nd with a nice red calf from imp. Rosy 5th, and Mr. Ayearst 3rd with the roan Crimson Duchess, by imp. President.

In the herd and family groups, the 1st prize for four calves under a year, bred and owned by exhibitor, went to Andrew Graham for one bull and three heifers, all by Manitoba Chief; and 2nd to Walter Lynch for a bull and heifer by Village Hero and two bulls by What-For-No. The prizes for bull and two of his get were awarded 1st to Barron, for Topsman and his daughters Baroness 3rd and Louise; 2nd to F. W. Brown, for Lyndhurst III. and two of his calves. For cow and two of her progeny—progeny bred in Manitoba or N.-W. T.—Mr. Lister got first place with Rosabel, the 1st prize cow, and her daughter, Rosabel III., and son, Heir of Parkdale. Mr. Ayearst won 2nd with Crimson Queen, Crimson Princess and Crimson Duchess. For herd, one bull and three females, bred in Manitoba or N.-W. T., Barron won 1st with Topsman, Baroness 3rd, Louise and Red Bess. A. Graham 2nd, with Robbie O'Day, Golden Belle, Necklace of Pomeroy and Princess. Lister 3rd, with 16th Crown Jewel, Rosabel 3rd, Daisy Earl and Rose of Alberta 3rd.

The open herd prizes for 1 bull and 4 females were awarded as follows: 1st to Barron, for Topsman, Red Baroness, Jenny Lind 4th, Rosy 5th and Louise; 2nd to Lister, for 16th Crown Jewel, Rosabel, Indian Princess, Rose of Monrath and Rosabel 6th; and D. Allison 3rd, for Riverside Stamp, Daisy of Strathallan 12th, Jubilee Queen, Crimson Cloud and Prairie Flower.

For herd, 1 bull and 3 females, all bred in Manitoba or N.-W. T., the special gold medal was awarded to J. G. Barron, for Judge II., Baroness III., Louise and Red Bess.

The special prize by the Dominion Shorthorn Breeders' Association for herd of bull and four females, all under two years old, the 1st prize was won by Andrew Graham (whose record as a winner with a small herd of his own breeding at this show was distinctly remarkable), for Chief Justice, Golden Belle, Necklace of Pomeroy, Princess and Eveline; 2nd by D. Allison, for Riverside Stamp, Crimson Cloud, Prairie Flower and 8th Constance of Maple Lodge.

Prairie Home Herd.—The selections from the herd of Hon. Mr. Greenway occupied a whole barn, which was gaily decorated with flags and bunting, and was a center of attraction for stockmen. Among the notable animals in this string were the roan three-year-old bull, Judge, the championship bull of the breed here last year, looking well, in moderate condition. His long, level quarters, wealth of natural flesh and fine handling qualities make him a fit head for a high-class herd, and his calves proclaim him a successful sire of the right sort; the first and second prizes for bull calves at this show going to his sons. The imported red yearling Jubilee, a thrifty, compact, well-proportioned bull of fine type and character, has been selected to breed to the daughters of Judge, and promises to worthily fill the place. The first and second prize bull calves above mentioned were bred in Mr. Greenway's herd and sold some time previous to the exhibition, to be delivered here, and quite fulfilled the expectations of the purchasers. The roan four-year-old cow, Freida, winner of 1st honors as a three-year-old last year, has her second calf by her side, a handsome roan, by Judge, and she keeps her marvellous smoothness and quality unimpaired. Gem of Athelstane, now in her three-year-old form, who was 1st prize two-year-old at this show in 1908, and the championship female of her class, is as smooth as ever, and is one of the most perfect Shorthorns of her day. The massive imported cow, Missie 142nd, of the famous Uppermill tribe of that name, and two other charming young imported cows, Red Rose and Clara 33rd, were included in the display, as well as a number of other typical members of the herd, which space forbids us to mention. In addition to these there were many fine animals in competition which had been sold during the year from this herd and were winners in the different sections, and others which were strong claimants for honors.

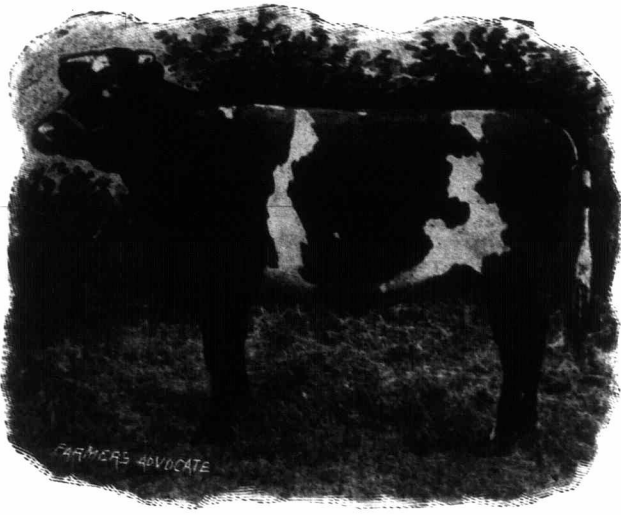
POLLED ANGUS.

The exhibit of black polls was smaller this year than usual, the Welwyn herds of J. Traquair and F. J. Colyer being missed; the exhibitors being Hon. Walter Clifford, Austin; Alex. Cummings, Lone Tree; and A. B. Fleming, Brandon, a new exhibitor in this class. Breeders do neither themselves nor their stock justice by showing them in poor condition. The public like to see show stock in better shape than the ordinary stuff that runs on the prairies. Some of the entries in this class were not fit for the showyard, being unmanageable as well as thin and scrubby-looking. Clifford got 1st and sweepstakes on aged bull, Chiltern of Brandon, a bull of good size, carrying a fair amount of flesh. He is well balanced, and with some fitting would make a capital showing. Cummings' Victoria's Montrose, bred by J. Traquair, was a close second, but lacks size, and was in thin condition. Clifford was also first in bull calf, and in aged cow with Black Annie. Cummings got most of the other 1sts, including yearling bull, Rosebank Lad; and three-year-old cow, Rosebank May 2nd; two-year-old, Rosebank Susy 2nd; yearling, Rosebank Beauty 3rd; heifer calf, Rosebank

May 3rd; also the herd prize, and Cattle Breeders' diploma for two calves, bred and owned by exhibitor.

HEREFORDS.

In this breed, J. E. Marples, Deleau, Man., made the strong showing, having recently purchased many of the best things in Wm. Sharman's herd. John Wallace, Cartwright, was his principal competitor, while Wm. Sharman showed one entry, the two-year-old bull, Pride of Westview, a bull of good size and excellent handling quality. John Cram, Pilot Mound, also had one entry in the bull class. All the stock from the Poplar Grove herd of J. E. Marples came in right off the grass, without any special preparation; and while more flesh would have made a better showyard parade, they all were in excellent condition. In the aged class, Spotless of Ingleside, bred by H. D. Smith, Compton, P. Q., was an easy first. He has size, and is well and evenly covered. Wallace's Dominion Hero is a fairly good bull, particularly in the fore end, but a little bare on the back. A couple of his calves won 1st and 2nd in the bull class; the 1st, Sir John, being particularly well covered on the back, thick quarters and thighs. Spotless of Ingleside was sweepstakes bull any age. In females, Mr. Marples was without competition, but presented a nice, even lot. Constance of Breezelawn, a very neat, smooth, thick-hearted four-year-old, defeated her bigger but less stylish stall-mate, Countess of Ridgewood. In three-year-olds, Flossie turned down Daisy of Ingleside, the latter a growthy, fine-quality heifer, but hardly in the finish of her successful companion. In the two-year-old Isabel, bred by Wm. Sharman, by Cronkhill Chief, out of Belle of Fellhampton, Mr. Marples possesses one of his very best numbers. She has size, thickness, depth, and carries an abundance of flesh, evenly distributed; and withal has lots of style and quality. Her mate, Duchess of Poplar Grove, is smaller—a little light behind, but good forward. The one-year-old heifer, My Valentine, by Valentine, out of Lady Wilton, is one of the sweetest things in the string, full of quality and breed character. The first prize calf went to Spot of Poplar Grove, by the sweepstakes bull, out



CRIMSON CLOUD.

By Canada—1906—, out of Crimson Flora. First prize yearling heifer at the Winnipeg Industrial.

OWNED BY D. ALLISON, ROLAND, MANITOBA.

of Heather Bell, and a nice sweet thing she is, and a good thrifty doer. The herd prize went, of course, to the Poplar Grove herd.

HOLSTEINS.

Whether the breeders of the black and white record-breakers have lost pride in their breed, or the active demand and good prices for stockers have caused them a temporary discouragement, is a matter, perhaps, of speculation; but certain it is that the exhibit of Holsteins was not up to previous years, and it was the common opinion of those about the arena that the entries were brought out in poor fit—mostly right from the pasture fields—with harsh hair and sunburnt hides. Whatever may be said against showing stock in too high condition, it certainly does not help to popularize a breed to show them in poor fit. A year ago six aged bulls faced the judge, this year but two—the 1st and 3rd winners of the previous year. Oughton Bros., Middlechurch, got 1st with Royal Duke, a bull of great scale and very well brought out. He is, however, somewhat beefy and thick in the thighs for a typical Holstein. His sire, Yekma Mercedes King, from the herd of Jas. Glennie, Longburn, was placed second. He is up in years and very low in condition. In two-year-olds, W. E. Baldwin, of Manitou, a new exhibitor in this class, drew the red on Prince of the North, bred by D. Marwood, of Treherne; Glennie second on Tempest 3rd Clothilde; with A. B. Fleming, another new exhibitor in Holsteins, from Brandon, third on Pride of Maple Grove. There were but three entries in the yearling bull class. Sir John, a son of Daisy Teake's Queen, shown by R. Waugh, made a good first. He is a bull of very fair breed character, and well brought out. Second went to Fleming's Pride of Maple Sweet, and 3rd to A. B. Potter, Montgomery, Assn., on Sir P. J. DeKol. There were just enough entries in bull calf under a year and bull calf under six months to take up all the ribbons. In the first, Oughton's was 1st, Flem-

ing 2nd, and Glennie 3rd; and in the latter, Glennie 1st, Fleming 2nd, and Potter 3rd. Oughton's aged bull, Royal Duke, got the sweepstakes. But five cows came out in the aged class, against ten in 1908. Daisy Teake's Queen was once again an outstanding winner, with her daughter, Fanny Teake, 2nd, and Rose Teake 3rd, all from the herd of Jas. Glennie. A daughter of Daisy T. Queen, Fossetta Teake, won the red for Glennie in the three-year-old class—a good cow, but not equal to her illustrious dam; Potter's entry 2nd, with Oughton's third. In the younger females there were none of special merit, the ribbons going in the following order: Two-year-olds—Fleming, Oughton, Potter; yearlings—Glennie 1st and 2nd, Baldwin 3rd; heifer calves—Fleming, Oughton, Glennie; heifer calves under six months—Oughton, Glennie. Daisy T. Queen was 1st female any age in milk, with her daughter 2nd. Glennie 1st on herd, 1st on three animals bred in Manitoba, and 1st on two calves bred and owned by exhibitor.

JERSEYS AND GUERNSEYS.

This class had about the usual representation numerically, and most of the entries were very nicely presented. The animals were in most cases the same as in previous years, but few new exhibits appearing. In the aged bull class, James Walsham, of Portage la Prairie, had an easy winner in Belvedere Signal, of Mrs. Jones' breeding. He was also declared best bull any age. He has great substance, being deep and good at the chest, has a good barrel, excellent dairy points, and was shown in fine fit. W. V. Edwards, of Souris, had 2nd with Dean of Highfield, a bull of fairly good quality, but lacking somewhat in depth; Lord Pogis of St. Lambert, shown by W. J. Buxton, of Moosomin being placed third. The call for two-year-old bulls brought out the only Guernsey in the show—Klondyke of Grand View, of Green-shields' breeding, and shown by A. McArthur, of Welwyn. He is a strong-backed bull of good quality, but deficient in depth of rib. Munroe Creamery Co. got 2nd on Linda's Pride. Edwards was alone with a very promising son of Yankee's Rosebud—Souris Chief—in the yearling class. The under-six-months bull calf shown by John Webster, Portage la Prairie, called King of Portage, was one of the best in the show—full of quality. The aged cow class contained half a dozen fairly good ones, without an outstanding winner in the bunch. The Munroe Creamery Co. had four entries, and drew the red and the white on Daisy Dean and Prairie Rose; the first, a straight-backed, deep-bodied cow, showing lots of constitution, with a fairly good udder. Edwards' Yankee Pogis was 2nd, a cow of fine quality, with a capital udder and teats; but she is very hollow in the back, and lacking in depth and substance. Edwards' Duchess Malone headed the three-year-old class. She is a fine-quality heifer, with nice square udder. Munroe's Pet of Oak Grove was 2nd. Three good entries made up the two-year-old class. Edwards again winning with Baby Malone, a young cow with nice large udder and teats, good substance and character, and a nice skin, her head, however, a trifle rough. Webster got the blue with a nice, milky-looking heifer, the dam of the 1st prize bull calf; Edwards following in third place. To the Souris exhibit of Mr. Edwards also went the prizes for yearlings and heifer calves; for females any age, in milk, on Yankee's Rosebud; but this herd had to be content with second place on herds, first going to a string of big, strong-looking, milky cows, shown by the Munroe Creamery Co.

AYRSHIRES.

There were but 4 exhibitors in this class: Messrs. Steel Bros., Glenboro; Wellington Hardy, Pomeroy; E. F. Petar, Souris, a new exhibitor, and W. M. Smith, Fairfield Plains, Ont. The judge, Wm. Stewart, of Menie, Ont., took great pains with all his work, and his decisions gave general satisfaction. He looked for quality, substance, and business capacity, rather than fancy points. Hardy's St. Patrick, was without competition in the two-year-old class for bulls. Smith got 1st in yearlings, with a fair bull, Commodore, by Surprise of Burnside; Steels 2nd, with Royal Chief, bred by Dymont, of Clappison's Corners, Ont.; and Petar 3rd with Silver Prince, a son of Steel Bros.' What-Care-I. Smith's Surprise of Fairfield, by Surprise of Burnside, out of Annie Laurie, shown in the calf class, was undoubtedly one of the finest-quality things in the class; a skin like satin, a beautiful head, neck, clean, narrow shoulder top and fore rib, strong back and loin, deep barrel, good heart-girth and flanks, and thin thighs, and quality all over. He also won sweepstakes for best bull, any age. Steels' What-Care-We, 2nd, and Hardy's Prince Patrick, 3rd. In calves under 6 months, Steels had in Cock o' Bendie, by Perfection, one of their best-quality entries, with good dairy points, and a fine skin. Steels' Royal Star, 2nd, and Hardy's St. Lawrence, 3rd. In cows over 4 years, but 5 came out; Steels got the red and the blue on Jessie Wallace and Heather Daisy. Up to this time the latter has always been the winning cow, but she is settling a bit in the back, and hardly in the prime she once was, although later down the lists she won over her stall mate in a class of 6 "any pure-breed or grade for best milk cow." The Glenboro herd, although brought in from the fields without special fitting, were all in fine condition, having a slight sunburn and hair harshness, incidental to outdoor living. Petar came in for 3rd on Lassie Jean. Midge, bred and shown by Steels, was alone in the three-year class, and their

Nellie in the two-year-old class, both What-Care-I heifers, of nice quality. In yearlings the Glenboro herd had 3 entries, winning 1st and 3rd on Lady Diana 2nd, by Stacey's Carlisle of Lessnessock, out of imported Lady Diana, and Spunky, by What-Care-I; Petar's Jenny Lind getting 2nd; while Hardy's Primrose, a heifer of fine appearance, but hard handling, did not get placed. Petar had in Lady Minto, a daughter of Surprise of Burnside, the 1st prize calf under a year, and Steels the 1st under 6 months. The Glenboro herd got 1st with Royal Chief, Jessie Wallace, Heather Daisy, Midge and Bella, and the Souris herd 2nd with Silver Prince, Lassie Jean, Stately Twin, Jenny Lind and Lady Minto. To the Glenboro herd also went the 1st and 2nd for three animals bred in Manitoba, the get of one sire, with What-Care-I's Midge, Bella and What-Care-We. Also the Cattle Breeders' diploma for two calves on Cock o' Bendie and Nancy.

SHEEP.

This department of the show was not so well filled as last year, but many really good animals were shown. Mr. J. C. Snell, of London, was the judge in all the classes.

COTSWOLDS

were shown by F. W. Brown, Portage la Prairie; A. B. Smith, Moosomin; Oughton Bros., Middlechurch. Mr. Brown scored in rams 2 years and over, with a strong sheep, of good quality, which was also awarded the male sweepstakes, Mr. Smith taking 2nd and 3rd with sheep of good quality and with excellent fleeces. In shearing rams, Oughton Bros. won 1st and 2nd. There were no ram lambs shown. In ewes 2 shears and over, Smith won 1st with sheep of good quality, one of these winning the sweepstakes for best ewe of any age, a very level, well-proportioned ewe, showing strong breed character. Oughton Bros. were 1st and 2nd with shearing ewes and ewe lambs, and also won the open flock prize, and Mr. Smith took the special prize offered by the Sheep and Swine Breeders' Association of Manitoba and the N.-W. T. for best pair, ram and ewe.

LEICESTERS

were exhibited by Alex. D. Gamley, Brandon; James Murray, Lyleton; D. Preston, Glen Ewen. Mr. Gamley had the 1st prize ram over two shears, who was also the champion winner as best ram any age; a sheep of grand character and quality, well fitted, standing on a splendid set of legs, and having a very nice fleece. Murray had the 2nd prize sheep, and Preston the 3rd, a ram that had been a winner, but was out of condition on this occasion. Murray scored in shearing rams, with a very tidy sheep, but was closely followed by Gamley, with one of larger type and good quality, but handling a little hard at present. In ram lambs, Preston scored 1st and 2nd, Murray 3rd. Murray won 1st and 2nd for ewes two shears and over, and 1st for shearing ewes; Gamley 2nd. Preston was 1st for ewe lambs. Murray won the flock prize, and Gamley the special for best pair.

LINCOLNS

were represented by one exhibitor, W. T. Lyttle, Beaconsfield, who showed a good strong lot of sheep, in good condition, and was awarded all the prizes he entered for.

SHROPSHIRE

were shown by R. S. Preston, Pilot Mound; D. E. Corbett, Swan Lake, and Oughton Bros., Middlechurch. Some very good sheep were shown, though not in as high condition or as well fitted as they might have been. Preston won 1st in aged rams, Corbett 2nd. In shearing rams Corbett was 1st, Oughton Bros. 2nd. Corbett won the sweepstakes for best ram and for best ewe, any age; 1st for aged ewes and shearing ewes; the 1st prize for flock (open to all), one ram, two ewes, and two ewe lambs; 1st for best pair, and the special prizes by the Shropshire Association for best four lambs, and for best flock, one ram and three ewes.

OXFORD DOWNS

were shown by Alexander Wood, Souris, who had out a really good exhibit of strong sheep, of good quality, and in good condition. He was awarded all the prizes for which he made entries.

SOUTHDOWNS

made a very good show, the exhibitors being W. M. Smith, Fairfield Plains, Ont.; A. B. Smith, Moosomin, and D. Fraser & Sons, Emerson, the last two named having only a few entries, and the bulk of the prizes going to the Ontario flock, including the pen prize and specials for flock by the Breeders' Associations.

HORNED DORSETS

were represented by a selection from the flock of R. H. Harding, Thorndale, Ont., which were typical animals, in fine condition, were much admired, and were awarded all the prizes for which entries were made. The prizes for fat sheep were won by W. M. Smith, Jas. Murray, D. E. Corbett, D. Fraser & Sons, and Oughton Bros.

SWINE.

The display of hogs was large in number, and the general quality was very good. In Berkshires and Yorkshires there was keen competition in most of the sections, and many very meritorious animals were brought out. Mr. J. C. Snell was the judge in all the classes.

BERKSHIRES

were shown by R. McKenzie, High Bluff; F. W. Brown, Portage la Prairie; and A. Graham,

Pomeroy, who had two or three entries. The quality of the exhibit was high-class, and the competition close in nearly all sections. In boars two years and over the contest was between McKenzie's Proud Victor, by Baron Lee 4th, and Brown's Tippecanoe, by Enterprise. The latter has been a very successful prizewinner, and has many strong points in his favor, but the flesh has fallen away from his loins as a result of age, and he was relegated, to 2nd place on this occasion. Proud Duke, with great length and strong character, carrying his flesh well up on top, was awarded 1st honors and sweepstakes as best boar any age. In yearling boars Brown won 1st, 2nd and 3rd prizes with capital hogs, his only competitor being Mr. Graham, who had one entry. In boars over six months and under a year old, Brown scored 1st and 3rd, and McKenzie 2nd. For boars under six months, McKenzie 1st and 2nd, McDermott 3rd. Sows over two years were a strong class, Brown scoring 1st and 2nd on Alma, by Manor Hero, and Cora Bell, by Baron Lee 7th, and McKenzie 3rd on Maiden Lass. Yearling sows were a grand lot, and here Brown won 1st and sweepstakes on Flower, by Fitz Lee, and 3rd on Highclere of Plainview, and Graham 2nd on Bessie Lee, by Tom Lee. In sows over six and under twelve months, McKenzie got 1st place for Artful Belle XXI., bred by Mr. Gentry, of Missouri, and got by Baron Lee 4th; a sow of fine length and good quality, smooth shoulder and a strong back. Brown 2nd and 3rd. For sows under six months, McKenzie got 1st and 2nd, and Brown 3rd. The sweepstakes for best sow was won by Brown's 1st prize yearling sow, bred by T. A. Cox, Brantford, Ont. For sow and litter, McKenzie got 1st place with Maiden Lass and a fine litter, Brown 2nd. For herd of one boar and three females, bred in Manitoba, Brown won 1st. For herd, one boar and three sows (open to all), McKenzie was 1st.

YORKSHIRES

were well shown in the female sections, the entries being numerous and the quality first-class; but the sections for boars were not well filled, and those for hogs over a year old were nearly blank. The exhibitors were: Andrew Graham and W. Hardy,



ROYAL DUKE.

First prize aged and sweepstakes Holstein bull, son of Daisy Teake's Queen.

THE PROPERTY OF OUGHTON BROS., MIDDLECHURCH, MAN.

Pomeroy; Jas. Bray, Longburn; A. B. Potter, Montgomery; and Oughton Bros., Middlechurch. Graham had the only entry in boars one year and under two—Snowman X., which was awarded 1st prize. In boars over six months and under twelve, Graham scored 1st with Snowman XI., and Bray got 2nd and 3rd prizes. In boars under six months, Graham won 1st with a young pig of fine type, imported by D. C. Flatt, Millgrove, Ont. Breeding sows over two years old were a strong class, and Bray won 1st money with Millie 4th, a sow of great length and depth, which also won the sweepstakes as best sow any age. Graham came in for 2nd with Jubilee Queen, a sow of fine type, but reduced a little in flesh by nursing a litter. Third prize went to Hardy for Primrose, a good sort. Sows over one and under two years were an exceptionally good lot, and 1st prize went to Potter for Brampton Maid, a sow of fine type, lengthy, smooth, and deep-bodied, though in moderate flesh, having raised a litter. Second went to Bray for a very handsome sow with broad back and splendid hams, but not so near the bacon type. Potter had also a good one for 3rd place. In sows over six months and under twelve, Graham showed a trio which swept the prize list. They were extraordinary and up-to-date, and easily won everything in sight in the section. Mr. Graham was also successful in the section for sows under six months, with a pig recently purchased from D. C. Flatt, which won 1st prize in strong competition, Mr. Bray winning 2nd and Mr. Hardy 3rd. For sow and litter, 1st went to Bray for a capital sow, nursing a litter of 12 splendid pigs, 2nd to Potter, and 3rd to Graham. For the best herd of one boar and three females, bred in Manitoba or the N.-W. T., Mr. Bray won 1st, as also the special offered by the Swine Breeders' Association for best herd of one boar and three sows, open to all. Graham won sweepstakes for best boar, and Bray sweepstakes for best sow.

CHESTER WHITES

were shown by R. S. Preston, Pilot Mound; K. McLeod, Cleveland; Wm. McBride, Portage la Prairie; and Oughton Bros. Many of the entries were of good type. Preston won 1st and McLeod 2nd in section for boars two years old. McBride 1st, McLeod 2nd and Preston 3rd for yearling boars. For boars over six months, McBride was 1st and McLeod 2nd. For sows over two years the rating was McLeod 1st, Preston 2nd, Oughton Bros. 3rd. Yearling sows, McBride 1st, Preston 2nd and 3rd. Sows over six months, McLeod 1st and 2nd. Sows under six months, McLeod 1st and 2nd, Preston 3rd. Sweepstakes for best sow and best boar, McBride 1st. Sow and litter, McLeod 1st, Oughton Bros., 2nd. Herd, McBride.

TAMWORTHS

were a very good class. There was not much competition, but most of the entries were creditable specimens. The exhibitors were L. A. Bradley, Portage la Prairie; W. E. Baldwin, Manitou; and R. S. Preston, Pilot Mound. Bradley won 1st for boar over one year, boar under one year, sow over one year, sow and litter, and sweepstakes for best sow any age; Baldwin taking 1st for boar under six months, sow under six months, herd of boar and three sows, and sweepstakes for best boar any age.

POLAND-CHINAS

were shown by W. M. Smith, Fairfield Plains, Ont.; Oughton Bros., Middlechurch; and W. L. Trann, Crystal City. There were some very good specimens, with fair length and smoothness, though some were too short and thick. Smith won 1st prizes for boar over two years, boar under one year, boar under six months, sow under a year, sow under six months, sow and litter, and sweepstakes for boar any age. Trann secured 1sts for yearling boar, yearling sow, herd of boar and three sows, and sweepstakes for best sow any age, also 2nd for sow under a year, and boar under a year. Oughton Bros. won 2nd for two-year-old boar, 3rd for boar under six months, sow under a year, and sow and litter.

DUROC-JERSEYS

were shown only by W. M. Smith, Fairfield Plains, who had a very useful lot, and was awarded all the prizes he showed for.

OTHER PURE BREEDS

were represented by Suffolks and Improved Suffolks, shown by K. McLeod, Dugald, who had some very good ones, and secured all the prizes he entered for.

FAT PIGS

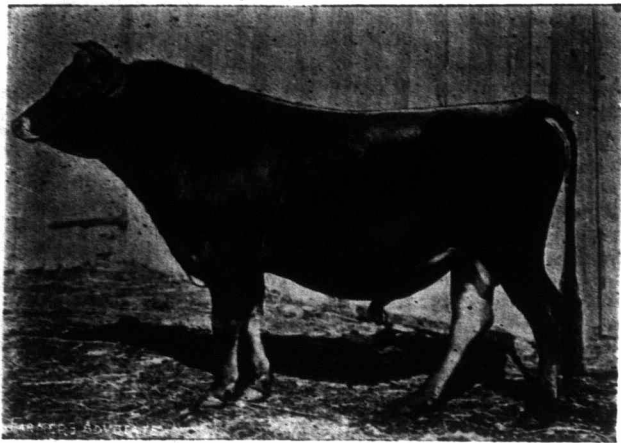
were shown by Jas. Glennie, who won 1st and 2nd prizes for best three pigs of one litter under one year, with a splendid lot of Berkshire-Yorkshire cross-breeds of approved bacon type, and R. McKenzie won 1st for best pig under six months with a Berkshire of faultless form for the packer's purposes, and W. M. Smith 2nd with a Poland-China that would fill the bill very well for the same purpose.

POULTRY.

The poultry exhibit at the Industrial is a good one, and must have been satisfactory to Mr. Chadwick, the director in charge. Exhibits were present from Ontario and the U. S. A. The Provincial birds, however, held their own well. Mr. Sharp Butterfield again placed the awards in this department. The utility breeds—Plymouth Rocks, Brahmas, Leghorns—were well represented and the competition was keen. Ling, Winnipeg, won the pen prize with G. L. Wyandottes. Kitson, Burnside, got there with a pen of White Wyandottes, Woods with the pair and also in pen of Black Wyandottes. Smith, of Fairfield Plains, showed S. P. Hamburgs, and won out. Luxton, Georgetown, Ont., got first with a fine pair of Black Leghorns; his Red Caps also took a red ticket. F. G. McArthur won in Buff Wyandottes, Ball (Portage la Prairie) in Cornish Indian Games, while Muller, of Cypress River, took first in Brown-Red Games. Ling showed a pen of large C. I. Games, also some good Langshans. Wm. Rutherford won the pen prize in Barred Rocks with a very good trio, but had to be content with second on pair. Grundy won first on pair of Barred Rocks, his male bird being of superlative merit. Smith, of Athens, Ill., got first. In Buff Cochins, Hon. T. A. Greenway got the red tickets with a pair of large birds. Dark Brahmas were a good class, the premier position being awarded to the Wisconsin exhibit. In Light Brahmas, Chadwick was quite in evidence. E. R. Collier had a pair of Anconas, a new breed to this country. They are of southern Europe origin, and it is claimed for them that they are a utility breed, laying a good number of fair-sized eggs. Midwinter won in China and Toulouse geese, the Toulouse being especially good fowl. Guineas were exhibited in fair numbers, Midwinter (Winnipeg) and Smith (Fairfield Plains) taking the honors. Maw had some fine Toulouse geese in the exhibit. In turkeys Maw's big Bronze tom again took the red ticket, both for best and also largest bird. The prizes for Rouen ducks went to the Whitewater (Wis.) exhibit, and to A. G. H. Luxton, from Ontario. E. R. Collier won the Chadwick silver cup for the best pen of Light Brahmas.

The Brandon Fair.

The Western Agriculture and Arts Association held their third annual summer fair the week immediately following the Winnipeg Industrial, July 18th to 21st. Although the Brandon Fair of 1898 was an unprecedented success, that of 1899 was even more so. The officers and directors and the energetic Secretary had for months been devoting time and energy to leave nothing undone that would tend to the success of the Fair, and when the gates were thrown open a much larger number of exhibits than ever before were in position. The weather was most propitious, and the people came in crowds, all in the best of humor and prepared to enjoy themselves, which they apparently did to their hearts' content. The grounds are very much improved by the laying out of gravel roads, with rows of trees planted along each side, and as these improvements are extended from year to year, the grounds will become more attractive and beautiful. It is no disparagement to the management of the Agricultural Society that one of the best drawing cards



BRAMPTON MONARCH.

Two-year-old Jersey bull. Winner of championship, Toronto Exhibition, 1898. (See Stock Gossip, page 442.)
OWNED BY B. H. BULL & SON, BRAMPTON, ONT.

they have is the opportunity afforded of visiting the Experimental Farm, and hundreds of farmers and others take advantage of the cheap rates as much to visit the Farm as to see the Fair, and outside of the live stock exhibits, it goes without saying that as important lessons can be learned on the Farm as in the Fair grounds. This year the Farm looks well and shows the work of a master hand. Apart from the general attractiveness of the tree-planted avenues and drives, the arboretum and shrubberies, perhaps no feature is so noticeable and so pleasing as the absence of weeds. The effects of thorough cultivation and systematic methods can seldom be seen to greater advantage, although there is now ten times more work to be overtaken on the Farm than when it was started; there are no more men employed; weeds are practically conquered, and can now with a minimum of labor (and that nearly all horse labor) be kept in subjection, and every farmer can appreciate what an immense saving of labor that means, not only in the cultivation of the soil, but in the harvesting, threshing, marketing, etc. Great interest was shown by the visitors in the trees, shrubs, hedges, and small fruits. The grass plots were also an object of great interest, the Brome grass being particularly interesting. Every plot of this grass, whether old or new, or under whatsoever treatment, seems to flourish. The patches of clover and alfalfa were also much admired, and great hopes entertained for the successful introduction of these most useful fodder plants and soil restorers. The beautiful showing of hardy annual and perennial flowering plants was a source of delight to many a farmer's wife and daughter, and from these object lessons many a farm home will be beautified and made more cheery.

HORSES.

The exhibit in this class was good, there being considerably more entries than in any previous year, and the average quality showed some advance. It was the general remark around the ring that the horses, especially the younger classes, from the farms were well conditioned and fitted. As throughout this district many farmers depend almost entirely on green-cut oat sheaves instead of hay, it would be worth noting whether this has anything to do with the condition of the young horse stock. The light horses were judged by Dr. Young, of Manitou, and the heavy classes by W. Brisban, of Cobourg, and Wm. Watt, of Salem, Ont. Although there was no special room for fault-finding in either class, still there was one more clear demonstration in favor of the single-judge system, the work of one judge being done fully, more expeditiously, and type and breed character more closely adhered to throughout the various sections.

CLYDESDALES.

But two aged stallions appeared in the opening ring, both good ones. Burnbrae, shown by J. A. S. Macmillan, the first prize and sweepstakes horse at the Industrial, was, after a careful survey of the two horses, sent to the front; with Colquhoun & Beattie's entry, Erskine Lad, a good second. Both are horses of great scale and true Clydesdale character. Erskine Lad, a favorite with many farmers, shows more action, but has not the levelness

and finish of his successful rival. In brood mares, T. Elder, Blyth, had the first premium in a grand good one, bred by N. P. Clark, of Minnesota; second going to J. B. Thompson's (Hamiota) Lady Almondale. This matron's fillies, Adeline McGregor and Princess Royal, both by Auldmuir 4230, were successful in their respective classes, and with their dam were first in mare and progeny class.

SHIRES.

J. A. S. Macmillan's Nailstone Morning Star II. was without competition in this class. He has done a big season, through the wet spring and heavy roads, and is in lower condition than previously shown.

HEAVY DRAFT.

There were some excellent teams paraded, the red going to Hughes & Long on a big draft team recently imported from Ontario, and the blue to J. Scott, Brandon, on a fine, massive team, well brought out. N. Rodgers had the first prize brood mare, and F. Rowland second. A. Cummings, Lone Tree, had an entry in yearling class, being without competition. Three draft foals came before the judges. A. Cummings was first, with a big, sappy colt, by Kintyre Hero; second going to a fine Burnbrae foal, shown by F. Rowland. The third entry was also a Burnbrae foal, shown by A. McPhail, Brandon.

Classes are given for agricultural and also for general purpose, as well as heavy draft, and each exhibitor is left to make his own definition of what these terms mean, and enter his stock wherever he thinks he stands best chance of winning. Much more intelligent results would follow if a clearer definition could be given these classes. Both the agricultural and general purpose classes were well filled. In the former class there were five teams entered, all good ones, but of several types, leaving the judges no easy task in selecting the two best. They sent the red, however, to D. T. Wilson's handsome bays, a team that fitted the class; second went to a thick, low-set team of blocks, just brought in from Ontario by W. E. Butler. Many would have preferred the larger, more up-standing pair shown by Mr. Bastard, of Brawardine. Others thought them too heavy for the class. While they carried a lot of flesh, they were not heavy enough for the draft class. N. Reid's browns and A. McPhail's bays were left unplaced. A. McPhail was first on brood mare, with a Burnbrae foal by side; Cummings second. D. T. Wilson, Asessippi, and Wm. Sanderson, Souris, were the winners throughout the balance of the class, with N. Rodgers first on a Burnbrae foal.

GENERAL PURPOSE.

The call for teams brought out four really good teams, well-fitted, harnessed and handled. Elder, of Blyth, was first, with a particularly attractive, clean-cut, good-actioned pair; second going to A. McGee's gray team, of similar type and good quality. A. McPhail had the premium mare and foal, the latter by Pascha. J. B. King, Fairfax, first on 3-year-old. Ed. Russell, Douglas, first on 2-year-old, with an extra well developed roan. D. T. Wilson first on yearling, with a big, drafty colt. He was also first with brood mare and progeny.

CARRIAGE.

Alex. Colquhoun, Douglas, was an easy winner, with his German coach horse, Pascha. In foals, A. McPhail won, with a Pascha foal, and Woodcock second with a Prince Danegelt, both coarse grade foals and not properly belonging to this class. Under the rule of the class, the same applies to the teams and single harness sections. T. D. Stickle's (Carberry) beautiful pair of carriage horses were without competition. Six single turnouts faced the judge, and were placed according to style and action, coupled with roundness, etc. First, R. Willis, Boissevain, on a bay with beautiful action; A. French, Dauphin, second.

THOROUGHBREDS.

Four aged stallions came out in this ring, headed by Rumpus, a big, rangy fellow, with great action, shown by R. S. Fulton, Brownsville, Ont.; second to Dr. Hurd, shown by Shaw, of Carberry. R. I. M. Power, Carberry, was alone in 3-year-olds with Click. In brood mare, yearling, foal, and mare and progeny, Mr. Ernes, Brandon, was given the red tickets on Coleen, a beautiful sorrel mare, and her colts, much resembling herself; Shaw and Armstrong, Carberry, coming into second place.

STANDARD-BREDS.

Three stallions faced the judge, who based his decision on size and substance, and sent the red to Arabus, a big, strong horse, shown by R. S. Fulton, with Pathmont second. College Boy, shown by D. McLachlan, Chatham, was first in the 3-year-olds, and his brother, College Chum, bred by Mr. Lachlan, shown by D. H. Chambers, Wawanesa, first in 2-year-olds.

ROADSTERS.

Brood mare class brought out five fairly good mares, first going to a finely-turned mare with a foal by George S., shown by I. Blanchard, Miami; second to F. Woodcock, Chater. In teams, A. French, Dauphin, was first, with a well-matched pair of chesnuts, showing good, clean action; James Bray, Longburn, second, with a pair of Kilburn colts. In single drivers, H. McFarlane, Brandon, was first, with a big, handsome, up-standing horse, of fine action; A. Blain, Wawanesa, second, on another fine, clean-actioned chestnut mare, by Sharper, leaving a couple of good drivers unplaced.

HACKNEYS.

In the aged stallion class the Winnipeg competitors again came together, and were placed in the same order; March Past, owned by Mr. Power, Carberry, being first, and Mr. Macmillan's Prince Danegelt second. Mr. Macmillan's special for Prince Danegelt foals went to F. Woodcock, first; T. Mitchell, second.

Some very nice ponies and saddlers were shown. The winners will appear in the complete prize list to be published next issue.

CATTLE.

Most of the breeds were fairly well represented at Brandon, though in some there was little competition, probably owing in part to the fact that the prize list was not very attractive, there being only two prizes in each section, and the amounts not sufficiently large to be tempting. The beef breeds and fat cattle were judged by Mr. J. C. Snell, London, Ont., and the dairy breeds by Mr. James Bray, Portage la Prairie.

SHORTHORNS.

were represented by excellent selections from the herds of F. W. Brown, Portage la Prairie, and D. Allison, Roland. Wm. Chalmers, Hayfield, also showed a few, and won several prizes in the Province-bred competition, and also first for three-year-old cows in the open class. The herd prize for best bull and four females went to Mr. Allison, whose herd was made up of the first prize yearling bull, Riverside Stamp; second prize cow, Daisy of Strathallan 12th; first prize two-year-old heifer, Jubilee Queen (winner of sweepstakes at Winnipeg); first prize yearling heifer Crimston Cloud (also first at Winnipeg); and the first prize heifer calf. Mr. Brown's herd, to which the second prize was awarded, included the first prize three-year-old bull, and sweepstakes winner here, Lyndhurst III, (who had also won first at Winnipeg); the first prize cow here, Gaiety 5th, and her heifer calf; the second prize yearling heifer, and another good heifer of the same age. Mr. J. S. Robson's bull calf, Royal Judge, who was placed first at Winnipeg, held the same position here. Hon. Mr. Greenway had a choice selection of Shorthorns on exhibition, though not for competition. Among these were his fine stock bull Judge, the champion here last year; the four-year cow Freida, and the three-year-old Gem of Athelstane, which were sold to Capt. Robson, Ilderton, Ont., and will probably be in his show herd at the Toronto Industrial Exhibition next month.

HEREFORDS.

were well shown by J. E. Marples, Deleau, who won the herd prize and the bulk of the other prizes in the class, having recently purchased most of Mr. Wm. Sharman's show herd, and made a very creditable display of typical animals. Mr. Sharman had the first prize two-year-old bull, Pride of Westview (bred by Dr. Wilson, Moe's River, Que.), which also won the sweepstakes as best bull any age, and is of the proper type. The

POLLED ANGUS.

breed was well represented by the herd of Alex. Cummings, Lone Tree, which won first prize, and his bull Victoria's Montrose the male champion of the class. A. B. Fleming, Brandon, also showed a number in this class, and won several prizes.

HOLSTEINS.

were shown by James Glennie, Longburn; A. B. Potter, Montgomery, who secured a number of prizes; and James Herriot, Souris, who won



COLLEGE BRAVENA.

Three-year-old Brown Swiss heifer. At Agricultural College, Lansing, Mich., best weekly butter record, 9.52 pounds.

second prize with an exceptionally good cow of fine dairy type and carrying a model shaped udder. Mr. Glennie was successful in winning all the first prizes he showed for, including the sweepstakes for best bull and first prize for his great cow Daisy Teake's Queen, one of the very best of the breed in America. Of

JERSEYS.

W. V. Edwards, Souris, was the principal exhibitor, and won the majority of the first prizes, including the herd prize, headed by Dean of Highfield, the sweepstakes bull, and including Yankee Rosebud, the first prize cow (which, he claims, was giving fifty pounds milk daily at home); the second prize cow, Tip Malone; the first and second prize two-year-old heifers, Baby Malone and Brampton Rose; and the first prize yearling heifer, Souris Beauty.

AYRSHIRES

were shown by A. Mutter, Brandon (who was awarded all the prizes he entered for, including the herd prize and sweepstakes for bull), and by W. M. Smith, Fairfield Plains, Ont., who had the second prize yearling bull.

The special prize of \$25, offered by the Bank of British North America, through their Brandon manager, Mr. H. G. Marquis, for the best herd (one bull and four females, two years old and under) of any pure-bred class, bred in Manitoba or N.-W. T., was awarded to J. E. Marples, Souris, for an excellent young herd of Herefords.

SHEEP.

The judges of sheep and swine were Messrs. J. McQueen, Carrievale, and J. Yule, Crystal City. The competition in the classes for sheep was limited, there being more in the class for Leicesters than any other. The exhibitors in the latter were A. D. Gamley, Brandon; Jas. Murray, Lyleton; and D. Preston, Glenewen. Gambley won first prizes for 2-shear ram, shearing ewes, ewe lambs, pen of one ram, two ewes, and two ewe lambs, and for ram any age. Murray secured first prizes for shearing ram, first and second for two-year-old ewes, and second for two-year-old ram, ram lamb, shearing ewes, and ewe lambs. Preston had the first prize ram lamb.

OXFORD DOWNS.

In Oxford Downs, Alex. Wood, Souris, was the only exhibitor; and in

SOUTH DOWNS.

W. M. Smith, Fairfield Plains, had the field to himself.

There were no Shropshires shown, and there being no class for Cotswolds or Dorsets, these were entered in the class for any other pure breed. F. W. Brown, Portage la Prairie, showed Cotswolds; and R. H. Harding, Thorndale, Ont., Dorsets. The latter won the majority of prizes. The contest in aged rams was so close that the judges recommended a first prize for each. Harding was awarded first for shearing ram, ram lamb, shearing ewes, ewe lambs, and for pen of one ram, two ewes, and two ewe lambs. The first prize for aged ewes went to Brown, who had also second for ram lamb and ewe lambs.

SWINE.

The swine classes were fairly well filled, and many really good specimens were shown. In

BERKSHIRES.

R. McKenzie, High Bluff, and F. W. Brown, Portage la Prairie, were the exhibitors. The former was awarded first for boar over two years old, on Proud Victor; first for boar under six months; for sow over one year and under two; for sow under six months; and the sweepstakes for best boar any age, on Proud Victor. McKenzie had also second for boar under a year; for sow under a year; sow under six months; and sow and litter. Brown secured first and second for yearling boars; first for boar under a year; first and second for sow over two years; first for sow under one year; for sow and litter; and sweepstakes for sow any age, on Cora Belle, the first prize sow over two years.

YORKSHIRES.

The exhibitors of Yorkshires were James Bray, Portage la Prairie, and A. B. Potter, Montgomery. Mr. Bray was awarded first prize for boar under a year and boar under six months; for sow over two years, sow under six months, sow and litter, sow any age, and boar any age. Potter had the first prize yearling sow; second for boar under six months; for sow under six months, and for sow and litter.

CHESTER WHITES AND POLAND-CHINAS

were grouped, and the prizes were divided between W. M. Smith, Fairfield Plains, who showed Poland-Chinas, and W. L. Trann, Crystal City, who showed Poland-Chinas and Chester Whites. L. A. Bradley, Portage la Prairie, showed a good lot of Tamworths, and secured most of the prizes.

Suit of Interest to Farmers.

WHEN ARE CATTLE RUNNING AT LARGE?—C. P. R. MUST PAY THE FARMER \$120.

An action of peculiar interest was tried before Judge McGibbon and a jury at Brampton last month. J. W. Albertson, of Lorne Park, owns a farm on both sides of Grand Trunk Railway track between Toronto and Hamilton, over which the C. P. R. has running powers. Last July, a year ago, Albertson sent his hired boy to bring the cattle from the field down to his farm. The boy collected the cattle and was driving them south along the road towards the railway track, when he suddenly saw a C. P. R. train approaching at a tremendous rate of speed. He dashed forward for the purpose of saving the cattle, but was unable to do so. Two of the cattle managed to get across the track, but the other three did not and were struck by the approaching train and killed.

The railway company contended that the boy had not the cattle sufficiently in charge. The plaintiff denied this, and further by his witnesses proved that the railway company had neither blown a whistle nor rung a bell, as provided by the statute, and were therefore in default. The case went to the jury, who answered all questions in favor of the plaintiff; but the railway company made a motion for non-suit, upon which Judge McGibbon reserved judgment, and he has just given judgment in the plaintiff's favor for the amount of the three cattle killed, which was fixed at \$120, and directed that the railway company must pay the costs.

Wants More Shires in Canada.

SIR,—In your issue of July, No. 482, I notice a very instructive article on "Mares and Foals on Pasture," from the pen of Mr. David Burns, Ontario County. He winds up his letter with a reference to the present breed of Clydesdale horses in Ontario, his experience being that that breed is now smaller and not so robust in constitution as they were some years ago, and suggests that the Shire cross could, perhaps, be used to advantage in helping to eradicate this failing.

There is no doubt young, big Clydesdale horses are not so plentiful in the country as they were. This, of course, is no doubt owing to the lack of interest shown by farmers in not breeding, and also to the fact that farmers are not as careful as they might be in the selection of the stallion to be used. To get a good, serviceable, and at the same time marketable, heavy draft horse, a good hard colored, strong-boned and good-footed sire should be selected, and even were such a horse as this used, there will always be quite a percentage of small stock, or, as they are called in another country, "misfits."

Mr. Burns asks for opinions regarding the use of the Shire cross with some of the Clydesdale mares in this country. From personal experience I consider the Shire stallion quite as good as the Clydesdale stallion for the purpose of getting heavy draft horses for use in our cities. I find them to be a good-constituted and good-footed class of horse, and that is what is mainly required for use on the city pavements. I would like to see more Shire stallions in this country, and am sure the use of them would be beneficial to the farmers and breeders in this country. WM. HENDRIE, JR. Hamilton, Ont.

FARM.

Good Results from the Plowing Under of Green Clover.

BY DR. WM. SAUNDERS, DIRECTOR OF EXPERIMENTAL FARMS, OTTAWA.

Among the many things of interest seen by the large number of farmers who have visited the Central Experimental Farm at Ottawa during the past few weeks, none have awakened greater surprise than the striking illustrations made this season, showing the advantage to crops of the plowing under of green clover. This is particularly seen in



DR. JAS. FLETCHER, PROF. OTTO LUGGER, HUGH M'KELLAR The professors hunting grasshoppers in the Boissevain and Deloraine districts of Manitoba, where the Rocky Mountain locusts committed considerable damage to farm crops in 1898.

a field of oats of about ten acres. This land in its preparation in the spring was treated the same throughout; the field was all sown the same day with one variety of oats—the Bavarian. Last autumn, about eight acres of this field had a good mat of red clover turned under, which was grown from seed sown (10 lbs. per acre) with a barley crop in the spring. One acre was plowed which had been in Brome grass for two years; one acre which had been occupied with other pasture grasses for a similar period; and one acre with a mixture of pasture grasses and clover.

Over the whole area where the clover was turned under, the increase in the growth of the oat crop is most striking. The difference in the height of the grain will average about twenty inches, and the deep green color of the leaves on this part of the field, and the vigor of the plants, are in striking contrast to the crop on the adjoining land where there was no clover. This remarkable increase in growth affords convincing proof of the added fertility given to land by the plowing under of green clover.

In another field, which has been planted with potatoes, a strip of the land covering eight rows of this crop had clover grown on it last year, which was plowed under. On that strip the growth of the potatoes, as compared with the same variety on the land adjoining where there had been no clover, was quite remarkable, the plants being much larger and more vigorous. The results of the crops in both these instances will be watched with interest.

Last year a like illustration was given on eight plots of land on another part of the Farm, on four of which red clover had been sown with grain in the spring of 1897; while on the other four, grain was sown without clover. This land was all plowed in the autumn of 1897, and in the spring of 1898 the whole area was sown with Banner oats. The greater vigor in the growth of the grain where the clover had been turned under was very noticeable quite early in the season and became more striking as

growth advanced. These results were brought under the notice of a large number of visiting farmers during the season of 1898. When this crop matured, the grain on these eight plots was harvested and threshed separately, and the yield per acre on the four plots on which the clover had been grown exceeded that obtained from the plots on which there was no clover by an average of eleven bushels and one pound per acre.

In another field clover was similarly sown in 1897, in different quantities, with grain on a series of plots, with three left as check plots without clover. As these were all to be planted with Indian corn, they were not plowed until May 23rd, 1898, by which time the clover had made a heavy growth. After plowing and harrowing, the corn was planted, and when harvested in the autumn the average crop on all the plots on which not less than eight pounds of red clover had been sown and plowed under exceeded in weight the average yield of the three check plots on which there was no clover, by 4 tons 233 lbs. per acre.

Inverted Clover Sod for Fall Wheat.

Where rotation of crops is practiced one cannot always choose the land best adapted to wheat; i. e., the land best located for it. The best crops we have grown have been on inverted clover sod, plowed about August 1st, and kept well cultivated with disk harrow or spring-tooth. We aim to work the surface well, to a depth of about three inches. This method forms a mellow, moist and firm seed-bed. When the clover crop has been a failure we have sometimes sown wheat after oats with good results. This method I know is not considered good farming. In many parts of England when land is leased it is agreed upon between landlord and tenant that no two white crops shall be sown in succession, as it impoverishes the land. Immediately the oats are carried we gang plow lightly. The land is manured at the rate of twenty loads per acre, and plowed fairly deep. It is next rolled, and then kept well harrowed until the time of sowing. This year we had good results after rape, which was sown on the weediest piece of land we had, about May 1st, in rows 2½ feet apart, and kept well cultivated. The lambs were weaned and turned on this the beginning of July. When it was eaten, was plowed, cultivated, etc., and sown with wheat the beginning of September.

We usually sow between the 1st and 10th September, but as the Hessian fly made its appearance in the early sown fields, we shall this fall follow the old rule and not sow before the 15th. We sow, if possible, north and south, to a depth of 2½ or 3 inches, then follow with a light smoothing harrow in order to fill in the valleys made by the drill. Then in case of a thaw in winter no ice will form. This year we grew the Dawson's Golden Chaff and Gold Coin. The former we have grown for five seasons with capital results. This is the first year for the Gold Coin. It seems to be very hardy, stands the winter well, is a good yielder, and a nice sample. We sow, as nearly as possible, 1½ bushels per acre of good, plump seed, but if the sample be small we set the drill to sow less. H. N. GIBSON. Middlesex Co., Ont.

Wheat Requires Well-Manured Land.

SIR,—In your article on fall wheat, in July 15th issue, you have given the most important points relating to preparation and culture. In my opinion the land naturally suited to fall wheat is somewhat stiff limestone clay and gravelly loam, although fair results are obtained from flat, black-ash swamp land, if well drained. A southern and eastern exposure preferred. I think the advantages of protection by woods has never been better proven than in the present crop. For choice, I would plow down sod (clover preferred), well manured; to be plowed down some time in July, and cultivated on the surface till sown. Next, pea land, broken from sod this spring, cultivated on top. Either of these are as good as a summer-fallow. A summer-fallow is better not broken until last week in June, when thistles and weeds have almost matured, and the roots are at their weakest stages. While a mellow, smooth surface is good, it is well not to plow it for at least two weeks before sowing, so that the body of soil becomes solid.

For the average year, and no one can tell what the fall will be, a good time for sowing is from Sept. 1st until 15th. While good results have been had both before and after these dates, they are exceptions, and not the rule. I think it is immaterial which way it is drilled, provided the land is not left too smooth. It is best to roll the land before sowing, to firm it. About three inches is deep enough. We sow 1½ bushels to acre, and endeavor to procure seed from a field that bore a good crop and good sample. I believe a change of seed is an advantage, such as a change from light to heavy land, and vice versa. If the seed is not perfectly free from smut, an application of bluestone is a great preventive, but it is only in odd years that smut troubles us. The varieties which suit our locality best are Democrat, Genesee Giant, Dawson's Golden Chaff, and Red Clawson. The Democrat is the surest, and the Golden Chaff the largest yielder. The bare fallow is almost gone out of use here, and manure is not being applied directly to wheat land, as used to be the custom; it is mostly applied to corn land and as top dressing to sod. But the fact remains that fall wheat requires well-manured land, whether applied directly or a year before. JOSEPH MOUNTAIN. Perth Co., Ont.

Kildonan Farmers' Institute.

[Address by Prof. Geo. Day, O. A. C., Guelph.]

The annual meeting of the Kildonan Farmers' Institute, held on July 3rd, was addressed by G. E. Day, Professor of Agriculture and Animal Husbandry at the Ontario Agricultural College, Guelph, and Mr. D. A. Stewart, of Pilot Mound. The meeting was not largely attended. The officers of the preceding year were all re-elected. Prof. Day spoke briefly on the "Selection and Feeding of Live Stock." From what he had seen of Manitoba, he had not any doubt but that Manitoba would yet be a large producer of live stock. In Ontario the breeding and feeding of live stock had become an absolute essential to successful farming. They had to raise stock to be able to raise grain, and to raise grain, to be able to raise stock. The sooner Manitobans take up stock-raising, the better it would be for the country, as it was not only much safer than exclusive grain-raising, but gave profitable employment throughout the year, and would keep the young men out of mischief during the winter months. He had heard people in this country remark that they did not intend to go in for stock-raising on account of the *drudgery* necessitated in feeding and caring for stock during the long months of winter. Whether stock-feeding is *drudgery* or not depends largely upon how you look at it. Given good stock, in which the feeder can take a pride, and there is no *drudgery* in caring and feeding such; and once get the boys of the farm interested and proud of the live stock that they have to work with, and there will no longer be the complaint that the boys leave the farm for other occupations.

One of the great difficulties is that men do not possess the dogged perseverance necessary to success in stock-raising. Men are not satisfied to start at the bottom, or according to their means, and stick to it with unwavering perseverance until they reach the top. In starting a herd or flock it is not necessary to have pure-bred females, but it is necessary to have an *ideal* in one's mind in order that an intelligent and persistent effort be made to attain a high standard. A man must *know* a good animal, and knowledge must be the basis upon which success is founded. In stock-breeding, of whatever breed is decided upon, the best individuals only should be retained, culling out those that are inferior. In common practice it is generally the best that are sold, simply because they bring the most money at the time; and in consequence the herds and flocks are continually degenerating. Then, for lack of a fixed purpose, people switch off from one breed to another. This practice he could not too strongly condemn, and believed that whatever breed a man selected he should stick to that breed, using the best sires obtainable.

In addition to careful selection, it was most essential to feed, and to feed properly. He was often asked, "What is the best ration for dairy cattle or for beef cattle?" He did not think there was any best ration. It depended very largely upon what feed was at hand. It was important, however, if it was necessary to buy feed, to understand the composition of a proper ration in order that the most economical feed might be bought. The fact is frequently overlooked that an animal can only return a profit in milk or beef out of the feed consumed above what is required for the maintenance of the body. An animal that will not pay for good feed cannot be made to pay at all. Nowadays more attention is given, in feeding stock, to the cheaper part of the ration—the coarse fodders. By careful study along this line, together with experience, it was found that considerable saving can be made in the amount of grain fed by making the fodder ration so palatable that the animals will eat a large amount of it. If cattle are fed good hay one meal and straw the next, they will not eat the straw, but wait for the next feed of hay; but if the hay and straw are cut and mixed together, along with ensilage or roots, or both, the cattle will eat all clean, and thus get the benefit of whatever nutriment there is in the straw. In this way meal rations for stall-fed cattle have been reduced within the past few years about one half. He cited a number of tests that have been made at the Agricultural College in feeding cattle. He strongly recommended roots, and was sure they can be grown in any part of this country with satisfactory results. Roots are also particularly useful in hog-feeding, and where they are fed during the winter months in suitable proportion there is much less trouble from crippling, and the hogs are in much better shape to be finished off with a heavy grain ration.

Mr. Stewart exhibited samples of Brome grass, which, he said, was doing exceedingly well wherever tested in the Pilot Mound district. He strongly recommended it for pasture and for hay, for renewing old land by supplying humus or root fiber to the soil, to prevent drifting of light soil or baking of heavy soil, and also pointed to its usefulness on dirty land to hold weeds in check. He had found that seven pounds of seed per acre of home-grown seed was sufficient in his district, and

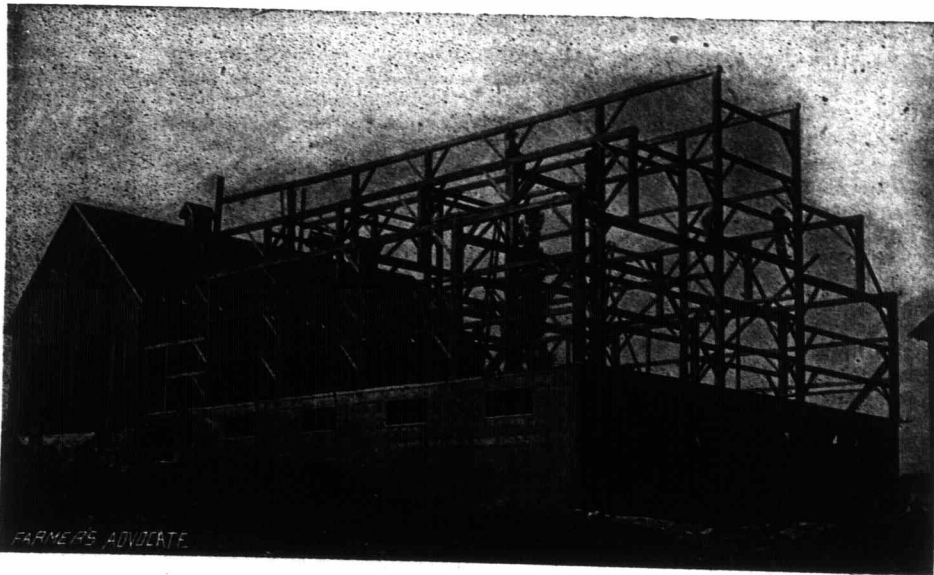
thought likely that quantity would be suitable anywhere on the heavy lands of the Red River Valley.

A New Dairy Stock Barn in Course of Erection.

The barn basement and frame represented by the accompanying illustration is on the 150-acre dairy farm of Mr. J. A. James, Nilestown, near London, Ont. The new portion is 72 feet long by 60 feet wide, and butts against the old barn with stone basement, which it becomes a continuation of. The basement walls of the new portion are of cement concrete, made from Thorold hydraulic cement. The walls are eight feet clear inside, and on account of the barn being on sloping ground average about twelve feet high outside. There was used in the construction of the walls 100 barrels of cement, 150 loads of gravel, and as many small stones as the cement would take. It was built by four men in two and one-half weeks, and presents, both in our illustration and upon close examination, a most substantial appearance.

The basement is divided lengthwise into two rows of single stalls and a row of box stalls, with nine-foot passages behind the cows, and an eleven-foot feed passage, which leads through the old basement to cement silo beyond it. The entire floor is to be of cement, as are also the mangers and gutters. The feed passage is to be 14 in. higher than the floor where the cows stand, so that the side of the passage will form the back of the manger. There will be put in a complete watering system, supplied from a hydraulic ram. The windows, of which there are five on either side and three in the end, are each 5 ft. long by 2½ ft. deep.

The superstructure is to have five mows on either side of the 16-ft. driveway. The corner and side posts are 16 ft. long and 10x10 in. square. The purlins are 8x8 in. square and 3½ ft. long, and the peak of the roof will be 39 ft. from the barn floor. The barn will, when finished, be painted on the outside and fitted on the inside with every



BASEMENT AND FRAME OF MR. J. A. JAMES' DAIRY STOCK BARN, NILESTOWN, ONT.

convenience that appears necessary for the comfort and support of the capital Ayrshire herd it is being constructed to accommodate.

Cleanliness in Dairying.

To the Editor FARMER'S ADVOCATE:

A great deal has been written upon this subject, but I think that a few more lines would not be out of place, judging from what I observed to-day while taking in the milk at the College creamery. It is not at all unusual to find all sorts of filth in the bottom of a can, such as grounds, manure, etc., etc. Such a state of affairs cannot be tolerated much longer if we expect to be able to compete with Denmark and other countries in the leading butter and cheese markets. We must educate the producer in order that he may fully realize the vital importance of perfect cleanliness in dairying.

Of the many reasons for the necessity of cleanliness in handling milk, one of the first is that milk is a liquid and will dissolve a large portion of the foreign matter that finds its way into it. When this matter is once dissolved, no amount of straining can remove it.

Another reason for giving especial care to the handling of milk would be that from the necessity of the case it is not the so-called unobjectionable kinds of dirt, that are sometimes distinguished as "clean dirt," to which milk is usually exposed, but to the germ-laden dust and obnoxious odors of the cow-stable, as well as particles of dried manure, hairs, and other minute particles, so apt to drop into the pail during milking.

We must bear in mind that it is not the dirt of itself that gives rise to so much trouble, but that it is the undesirable kinds of bacteria which enter the milk along with the dirt, as they exist in untold numbers in these objectionable contributions. When the forage and bedding are handled just before milking, as is often the case with men who have not made a special study of dairying, a very objectionable kind of bacteria (known as hay bacillus) find their way into the milk with the

dust. In addition to the sources referred to, it oftentimes happens that the unwashed hands of the milker, together with some old coat that has previously served a period of more esteemed service, but now serves as a special garment for the grooming of horses and milking the cows, furnishes a smaller, though very objectionable, part to the general supply.

Again, we may find that good housewife or domestic who has not learned the superiority of a good brush to the much-used dishrag has been unable to remove all the slimy substance that adheres so tenaciously to the vessels. Thus a supply of bacteria sufficient for an undesirable seeding is in this way preserved. Not only is milk liable to contamination from the above-mentioned sources, but it is of such composition that when once seeded the bacteria can neither be skimmed off nor strained out, but are there to stay, as it furnishes temperature, moisture and food supply so admirably adapted to their growth and increase that under these favorable conditions they multiply at an inconceivable rate of rapidity. This increase in undesirable bacteria very materially affects the keeping quality of the milk, thus greatly shortening the time in which it can be put upon the market in an apparently fresh condition. Or if the milk is to be used for the manufacture of butter or cheese, the presence of these germs will prevent a proper ripening of the cream, thus making it impossible for the buttermaker to secure that much-sought-for quality, good flavor, in his butter. In the production of cheese they produce gassy and floating curds, which cause the cheese to be spongy and "pinholey."

After these things have been considered, there is yet the influence that uncleanness may exert upon the health of the consumer of the milk or its products, and also as regards securing the best price for the article offered for sale. As regards health, there is no longer any doubt that impure milk is not only undesirable, but positively dangerous, from the disease germs that are likely to abound wherever there is dirt, filth or decay. The milk may not only serve as a means of conveying the germs of such diseases as typhoid fever, tuberculosis, and numerous other virulent diseases, but the decomposition that is set up in the milk by the putrefactive bacteria may produce in milk or its products toxic compounds that are extremely poisonous, and which often produce sickness or even fatal results. This form of poison, as well as various other troubles, develops in cheese also, and is, like other cheese diseases, supposed to be the outcome of improper care of the milk.

In butter, one of the most annoying effects of undesirable bacteria is the earlier development of butyric acid and the consequent rancidity of the butter. From some experiments made here at the Iowa College creamery in regard to the keeping qualities of butter made from cream that had been separated from milk which had been exposed to unfavorable conditions that are so frequently to be met with, and other cream that was free from all undesirable kinds of bacteria, I am firmly convinced that uncleanly conditions are more directly responsible for rancidity in butter than is indicated by any authority that I have read upon that subject. I do not hesitate to venture the opinion that if more thorough cleanliness was rigidly practiced by all who put butter upon the market, the reduction in the amount of rancid butter would be sufficient to silence those champions of oleomargarine and other imitation butters who have been successful [In the United States.—ED.] in persuading so many that these products of the great packing corporations should be allowed to supplant butter as an article of food on account of their better keeping qualities. While it is possible, by resorting to pasteurization and pure culture starters, to improve the quality of butter made from milk that has been poorly cared for, I think it is admitted that there is no process by which poor milk can be made to produce the very best butter or cheese. We must also bear in mind that while commission merchants purchase the poor butter with reluctance at a lower price than is profitable to the producer, they are eagerly watching for the very best, and will often pay from half a cent to one cent a pound above market quotations to customers who can always supply them with the very finest article. W. J. KENNEDY, B. Sc. AG. Iowa Agricultural College.

The Practice at St. Mary's Creamery.

To the Editor FARMER'S ADVOCATE:

SIR,—In a few words I will endeavor to give you our method of making first-class butter.

In the first place, aroma or a good flavor is obtained by being careful as to the quality of milk taken. To get a uniform flavor we pasteurize all our cream, cool it to a good ripening temperature (60 degrees), then add a pure culture starter, which will have the same flavor each day if proper precautions are taken.

The *Texture* is influenced by the temperatures and handling of cream and butter, stirring the cream gently when ripening and before putting it

into churns. The butter should be worked just sufficiently to work out moisture and dissolve the salt. Too much working spoils the texture.

A uniform quality can only be obtained in the different seasons of the year by pasteurization, which, with proper attention to the different details, overcomes to a great extent a buttermaker's trials and worries over putrid, lardy, bitter, doughy, etc., butter; also in trying to check the development of acid.

The keeping quality is wholly influenced by the same process as above, and will keep good where ordinary butter would spoil completely.

The attractive appearance is one of our specialties. We use a good, strong, clean box, well paraffined, with a neat brand on the one side. The box is lined with heavy parchment paper, and when butter is turned out of box shows no crevices or holes; and the top part of butter is shaved off smoothly and evenly, papers are folded over it, and about one-half to one inch of salt paste put on between lid and butter, excluding the air.

F. DEAN, Buttermaker.
St. Mary's Creamery, July 5th, 1899.

To Secure Better Milk from Careless Patrons.

The *Produce Review*, in its effort to help creamery managers to succeed in getting careless patrons to take better care of their milk, asked a number of leading U. S. dairymen their advice upon the subject. Among the many suggestions of correspondents, we call the following, all of which may be called parts of the argumentative or persuasive method.

1. Secure the confidence of patrons by being at all times courteous, genteel, and friendly to all, and dealing with strict honesty and impartiality.

2. Be sure to make your creamery a pattern of neatness and cleanliness, otherwise your demands for cleanliness on their part will appear ridiculous.

3. Prove to them that it is to their interest to keep the quality of the factory's product as high as possible, and that the finest goods cannot be made from defective raw material. Explain the effect of poor milk in reducing the size of the monthly milk payment.

(But how much more potent is this argument when you can explain that you cannot take poor milk at all in justice to your other patrons.)

4. Set an average standard and offer a premium for milk showing exceptional quality, say that which has been carefully strained, aerated and cooled below 60°, the cans being perfectly cleaned, etc. Or pay different prices according to quality, as well as according to fat content: two grades are suggested.

(If it is poor milk, it may be dear at any price for butter or cheese making.)

5. Educate them.

(Many suggestions were made which properly belong under this general head. They include the organization of patrons' clubs and holding educational meetings; visiting the patrons and explaining the proper methods of caring for milk, as well as the proper care and feeding of the cows; furnishing the patrons with instructive dairy literature, also with printed instructions as to the creamery's requirements of quality and how to meet them.)

6. Encourage every patron to keep enough cows so that the item of milk will be large and important, making rejection a serious matter, and attracting more attention to the necessity of knowledge and care.

7. Establishing competition between the patrons as to who can produce the best average milk condition for a month. The offer of prizes is suggested.

Undoubtedly all of these suggestions have in practical work been found useful, and theoretically they are generally sound and good. They should be used as far as possible in all cases, but it will certainly be found that only when they are built up on a foundation of rejection of poor milk will the improvement be rapid and satisfactory.

Good Butter.

ITS CHARACTERISTICS AND HOW TO MAKE IT.

BY PROF. H. H. DEAN.

Good butter is made up of fine flavor, good grain, body and texture, even color, uniform and mild salting, and attractive appearance, combined with keeping quality, for the export trade.

In our dairy school we use the following scale for judging butter:

| | |
|-------------------|-----|
| Flavor | 45 |
| Grain and texture | 25 |
| Color | 15 |
| Salting | 10 |
| Package | 5 |
| Total | 100 |

Fine Flavor depends upon the cow, the quality of the feed, and the care of the milk, as the patron's part of the work. After the milk reaches the creamery, the main point which determines the flavor of butter is the proper control of its cream-ripening. The chief factors in cream-ripening are the "starter" or culture used, the temperature, the length of time ripened, and the amount of acid developed in the cream. The main points to be observed in proper ripening of cream are: To have a good culture and propagate it from day to day by using pasteurized skim milk as a basis,

to have the temperature such that the cream will ripen in 12 to 20 hours (though I consider if makers could have perfect conditions a longer time would give better results), to check the acid by cooling or churning when it contains .5 to .6 per cent. of acid, depending on the richness of the cream, and to be careful in the washing and working of the butter, so as not to destroy fine flavor. Cream having 25 to 35 per cent. butter-fat is suitable for producing fine flavor, as it contains about the right proportion of caseous and sugar material for the ferments to work upon. More than 35 per cent. fat does not contain enough flavoring material, while less than 25 per cent. contains too much, and needs to be watched carefully or it will become overripe, besides causing more labor in handling and cooling.

Grain and Texture are determined by the cow, the feed, the temperature of cream and water, and method of working. Some cows produce butter of firmer texture than others, while some give butter which is too difficult to spread on bread in winter time. The quality of being suitable for bread-spreading is a very important one in butter. Soft foods tend to produce soft butter, because they make an excess of the soft or oily fats. The higher the temperature at which the cream is churned above 55° the softer will be the butter, especially separator cream butter. Too much working and working by friction tend to make butter "greasy." A roller or lever worker, which applies gentle pressure, is best suited to preserve "grain" in butter. Soft butter may be temporarily hardened with cold water when washing, but it is not a permanent remedy. The temperature at which butter is stored also affects its body and texture.

There is a growing demand for pale-colored and lightly-salted butter. Too many Canadians are spoiling their butter for fancy trade by going to extremes in color and salt. To secure even color, a thorough mixture of the salt with the butter is the main point to observe. Washing with water too cold sometimes causes "streaks" or "mottles." The chief remedy for mottling is working twice. Fine salt, at the rate of 1/4 to 3/4 oz. per pound butter, suits the Canadian trade. Less than 1/2 oz. is desirable for British markets.

The most suitable package for export is the 56-lb. box lined with paraffine wax and heavy parchment paper. Pack the butter firmly and cover top with parchment paper and a light salt paste. Boxes are better covered with canvas sacks for shipping. For local trade we use the oblong pound print wrapped in parchment paper, 8x11, having our stamp—



—on each print.

For keeping quality have perfect milk, ripen cream properly, churn at as low a temperature as possible, wash twice, salt one ounce to the pound, work twice, pack firmly in tub or box, exclude the air, and keep at a temperature of 12° to 33° F.
Ontario Agricultural College. H. H. DEAN.

VETERINARY.

Milk Fever Case Wrongly Treated --- Cow Killed by Drenching.

To the Editor FARMER'S ADVOCATE:

SIR,—Owing to the increasing prevalence of parturient apoplexy, or "milk fever," and the discovery of an effective remedy, I would give your readers my experience with a case I pronounced as milk fever which terminated fatally in a dairy herd under my management. This cow, a fine Jersey, was in fair flesh, and of a strong, robust constitution. Being a persistent milker, she continued to give a copious flow until parturition took place on morning of July 17th. It was an easy birth. She was fed bran and hay and given as much slightly warm water as she cared for. The same evening was out in a sharp shower of rain for about a quarter of an hour. At night she was partially milked and enclosed in a box stall, and was lively when left for the night. The next morning at five o'clock she was found lying with her legs stretched out, breathing laboriously, a slight moan escaping with each breath. She was bloated considerably, and struggled quite frequently, as though sudden pains troubled her at intervals. I undertook to treat her. I administered a pint and a half of linsed oil and two ounces of turpentine to relieve the bloating. In about twenty minutes I drenched her with two pounds of Epsom salts and an ounce of ginger. For half an hour the labored breathing continued and the bloating increased. To relieve this I punctured her on the left side, midway

between the hook joint and the last rib. Had a good escape of gas, and her side became quite flabby. I had a rectal entry made with the hand, and a few particles of hard, dark excrement were dislodged from an arm's length. About this time I concluded to try the potassium iodide treatment which had been described in your columns in a recent issue, and was about to procure the required articles when I noticed the animal discharging some chewed hay and a watery-looking matter from her nostrils. This increased until it began to interfere with her breathing, so I had her raised to a natural position, with her front legs bent under her, and had her head held up, hoping to thus return the discharge to her stomach. Until this time (seven o'clock) the cow had been conscious, though in evident distress and perceptibly sinking. She had not been held in this position two minutes until she became unconscious. I let her head down, she gave three or four gasps, and died. It struck me as peculiar and unnatural that she did not struggle or move a muscle in the slightest degree, and I could only satisfy myself she was dead by putting my ear over her heart. Was it milk fever? Had I been treating her properly?
Hopkinsville, Ky. DAIRYMAN.

[There is little room for doubt that the case so minutely described was one of milk fever, and had she been given the Schmidt udder injections when first discovered down, she would likely have been living to-day. The great probability is that the cow was killed by the drenches she received, and which she could not properly swallow, causing them to enter her lungs. Dr. Tennant, V. S., who has had probably twenty cases, with only two losses, and those from interference outside of his treatment, has altogether dispensed with drenching until after the udder injection has so far cured the case to enable her to swallow properly, and then he gives simply a teaspoonful of whiskey, with a small quantity of ether and nux vomica. He seldom gives physic any more, as he finds the cows are generally better without it. When he reaches a patient he first washes the udder and teats with water to which has been added a small quantity of creoline, then milks her out and injects, with a perfectly clean instrument, the Schmidt treatment at blood temperature. He also finds it well to knead or rub the bag after the medicine is injected. He then leaves her as comfortable as possible for a few hours, when she invariably gets unto her feet. Usually in about six hours after the udder injections she is able to swallow freely, when the whiskey or other stimulant is given. It is generally necessary, or, at least, advisable, to repeat the udder injection ten hours after the first, and to continue giving the stimulating drenches every six or eight hours for a day or two. We have heard of several veterinarians trying the new treatment, and all seem well satisfied with it.]

Artificial Impregnation.

(BY VETERINARIAN.)

During the more prosperous periods in horse-breeding circles the frequent disappointment to the breeder in not being able to raise foals from a percentage of the best mares through apparent barrenness, led the more wide-awake to investigate the cause of failure and seek to overcome the difficulty. Upon investigation it was found that in very many of those cases the cause of failure to breed lay in the fact of various peculiar abnormalities existing at the os-uteri (neck of womb). Frequently this organ will, upon examination, be found to be mechanically blocked with mucus and membranous deposits, which only require to be carefully removed and the organ dilated with the hand just before service. But from what we can gather from literature and the more practical horsemen and stallion owners, the abnormality most frequently lies in an unnatural entrance to the womb (os-uteri), which is either directed to the right or left, up or down, as the case may be, forming a mechanical obstruction to the ready entrance of the vital fluid into the womb, which carries the spermatozoa to inhabit the ova; and while apparently a simple matter, these conditions have been a source of perplexity and loss to many an enthusiastic owner. Although this subject has been more thoroughly investigated by horse-breeders than any other class of men, it by no means follows that they are the only ones who have suffered loss from this cause. Cows, ewes and sows are not exempt from such conditions; yet the former is, perhaps, noticed in greater percentage than any of the other domesticated animals. Not that the writer considers that they are so at birth, but contagious abortion (a prevalent disorder) has brought about a thickening of the neck of the womb, practically closing it up and rendering many a valuable breeding animal a subject for the block. Much has from time to time been written on the subject, and contrivances invented and placed upon the market to enlighten the public and relieve their condition, and although many of the instruments possessed high merit, yet much depends upon their successful manipulation. In conversation with Mr. O. A. Coates, of Bothwell, Ont., a successful and extensive stallion owner, we gathered that he had devoted several years to the study and practice of artificial impregnation, and from that gentleman (who has become an expert at both locating the trouble and applying the proper remedies) we learned that he now considers barrenness an almost unknown condition, and has to-day in his vicinity many strong foals running about whose dams failed to breed in the

normal way. After the second or third failure, Mr. Coates provided himself with the necessary appliances (such as impregnators, capsules, etc.), and practice has rendered the operation a comparatively simple one to him. What I wish more particularly to refer to is the introduction of the semen into the womb by means of the half-ounce gelatine capsule put up for ordinary veterinary practice.

The heretofore barren mare or cow is carefully examined as to the exact condition of the os-uteri. A clean basin and small glass syringe is at hand, heated to about the temperature of the blood (102° Fahr.), with warm water, also the necessary capsule, the cap of which has been punctured with a pin or other small instrument to allow the escape of air when replaced, then the service of the male is allowed, the semen is withdrawn by the hand from the floor of the vagina into the basin, and carefully and quickly drawn into the small syringe and deposited into the capsule and top replaced, which is pressed into the womb through its neck, the os-uteri. Care must be exercised in order to keep the outside of the capsule dry, as moisture renders it slippery and hard to direct. I believe the impregnator in every way reliable when carefully handled, but the danger of injuring the parts with which it comes in contact renders it more unsafe than the above described method.

In case of a stallion or bull being overrun at the busier seasons, it is just as practicable to catch the escaping semen from the stallion or mare when an independent mare is at hand at the proper moment, and impregnate the two subjects at one service. With cows this may be more difficult; yet, in the hands of an expert, this may even be accomplished with success.

The after-treatment should in no way differ from impregnation obtained by natural methods.

MISCELLANEOUS.

Pure Culture Starters.

DEAR SIR,—I would like to draw the attention of owners and patrons of creameries and cheese factories to a circular recently issued by this laboratory to the creameries and cheese factories throughout the Province.

The circular contains information which will be of service to cheese and butter makers. It also states that this laboratory is prepared to furnish them at a nominal cost with pure cultures for cheese and butter making.

There have, as yet, been very few applications for these starters, more cheese than butter starters having been asked for. There can only be two reasons why this opportunity is not being more fully taken advantage of. Either the buttermakers consider that their butter cannot be improved in flavor or keeping quality, or they are unaware of the advantages derived from the use of pure culture starters.

In order to give some information to those who have not been able to give much attention to the subject, I have made a few extracts from a recent report of Prof. Conn, of Storrs, Conn., who has recently been inspecting the European dairy methods. As he is perhaps the highest authority in America upon the bacterial production of flavor in butter, his opinions may induce patrons and makers to make a further study of the question.

EXTRACTS FROM PROF. CONN'S REPORT.

"It has been proved that the quality of the product is in a considerable degree dependent upon the particular kind of bacteria which may ripen the cream. . . . These facts are well known, but the practical application of them has not been very widely extended in any European country except Denmark and North Germany.

"In Denmark the use of pure cultures has become very common. It is stated that over 95 per cent. of the butter made in this great buttermaking country at the present time is made by the agency of artificial cultures used in cream ripening. This percentage is surprising, and conveys a very great lesson. Danish buttermakers stand at the head of the profession for the world. Danish butter commands the highest price, and has the highest reputation of all butters. The Danes adopt with practical uniformity the use of pure cultures, and the undoubted inference to be drawn is that the use of pure cultures in cream ripening results in uniform advantage.

"The conclusions of the Danish Association of Buttermakers is given as follows: 'Butter made with pure cultures is almost always better than that made by the older method. While this is not always the case, and while it is true that some samples of butter made without pure cultures rank very high, there is no uniformity in regard to the grade of the other types of butter, while the butter made by pure cultures is of uniform grade. There has been since the introduction of pure cultures a noticeable and almost universal improvement in the grade of Danish butter in general.' . . . The results of this method of the use of pure cultures in Denmark are, of course, satisfactory, or the method would not be so widely used.

"It is somewhat more expensive than to make butter without pasteurization and pure cultures, and we may be sure that if the result were not satisfactory the process would not have been adopted in over 95 per cent. of the creameries."

The starters sent out from the laboratory are identical with those used in Denmark, and with proper care and management should yield equally good results. Patrons should ascertain if their makers are obtaining the highest price for their butter or cheese; if they do not, let them make inquiries as to the cause of the lower price. In nine cases out of ten the fault will be found in the flavor; that is, it is the result of bad or no starters, or of tainted milk.

In other industries where bacterial organisms are made use of in the production of a manufactured article, such as in breadmaking, brewing, etc., those establishments which use the pure culture system are superseding those which adhere to the old, unreliable methods.

The pure culture method is not a mere scientific theory. It is nothing less than a businesslike method of producing a standard and uniform article. No man expects to obtain a clean crop of wheat if he sows seed which contains half a dozen kinds of seed, and he can no more reasonably expect to obtain butter or cheese with a uniform flavor if the cream has been ripened by undesirable bacteria.

The Canadian cheese has obtained the position it now holds in the British market because in its manufacture accurate technical knowledge and sound business principles have been used. At present the Farmers' Institutes in the States, and the dairy associations in Australia, New Zealand, and the States, are taking up the subject of dairy bacteriology far more energetically than is being done in this country. It is especially desirable, now that the efforts of cold storage are being so closely watched by the British buyers, that everything that can have an improving influence upon our food products should be taken advantage of to the fullest extent.

It must not be supposed that pure starters will compensate for carelessness or neglect in any part of the process of buttermaking. Milk or cream that has undergone any injurious bacterial change cannot be made to give good butter or cheese by any treatment. The greatest benefit can be derived from the use of pure cultures only when the cream or milk is ripened by the bacteria contained in the starter. This, as a rule, necessitates pasteurizing the cream. However, great improvements can be made by taking precautions as to cleanliness and the employment of low temperatures while handling the milk, the starter being added when the cream is set to ripen.

MALCOLM ROSS,
Bacteriological Dept., Ontario Agr. College.

POULTRY.

Brooder House.

In order to successfully raise early or winter chickens, a comfortable house is necessary. Manufacturers of poultry supplies are prepared to furnish us with outdoor brooders, but these are scarcely suitable for large numbers of chickens until the snow has gone and the weather has become warm enough for the chickens to spend some time in the open air. We find that a warm house saves food and fuel. The season is fast approaching when we must begin planning and building if we intend to raise chickens during the coming winter.

There are houses and houses, and each has some special claim to our consideration. If one is a practiced hand at broiler-raising, the cost of the house is not so much to be considered as its suitability and durability. The one I shall describe is suitable for a learner, as it is not expensive and will last sufficiently long for the beginner to be transformed into a successful poultry-raiser, or to have decided that poultry-raising does not pay.

Ours, as shown in Fig. No. 1, is constructed of unplanned, cheap quality of inch pine lumber for siding and roofing—two thicknesses, or double-boarded, with one ply of tarred paper between. The lumber is all put on outside of the frame, and is quite windproof.

The frame, as shown in Fig. No. 2, is composed of 2x4 in. scantling, excepting the collar beams, which are inch material, and sills 2x6. The building is 12 ft. wide by 20 ft. long. The north side is 6 ft. high, the south side 4 ft., with double pitch roof, being 8 ft. high in the ridge, which is 4 ft. from the north wall, giving the largest slope to the south. The sills rest on the ground, and it is banked on the outside and filled (preferably with gravel) level with the sills inside. The windows being low, the sunlight is thrown directly on the floor, which is the best place for the light in a brooder house. Single windows are used. Some poultrymen prefer the slope to the north, with the passage running along the south side. This must shut the chickens further from the sunlight.

In Fig. No. 3, the inside divisions are shown. In the section marked 1 (12 ft. by 6 ft.) we keep a box stove and the food supply. The pipe from the stove runs the full length of the house, retaining all of the heat. Wood being plentiful, we find the stove furnishes plenty of heat after the first few days of "chickenhood," so that the brooder lamp can be put out during the day. In section 2 (which is 9x4 ft., a brooder, marked B, is kept which will accommodate fifty chickens, more or less. This pen will always contain the latest hatches. When three weeks old they are moved into pen 3 (9x5 ft.), which is provided with a warm hover, marked H. This is similar to but larger than the brooder, and requires no lamp. When a third lot is hatched,

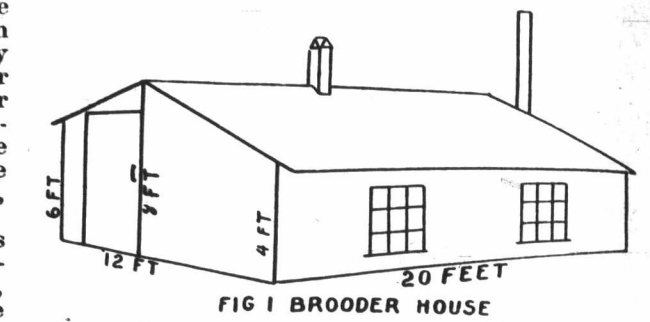


FIG 1 BROODER HOUSE

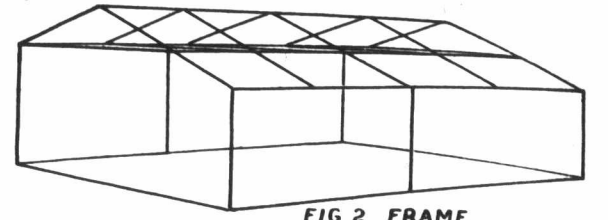


FIG 2 FRAME

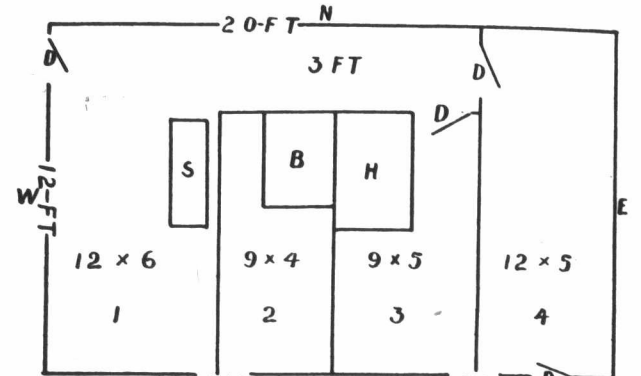


FIG 3 GROUND PLAN

the first are moved into pen 4, which extends the full width of the house, being 12 ft. long and 5 wide. When the fourth lot of chickens are hatched the first is ready for market, and should weigh between two and a half and three pounds to the pair. Some broiler-raisers succeed in getting them to weigh four pounds per pair at eight weeks old.

The divisions between the pens should be of netting, and a ventilating shaft may be run from the floor through the roof. We have a small door leading from division 1, so that the older chickens may have some outdoor exercise. Some successful breeders put one hundred chickens in each division instead of fifty. In that case I think the first compartment, marked 2, and the brooder, should be divided lengthwise in order to avoid overcrowding of the very young chickens.

GYRA.

A Chick from a Broken Shell.

Mr. W. J. Campbell, Melgrove, Ont., writes us: "I imported two settings of Barred Rock eggs this spring, and when they arrived the shells of two of them were broken. I put a piece of court-plaster about an inch square over the cracks, and one of the eggs hatched a live chick all right."

Take Care of the Chickens and Keep Them Growing.

Hatching them out is one thing, but to bring them up to maturity without a check in their growth and to save them from their many enemies is quite another. The qualities of the future breeder and the prolific layer depend largely on the care and management of the chickens while young. A strong, vigorous constitution is required in our fowls to stand the rigors of the long winters, and if eggs are to be produced in the cold weather it is doubly necessary that the fowls be hardy. This is the main point in a flock of good layers.

There are so many adverse circumstances to retard the growth of chickens that the most untiring energy and persistent watchfulness are required to combat the evils. There is no stock on the farm that has more enemies than the poultry, which is the reason that so many give up in disgust and think that, as a business, poultry-raising has too many disadvantages to warrant any outlay of time or money. Many poultry-raisers will admit that if they save one-half the chickens they hatch out they do pretty well. Crows, hawks, rats, skunks, etc., are all to be taken into account, and an extra number hatched to allow for what, people think, must inevitably be destroyed. The wonder is that any are raised with the haphazard methods that most people employ in their management of poultry. They talk of the "poor luck" they have, and will go on raising, or trying to raise, chickens year after year—always experiencing the same losses—yet make no provision for safe shelter. Every chicken lost is worth from 15 to 25 cents (and on the farmer's table it is worth more) when butchers' meat is 10 and 12 cents per pound, pork 5 cents per pound live weight, and cheese 13 cents; yet nearly enough chickens and poultry in general are destroyed annually on many farms to furnish each farmer's table luxuriously and cheaply.

It is absolutely necessary, if one wishes to avoid these losses, to have a proper building to shelter the young fowls in at night. Almost any farmer who is at all handy with tools can put up a building that will keep them safe, and into this the young broods should be taught to go. The size should be regulated by the number of fowls one expects to raise, and plenty of room allowed so

that they will not be crowded as they grow larger. It must be well fitted together, so as to be perfectly rat-proof and the roof water-tight, as dryness is as essential for a chicken's health and comfort as man's. Ventilation is also necessary, and sliding windows, with fine poultry netting on the outside, are the simplest arrangement.

When different kinds of poultry are to be housed, partitions should be put in to keep them apart. The convenience of a place like this cannot be realized until one has tried it, and in most cases the value of the poultry lost in one season will defray the cost.

Roosting in the same filthy coops night after night is not only a source of disease, but greatly retards the growth of young fowls, for if they are covered up closely enough to keep out prowlers, then the air becomes so laden with poison that in breathing it into their lungs a healthy action of these and the other organs is impossible; and lice being the companion of filth, from these two sources most of the diseases of poultry spring. There is a cause for everything, and when a sick fowl is noticed, destroy it and look for the cause. Examine the perches—they will be found covered with the little mites that attack the fowls at night and render them weak and debilitated and an easy prey to disease. Attend to these quickly with coal oil and brush, and have the henhouse cleaned. Remove all the old truck not required. Perches, nests and water vessels are all the furniture required in a henhouse, and these need to be kept scrupulously clean.

I should have emphasized the fact that the roosting shed for the chickens must be entirely separate from the henhouse, as nothing is more injurious for them than to be mixed up with the old fowls. Have it placed in a situation convenient to their runs, and it affords them a shelter during heavy rain storms.

If chickens have the run of a good large orchard they usually thrive well. It is better for them than staying around the barns, as it is cool and shady and they have better shelter from hawks and crows, and they can pick up quantities of insects that are so injurious to the trees. Evergreens also form excellent shelter for them when the hawks are on the watch, as they can run under cover of the thick branches and are safe. People who keep white fowls usually lose more chickens than those who have the dark ones, as they are so easily seen by their enemies hovering overhead.

Keep the chickens steadily growing up to maturity. A stunted chicken never makes a good fowl. Feed regularly, house them carefully, and keep them clean, and success will be the result. Close observation and prompt action—no put-off—are what is needed to help towards success in raising poultry.

Huron, Ont.

P. J. C.

GARDEN AND ORCHARD.

The Ontario San Jose Scale Commission.

(Continued.)

Beginning on the 3rd of July, the San José Scale Commission held two sessions daily at points taken in the following order: St. Thomas, Chatham, Blenheim, Guild's, Leamington, Kingsville, Amherstburg, and Windsor.

Except at Chatham, Blenheim, Guild's, Kingsville, and one farmer at Leamington, the witnesses had not had any personal experience in combating the insect, but valuable information was obtained relating to valuation, compensation and inspection at all these places.

Mr. A. W. Graham, a nurseryman at St. Thomas, thought the regulations pertaining to fumigation injurious to owners of small nurseries who sell direct to farmers. His customers, who preferred to have the trees taken out of the rows and immediately hauled home to be planted, were inconvenienced and delayed. He thought the San José scale could be held in check by washes and spraying. The other witnesses approved of going on discovering and burning affected trees.

At Chatham, interesting evidence was given by Mr. John Van Horn, who in 1893 had bought some affected nursery stock from Parry, New Jersey. In 1895, Parry notified him to be on the outlook for San José scale. He found it, and began treating it with a California mixture of lime, sulphur and salt, and later with whale-oil soap. One Simoni plum tree was cured, but the scale was not eradicated from the others. When the Act came into effect, his treatment experiments were stopped, and the affected trees were burned. Mr. G. Marshall, a neighbor of Mr. Van Horn's, produced a map of his orchard to support his theory that the wind had carried the scale through blanks in a row of pine trees into his orchard out of Mr. Van Horn's. Mr. Frank Wilson, who has about 200 acres in orchard and nursery, has had some experience with the scale. He never saw trees killed by it. The friction with the farmers has been caused by the brusqueness of the officials and the low compensation for destroyed trees. Mr. J. C. McMullin estimated his loss at \$150, whereas he received only \$15.75. He would not replant until he saw what the result of the present disturbance is likely to be. A number of other witnesses favored the continuance of the effort to "stamp it out," with increased compensation for destroyed trees.

At Blenheim, a large number of witnesses, with various opinions, were examined. Details of the method of inspection occupied a good deal of attention here. It came out that the first examination had missed it in orchards where it was subsequently discovered, and vice versa; that one set of inspectors had reported it in an orchard (Geo. Mallory's) and blazed 96 trees where the next set of inspectors said they could not find it. The majority of the Blenheim witnesses were in favor of going on with the Act, but increasing compensation. Here, as well as at Chatham, the witnesses were cross-examined by Mr. Laird and Mr. John Gordon, of Guild's, who tried to get them to give opinions on two points—whether, if it can be proven that the insect is on forest trees and on weeds, it is possible to "stamp it out," and whether the Government should guarantee future immunity to owners who cut down and burn their orchards.

On the 6th July the Commission held sessions in the large public school house at Guild's. At the evening session, men, women and children crowded every foot of sitting and standing room. The opposition to the Act is very fierce in this neighborhood. In 1892, Mr. Warner had introduced scale into his orchard on some young nursery stock. He noticed the effects of it in 1897, and sent specimens to Ottawa for identification. It is not known whether all the infestations in the district have spread from his orchard or not, but the scale has been found in a number of orchards, which have been cut down and burned. Mr. Gordon produced willows, wild hemp, and several other herbaceous plants, upon which the insect had settled, and inoculations of various forest trees, to prove that the insect can live on them. He described his resistance to the cutting of his trees by locking gates and otherwise, vainly hoping that he would be taken to jail and his orchard spared in the meantime. Mr. Glendenning, a heavy loser, held that they might as well try to stop the wind as to exterminate the scale. Mr. Laird emphasized the value of a farmer's orchard for ornament, shade and protection, aside from its commercial value. If they burned his barn to kill the rats, he is not too old to build another, but he could not hope to enjoy another orchard. He favored the continuance of inspection. He thanked the Government for helping to discover the scale, and held that its next duty was to conduct experiments to find out how to control it without destroying the orchards.

At Leamington, Kingsville (where two or three orchards have been burned), Amherstburg, and Windsor, the witnesses were divided in their opinion, some favoring procedure on the present lines, with increased compensation, and about as many others favoring remedial treatment. Valuation is now made by the Government Inspector, and compensation given to the extent of one-eighth for infested trees and one-quarter for suspected ones. Nearly all the witnesses advocated valuation by some kind of arbitration in which the owner would have a voice, and that he should be compensated at one-half to three-fourths of the arbitrated value.

At the close of the Windsor session the Commissioners went to Catawba to observe the effects of remedial treatment for San José scale there. They expected to meet Prof. Webster, the State Entomologist of Ohio, at that place.

In the report of the visit of the Ontario Commission to Catawba Island, Ohio, published by an American exchange, it is stated that the Commissioners were shown infested trees from which the San José scale had been eradicated by the use of strong whale-oil soap properly applied. The insect, it seems, can be controlled by applications of weaker grades of soap; that is, soap with a lower percentage of caustic potash. The report refers to other benefits the trees derive from the soap-spraying besides the reduction or eradication of the scale insects. May not some of these benefits arise from the destruction of borers and the fertilizing effects of the drenching which the trees receive and which runs to the ground?

QUESTIONS AND ANSWERS.

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

Veterinary.

PIGS WITH SKIN ERUPTION.

SUBSCRIBER, Simcoe Co., Ont.:—"Would you please answer the following question: I have an acre of tares and an acre of rape in the same field. When the pigs had been feeding on them for a week I noticed them getting very itchy. Some of them are very bad—the skin is all cracked along their backs. I think it must be the rape that is causing the trouble. Will it do them any harm? Some of the pigs are white, some black. It is only the white ones that are affected yet. All the grain they get is corn meal. 1. Is there anything that could be done to relieve them? 2. Could you tell me how to mix fish oil and coal oil for keeping flies off cattle?"

[In answer to yours of the 14th inst. re pigs, I would say that the trouble certainly is not due to the rape. I cannot speak so confidently about the tares, as I cannot call to mind instances of pigs

pasturing on such. Still, I do not think it would cause a skin eruption, especially in such a short time. The condition is probably due to high feed and confinement before being turned out, though the heat of the sun hastened its development. White hogs are liable to sunburn when first turned out in hot weather. I would advise the following treatment: Feed once daily, in sloppy food, equal parts Epsom salts and sulphur, say from one to two tablespoonfuls for each pig, according to size. Dress the affected parts with raw linseed oil, forty parts; carbolic acid, one part. Dress twice daily.

J. H. REED, V. S.

Ontario Agricultural College.

2. See FARMER'S ADVOCATE, July 15th issue, page 403.]

Miscellaneous. NOTICE.

We have decided to discontinue giving answers to legal questions, many of which we find are not of general interest. It is really no part of the legitimate work of an agricultural paper, and is not, as a rule, adopted by the best papers of this class; besides, our space has been pretty heavily taxed with questions upon agricultural and live stock, and we desire to encourage this feature by giving more prompt answers than we have been able to do in the past on account of the large amount of matter which at times accumulates in this department. Our friends, we trust, will take kindly this announcement, and not refer any more legal questions to us.

SICK DUCKS.

SUBSCRIBER, Oxford Co., Ont.:—"I had twenty ducks about half grown. They were healthy until a few days ago, when some of them would stagger around and in a few hours die. They were fed two quarts corn meal and bran, equal parts, three times a day. They had plenty of water, though not extra clean. Give cause and cure, and if feeding is correct?"

[I think the trouble is caused from a lack of grit or gravel and shade. Ducks require shade from the sun, for if it is not supplied they will sometimes stagger about and in a few hours die. They will sometimes die from lack of grit. We put a handful of grit into every two quarts of feed. Whenever we have undertaken to raise ducks without the grit, some always died as above. I would prefer one part shorts in the place of two parts bran. If the ducks are for breeding purposes, less corn meal would be advisable, as this food is very fattening. We are feeding our ducks as follows: Equal parts by measure of bran, middlings and corn meal, which is mixed dry, then moistened with skim milk. We add one handful of grit to every two quarts of food. We also give them all the green feed they will eat. Fresh water is given at every feed, which is five times daily. No water is allowed for the ducks to swim in. I would prefer clean water to a filthy stream or pond.

W. R. GRAHAM,

Manager Poultry Dept.

Ontario Agricultural College.]

UNHEALTHY PEACH TREES—YELLOW.

G. R. H., Wentworth Co., Ont.:—"I write to ask for a little information regarding peach trees. They have been planted three years and have made very rapid growth, but I notice this spring they are not as healthy as should be. In working around them I notice at the surface of the ground a jellylike substance has oozed out of the trunk, in some cases to the amount of a small teacupful or so. Is it the yellows? Please describe fully the yellows. There is a good showing of fruit on these trees at this date. Very little curl leaf. An answer to the above through your valuable paper, the ADVOCATE, will be prized."

[In reply to your correspondent's question regarding his peach trees, I may say it is difficult to tell from the information he has given just what is the matter, but there are several things which would cause the gumming which he speaks of. Partial winter-killing or injury to the bark would have this effect. If the gumming occurred higher up on the tree it might be due to peach rot (*Monilia fructigena*). However, if the gumming occurs near the ground it is more likely to be due to injury to the bark. In a bulletin on "Peach Culture," by Prof. Craig, issued by the Experimental Farms, the author gives Bailey's description of yellows as follows:—

"Yellows is a distinct disease. It attacks peach trees of all ages and in all conditions of vigor, seeming to have a preference for those which are thrifty. It is incurable, and its termination is always fatal.

"It is communicable from tree to tree. The means of communication is unknown, but it is not spread through the soil, it does not originate in the roots, it is evidently not conveyed from flower to flower, and it is probably not transferred by means of pruning tools.

"The one unmistakable symptom of yellows is the red-spotted character of the fruit. The flesh is commonly marked by red lines or splashes beneath the spots. These peaches generally ripen prematurely, and in the second year they are usually smaller and often more fuzzy than the normal fruit. The second symptom to appear, or the first in trees not in fruit, is the tip growth. This is a short growth starting from the upper or terminal buds, usually late in the season, and is characterized by narrow stiff yellowish small leaves, which stand at nearly right angles to the shoot. Sometimes these tips appear late in autumn, after the leaves

have fallen, or in spring before normal growth begins. They are often first seen upon the ends of watersprouts. This tip growth is sometimes little pronounced, and then only a practiced eye will detect it.

"The third mark of the disease is the pushing-out of slender, stiff-leaved, yellowish shoots from the body of the tree or the sides of the large limbs. In pronounced cases, or when the tree is about to die, these shoots may branch into close, bunched tufts. These symptoms are frequently wholly absent in New York State throughout the entire course of the disease.

"In its final stage the disease is marked by small and slender growth of all new wood; small narrow yellow or reddish foliage, and occasionally by a great profusion of slender and branchy growths in the center of the tree.

"As a rule, yellows trees die in five or six years from the first visible attack.

"The yellow and stunted condition following neglect or the work of borers (both of the common borer and the pinhole borer) is often mistaken for yellows.

"Extermination of all affected trees—root and branch—is the only means of keeping the disease at bay. This work should be prosecuted vigorously and systematically, and with the full support of the whole community.

"Trees may be set in the very places from which yellows trees have just been removed, with entire safety. The disease is readily communicated to nursery stock by affected buds, even by buds from those branches of affected trees which do not show any signs of the yellows.

"Pits from affected trees, when viable, may be expected to propagate the disease."

W. T. MACOUN, Horticulturist.
Central Experimental Farm, Ottawa.]

PRACTICAL POINTERS ABOUT BEE FRAMES.

G. L. L., Prescott Co., Ont.:—"I hived a swarm of bees, and in about nine or ten days examined them and found that they had connected the frames by building their combs 'zigzagging' from end to end of the same, and that, when attempting to separate them with a knife, the combs full of honey, pollen and larvæ, fell to the bottom of the hive in a heap, and the following day the colony left for the woods. It was again caught and hived in a new hive, and in two days examined and found that the frames could not be removed, owing to pieces of comb having fallen across their bottom bars, and that while the bees were building comb from the top downward, they were also building it from the bottom upwards.

"1. What is the matter with my frames?
"2. Is it absolutely necessary to put in foundation sheets?"

"3. Do you suppose they were nearly swarming and that the disturbance only hurried them off?"

"4. My super frames are four inches high, with an upright in the middle. Will I require foundation for these spaces, which are about 4 x 8 inches?"

"5. How soon should the super be put on after the swarm was caught?"

"6. Where can supplies be procured, and what is the probable cost of a small extractor, a smoker and foundation?"

[1. As far as the circumstances stated are concerned, there is nothing the matter with your frames. The combs dropped in the first instance because, when you attempted to separate the frames, you had to do considerable cutting and breaking of the combs, which must have partially destroyed their support, and being tender, because new and heavy with honey, pollen and brood, they fell. In the second case, I am not sure what made the combs fall, but I am guessing they had become overheated. However, if you had used good brood foundation, running 5 or 6 sq. ft. to the pound, wired into the brood frames, and well fastened to their top bars, and had your hive been painted white, protected from the sun and had an entrance clear across the front $\frac{1}{2}$ to $\frac{3}{4}$ inch deep, your combs would not have fallen, as stated; and if, in addition to the above, your hive had stood level, the bees would have built their combs straight and even in the frames.

2. It is absolutely necessary for the frames to hang plumb, and to use some kind of a foundation guide if you wish your bees to build their combs straight and even in the frames. A beginner should use full sheets in all his frames, both brood and surplus. A success can, in many cases, be made by using strips of foundation, about $\frac{3}{4}$ inch wide, and fastened to the center of the top bars of the brood frames; but only persons of some considerable experience should attempt this.

3. No. A swarm, for various reasons, will often leave its hive a day or so after being put into it, and especially if disturbed by the breaking down of its combs, as described. It is not often, however, that they will leave it as late as ten days after being hived, but such cases are by no means exceptional under such circumstances as mentioned.

4. Yes.

5. The same day, as soon as hived.

6. Beekeepers' supplies can be had of W. A. Chrysler, Chatham, Ont.; Goold, Shapley & Muir Co., Brantford, Ont.; R. H. Smith, St. Thomas, Ont.; and for the Heddon or case system of handling bees, of A. E. Hoshal, Beamsville, Ont. An extractor, such as you mention, would cost from about \$7 to \$9; a smoker, \$1 to \$1.60; brood foundation, 45c. to 50c. per lb., and section foundation, 55c. to 60c. per lb.

Lincoln, Co., Ont.]

A. E. HOSHAL.

FITTING A BULL FOR SHOW.

E. B. PARSONS, Stanstead Co., Que.:—"What would be the best ration for my twenty-months Ayrshire bull to fit him for showing this fall?"

[Regarding the fitting of the Ayrshire bull for the fall shows, unless he is in fairly good shape now there is little enough time to put a showing bloom on him. The idea is not so much to get him fat as to have him fresh and thrifty, with the brightness of eye and mellowness of hair and skin of a horse ready for a race. To this end he should not have heavy grain-feeding, nor such as corn meal at all. While a number of suitable combinations of foods could be made, we would recommend as grain one part each of pea chop and oil cake, and two parts each of oat chop and wheat bran. This is a safe food, and can be fed liberally after he has become accustomed to it. Aftermath clover, large enough to mow, and allowed to wilt a couple of hours in the sun, then run it through a straw-cutter, would do well to mix the chop with, or bright clover hay would do well. He should get from six to eight quarts of the chop per day after a couple of weeks' feeding. He should be kept in during the day in a cool, darkened place, and allowed out in a paddock or field at night, away from other stock, so that he will remain quiet and contented. Fresh water and salt should be kept before him constantly, and he should have liberal daily grooming with brush and flannel, so as to put his skin right. His hoofs should be trimmed into natural shape and his horns cleaned up before the show. If the bull is of typical Ayrshire form and has never been stunted, he should with the above treatment be made a probable winner in good company.]

CULTIVATION AND PRUNING OF RASPBERRIES.

E. S., Oxford Co., Ont.:—"Will you kindly give me some information on the cultivation and pruning of the raspberry?"

[A raspberry plantation should be set in spring as early as there is warmth in the land. The stock set out should be vigorous suckers of the previous year's growth, taken from productive plots of good variety. The land to receive the plants should be prepared in the previous autumn by deep and thorough cultivation and liberal manuring. The plants should be set in rows six feet apart and four feet apart in the rows. The plants should be trimmed back to about one foot in length at planting. The ground between the plants should be kept cultivated on the surface during the fore part of the season, and then mulched with damp straw to keep down the weeds and preserve moisture. The following spring the canes may be tied up to stakes loosely with soft string or strips of cotton, but this is not generally considered necessary. The ground should be cultivated as during the previous season, or a mulch may be applied soon after the fruit is set on the canes. After the fruit has been harvested, the old wood may be removed and burned, or left till the fall or following spring, and the latter is probably the better course. The tops of the canes should be cut back in the spring, leaving them about three feet high. They will thus grow stronger, and will be less liable to fall down with their own weight. It is wise to thin out the canes each spring to four or five vigorous canes in a hill or group. The soil should be kept in rich condition, and when the plantation shows an inclination to run out, a new one should be set out and some other crop grown on the ground for a few years. By renewing the plot in this way every five or six years, good results should be realized, if general, intelligent care is given to all the details of the work.]

VIRGIN HEIFER GIVING MILK.

C. A. M., York Co., Ont.:—"In my herd is a heifer about eighteen months old, which has not been suckled by self or other cattle. Nobody has ever milked at her, and she is not in calf, yet she is making bag. Her milk is rich-looking and good color. What would cause the above, and what would you advise me to do?"

[It is no uncommon circumstance in good dairy herds for heifers to develop udders and give milk for months before calving. A number of such cases have come beneath our personal notice, but we cannot determine the cause of the premature lactation period. We have it on good authority that a heifer belonging to one of the FARMER'S ADVOCATE subscribers gave milk that produced 200 pounds of butter before having her first calf. We would advise milking the heifer, and breeding her when the proper time comes. She will likely develop into a good breeder and a good milker.]

STRAYED LICE.

On a recent date a small glass vial was received at the FARMER'S ADVOCATE, containing a number of very minute vermin. No letter has yet been received concerning the consignment, but we judge they were taken from the bodies of live stock, of which class we cannot determine. If our surmise is correct, we would recommend that the infested animal be given repeated washings with one or other of the commercial dips advertised in our columns. The consignor would confer a favor by writing us of the prey of the lice.

HORN FLY TREATMENT WANTED.

A. MCL., Renfrew Co., Ont.:—"As you are supposed to know everything, can you tell me what will be best to spray the cows with to keep the horn fly off them?"

[See FARMER'S ADVOCATE, July 15th issue, page 403.]

LEAKING WATER TANK—OX-EYED DAISY.

J. S. MCG., Hastings Co., Ont.:—"1. I built a large elevated tank of 2-inch pine plank last summer, and it leaks ever since. I put in shorts, and failed; then lime, and failed. Now, I hope the ADVOCATE will be so good as to help me out of the difficulty. 2. What is the best means of exterminating wild daisy?"

[1. If the planks of the sides and bottom of the tank were properly sized and put together, with paint at the joints and firmly hooped, no water should get through, especially after the wood became saturated. It is not an easy matter to prescribe in such a case without some knowledge of the cause of the leak. We would recommend, however, that the water be let out, the tank allowed to dry for a time, tighten the hoops, and then fill and cover all the cracks and seams with hot pitch. It may be necessary to stuff tarred oakum into the larger crevices.

2. The wild daisy, or ox-eyed daisy (*Leucanthemum vulgare*), is a simple perennial which grows from one to two feet high, bearing large yellow-centered flowers with white rays. It infests all kinds of crops, and it also grows where the land is not cultivated, as in permanent pastures and in by-places generally. It is most difficult to eradicate in permanent pastures and meadows, and especially as they grow older, since the roots of the daisies then become much interlaced with those of the crops. It is propagated by means of its seeds, and is frequently distributed among the seeds of timothy and clover. As it infests more particularly grass land, it is well to drop meadows out of the rotation, as far as possible, until infested fields have been dealt with. In the case of meadow land infested with the weed, pasture it until the middle of June, then plow it deeply, and sow with rape in drills, taking pains to cultivate the rape carefully, so as to make it a cleaning crop, and the rape will come in for fall pasture for cattle or sheep. It may be necessary to follow the rape crop with a crop of corn or roots that would be cultivated during the summer. In dealing with a grain field, plow the infested field lightly after harvest, and again deeply just before winter. In the interval give the soil two or more harrowings to induce the daisy seed to germinate. In the spring follow this preparation with a hoed crop or summer-fallow, and if necessary with another hoed crop. During the time of farming without meadow, corn, millet and early-cut rye or oats may be used for fodder. It should be the aim to facilitate the germination of the weed seeds in the soil, and then destroy the young plants before they produce seed. The plans we have mentioned are such as will surely destroy the weeds if they can be carried out thoroughly, but they may not suit certain men as well as some others that may be quite as effective. We invite those of our readers who have cleared fields of ox-eyed daisies to write us fully how they did it, for the benefit of many anxious readers.]

OPEN WOUND.

H. D., Northumberland Co., Ont.:—"1. I have a horse that was cut by overreaching last spring, and it has not healed up yet, and is some lame on it. It still discharges a little at the back of the hoof. What would be best to apply to it?"

"2. There is a small blue fly on the elm trees, that collects on the leaves, causing them to turn in, and by appearances will kill the tree. What would be best to destroy them?"

[1. We presume the wound cannot discharge freely on account of its situation, which is making it slow to heal. It should be thoroughly syringed out with warm, boiled, soft water and a little castile soap or a few drops of carbolic acid in the water, and then given a mild blister with cantharides, 1 part to 12 parts of lard. When on twenty-four hours, wash off and commence using white lotion made of one-half ounce each of sulphate of zinc, sugar of lead, and pulverized alum, dissolved in one quart of water. The wound should be kept clean and the lotion applied two or three times daily until healed. The horse should be fed on laxative food, such as grass and a little bran, so as to keep his blood right.

2. Without specimens of the insect, I can only say that it is probably a plant-louse which injures the leaves by sucking the sap by means of a slender beak inserted in the epidermis. The remedies against plant-lice are kerosene emulsion, whale-oil soap solution, and tobacco and soap wash, the receipts for which are given in the spraying calendar published in the FARMER'S ADVOCATE for April 1st. Either of these mixtures should be applied with a spraying pump and nozzle well under the leaves. The best time for the application is early in the spring, as soon as the plant-lice begin to appear.

J. FLETCHER,
Central Exp. Farm, Ottawa. Entomologist.]

SHOWS AND SHOWING.

Fairs of 1899.

CANADA.

| | |
|---------------------------------------|---------------------|
| Stanstead Live Stock, Stanstead, Que. | Aug. 23 and 24. |
| Industrial Exhibition, Toronto | Aug. 28 to Sept. 9. |
| Dundas County, Morrisburg | Aug. 29 to 31. |
| Eastern Exhibition, Sherbrooke, Que. | Sept. 4 to 9. |
| East Elgin, St. Thomas, Ont. | " 6 " 8. |
| Western Fair, London, Ont. | " 7 to 16. |
| South Lanark, Perth, Ont. | " 11 " 13. |
| Kingston District, Kingston | " 11 " 14. |
| Quebec Exposition | " 11 " 16. |
| New Brunswick Provincial, St. John | " 11 " 20. |

Table listing various locations in Ontario and Quebec with dates from Sept. 11 to Oct. 17, 1899.

Table listing various locations in the United States with dates from Sept. 4 to Oct. 7, 1899.

Canada's Great Fair.

Anticipating a large increase in the exhibit of utensils and products in the dairy department this year, the directors of the Toronto Industrial Exhibition have considerably increased the space over former years.

In reference to other departments of the Exhibition, it is only necessary to state that the indications are that the entries will be fully up to any previous year, while there will be many new and unique features.

MARKETS.

FARM GOSSIP.

P. E. Island.

Almost incessant rain since July came in. Should be at hay, but no use to begin till weather changes. Hay crop heavy, as damp weather has thickened it up immensely.

Oxford County.

The fall wheat in this section is now mostly in the barns. Ours yielded between one and a half and two loads to the acre, and I would estimate would turn out somewhere about 25 bushels to the acre.

Chatty Stock Letter from Chicago.

Following table shows current and comparative live stock prices:

Table showing live stock prices for Beef cattle, Hogs, Sheep, and Lambs, with columns for prices and dates.

There has not been such activity in the range cattle business as at present since the early eighties. There isn't exactly a boom, but the demand for cattle and cattle ranches seems to be largely in excess of the supply.

The tendency among corn-belt breeders is to buy instead of breed, and as long as this is the case the best cattle at market are liable to be branded.

The U. S. Government is just now buying 3,000 light cavalry horses. The first consignment of range horses reported at the Union Stock Yards market this summer arrived recently, and were from the ranch of J. R. Smith, Teton, Wyo.

This consignment was sold to Robert Hayden, London, Eng., for \$55 per head. They were partially harness-broken, and are among the first range horses exported to Europe.

The hog situation seems to be a very strong one, current prices being the highest since May, 1898. The demand for hogs and hog products is wonderfully wide, and if it were not so the current hog supply would be a much bigger one relatively than it is.

A Chicago man has returned from a trip to South-western Texas. He says the supply of sheep is fairly large, but the majority are not in condition to ship.

Montana wool has touched 20c., and sheep-growers in that State are in a happy frame of mind. Farming in the middle West pays industrious, capable people.

The trade in cattle at the Western market was brisk, receipts large, and well cleared up by noon; about 80 carloads, composed of 1,300 cattle, 1,100 sheep, 80 calves, 2,400 hogs.

Toronto Markets.

The trade in cattle at the Western market was brisk, receipts large, and well cleared up by noon; about 80 carloads, composed of 1,300 cattle, 1,100 sheep, 80 calves, 2,400 hogs.

Quality of fat cattle very fair. One consignment from Fullerton was extra choice. The price for best export cattle has averaged \$5.00 per cwt., which is an improvement over last year of probably one-half to three-quarters of a cent per lb.

Mr. James Harris bought one load of export cattle, 1,200-lb. average, at \$5.00 per cwt. Mr. H. Crowe sold 13 exporters, 1,325-lb. average, at \$5.25 per cwt.

Butchers' Cattle.—Choice picked lots of butchers' cattle, weighing 1,000 to 1,100 lbs. each, sold at from \$4.37 1/2 to \$4.50 per cwt.

Feeders.—Very few on offer. Choice well-bred steers, weighing from 900 to 1,000 lbs., worth from \$3.70 to \$3.90, in demand, and would meet a ready sale.

Sheep.—Mr. A. J. Murra, of Drumbo, Ont., was on the market with a choice carload of sheep, realizing the best price for the day.

Lambs.—Prices firm, at \$3.50 to \$4.00 each, or at \$4.75 to \$5.75 per cwt., for picked lots.

Hogs.—Deliveries large, and of fairly good quality. Prices firmer, and advancing on choice singers, weighing not less than 160 lbs., nor above 200 lbs.

Butter.—Liberal offerings. All select stock sold well for local consumption. Dealers' quotations are: Dairy tubs, strictly choice, 13c. to 14c. per lb.

Hay.—On the street market, 25 loads of hay sold at \$11.00 to \$13.00 per ton for old, and \$7.50 to \$9.00 for new.

Grain Market.—Ontario red and white, 68c. to 69c., and Manitoba hard, 81c. per bus.

Receipts more free. Market quiet; prices steady. Dealers sell at 13c. per doz. Small lots of select fresh-gathered, new-laid, are quoted at 14c. per doz.

Very little change of movement has taken place in the local market. Grass cattle are coming forward now, and in fairly good condition, but in a large per cent. of cases a few weeks longer on the grass would have been money well spent.

The prevailing condition of the market is good, as both sheep and lambs do not seem to be coming forward in numbers that would indicate any great quantity of them in the country.

The absence of real prime bacon hogs appears in the quoted prices, which are from 40c. to 45c. below Toronto quotations, or \$4.60 for best, down to \$4.25 for culled lots.

Shipments of butter during the week just ending (July 22), when our totals are made up, show a gain over the preceding week, but the two combined are not equal in volume to the two previous weeks.

A heavy blow was struck shippers this week in a decline on the foreign markets of a 1/2c. to 3/4c. per lb., in some cases shippers saying it reaches fully one cent.

British Markets.

Best States steers made 11c. in London, and 11c. in Liverpool; best Canadian, 11c. in London, and 10c. for Liverpool.



AN AFRICAN MILLIONAIRE.

EPISODES IN THE LIFE OF THE ILLUSTRIOUS COLONEL CLAY.

BY GRANT ALLEN.

(Continued from page 410.)

"You're a murderer, sir!" Charles shrieked out. "We shall starve or die here!"

Colonel Clay, on his side, was all sweet reasonableness. "Now, my dear sir," he expostulated, one hand held palm outward, "do you think it probable I would kill the goose that lays the golden eggs with so little compunction? No, no, Sir Charles Vandrift, I know too well how much you are worth to me. I return you on my income-tax paper as five thousand a year, clear profit of my profession. As a regular financier, I allow, I couldn't hold a candle to you, but in my humbler walk of life I know just how to utilize you. I lead you on where you think you are going to gain some advantage over others, and by dexterously playing upon your love of a good bargain—your innate desire to best somebody else—I succeed in besting you. There, sir, you have the philosophy of our mutual relations."

He bowed and raised his cap. Charles looked at him and covered. "And do you mean to say," he burst out, "you intend to go on so bleeding me?"

The Colonel smiled a bland smile. "Sir Charles Vandrift," he answered, "I called you just now the goose that lays the golden eggs. You may have thought the metaphor a rude one. But you are a goose, you know, in certain relations. Smartest man on the Stock Exchange, I readily admit; easiest fool to bamboozle in the open country that ever I met with. Regard me, my dear sir, as a microbe of millionaires, a parasite upon capitalists. I am a Robin Hood of my age, and, looking upon you as an exceptionally bad form of millionaire, as well as an exceptionally easy form of pigeon for a man of my type and talents to pluck, I have, so to speak, taken up my abode upon you."

"Why do you insult me by telling me all this?" Sir Charles cried, writhing.

The Colonel waved his hand. It was small and white. "Because I love the game," he answered, with a relish; "and also because the more prepared you are beforehand the greater credit and amusement is there in besting you. Well, now, ta-ta once more! I am wasting valuable time. I might be cheating somebody. I must be off at once. Take care of yourself, Wentworth. But I know you will. You always do. Ten per cent. is more usual!"

He rowed away and left us alone on the island. Charles flung himself on the bare rock in a wild access of despondency. As for myself, I climbed with some difficulty to the top of the cliff, landward, and tried to make signals of distress with my handkerchief to some passer-by on the mainland.

The evening came on slowly. Puffins and cormorants circled around our heads in the gray of twilight. Charles suggested that they might even swoop down upon us and bite us. They did not, however, but their flapping wings added, none the less, a painful touch of eeriness to our hunger and solitude.

About eleven o'clock we heard human voices. "Boat ahoy!" I shouted. An answering shout aroused us to action. We rushed down to the landing-place and cooed for the men, to show them where we were. They came up at once in Sir Charles' own boat. They were fishermen from Niggarey, on the shore of the Firth opposite.

A lady and gentleman had sent them, they said, to return the boat and call for us on the island; their description corresponded to the two supposed Grantons. It was half-past twelve by the gatehouse clock when we reached the castle. Amelia had gone to bed, much alarmed for our safety. Isabel was sitting up. It was too late, of course, to do much that night in the way of apprehending the miscreants, though Charles insisted upon dispatching a groom, with a telegram for the police at Inverness, to Fowils.

Nothing came of it all. A message awaited us from Lord Craig-Ellachie, to be sure, saying that his son had not left Glen-Ellachie Lodge, while research the next day and later showed that our correspondent had never even received our letter. An empty envelope alone had arrived at the house, and the postal authorities had been engaged, meanwhile, with their usual lightning speed, in "investigating the matter." Cesarine had posted the letter herself at Fowils, and brought back the receipt, so the only conclusion we could draw was this—Colonel Clay must be in league with somebody at the post office. As for Lord Craig-Ellachie's reply, that was a simple forgery; though, oddly enough, it was written on Glen-Ellachie paper.

But the oddest part of it all was that from the moment those two people landed at Niggarey and told the fisherman there were some gentlemen stranded on Seamew's island, all trace of them vanished. At no station along the line could we gain any news of them. It was a most singular and insoluble mystery.

Charles lived in hopes of catching his man in London. But for my part, I felt there was a show of reason in one last taunt which the rascal flung back at us as the boat receded: "Sir Charles Vandrift, we are a pair of rogues. The law protects you. It persecutes me. That's all the difference."

VI.

THE EPISODE OF THE GERMAN PROFESSOR.

Charles does a little in gold, and a little in land, but his principal operations have always lain in the direction of diamonds. Only once in my life, indeed, have I seen him pay the slightest attention to poetry, and that was when I happened one day to recite the lines:

"Full many a gem of purest ray serene
The dark, unfathomed caves of ocean bear."

He rubbed his hands at once and murmured enthusiastically, "I never thought of that. We might get up an Atlantic Exploration Syndicate, Limited." So attached is he to diamonds. You may gather, therefore, what a shock it was to that gigantic brain to learn that science was rapidly reaching a point where his favorite gems might become all at once a mere drug in the market.

It happened after this manner. We were strolling along Piccadilly when whom should we happen to knock up against but Sir Adolphus Cordery, the famous mineralogist and leading spirit of the Royal Society. "Halloo, Vandrift," he cried, in his peculiarly loud and piercing voice, "heard about this marvellous new discovery of Schleiermacher's? It's calculated to make you diamond kings squirm like an eel in a frying-pan."

I could see Charles wriggle inside his clothes.

"Please don't talk quite so loud! All London can hear you."

Sir Adolphus ran his arm through Charles' most amiably. "Come along with me to the Athenaeum," he went on, in the same stentorian voice, "and I'll tell you all about it. Most interesting discovery. Makes diamonds cheap as dirt. Calculated to supersede South Africa altogether."

Charles allowed himself to be dragged along. There was nothing else possible. Sir Adolphus continued that Professor Schleiermacher, of Jena, "the greatest living authority on the chemistry of gems," had lately invented, or claimed to have invented, a system for artificially producing diamonds, which had yielded most surprising and unexceptionable results.

Charles' lip curled slightly. "I've heard of it before. Very inferior stones, quite small and worthless, produced at immense cost, and not then not worth looking at."

Sir Adolphus produced a small cut gem from his pocket. "How's that for the first water?" he inquired, passing it across, with a broad smile, to the sceptic. "Made under my own eyes—and quite inexpensively."

Charles examined it close, stopping short against the railings in St. James' Square to look at it with his pocket lens. There was no denying the truth. It was a capital small gem of the finest quality.

"Made under your own eyes!" he exclaimed, still incredulous. "Where, my dear sir—at Jena?"

The answer was a thunderbolt from a blue sky. "No, here in London; last night as ever was; before myself and Dr. Gray; and about to be exhibited by the President himself at a meeting of Fellows of the Royal Society."

Charles drew a long breath. "This nonsense must be stopped," he said firmly. "It must be nipped in the bud."

How do you mean?" Cordery asked, astonished.

Charles gazed at him steadily. "Where is the fellow?" he asked.

Here in London," Sir Adolphus replied. "He's staying at my house, and he says he'll be glad to show his experiments to anybody scientifically interested in diamonds. We propose to have a demonstration of the process to-night at Lancaster Gate. Will you drop in and see it?"

Would he "drop in" and see it? "Drop in" at such a function! Could he possibly stay away? Charles clutched the enemy's arm with a nervous grip. "Look here, Cordery," he said, "this is a question affecting very important interests. Don't do anything rash. Don't do anything foolish. Remember that Shares may rise or fall on this."

"I should think it very probable," Sir Adolphus replied, with the callous indifference of the mere man of science to financial suffering.

Sir Charles was bland, but peremptory. "Now, observe," he said, "a grave responsibility rests on your shoulders. You must not ask in any number of outsiders to witness these experiments. I will come myself—I'm engaged to dine out, but I can contract an indisposition—and I should advise you to ask Mosenheimer, and, say, young Phipson. Above all, don't blab; for Heaven's sake let there be no premature gossip."

"We are keeping the matter a profound secret, at Schleiermacher's own request," Cordery answered, more seriously.

"Which is why," Charles said, in his severest tone, "you bawled it out at the very top of your voice in Piccadilly!"

However, before nightfall everything was arranged to Charles' satisfaction, and off we went to Lancaster Gate, with a profound expectation that the German professor would do nothing worth seeing.

He was a remarkable-looking man, once tall, I should say, from his long, thin build, but now bowed and hunched with long devotion to study and leaning over a crucible. His hair, prematurely white, hung down upon his forehead, but his eye was keen and his mouth sagacious. He plunged at once into the thick of the matter, telling us briefly, in his equally thick accent, that he "now brooded by his new process to make for us some good and satisfactory diamonds."

He brought out his apparatus and explained—or, as he said, "eggsblained"—his novel method. "Diamonds," he said, "were nozzing but pure crystalline carbon. He knew how to crystallize it—zat was all ze secret." The men of science examined the pots and pans carefully. Then he put a certain number of raw materials, and went to work with ostentatious openness. There were three distinct processes, in three-quarters of an hour (and he smiled sardonically) he could produce a diamond worth, at current prices, two hundred pounds sterling. "As you shall now see me perform," he remarked, "viz zis simple abbaradus."

The materials fizzed and fumed. The Professor stirred them. After three-quarters of an hour the Professor, still smiling, began to empty the apparatus. He removed a large quantity of dust or powder, which he succinctly described as "by-products," and then took between finger and thumb, from the midst of each pan, a small white pebble, not water-worn apparently, but slightly rough and wart-like on the surface.

They were handed round for inspection. Rough and uncut as they stood, it was, of course, impossible to judge of their value. But one thing was certain. The men of science had been watching close at the first, and were sure Herr Schleiermacher had not put the stones in; they were keen at the withdrawal, and were equally sure he had taken them honestly out of the pannikins.

"I will now distribute zem," the Professor remarked in a casual tone, as if diamonds were peas, looking round at the company. And he singled out my brother-in-law. "One to Sir Charles!" he said, handing it; "one to Mr. Mosenheimer; one to Mr. Phipson—as representing the diamond interest. Zen one each to Sir Adolphus, to Dr. Gray, to Mr. Fane-Fifian, as representing science. You will haf' zem cut and rebort upon zem in due gourse. We meet again at zis blace ze day after do-morrow."

Charles walked homeward with the Professor. He sounded him gently as to the sum required, should need arise, to purchase his secrecy. Already Sir Adolphus had bound us all down to temporary silence—as if that were necessary—but Charles wished to know how much Schleiermacher would take to suppress his discovery. The German was immovable.

"No, no!" he replied, with positive petulance. "You do not understand. I do not buy and sell. Zis is a chemical fact. We must publish it for the sake of its secretarial value. I do not care for wealse. I haf' no time to waste in making money."

On the appointed night Charles went back to Lancaster Gate, as I could not fail to remark, with a strange air of complete and painful preoccupation.

The diamonds were produced, with one surface of each slightly scored by the cutters, so as to show the water. Strange to say, each of the three diamonds given to the three diamond kings turned out to be a most inferior and valueless stone; while each of the three entrusted to the care of the scientific investigators turned out to be a fine gem of the purest quality.

I confess it was a sufficiently suspicious conjunction. The three representatives of the diamond interest gazed at each other with inquiring side-glances. Then their eyes fell suddenly; they avoided one another. Had each independently substituted a weak and inferior natural stone for Professor Schleiermacher's manufactured pebbles? It almost seemed so.

Then Sir Adolphus spoke—or, rather, he orated. He said, in his loud and grating voice, we had that evening, and on a previous evening, been present at the conception and birth of an Epoch in the History of Science. Professor Schleiermacher was one of those men of whom his native Saxony might well be proud; while as a Briton he must say he regretted somewhat that this discovery, like so many others, should have been "Made in Germany." The Professor did not seek to make money out of his discovery. He rose above the sordid greed of capitalists. However, out of deference to the wishes of those financial gentlemen who were oddly concerned in maintaining the present price of the diamond interest, they had

arranged that the secret should be strictly guarded and kept for the present till he himself, and a small committee of the Royal Society, should have time to investigate and verify for themselves the Professor's beautiful and ingenious processes—an investigation and verification which the learned Professor himself both desired and suggested. (Schleiermacher nodded approval.) When that was done, if the process stood the test, further concealment would be absolutely futile. The price of diamonds must fall at once below that of paste, and any protest on the part of the financial world would, of course, be useless.

Everybody applauded. It was an awkward moment. Sir Charles bit his lip. Mosenheimer looked glum. Young Phipson dropped an expression which I will not transcribe. And after a solemn promise of deathlike secrecy the meeting separated.

I noticed that my brother-in-law somewhat ostentatiously avoided Mosenheimer at the door, and all the way to Mayfair he leaned back in his seat with close-set lips, never uttering a syllable.

Before he retired to rest, however, in the privacy of the billiard-room I ventured to ask him, "Charles, will you unload Golcondas to-morrow?"

He eyed me sternly. "Wentworth," he said, "you're a fool! Is it likely I would unload, and wreck the confidence of the public in the Cloetedorp Company, at such a moment! As a director—as Chairman—would it be just or right of me? I ask you, sir, could I reconcile it to my conscience?"

"Charles," I answered, "you are right. Your conduct is noble. You will not save your own personal interests at the expense of those who have put their trust in you."

At the same time I thought to myself, "I am not a director. Before the crash comes I will sell out to-morrow the few shares I hold, through Charles' kindness, in the Cloetedorp Golcondas."

With his marvellous business instinct Charles seemed to divine my thought, for he turned round to me sharply. "Look here, Soy," he remarked, in an acidulous tone, "recollect, you're my brother-in-law. You are also my secretary. The eyes of London will be upon us to-morrow. If you were to sell out, and operators got to know of it, they'd suspect there was something up, and the company would suffer for it. Of course, you can do what you like with your own property. I can't interfere with that. I do not dictate to you. But as Chairman of the Golcondas, I am bound to see that the interests of widows and orphans whose All is invested with me should not suffer at this crisis. Therefore I am bound to give you warning. If you sell out those shares of yours, openly or secretly, you are no longer my secretary; you receive forthwith six months' salary in lieu of notice, and—you leave me instantly."

"Very well, Charles," I answered, in a submissive voice, though I debated with myself for a moment whether it would be best to stick to the ready money and quit the sinking ship, or to hold fast by my friend and back Charles' luck against the Professor's science. After a short, sharp struggle with my own mind, I am proud to say friendship and gratitude won. Vandrift was the sort of man who would come to the top in the end in spite of everything. And I decided to stand by him!

I slept little that night, however. At breakfast Charles also looked haggard and moody. He ordered the carriage early, and drove straight into the City.

There was a block in Cheapside. Charles, impatient and nervous, jumped out and walked. I walked beside him. Near Wood Street a man we knew casually stopped us.

"Halloo, Sir Charles!" he called out, in a bantering tone. "What's all this about diamonds? Where are Cloetedorps today? Is it Golconda, or Queer Street?"

Charles drew himself up very stiff. "I fail to understand you," he answered, with dignity.

"Why, you were there yourself," the man cried. "Last night at Sir Adolphus'! Oh yes, it's all over the place; Schleiermacher of Jena has succeeded in making the most perfect diamonds—for sixpence apiece—as good as real—and South Africa's ancient history. There's a slump in Golcondas."

Charles moved on, disgusted. The man's manners were atrocious. Near the Bank we ran up against a most respectable jobber.

"Ah, Sir Charles," he said, "you here? Well, this is strange news, isn't it? For my part, I advise you not to take it too seriously. Your stock will go down, of course, like lead this morning. But it'll rise to-morrow, mark my words, and fluctuate every hour till the discovery's proved or disproved for certain."

The general opinion was that Cloetedorps were doomed, and that the sooner a man cleared out the less was he likely to lose by it.

Charles strode on like a general; but it was a Napoleon brazening out his retreat from Moscow. His mien was resolute. He disappeared at last into the precincts of an office, waving me back not to follow. After a long consultation he came out and rejoined me.

All day long the City rang with Golcondas, Golcondas. Everybody murmured, "Slump, slump in Golcondas." But Charles stood firm as a rock, and so did his brokers. "I don't want to sell," he said, doggedly. "The whole thing is trumped up. It's a mere piece of jugglery. For my own part, I believe Professor Schleiermacher is deceived, or else is deceiving us. His brokers, Finglemores, had only one answer to all inquiries: 'Sir Charles has every confidence in the stability of Golcondas, and doesn't wish to sell or to increase the panic.'"

He went home that night more harassed and ill than I have ever seen him. Next day was as bad. The slump continued, with varying episodes.

The morning after, as if by miracle, things righted themselves of a sudden. While we were wondering what it meant, Charles received a telegram from Sir Adolphus Cordery:

"The man is a fraud. Not Schleiermacher at all. Just had a wire from Jena saying the Professor knows nothing about him. Sorry unintentionally to have caused you trouble. Come round and see me."

"Sorry unintentionally to have caused you trouble," Charles was beside himself with anger. Sir Adolphus had upset the share market for forty-eight mortal hours, half-ruined a round dozen of wealthy operators, and now he apologized for it as one might apologize for being ten minutes late for dinner! Charles jumped into a hansom and rushed round to see him. How had he dared to introduce the impostor to solid men as Professor Schleiermacher? Sir Adolphus shrugged his shoulders. The fellow had come and introduced himself as the great Jena chemist. He had long white hair and a stoop in the shoulders. What reason had he for doubting his word? Besides, what object could the creature have for this most extraordinary deception? Charles knew only too well. It was clear it was done to disturb the diamond market, and we realized too late that the man who had done it was—Colonel Clay.

Doubtless, with his extraordinary sleight-of-hand, he had substituted real diamonds for the shapeless mass that came out of the apparatus in the interval between handing the pebbles round for inspection and distributing them piecemeal to the men of science and representatives of the diamond interest. We all watched him closely, of course, when he opened the crucibles, but when once we had satisfied ourselves that something came out our doubts were set at rest, and we forgot to watch whether he distributed those something or not to the recipients. As usual, too, the Professor had disappeared into space the moment his trick was once well performed.

Charles went home more angry than I have ever beheld him. I endeavored to console him. "After all," I said, "though Golcondas have suffered a temporary loss, it's a comfort to think that you should have stood so firm, and not only stemmed the tide, but also prevented yourself from losing anything at all of your own through panic."

[TO BE CONTINUED.]



MY DEAR CHILDREN,—

I suppose you all felt very jolly when the holidays began and schoolbooks were all huddled out of sight. It is wonderful how even the tiniest little tots talked of their "zaminations" in the most businesslike way. My little niece (aged six) told me yesterday that she wished the holidays were over because she had "nothing to do and was always getting into mischief." What is the world coming to? I often hear such complaints nowadays. Why, when I was young the holidays were never half long enough for all we had to do. As for "getting into mischief!" well, our elders had to look out for that. We were too busy to think about such possibilities. I hope all this struggling and studying to "pass" has not taken all the play out of you children. Study is very well in its place, but do manage to play often, not only in the holidays, but all the year round. The old saying, "All work and no play makes Jack a dull boy," is as true now as it ever was, and even more applicable than it used to be.

I have just been reading about some little Irish children who have a splendid toy to amuse them. It is a tiny train which their father made—at least, he made everything but the engine. When the children are packed closely, sixteen can ride at once in the dear little open cars. The track is a quarter of a mile long, and there is a signal box, turntable, and everything else that a baby railroad needs. Of course, there are tickets for the passengers, and everything is done in first-class style. If a passenger gets on without a ticket, he is put off at once.

Another family of children, living in England, also have a little train of their very own, which is even more perfect in its arrangements. It goes through a little tunnel and over a tiny cantilever bridge. The engines are worked by levers, I think—steam would be rather too dangerous.

Well, you are not likely to make anything as grand as that, but perhaps you can do something to keep the holidays from being dreary. Let us make a bargain. You get as much fun as you can this summer, then write and tell me all about it. I will give a prize for the best letter, and possibly second and third prizes if you deserve them. Some of the letters will be printed, so be careful about the spelling. Remember, they must be descriptions of play—real, busy play—not lounging in a hammock. If you haven't had any playtime, you can invent some. The events described may be quite imaginary, but they must be interesting, and don't make your letters very long. A fishing or picnic excursion, camping expedition, playhouse, or anything interesting and energetic may be described. Be as original as you can. Send in all your letters before the end of September. Any child under fifteen can compete. First prize for fifteen and under, second prize for twelve and under, third prize for ten and under. You must send a certificate of age from parent or teacher. The writing and spelling will be considered in awarding the prizes. Address to
Your old friend— COUSIN DOROTHY.

"An Eavesdropper."

Do you know why "Listeners never hear any good of themselves?" I think it is because anyone who has so little sense of honor as to spy upon another, and listen secretly to what is not intended for his ears, will probably hear his own character described pretty openly if it is mentioned at all.

However, this listener is not likely to hear his own name mentioned. Did you ever see a more devoted pair of lovers? Like most lovers, they are sublimely indifferent to the world and its opinion. What do Jack and Jill care even though an eavesdropper in the shape of Peter may be just appearing round the corner? He will soon stop their billing and cooing, I know. Life is only a frolic, in his opinion, and he doesn't object in the least to his position of eavesdropper and "gooseberry."—C. D.

A Thought for Every Day.

There's many a thing for you to do,
My lad, if you but knew it,
That's sent to you, and only you—
Don't let another do it.

Don't let another lift the load
Your back was meant to carry;
Don't think your task were done as well
By Tom or Dick or Harry.

Don't say God's work can wait to-day—
'Twill do as well to-morrow;
Don't put your own will always first,
And count His service sorrow.

Don't wait till you are strong and wise—
Trust Him to gauge your burden;
And then at last trust Him, my lad,
To give the well-earned guerdon.

—C. W. Gregory.

Our Library Table.

"MANY CARGOES." W. W. Jacobs.—"A bunch of 21 genuine old sailors' yarns which for originality of outline and uniqueness of humor could scarcely be surpassed. No general descriptions could do justice to their droll wit, intensely funny situations, and delightful surprises; nor could any one of them be chosen as typical of the lot, as each one is typical of itself. In fact, it would be difficult to think of anything in the way of fiction more delightfully suited for taking along on a holiday trip."

To this portion of a recent review we may add that whether on a "holiday trip" or at home, anyone who misses reading "Many Cargoes" has missed some big, big laughs. We have not come across such fresh, breezy humor for many a long day. Copp, Clark Co., Toronto, publishers.

"THIS LITTLE WORLD." David Christie Murray.—One seldom finds so many character studies in one novel. Of course, the chief interest lies in John Cutler, who doggedly carves his way to fame, as an artist, in spite of difficulties which would drag down most men. A fine study—well drawn. Then, young Hope Whitehouse, with the phenomenal voice, makes a very sweet picture—all the sweeter because not entirely faultless, and thus so much truer to nature than those beings of rare perfection whom one never meets! The story is worked out with masterly skill, but it is in the individual characters that the chief charm lies. The ex-prize-fighter, George Cutler, the man of enormous muscle



"AN EAVESDROPPER."

and tender heart, who loves to chat of the good old days when the "P. R." was an honored institution! His shrewish mite of a wife (these giants generally choose their opposites), who is ever rating at him, yet thinks there never was such a hero as her big, foolish George. Old Leonard Whitehouse, the dreamy bookworm, with his fine nature and his learned quotations. It does one good to read about both these men. Then the two ponderously fat men—meek Mr. Woodhall, and pompous Mr. Waddell, whose "legs flourished underneath him as if they were proud of carrying a burden so distinguished!" The gaunt and humorous Solomon Solly, with the moist eye and pendulous lip. All these are delightful, and the chapter in which they all meet at the "Dancing Bear" inn is one of the choicest bits of humor in the whole book. Other characters there are, of high and low degree, who have, perhaps, more to do with the thread of the story than those named, but they do not stand out as prominently. A book indeed worth reading. Copp, Clark Co., Toronto, publishers.

"AUNT DIANA." Rosa Nouchette Cary.—This popular authoress has written so many books, now widely known, that it is difficult to select. They have always a good purpose and generally deal with some very common faults of our weak human nature; faults, however, which can be overcome. "Aunt Diana" tells of a young girl, Alison Merle, who was being somewhat spoiled by charming and congenial surroundings; but who, at last, makes up her mind to return to home decidedly uncongenial—full of discontent and rudeness. Through earnest prayer and self-conquest, Alison bravely gains for others and herself a victory full of happy results. The works of Mrs. Cary are not of the so-called sensational type, but they are always interesting as stories and always have an aim, which should recommend them, especially to young people.

"MAUREEN, AND OTHER POEMS." Ella Wheeler Wilcox.—To many readers, the poems of this authoress are familiar. There is that in them which appeals strongly to us—beauty of thought, strength of purpose, and simplicity of language. In Maureen we find an example of sublime self-sacrifice, so complete, so noble, so sad, that we almost (in our ignorance, perhaps) feel inclined to cry that it

should not have been! There are not many women who could do as Maureen did—give up the chosen love of her heart by making him think she only regarded him as a friend; and this because he is loved by her friend, Helen, a delicate, almost dying girl. Our sympathies are so entirely with sweet and brave Maureen, that, as we hinted, we do not feel quite sure she was right, or, at least, we cannot help regretting that something did not turn up to alter things; but then we should have lost this exquisite story! The end is not for us to tell. "Maureen" must be read and its beauty digested. The other poems in this book are all worth reading, and possess much charm. Ella Wheeler Wilcox has sounded the human heart to the core, and writes with knowledge. FELIX.

Spanish Cream.

One pint milk and 1/4 box gelatine heated together; yolks of 3 eggs and 5 tablespoons white sugar beaten together and added to the above. Take off as soon as it thickens. Stir in the whites of the eggs, beaten stiff. Flavor and pour into molds.

Jokes.

CONTRIBUTED BY MISS M. E. FORSYTHE, ALBERTON, P. E. I.

An English lady who went to make purchases in Jamaica, accompanied by her black maid, was repeatedly addressed by the negro shopman as "massa," whereupon her sable follower exclaimed with a look of infinite contempt: "Why for you speak such bad English—no grammar, sabby! Why for you call my missus 'massa'! Stupid fellah—him's a she."

As the late professor was one day walking near Aberdeen, he met a well-known individual of weak intellect. "Pray," said the professor, "how long can a person live without brains?" "I dinna ken," replied Jemmy, scratching his head. "How auld are ye yersel?"

An editor at a dinner-table, being asked if he would take some pudding, replied in a fit of abstraction: "Owing to a crowd of other matter we are unable to find room for it."

CONTRIBUTED BY F. W. ADAMS, ASSA, N.-W. T.

A farmer's boy in Scotland was brought up, charged with pushing a girl into a millpond. In pleading his case he said he did not push her in—he was only "gaun to do't." Whereupon the Bailie summarily informed him that "do't and gaun to do't" were all the same, and that he would have to pay a fine of 10s. or go for ten days to gaol. The boy not having the wherewithal was allowed to go and get it from a friend. In a little while he was again seen standing in court, when the Bailie asked if he had paid his fine yet. "No," said he; "but I was gaun to do't, and as ye say do't and gaun to do't are a' the same, I'm thinking you an' me'll be clear noo!"

CONTRIBUTED BY RUTH E. R. FORD, SMITH'S FALLS, ONT.

"HE LAUGHS BEST WHO LAUGHS LAST."

The innocent elderly gentleman who meekly submits to rough handling in a crowd may have his own method of avenging rudeness.

"Witness the experience of fifty medical students," says the Chicago Times-Herald, "who indulged in a jollification and thought themselves very smart indeed."

They were holding high carnival in a certain smoker they had taken possession of. Among the passengers was an old man—a nice old man—with white moustache and silk hat. As various stations were reached and passengers tried to get out, the students assisted. "Pass him along," was the cry, and the unfortunate passenger was lifted over heads and finally tossed on the platform.

The guards told the students to cease their rough behavior or leave the train. The admonition was unheeded. The fun grew more hilarious, until the old man with the white moustache got up to leave. "Pass him along," shouted the students. "Help the old man out!" They helped him out. They tossed him to the ceiling; they dropped him to the floor; they wedged him here, they wedged him there; they tossed him out at last, then smashed each others' hats with their canes.

At eight o'clock that night a young man came meekly to the central police station and reported an old man with white moustache, silk hat, etc., had picked the pockets of some students on the train, securing four gold watches and a few pocketbooks.

"Please keep it out of the papers," said he, as he tipped the chief.

A WITTICISM.

Not long ago a bishop was a guest at a dinner party in B—. "By the way," said one of the guests, a woman noted for her witty remarks, "do you know that there are times when it is dangerous to enter an Episcopal church?"

"What is that, madam?" enquired the bishop with great dignity, straightening himself in his chair.

"I say there are times when it is positively dangerous to enter the church," she replied.

"That cannot be," said the bishop. "Pray explain, madam." "Why," said she, "it is when there is a canon at the reading desk, a big gun in the pulpit, when the bishop is charging his clergy, the choir murdering the anthem, and the organist trying to drown the choir."

A hearty laugh went the round of the table at the bishop's expense, and he acknowledged that at such a time he could well imagine it disagreeable at least, if not dangerous, to be present.

HUMEROUS TIDBITS.

It is told, when Mrs. Kipling was one day punishing her little daughter for an untruthful statement, the little one sobbingly remarked: "I don't know why mamma whips me for telling a story when (Bo'ho) pappa writes such whoppers!"

A visiting physician of one of our lunatic asylums one day on entering the grounds was astonished as he approached the building to see a patient who had always been considered dangerous wandering at will over the lawn within the inclosure. Rightly conjecturing he had somehow escaped the vigilant eye of the keeper, he was in a dilemma whether to raise an alarm or try his persuasive powers. He had not long to debate, however, for on seeing the doctor the fellow made a horrible grimace, brandishing what appeared to the doctor's terrified eye some murderous weapons, and proceeded to "make" for the almost paralyzed physician, who at once took to his heels. It was the end of March; everywhere was mud, and blue clay at that. The lawn had been upturned in order to put in new water pipes. Round and round, over ditch and drain, up the gravel walk they sped. Step by step the demented man gained on his victim, still brandishing that gruesome weapon. The doctor's hat was off; he had lost both rubbers;—a fig for appearances! Life was sweet! Suddenly his foot caught in a pile of tile placed ready for the workmen. Horrors! The crazy man was within a foot of him now. A demoniacal laugh broke from him (the lunatic) as he grabbed the other's sleeve and cried, "Tag! Tag! Ha, ha! Say, you're it!"

THE QUIET HOUR.

The Secret of Success.

"We kneel, how weak! we rise, how full of power!
Why, therefore, should we do ourselves this wrong—
Or others—that we are not always strong,
That we are ever overborne with care,
That we should ever weak or heartless be,
Anxious or troubled, when with us is Prayer,
And Joy and Strength and Courage are with Thee!"

Do not the difficulties before you sometimes seem to be almost insurmountable? There is work to be done—plenty of it; but when the call comes, as it did to Gideon,—“Go in this thy might”—you shrink back, as he did, with words of seeming humility,—“I am not good enough, wise enough or strong enough for the task,” you plead. Yet you know all the time that God has said (as He did to Gideon), “Have not I sent thee?” Look at his position. Israel was completely in the power of the Midianites, who were “as grasshoppers for multitude.” The law of God was entirely disregarded. Instead of punishing a man with death for worshipping idols, any man who dared to destroy the idols did it in peril of his life.

Gideon was commanded to save Israel from the hand of the Midianites, and to begin this salvation by destroying the altar of Baal. This would bring down on him the wrath of his own countrymen. What possible chance of success had he with enemies at home and abroad? Surely none, if he looked at his own strength—at his own circumstances. But the things that are impossible with men are possible with God. It has been well said that “man's extremity is God's opportunity.” What he could never do alone was quite possible and easy for God to do, in and by him. When the Lord said unto him, “Surely I will be with thee, and thou shalt smite the Midianites as one man,” it was no longer humility that made him shrink back in fear. It was want of faith. God's power is invisible, and it is not easy to depend absolutely on it, when the visible enemy is so plainly in sight. See how gently Gideon's weak faith was strengthened by sign after sign that God was really with him! Then we read that “the Spirit of the Lord came upon Gideon.”

There was no reason to be discouraged, you see. God could save Israel without any difficulty. If He chose to honor Gideon by making him the instrument through which the work was done, He would certainly supply the necessary strength and ability.

Gideon was not allowed to use all the earthly help he might have had, so that he might rely more entirely upon God. When the people were gathered together against Midian, all who were fearful, and afraid, were sent home. The position must have been desperate, indeed, when twenty and two thousand were afraid to fight in defense of their desolated country. But even the ten thousand that remained were too many! And, when the host was reduced to three hundred men, these were told to stand still in their places. The victory was God's—and a great victory it was.

Now, can you say that your task is more difficult than Gideon's? Dare you refuse to attempt it because you are weak and helpless? Perhaps that is the very reason it is put into your hands. “We have this treasure in earthen vessels, that the excellency of the power may be of God, and not of us.”

God has declared that his strength is “made perfect in weakness.” You may fail—indeed you certainly will fail—if you try to work or fight alone. But, as “the Lord looked upon Gideon,” as the disciples, struggling in the darkness on the Lake of Galilee, were under the watchful eye of their Master, so it is with you. He is close beside you, ready to stretch out a helping hand when you look to Him.

Never be discouraged. If the work is hard, that is only a reason for depending on God more and more. If the task were easy, you might forget Him altogether. One weapon must be constantly ready for use—the weapon of Prayer. It is both sword and shield. The attitude of dependence on God is in itself a prayer, and, if cultivated, will become instinctive.

God has often brought His servants face to face with seeming impossibilities; and then, when they obeyed His command, the difficulties vanished as if by magic. Think of the Israelites on the shore of the Red Sea receiving the startling command, “Go forward!” How impossible it looked, and yet how easy it was! Think of the disciples, surrounded by thousands of hungry people, being able to obey the equally amazing order, “Give ye them to eat.”

Surely “these things happened unto them for ensamples; and they are written for our admonition.”

The true secret of success, then, is found in looking away from self altogether, and always looking up to God.

“Be strong and of a good courage; be not afraid, neither be thou dismayed: for the Lord thy God is with thee whithersoever thou goest.” HOPE.

“A Worker's Prayer.”

Lord, speak to me, that I may speak
In living echoes of Thy tone;
As Thou hast sought, so let me seek
Thy erring children lost and lone.

O lead me, Lord, that I may lead
The wandering and the wavering feet;
O feed me, Lord, that I may feed
Thy hungering ones with manna sweet.

O strengthen me, that while I stand
Firm on the Rock and strong in Thee,
I may stretch out a loving hand
To wrestlers with the troubled sea.

O teach me, Lord, that I may teach
The precious things Thou dost impart;
And wing my words, that they may reach
The hidden depths of many a heart.

O fill me with Thy fullness, Lord,
Until my very heart o'erflow
In kindling thought and glowing word,
Thy love to tell, Thy praise to show.

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES,—

You will probably think “weeds” a rather commonplace and uninteresting subject, yet it is about them that I wish to chat with you to-day. But what is a weed? A definition I once heard was, “A weed is a flower growing out of its sphere,” and I thought it very appropriate. When we find some thrifty plants of clover in our flower beds we call them, in common with other undesirable plants, “weeds,” yet in another case we would not dream of bestowing on them such an appellation. Again, the same title would be unhesitatingly bestowed upon some of our garden favorites if found by the careful farmer growing among his grain. Then, many plants that have become so troublesome in this country are in other places carefully cultivated as valuable additions to floriculture. The common mullein that infests our pastures and highways is quite an aristocrat in England, where it rejoices in the name of American Velvet Plant. On the other hand, the beautiful flowering cacti that adorn our windows and greenhouses grow wild in many parts of the States, where they attain an enormous size, and with their dreadful thorns prove very troublesome. In the Scandinavian Peninsula our much-loved pansies revel in freedom o'er hill and dale, and are not highly valued, while we have to work a little to procure them. Thus we see the truth of the definition above quoted. There are, unfortunately, more weeds in the world than those that take root in the earth—weeds of an infinitely more dangerous character—human weeds, creatures whose low sense of honor and lack of moral principles do not justify us in placing them in any other class. With these we do not mean to deal, although, to carry the plant simile further, might not even these be improved if given such care and cultivation as a skillful florist bestows upon his seedlings? Perhaps, too, we designate as “weeds” many who deserve a better name, the fault being in our failure to appreciate their worth.

Bad habits may be considered as troublesome sorts of weeds, very difficult to exterminate. Once I was given a young plant, supposed to bear beautiful flowers. I tended it carefully, it flourished abnormally, and in course of time buds appeared. How I watched for the first flower! Imagine my disappointment at finding it not merely insignificant, but very like a bad weed often seen growing by the roadside. I dug it up immediately, but the roots seemed to have penetrated everywhere, and it was only after considerable work that I felt satisfied that I had got rid of it. After some time fresh shoots appeared that required similar treatment, but by untiring vigilance I succeeded in eradicating them.

If when we find some unlovely habit growing upon us we look just such vigorous steps to root it out, we should certainly overcome it. True, the roots may be far-reaching and possessed of almost unlimited vitality, but persistent effort will conquer these difficulties; and some wise person has said if we free ourselves from one fault every year we shall in time become perfect. All seasons are suitable for weeding of this kind, so let us examine our mental gardens, find the most troublesome plant therein, and forthwith exterminate it. Not only this must we do, but if we would not be classed with the “weeds,” we must also confine ourselves to the sphere to which we belong.

Your loving— UNCLE TOM.

Puzzles.

The following prizes are offered every quarter, beginning with months of April, July and October: For answers to puzzles during each quarter—1st prize, \$1.50; 2nd, \$1.00; 3rd, 75c. For original puzzles—1st, \$1.00; 2nd, 75c.; 3rd, 50c.

This column is open to all who comply with the following rules: Puzzles must be original—that is, must not be copied from other papers; they must be written on one side only of paper, and sender's name signed to each puzzle; answers must accompany all original puzzles (preferably on separate paper). It is not necessary to write out puzzles to which you send answers—the number of puzzle and date of issue is sufficient. Partial answers will receive credit. Work intended for first issue of any month should reach Pakenham not later than the 15th of the month previous; that for second issue not later than the 5th of that month. Leave envelope open, mark “Printer's Copy” in one corner, and letter will come for one cent. Address all work to Miss Ada Armand, Pakenham, Ont.]

1—CHARADE.

My FIRST in snowy folds may lie,
Or glow with shades of every dye,
Assist our toilet, deck our board,
And gleam from Eastern garb and sword.

My SECOND yields its balmy breath
Most sweetly when 'tis doomed to death;
And names a maiden pure and fair,
With tender eyes and clustering hair.

A curious casket is my THIRD,
Locked in a short and simple word,
Whose richest treasures shun the light,
Or coyly open to our sight.

My WHOLE is just the loveliest thing
In Summer's crown bequeathed by Spring;
Cupid proclaims his message by it
When bashful lips would fain deny it.

2—DOUBLE ACROSTIC.

In “Handy Andy” so light,
In “Ivanhoe” of might,
In “Jules Verne's” full of fight,
In “Austin,” the poet all right,
In “Maud Muller” took the judge's sight,
Now name the book of the day or night;
'Tis greatly admired, 'tis good and bright.

3—ENIGMA.

I stay the rapid river's course,
I guard your goods from fraud or force;
And yet, fair ladies, I form part
Of charms which bind a lover's heart.

4—ENIGMA.

In “vehicle” on wheels,
In “canoes” so real,
In “palace” of steel,
In “parties” who feel
The want of a meal.

In “ADVOCATE” so fine,
In “articles” prime,
In “farm boys” who repine,
In “opinion” of mine,
That is, “Dom” is good and fine.

Two periods of time this will tell;
We all delight to get them,
When to spend them is a question
Over which many have to con.

5—NUMERICAL.

A Scriptural adage based on agricultural experience consists of thirty-nine letters.

- 39, 29, 6, 17, 34, 2, 11, 36, 9—the knife of a field implement.
- 12, 35, 1, 18, 10—another field implement.
- 22, 27, 36, 8, 31, 5, 19—the ingathering.
- 25, 4, 13, 28, 33—the place in a stable where a horse is kept.
- 20, 23, 28, 21, 7, 10—the rope with which he is tied.
- 16, 32, 24, 15—a species of grain.
- 28, 38, 4, 30—possesseth.
- 3, 14—one.

F. L. S.

6—A LOVING CUP.

- Centrals name a drink taken on horseback.
- 1, Hurry. 2, Certain fruits.
- 3, Attempt. 4, Relating to duty.
- 5, An animal.
- 6, Soft earth.
- 7, In cup.
- 8, In cup.
- 9, Place.
- 10, Antic.

F. L. S.

7—NOTED MEN.

- 1, -o-g-l-w—a poet.
- 2, H-o—a general.
- 3, T-n-s-n—a poet.
- 4, -e-y—an admiral.
- 5, M-l—a poet.
- 6, -i-h-r—a general.

C. R.

8—A DIAMOND.

- 1, In constant; 2, to grate; 3, a hardwood rubber; 4, to annex; 5, shoes; 6, a common contraction; 7, in constant.

BUTTERCUP.

9—CHARADE.

My first was the first of his kind; my second is the first syllable of the name of a famous almanac; my whole is a poet's name for a noted northern plantigrade.

K. K.

Answers to July 1st Puzzles.

- 1—Caper, broom, beech, olive (O! live), bay, fir, birch.
- 2—The vowels, a, e, i, o, u.
- 3—First of July. Dominion Day.
- 4—Cousinly Chat. 6—H, E, A, D.
- 5—Dime, die, m; hie, he, i; feed, fee, d; drink, rink, d; slat, sat, l; seam, Sam, e; smack, sack, m; stay, sty, a; trend, tend, r; farce, fare, c; thank, tank, h; Middlemarch.
- 7—Fencing, marble, fall, Billie, sash, drummer.
- 8—Doukhobors (Duke-o-bores).
- 9—Rails, inlet, cadji, haven, ashes, ratio, drain, Richard Stinson.
- 10—Endeavorer. 11—Husbandman.

SOLVERS TO JULY 1ST PUZZLES.

“Dennis,” “K. K.,” “Sigma,” M. R. G.

ADDITIONAL SOLVERS TO JUNE 15TH PUZZLES.

Gertie Klinck, C. Roth.

COUSINLY CHAT.

M. R. G.—I am glad your prize-money reached you so promptly.

Gertie K.—The prizes are awarded once in three months, and are given to those sending most correct answers and to those who send most and best puzzles available for publication. All puzzles sent are not worth using, so it is better to send fewer and better.

“Sigma.”—You are a new friend, but as welcome as any. Kindly send name another time.

“K. K.”—I thought your other puzzle rather difficult for young solvers, so did not use it. Let us hear from you often.

“Arny.”—Where are you with your answers this time? Any further news from the “old country?”

C. R.—Am using one of your puzzles—try again.

“Dickens.”—We make use of as many of your puzzles as we find suitable. Those for this issue are very good. Why do you not solve as well?

A. A.

Ready with His Chalk.

When Poole, the famous tailor, was an old man he was at Brighton on a vacation, and one afternoon went out to walk upon the pier. A young man was also upon the pier with a couple of ladies, to whom he said as he saw Poole coming:

“Now, you wouldn't take that good-looking man for a tailor, but he is. Just listen while I take him down a notch or two. I'll tell him my coat, which I have just had from him, doesn't fit.”

As he spoke, Poole approached and politely acknowledged the salutation of his customer, who, walking up to him, said: “Here, Poole, now do take a look at me. Does this coat fit?”

Poole took in the situation. “It certainly does not fit,” said he, and pulling out a piece of French chalk, he proceeded liberally to mark and cross the coat all over, and then observed with the utmost urbanity: “Now, if you will kindly send that coat to my shop the alterations shall be attended to.”

ESTABLISHED 1868.

INCORPORATED 1887.

THE WESTERN FAIR

LONDON, ONTARIO, SEPTEMBER 7TH TO 16TH, 1899.

\$1,015 added to the Live Stock class this year.

New style Prize List. Separate Entry Form for each department. In asking for Prize Lists, state kind of animal or article you intend to enter.

Special Features will outshine any or all former exhibitions.

4,800 square feet added to the Machinery Hall. 1,200 square feet added to Dairy Building. New Open Grand Stand, nearly doubling the capacity.

SPECIAL TRAIN ARRANGEMENTS. STABLING AND SPACE ALLOTTED AS ENTRIES ARE RECEIVED. PRIZE LISTS AND MAPS NOW READY.

SEND FOR ONE.

LT.-COL. WM. M. GARTSHORE, President.

J. A. NELLES, Secretary.

GOSSIP.

Mr. A. W. Smith, Maple Lodge, Ont., arrived home from Great Britain July 25th. His importation of Leicester sheep are now in quarantine at South Quebec.

Mr. Arthur Johnston, Greenwood, Ont., sailed for Scotland July 14th, presumably with the intention of importing Shorthorn cattle, if he finds what suits his critical judgment.

CLYDESDALES FOR CANADA.

Messrs. H. Cargill & Son, Cargill, Ont., have through Mr. Sylvester Campbell, Kinellar, purchased and shipped six fillies and colts to Canada. Amongst them are three well-bred ones from Balmedie, and three from other studs in Aberdeenshire, got by Sir Everard (3353), Prince of Carruchan (3151) two, Royalist (6242) two, the sire of that lovely mare, Balmedie Queen Mab, which stood reserve for the female championship at the Highland; and Royal Alexander (9997), the Dumbartonshire and Fyvie premium horse. These are all out of well-bred mares, the other studs being drawn on besides Balmedie being those at Smiddyburn, Tulloford, and Coullie.

Mr. R. G. Howgate, Toronto, recently purchased from Mr. Walter S. Park, Hatton, and shipped to-day to Canada, three well-bred Clydesdale stallions, Ardlathen Fortune (10305), Royal Erskine (10431), and Sir Marengo (10462). All these were bred in the north, and are well adapted for the foreign trade. Ardlathen Fortune, as his name indicates, was bred by Mr. Copland, and was got by Mr. Scott's Prince of Fortune (9326), winner of numerous prizes, including first at the Glasgow Spring Show. His dam was Crimson (1172), the well-known Kenmuir mare, by the Glasgow premium horse, Young Duke of Hamilton (9122), and his granddam was the fine mare, Tartan, by Darnley (222). Royal Erskine (10431) was bred by Mr. Smith, Inchcoursie, Huntly, and was got by Prince of Erskine (9617), the famous Glasgow prize horse, and second at the H. and A. S. Show at Perth in 1896, out of the prize mare, Rosabella (12921), by the massive big horse, Lord Montrose (7979). This horse was first at the Northern shows when a yearling, and is a big, powerful animal, likely to breed cart horses. Sir Marengo (10462) was got by the celebrated Sir Everard (3353), thrice awarded the Glasgow premium, and one of the most successful breeding horses of recent years. His daughters were second, third, and fourth in the brood mare class at the Highland, and many of his sons have been show horses. The dam of Sir Marengo was got by that noted horse, St. Lawrence (3220), twice winner of the Glasgow premium, and a son of the great Prince of Wales (673).

Mr. John Macdonald, North-East Boquhanran, Dalmeir, has sold the well-bred three-year-old horse, Fransesco, to Mr. T. McLachlan, Brussels, Ont. Fransesco was bred by Mr. Macdonald, and was got by his noted Glasgow premium horse, Lord Hopetoun (2965), out of the prize mare, Lady Tip-Top, by Sir Wyndham (1728). Lord Hopetoun was first at Glasgow Stallion Show in 1885 and 1896, and third at the H. and A. S. Show at Inverness in 1883, and was by the famous Prince of Wales (673), out of the dam of the great sire and prize horse, Top Gallant (1850). This horse is bred from prizewinning stock on both sides, and ought to prove a successful sire in Canada.—S.F.

CHARLES H. ROWE'S SHROPSHIRE.

It is a well-established fact that some sections of Ontario are more suitable for sheep-rearing than others, and that while some lands may do very well, others seem specially favorable for this class of stock. In the latter class we would place the farm of Mr. Charles H. Rowe, near Orillia, Ont., whose Shropshire flock maintain the strong English characteristics of the breed through the high limestone character of the pasture. Foundation stock was obtained from many of the leading breeders of Canada, and to-day Mr. Rowe carries upwards of 100 head of all ages. A dozen each of shearing ewes and rams were on hand at the time of our visit to the farm, as well as a large crop of splendid and uniform lambs. Watch for Mr. Rowe's advertisement.

ROWATT BROS.' SHROPSHIRE.

The Messrs. Rowatt Bros., whose stock farm in Simcoe Co., Ont., lies near the village of Hillsdale, are again to the front with some choice Shropshire lambs for sale, and as they have bred up from the best English flocks and selected strong, well-covered sires, they will be found in a position to again ship some choice ram lambs this fall. At the time of our visit to the farm they were busily engaged in the building of an extensive barn and stable, and will be in a better position than ever to meet the increasing demand for choice foundation stock. Watch their space in advertising columns.

AGRICULTURAL COLLEGE

The Ontario Agricultural College will reopen on SEPTEMBER 26th, 1899.

Full courses of Lectures, with practical instruction in Agriculture, Live Stock Dairying, Horticulture, Poultry, Beekeeping, Veterinary Science, Chemistry, Geology, Botany, Entomology, Bacteriology, English, Mathematics, Bookkeeping, and Political Economy. Year shortened to suit farmers' sons.

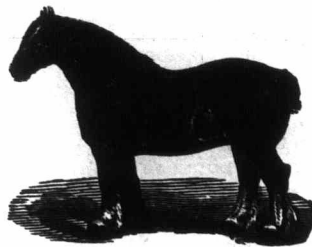
Send for Circular giving terms of admission, course of study, etc.

JAMES MILLS, M. A., PRESIDENT.

GUELPH, ONTARIO.

FOR SALE... IMPORTED AND CANADIAN-BRED Clydesdale Stallions

From One to Four Years Old. Also



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

ROBT. DAVIES,

Thorncliffe Stock Farm, TORONTO.

FOR SALE: Nine Clydesdale Stallions

Just landed from Scotland; also a few imp. and home-bred Shorthorn females.

JOHN ISAAC,

KINELLAR LODGE, MARKHAM, ONT. GLYDESDALES, AYRSHIRES and POULTRY.

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

River Bow Stock Farm.

B. SNARY & SONS, CROTON, ONT.

Breeders of

Shorthorn Cattle,

Poland-China and

Chester White Swine.

We offer for sale seven good

young bulls, from seven to

twelve months old; eight

heifers of choice quality

and breeding. Sired by

Chief Captain. Pigs of

both sexes and all ages at

moderate prices, quality

considered.

HAWTHORN HERD

OF DEEP-MILKING SHORTHORNS.

3 heifers bred to Beau Ideal = 22554 =,

of first-class quality and A 1 breeding.

Wm. Grainger & Son, - Lonsdale, Ont.

Scotch Shorthorns For Sale:

90 HEAD TO SELECT FROM.

We are offering a number of cows and heifers (including some show heifers), from such sires as Valkyrie = 21806 =, Young Abbottsburn's Heir = 15947 =, and Imp. Mariner = 2720 =, served by Imp. Diamond Jubilee (Vol. 15) now at the head of herd. Farm 1 mile north of town.

T. DOUGLAS & SONS,

Strathroy Station and P. O.

W. G. PETTIT & SON,

FREEMAN P. O., Burlington Junction

ONT. Telegraph Office.

10 SHORTHORN BULLS 10

By Indian Statesman = 23004 =, from 10 to 20 months.

Twelve young cows or heifers with calves by side or

in calf. Twelve ram and 20 Shropshire ewe lambs,

sired by (Imp.) Flashlight. Also, Berkshire boars

and sows, all of which will be sold at moderate prices.

Farm half mile from Burlington Junction, G. T. R.

SPRINGFIELD FARM

HEED OF

Shorthorns, Oxfords,

AND Berkshires.

Young bulls and Heifers

on hand. Also a few

choice Berkshires.

CHAS. RANKIN,

Wyebridge, Ont.

SIMCOE CO.

SHORTHORNS

9 BULLS, 4 HEIFERS,

Mostly Scotch-bred, and got by such bulls as Kinellar

Sort (Imp.), Northern Light (Imp.), Prince and Prince

Bismarck. Prices right. Correspondence Solicited,

and Visitors Welcome.

G. A. BRODIE,

Stouffville Stn., G. T. R. BETHESDA, ONT.

F. BONNYCASTLE & SONS

CAMPBELLFORD P. O., ONT.,

BREEDERS OF

Shorthorns, Cotswolds, and

BERKSHIRES.

Have 9 bull calves for sale, from 1

to 8 months old, price from \$45 to

\$60 each (registered). Also heifers

and heifer calves; 30 Berkshire pigs,

from 5 weeks to 5 months old, from

\$5 to \$10 each (registered).

JOHN DRYDEN,

BROOKLIN, ONTARIO,

BREEDER OF

Scotch Shorthorns,

AND

Choice Shropshire Sheep.

GOSSIP.

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

Mr. R. Honey's farm, near Warkworth, Ont., was the object of our visit to that section late in June, when his extensive pasture and grain lands looked at their best, as they had been favored with regular showers all through the month. Northumberland county seems peculiarly adapted to stock-raising, and in favorable seasons the stock have a decided advantage over many sections in the Province. Though not numerous, we found Mr. Honey's stock again in good form, and his splendid herd of pure-bred and grade Holstein cows busy making milk while the grass was growing to nourish them. The pure-bred herd, as we have before stated, was founded on that well-formed and powerful dairy cow, Minister Maid, who has been immensely successful as a milkmaid in Mr. Honey's hands, her two young bulls finding ready purchasers at satisfactory prices, while the females and their descendants make up a choice bunch, the matured ones proving dairy performers of high order, and produce very salable young stock. Recent sales have reduced the herd to seven females. As the old cow has proven her ability to produce over 65 lbs. milk daily, it is not hard to understand why her progeny should be eagerly sought, especially when she possesses showyard quality, with immense size, and a splendid, well-balanced udder. Her daughters inherit her dairy points and qualities, and all possess grand feeding qualities and constitutions. All are safely in calf, two being due in September. The present 3-year-old stock bull possesses a combination of noted families in his pedigree, as his name indicates—Netherland, Trinia Baron—his dam having a liberal supply of the noted Aaggie blood in her veins, which should, and undoubtedly will, prove valuable to the herd which he heads.

Activity in Cotswold circles has almost depleted the sheep pens, but though not numerous, Mr. Honey knows the good ones, and usually retains those satisfactory to himself, to say nothing of his selection in purchasing. In Yorkshires we never found him in better shape. Four splendid brood sows are on hand. The old sow, Blenheim 2188, by Holywell Hastings 571, and out of Lady Percy 918, continues to raise litters annually. Rosa, her daughter by Bismarck, is due to farrow in August. Jennie Lind 2147, by Northampton, and out of Lady Nora, is in her prime, and with the young sow, Flower of Brickley, by Jock, and out of Lady Percy, which is also due early in July, the owner has reason to feel proud of his stock. We also saw a dozen or more choice, lengthy young sows, three and four months old, and nearly as many boars approaching the serviceable age, by Perfection, the late stock boar; also an extra smooth and long-bodied 8-months boar, by Lord Grey, and out of a daughter of Perfection, is well qualified to enter any showyard competition in America if he had been reared with this end in view, and we only regret that Mr. Honey had not conceived the idea early in the season of exhibiting at the large shows, that his efforts as a Yorkshire breeder could have been seen and appreciated to their proper extent.

NOTICE.

Little's Sheep Dip and Cattle Wash. During a recent visit in the northern part of Grey Co., Ont., one of our representatives called upon Mr. Robert Wightman at his place of business, Owen Sound, and found him, as usual, busily engaged in dispensing to the ailments of the human race, to say nothing of the attention he is required to bestow upon Little's Sheep Dip and Cattle Wash, for which he is the Canadian representative, and from the enthusiasm exhibited by Mr. Wightman and his stock and facilities for dipping business, we were compelled to believe that he is enjoying a great portion of the sheep-dipping patronage. On page 236, in the May 15th issue of the FARMER'S ADVOCATE, was brought out not only the necessity for judicious and thorough disinfection, but also pointed out the importance of making a proper selection among the many disinfecting agents within reach, as to effectiveness, safety, and convenience, and also specially mentioned the coal tar products as being the best suited for that purpose, and in Little's Sheep Dip we have an "ideal" agent for that purpose. In official reports which we examined, the preparation was referred to most favorably. Its value as a sheep dip and cattle wash is unquestionable, and the flattering testimonials from the largest and most experienced breeders in Canada and elsewhere is sufficient proof of its value. Write Mr. Wightman for his descriptive circular, and watch his advertisement in the FARMER'S ADVOCATE.

GOSSIP.

Mr. Hardy Shore, Glanworth, Ont., has disposed of his fitted flock of Cotswold sheep to Messrs. Geo. Harding & Son, Wisconsin, U. S.

Mr. E. Dool, Hartington, Ont., when writing the office, intimates his intention of showing a few nicely fitted Yorkshire swine at the Toronto Industrial. He has made a few sales recently, and will be ready to make more at and after the Industrial.

Robert Hunter, farm superintendent for Mr. W. W. Ogilvie, Lachine Rapids, Que., in ordering a change of his advertisement of Ayrshires, writes that the herd is in good condition, the thirty imported cows breeding and milking well. They have a number of excellent young bull calves for sale from their imported cows, and report the following recent sales of yearling bulls and bull calves: To Jas. McCormack & Son, Rockton, Ontario, the young bull, Glenora Sultan, imported in dam (Bargenock of Wyndholm), by the Sultan of Auchenbanzie (3071). This is a very promising young bull, and in Mr. McCormack's hands will doubtless be heard from again. His sire is famous as a show and breeding bull. To Walter Nichol, Plattsville, Ont., Glenora Lord Minto, imported in dam (Tempest of Knockdon), sire Yellow Bob of Knockdon, a bull that has sired the right sort of stock. To J. B. McDonald, Glen Saffield, Ont., Glenora Tupper, imported in dam (Topper of Drumdon), sire Home Again of Drumdon. To Robert Hunter, Jr., Maxwell, Ont., Glenora of Knockdon, imported in dam (Kate of Knockdon), sire Sloth of Hillhouse. This bull was sire of the champion at Kilmark this year. We have also sold two of this spring's bull calves: One to John A. McCallum, Martinstown, Ont., and one to J. L. Wilson, Alexandria, Ont. These young bulls have been sold at good paying prices, but within the reach of any good stock raiser, and we shall be surprised if they do not make their mark. We have had a very large enquiry through our advertisement in the FARMER'S ADVOCATE.

THE BRAMPTON HERD OF JERSEYS.

The fine herd of Jersey cattle owned by Messrs. B. H. Bull & Son, of Brampton, Ont., was recently inspected by a member of the FARMER'S ADVOCATE staff, and found in prime health and condition, and doing good work in the dairy. The herd now numbers about sixty, and is headed by the two-year-old imported, Island-bred bull, Brampton Monarch (illustrated on another page in this issue), winner of first prize, in exceptionally strong competition, as a yearling at the Toronto Industrial Exhibition, 1898, and also the championship at the same show as the best bull of the breed of any age, competing with the champion of the American Live Stock Show at Madison Square Gardens, New York, and the first prize bulls in all the sections at the Toronto Industrial. To show that he comes honestly by his exceptional individual merit, it is only necessary to mention that his dam, imported Manor Lass, H., was the winner of the female championship at the Toronto Exhibition in 1887, and repeated the record in 1898, in competition with such a galaxy of imported and American-bred cows as has never before faced a judge in Canada, and including the winners of the Trans-Mississippi Exhibition at Omaha, in the same year. The fact of mother and son winning first and championship prizes in such a contest constitutes an unparalleled record, and marks a red-letter event in the history of Jerseys in the Dominion of Canada. Brampton Monarch, as his portrait shows, is a typical dairy bull in conformation and quality, and is a high-class representative of the best of the breed, and his great individual merit, as we have shown, is founded on the pedigree of inheritance, through a long line of illustrious ancestors, the influence of which is seen in the character of his calves, which are uniformly stamped with the signet of their sire. Among the females, mention may be made of Sunbeam of Brampton, now in her four-year-old form, and maturing into the model cow she promised to make when she won first-class honors as a yearling and a two-year-old at Toronto, her perfect dairy form, smooth shoulders, level quarters, and large and shapely udder indicating the capacity for good work. Jetsam's Molina, a four-year-old daughter of imported Jetsam, and who won first prize at Toronto as a yearling, has developed into a very handsome and useful cow and shows true breed type and dairy points. Minette of Brampton is a deep-bodied and well-formed three-year-old cow of fine promise, who won second prize in the dairy test at the Provincial Show at Brantford last year, and is a granddaughter of Adelaide of St. Lambert, whose record of 82 1/2 lbs. milk in one day, and an average of 65 lbs. for a month, has never been equalled by any cow of the breed. Princess of Brampton is a two-year-old sister of Minette, and also a granddaughter of Adelaide, and is of the most approved dairy pattern. Batina of Brampton is another promising two-year-old, a daughter of Sybil's Lass 2nd, who gave 30 lbs. milk daily at two years old in the test at Brantford, where she won first prize, after milking four months. She was also a second prize winner at Toronto. Jubilee Maid is a handsome daughter of Jetsam's Molina, and was a prizewinner at Toronto as a heifer calf. Lady Lisgar is a yearling daughter of Rosa May's Boy, who was a son of Signal's Rosa May, the three times sweepstake cow at Toronto. Dolly's Pet is a handsome two-year-old heifer, with model form and a remarkably well-shaped udder, well-placed teats, and extraordinary milk veins, a neat head and neck and lots of quality. Una Massena is a deep, well-formed two-year-old daughter of Massena's Duke, whose sire won the sweepstakes at Toronto, and who was a grandson of Mrs. Jones' famous cow, Massena, winner of first prize at Toronto, and who made 116 lbs. 10 oz. butter in six months, in her 16th year. Colonia, by Kitty's Stoke Pogis, won third prize in the dairy test at Brantford, and gave 37 1/2 lbs. milk daily at two years old, testing 5 8/10 butter-fat. Rica is a handsome daughter of Costa Rica's Son, whose dam has a record of 90 lbs. 11 1/2 oz. butter and 126 1/2 lbs. 9 oz. milk in 31 days. Space forbids individual mention of many other young heifers and calves of promise in the herd, but a capital lot of six yearling bulls, which are held for sale, and which are bred from high-class cows, some of which are in the list described above, and others of similar breeding, should attract the attention of breeders requiring bulls of good character to place at the head of their herds. They are up-to-date in every respect, and cannot fail to give satisfaction.

Horse Owners! Use GOMBAULT'S Caustic Balsam

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., TORONTO, CAN.

Choice Ayrshire Bulls

FOR SALE: A NUMBER OF THE IMP. Neidpath Jock. A few young bulls fit for service, and bull calves under a year. Also a few heifers and heifer calves. Bred Rock, Black Spanish and Black Minorca fowls, and Cayuga and Rouen ducks.

JAS. McCORMACK & SON, ROCKTON, ONTARIO.

SHORTHORNS

I have six young females for sale—three are in calf and three old enough to be bred. These heifers have four or more crosses of the finest Booth sires, on imported Marr and Gordon Castle foundation, a desirable and needed line of breeding.

on D. ALEXANDER, Brigidon, Ont.

MOUNT ROSE STOCK FARM

Young Shorthorn bulls, heifers and cows for sale. Prices right.

J. W. Hartman & Sons, Elmhedg P.O., Ont.

WE OFFER Three Bulls for Sale

Six, eight and eleven months old, all red, and exceptionally well bred, and FOUR BERKSHIRE BOARS fit for service. Prices right.

A. J. C. SHAW & SONS, THAMESVILLE, ONT.

SHORTHORN CATTLE AND LINCOLN SHEEP.

Imp. Baron Blanc 11th at head of herd. Seven young bulls for sale—good ones. Also a few females. Stud rams all imported from H. Dadding, Esq.; the same blood as the 1000-guinea ram.

J. T. GIBSON, DENFIELD, ONT.

Maple Lodge Stock Farm

SHORTHORNS—Imported Knuckle Duster, and the great sire and show bull, Abbottsford, in service. Several choice heifers for sale, and a grand lot of young bulls by Calthness, from good milking dams. Some splendid Leicester ewes and rams for sale also.

A. W. SMITH, MAPLE LODGE P.O., ONT.

SHORTHORN BULL FOR SALE.

Elvira's Saxon 21064, by Royal Saxon 10537; dam Elvira 11th 11616, by Duke of Guelders (imp.).

R. MITCHELL & SON, Burlington Station, Nelson P.O., Ont.

BONNIE BURN STOCK FARM

Carries Isabella, Strawberry, and other noted Shorthorn strains, on which has been employed such sires as Kinellar Sort (imp.) and Northern Light (imp.), Shropshires and Berkshires. Farm within sight of station. D. H. RUSSELL, Stonyville, Ont., on

Shorthorns and Shropshires.

I have a few promising young bulls on hand, and am booking orders for Shrop. ram lambs for fall delivery; well covered.

GEORGE RAIKES, BARRIE, ONT.

SPRINGBANK FARM.

Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale.

on JAS. TOLTON, WALKERTON, ONT.

EGGS.

It pays to get the best. We have them in L. and D. Brahmas, B. and W. Rocks, W. Wyandottes, Black Minorcas, and Indian Game, at \$1.25 per setting.

JACOB B. SNIDER, German Mills.

EGGS FOR HATCHING.

Brahmas, Games, Min-Dorkings, Hamburgs, Houdans, Wyandottes, Ducks, Geese, and Turkeys. om For prices write WM. STEWART & SON, MENIE, ONT.

GOSSIP.

W. C. Shearer, Bright, Ontario, advertises in this issue Jersey cows and heifers, which are stock of first quality as milkers and family cows, the raising of which he makes a specialty.

James McCormack & Son, Rockton, Ont., offer for sale in our advertising columns in this issue the imported Ayrshire bull Neidpath Jock, also a number of young bulls fit for service.

F. Bonnycastle & Sons, breeders of Shorthorns, Cotswolds, and Berkshires, Campbellford, Ont., writes:—“We are having very good success making sales. We sold six head of Shorthorns (three bull calves and three heifers) to S. L. Parly, Medicine Hat, N.-W. T.; one bull calf to the Journal Printing Company, of Ottawa; one to J. A. Dunn, Wooler, Ont.; one boar pig to J. A. Nixon, Trent Bridge, Ont.; one boar pig to Francis J. Brunt, Amherstburg, Ontario.”

CHARLES LAWRENCE'S SHORTHORNS, SHROP-SHIRE, TAMWORTH, AND POULTRY.

No man in his district has taken greater interest in the advancement of the live stock industry than has Mr. Charles Lawrence, whose extensive and fertile acreage of rich pasture lands lies a short distance from the town of Collingwood, Ont. Back in the boom days of Shorthorn history, Mr. Lawrence was one of the very few men in his district who launched out to those centers where a choice could be made from the largest and best herds in Canada, and representatives of the noted Scotch-bred Duchesse of Gloster and Rosebud families were selected as being the best suited to his locality. Isabella bulls were also employed, and to-day may be found a fresh young herd of females, headed by the young bull Mattawa King 2470, by Stayner's Village Doctor, and out of Roxana, with pedigree running to the noted Melody family. And as general usefulness has been Mr. Lawrence's aim, the dairying qualities have by no means been neglected, and young sires from high-milking dams are frequently to be found on hand.

The Shropshire sheep have been of late commanding their share of attention at Mr. Lawrence's hands, and as they were founded upon stock obtained from the best flocks in England, an up-to-date flock can be seen here at any time. At no season has Mr. Lawrence been stronger in Shrops. than the present, and barring accidents we expect to hear of a strong bunch making a tour of the leading showyards the coming year. The first imported ewes were obtained through the late Simon Beattie, following which selections were made from the flock of the late Robert Callcutt, as well as from importations by the Millers of Mansell & Minton breeding, with which were mated none but the best obtainable rams; covering with size, quality, and uniformity being Mr. Lawrence's chief aim, and the young stuff shows the desired result in a high degree.

With a view of meeting the demands of the times in the increasing bacon trade, Mr. Lawrence has again launched forth by making selections from the best Tamworth herds, and at the time of our visit we found some very nice young things on hand. Among the animals, our attention was attracted by the brood sow Rosy 745, by Glen Sandy, now rearing her third litter to a Bell-bred boar, from which good lengthy young pigs may be selected.

A pen of Partridge Cochins fowls have also taken up their abode here, and from the stock we saw we would venture to state that we believe Mr. Lawrence is again on the right track, for they are real beauties.

Mr. Lawrence takes a very active interest in all matters pertaining to the advancement of agriculture, and devotes much time to the important positions at the head of Agricultural Societies, Farmers' Institutes, etc., to which he has been from time to time elected.

JAMES DOUGLAS' SHORTHORNS.

The fine old herd of Shorthorns established in 1885, at Caledonia, Ont., by the late James Douglas, and now owned by his son of the same name, was recently looked over by one of the ADVOCATE staff, and found in fine, healthy condition. The herd at present numbers about 80 head, and the principal stock bull in use in the last few years has been Duncan Stanley—16364—by Stanley (son of Challenge, and sire of Topman, winner of the championship at the Winnipeg Industrial Exhibition, 1899), and out of Isabella 14th, the dam of the champion Moneyfuffel Lad, by Topman. As might be expected from a bull of such breeding and family history and connections, he is one of exceptional individual excellence, as may be inferred from the fact that he has recently been purchased by his breeders, Messrs. J. and W. Russell, Richmond Hill, to head their show herd in the great Shorthorn tournament to come off in Toronto next month. He is an 8-year-old roan bull of great substance, constitution, and quality, and carrying a wealth of natural flesh, which well accounts for the grand lot of short-legged, thick-fleshed, and well-haired heifers he has left at the Caledonia herd, and which are a proof that, in breeding, the sire is more than half the herd. To succeed the old veteran as head of the herd, Mr. Douglas has installed the imported roan yearling Scotch-bred bull, Christopher—288533—bred by Mr. J. Stephen, Letheny, Inveruri, imported by Messrs. Cargill, and sired by Emancipator (6347), by the Cruick-shank-bred Dauntless, a great show bull and sire in Scotland. The dam of Christopher is Fairy Girl, by Gravesend, bred at Sittytown, and the son is a thrifty, sappy, thick-fleshed fellow, with a grand coat of hair, and promises to nick well with the daughters of Duncan Stanley, a number of which are now in calf to him, as well as with the matrons of the herd, most of which are now carrying calves by the old bull, and some of which have been bred to Christopher. A recent addition to the herd is the fine young roan cow, Miss Duxie, purchased from Mr. W. D. Flatt, Hamilton, got by imported “The Baronet,” and out of Mantalina Bud, by Sir Ingram. She was the highest priced cow at the dispersion sale of Mr. Jas. Hunter's herd, at Alma, and her daughter realized the highest price for yearlings at the same sale. Thirty calves are an exceedingly good lot, and three useful young bulls fit for service, are held for sale. The herd is one of the largest and best in the Dominion, and only needs to be known to be appreciated, as good judgment has been used in breeding for quality, early maturity and good milking propensities, and steady improvement has been the result.

J. W. HARTMAN & SONS' SHORTHORNS AND BERKSHIRES.

Since our visit to Messrs. J. W. Hartman & Sons' farm, at Elm Hedg, in Grey Co., Ont., last year, we are able to record advance made at our return visit this season. Activity in live stock matters stirs the more wide-awake to keep pace with the demands of the times, and although we were able to report very favorably in our visit of '98 as to Messrs. Hartman's facilities for handling live stock, we found no relaxation this year. A new silo of liberal capacity was lately added, which assisted much in bringing the Shorthorns through the long stall-feeding season. Improved facilities was not all the advance we found, for during the past few months fresh blood was introduced into the Shorthorn breeding herd. The red cow, Marjorie, by imported Blue Ribbon, and out of Isabel, and the red and white Perfection Queen, by Perfection 9100, and out of Strawberry 3rd, were purchased, with calves at their feet, and in their purchase we would judge that the firm has acted wisely in bringing such a pair of fresh young females into their herd, the quality and breeding of which qualify them for any herd in the Province, with their productiveness assured, and as they have placed the splendid young bull, Duke of Richmond, by Scarlet Velvet, and out of Miss Lamden 3rd, at the head of their herd, it is superfluous to add further remarks, other than to state that we saw Duke of Richmond when a calf, and though favorably impressed with his quality then, he has developed beyond our expectations. He has a great wealth of natural flesh, has a splendid straight and broad back, with plenty of bone, stands well on his feet, and is proving himself a sure and satisfactory sire. The cows of Ury descent and the young Grey Hero females are a good, even lot, with sufficient substance and natural flesh qualities to assure the attention of parties requiring young sires and foundation stock. In all we were shown some 20 females of different ages, in and approaching the prime years of their life, which are receiving the untiring efforts of their enthusiastic owners.

Among the Berkshires we found a few sows of the most approved type, and the reason was well explained when we noted their management and saw their pedigree, which run strongly into Baron Lee 4th and Enterprise families, with the addition of descendants of English-bred females. The stock boar, Black Knight, by Baron Lee 4th, and out of Gipsy, has developed into a very fine animal, possessing plenty of length and depth, has a grand back and head, and carries his substance very evenly throughout. He is proving a highly satisfactory sire. Numerous sales of young stock have been made in different sections of the country, each coming up to the purchaser's expectations, as replies have indicated. And in Shorthorns, the firm report the demand away beyond the supply; but as time advances fresh young stock is approaching the salable age. See Hartman & Sons' advertisement.

NOTICES.

The Ottawa Exhibition.—Last year the Central Canada Exhibition Directors had new poultry and dairy buildings erected, and big increases made in the live stock and dairy premium lists, making the prizes, it was admitted, all that could reasonably be asked for. Nevertheless, with the object of making this year's dairy exhibit, excel anything ever seen in Canada, the prizes in that department have been still further increased, and special inducements held out to parties to exhibit. All cheese and butter exhibited at the fair, and remaining unsold at the close of the Exhibition, will be placed in cold storage by the Directors until it is disposed of at exhibitor's price.

Three new classes have this year been added to the Central Canada Exhibition Association's premium list for horses. Two of these classes are specially for horses owned by farmers—carriage and heavy draft. The third is for French-Canadian horses. Secretary McMahon reports an unusually large number of entries for this year's show, which opens on Sept. 11.

In Ottawa, it is said, the displays in the main building at this year's exhibition of the Central Canada Exhibition Association will far excel any made in the past. The Fair management has received so many applications for space this year that the entire new iron fireproof building erected last year at an expense of \$60,000, will be devoted to displays of manufactures and novelties. Two or three of Canada's big exhibitors have promised to make exhibits that will eclipse any ever arranged before in the Dominion. The Fair is to open on Sept. 11th and close on the 23rd.

Reports from Ottawa are to the effect that the annual fair, to be held there in September, will excel any exhibition ever yet given in Central Canada. The Ottawa Show will last two weeks this year, commencing Sept. 11th. Among the special attractions will be several aquatic feats and sights, and workmen are now constructing a big lake at the fair grounds for the purpose. The night spectacular will be “The Bombardment of Pekin,” and several hundred of the volunteers of the Capital will take part in its presentation.

New “Milk Fever” Cure.

From time to time we have referred in our “Dairy” and “Veterinary” departments to the value and certainty of the new Schmidt milk-fever treatment. In our issue of April 1st reference was made to the success of the treatment by a veterinarian of our own acquaintance with his first two bad cases, and in our issue of July 1st we described how nine out of ten cases were completely cured, and in this issue we again refer in our “Veterinary” department to Dr. Tennant's continued success in curing cows attacked with this previously supposed fatal malady. We now desire to draw the attention of our readers to an advertisement in this issue that places the medicine and instrument for its application, with full directions for treatment, within easy reach of every cow-keeper. We are informed by Dr. Spencer, who is placing the treatment on the market, that the medicine, in the main, is the same as that found so successful by Prof. Schmidt, its discoverer, and in addition contains high antiseptic properties, which serves to further enhance the recovery. We have examined the instrument which will be used in the treatment, and find it well suited to the purpose in being easily manipulated, simple and substantially constructed.

CENTRAL CANADA....

Exhibition Association

TWELFTH ANNUAL EXHIBITION AT OTTAWA, ONT., SEPTEMBER 11th TO 23rd, 1899 TWO WEEKS.

This exhibition is second to none in Canada for Live Stock Accommodation, Quality of Exhibits, Excellence of Attractions.

\$1,500.00 added to Prize List in the Live Stock Department. Offered in purses of Horse Races, \$3,000.00

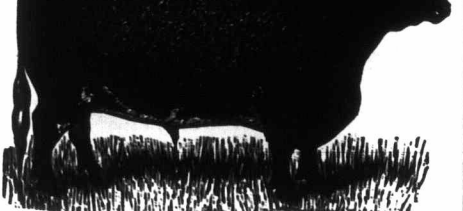
"Bombardment of Pekin"

Reduced rates on all lines of travel. For Prize List, Race Programmes, and all information, write the Secretary.

Wm. Hutchison, M. P., E. McMahon, President. 26 Sparks St.

ARTHUR JOHNSTON

Greenwood P. O. and Telegraph Office,



OFFERS FOR SALE 15 SHORTHORN BULLS

25 COWS AND HEIFERS Including 9 recently imported heifers. Prices right. Catalogues on application.

Claremont Station, C. P. R. Pickering Station, G. T. R.

"NO BUSINESS, NO HARM."

W. D. FLATT,

HAMILTON P. O. and TELEGRAPH OFFICE,



OFFERS FOR SALE Twenty-two Shorthorn Bulls

CHOICE from three to fifteen months old. Persons requiring show bulls can be supplied from this bunch.

TWENTY COWS AND HEIFERS served by imported bull, Golden Fame

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep. Herd prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898.

T. E. ROBSON, Ilderton, Ont.

SCOTCH SHORTHORN BULLS AND HEIFERS

HERD ESTABLISHED IN 1872. Such sires as imported Royal George and imported Warfare have put us where we are.

A. & D. BROWN, ELGIN COUNTY, IONA, ONTARIO.

Shorthorns and Leicesters.

Herd Established 1855. A number of young bulls, cows and heifers for sale.

JAMES DOUGLAS, CALEDONIA, ONT.

SPRINGHURST SHORTHORNS

Herd bred for practical usefulness, and produces as large a proportion of top show cattle as any herd in Ontario.

Exteter Station, G. T. R., half mile from farm. H. SMITH, HAY, ONT.

WM. WYLIE, 228 BLEURY ST., MONTREAL, OR HOWICK, P.Q.

Breeder of high-class Ayrshires. Young stock always for sale; bred from the choicest strains procurable.

W. F. STEPHEN, Breeder and importer of choice and fashionable

AYRSHIRES

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

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

MAPLE CLIFF Dairy and Stock Farm.

AYRSHIRES Three young bulls fit for service, and bull calves.

BERKSHIRES, TAMWORTHS, Booking orders for spring litters.

R. REID & CO., HINTONBURG, ONT. Five minutes' walk from Cen. Expl. Farm, Ottawa.

Choice Ayrshires for Sale.

Herd now headed by Royal Star of St. Ann's, 1st prize two-year-old at Toronto, 1st and sweepstakes at London, 1898.

WILLIAM THORN, Trout Run Stock Farm, Lynedoch, Ont.

AYRSHIRES FOR SALE.

The kind that can speak for themselves. Size, constitution, dairy and show combined. Six young bulls for sale.

JAMES BODEN, TREDINNOCK FARM, STE. ANNE DE BELLEVUE, QUE.

CHOICE AYRSHIRE BULLS

Four calves dropped in August, October, December and March, and sired by Craigielea of Auchenbrain (imp.), first prize bull at Toronto in 1897 (the only time ever shown).

W. W. BALLANTYNE, Formerly Thos. Ballantyne & Son, Stratford, Ont. "NEIDPATH FARM" adjoins city, main line G.T.R.

Ayrshire Bull Calves of 1899

3 YET on hand, and more to come within the next month, from some of our best imported cows. Will sell at reasonable prices. Address:

ROBT. HUNTER, Manager to W. W. Ogilvie, LACHINE RAPIDS, QUE.

MEADOWSIDE FARM, J. YUILL & SONS, Props., Carleton Place.

Breeders of high-class, deep-milking Ayrshires. Sweepstakes young herd at Ottawa. Shropshire sheep from prizewinning stock. Berkshire pigs and Barred Plymouth Rocks. Young stock for sale.

Ayrshire Cattle and Berkshire Pigs.

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.

D. BENNING & SON, 5-1-y-o Glenhurst Farm, Williamstown, Ont

HIGH-MILKING AYRSHIRES.

Descended from some of the most noted prizewinners at the World's Fair, Chicago, and other important competitions. None but the best are bred from. Young stock of both sexes for sale. Leicesters.

DONALD CUMMING, LANCASTER.

4 Yearling Ayrshire Bulls for Sale.

Also a number of spring calves, sired by Douglas of Loudoun. F. W. TAYLOR, Wellman's Corners, Ont.

NOTICES.

"The Reaper King." - With the above words a writer in the Philadelphia Saturday Evening Post heads a graphic article on Cyrus H. McCormick and the great McCormick reaper works of Chicago.

The bottle of Gombault's Caustic Balsam you so kindly sent me in November, 1896, I have used on my horse for enlarged tendon, and found it to work to my entire satisfaction.

The Reliable Feed Cooker advertised in this issue by Rippley Hardware Co., Grafton, Ill., seems to be winning its way to popularity wherever introduced.

Dear Sirs, - We have given your reliable feed cooker quite a thorough trial, and are highly pleased with its working.

Mr. F. Martindale, York, Ontario, reports the recent sale to Mr. W. D. Flatt, Hamilton, Ont., of three milk-fair Shorthorn cows of the Missis family, and the four-year-old cow Queen Ann 29031, by Aberdeen (imp.), of the Fair Queen tribe.

Some six miles south-east of London, Ont., brings one to the farm of Mr. Andrew Elliott, whose specialties are Oxford sheep, collie dogs, and Bronze turkeys.

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Some six miles south-east of London, Ont., brings one to the farm of Mr. Andrew Elliott, whose specialties are Oxford sheep, collie dogs, and Bronze turkeys.

The collic dog stock was rather lower than usual when we called, yet a very choice young bitch is held for sale.

About 60 Bronze turkeys were successfully hatched this season, and will be offered at the proper season, and as care was exercised in the foundation selections from the most noted prizewinning pens at the World's Fair and the other big shows, it is not unreasonable to expect good stuff to be reared among them.

The collic dog stock was rather lower than usual when we called, yet a very choice young bitch is held for sale.

W. S. CARPENTER'S SHORTHORNS, SHROPSHIRE, AND YORKSHIRES.

"Shorthorns, Shropshires, and Yorkshires in the future," says W. S. Carpenter, at Simcoe, when we met him at his homelike residence a few days ago.

In Shropshires, Mr. Carpenter laid his foundation by purchasing the descendants of importations made by Mr. W. Pettit, the ewes being in lamb to Mr. Pettit's imported Flashlight.

Oh, Yes! We sell Holstein Bulls. Sold 7 in May. Have 12 now on hand; oldest 9 months old; bred right and are right. Write for particulars. Male or female. State just what you want.

A. & G. RICE, Currie's Crossing, Ont. Oxford County.

Jersey Cattle

MONEY IN YOUR POCKET. Mrs. E. M. Jones, Box 324. BROCKVILLE, ONT., CAN.

BRAMPTON JERSEY HERD.

Offering high-class A. J. C. C. cows and heifers in calf, and heifer calves; 9 choice young bulls. High-grade cows in calf; and Berkshires.

S. WICKS & SONS

Offer two Registered A. J. C. C. Jersey Yearling Bulls. These are grand youngsters; cheap if sold at once.

Deschenes Jersey Herd.

HEADED BY IDA'S BROTHER OF ST. LAMBERT 47570. 4 young bulls fit for service - registered. Also Tamworth swine from diploma herd, Canada Central Fair, Ottawa, 1898.

FOR SALE!

JERSEY BULL, THREE YEARS OLD, A GRANDSON OF THEOLINE, THE SECOND RICHEST COW IN THE WORLD.

Jersey Cows and Heifers

In calf to fine registered bull, whose dam has tested 40 pounds milk per day, and 15 1/2 pounds butter per week.

Meadowbrook Jerseys, Tamworths.

Bulls and Heifers for sale from herd that averaged \$63.10 per head for butter-fat alone last year.

GLEN ROUGE JERSEYS.

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

MILK FEVER CURE.

IT is now KNOWN that the udder is the seat of milk fever. Schmidt's udder injections CURED 90 per cent. of the first 412 cases treated.

HOLSTEIN BULLS

that we think you will want when you know their breeding, and the large OFFICIAL milk and butter records of their nearest ancestors.

Lynnfield Holstein Herd.

Do you want to buy young cows that are great milkers, also two-year-old heifers, bred to our stock and show bull, Homestead DeKol Belle Boy.

HOLSTEIN-FRIESIANS

The Gold Medal Herd of '97 and '98. A few choice cows and heifers now for sale, mostly bred to the butter bull, De Kol 2nd's Paul De Kol Duke.

Oh, Yes!

We sell Holstein Bulls. Sold 7 in May. Have 12 now on hand; oldest 9 months old; bred right and are right. Write for particulars. Male or female. State just what you want.

A. & G. RICE, Currie's Crossing, Ont. Oxford County.



Persiatic Sheep and Animal Wash

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

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

GOSSIP.

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

JOHN I. BALSDON'S COTSWOLDS.

Mr. John I. Balsdon, of Balsam, Ont., whose advertisement of Cotswold sheep appears in this issue, is one of those men who has worked faithfully and patiently to establish a strictly good flock, and from what we saw at the time of our visit to the farm, it occurred to us that he had not labored in vain. The present flock of thirty breeding and a half a dozen shearing ewes, with the thirty odd lambs, about equally divided in sex, are a strong, well-covered, uniform bunch. The foundation stock was obtained and replenished from time to time from such breeders as Thompson, Miller, Ward, and Morrison, many of which are bred direct from imported sires or dams, or both, and we were informed that a bunch were expected from England this fall. The present stock ram has proven very satisfactory as a sire, and Mr. B. expressed his satisfaction with his progeny. In conformation we found him a very strong, rugged sheep, splendidly covered, has good bone and a grand back, with quality all over. Mr. Balsdon is offering stock of all ages and both sexes for sale, and we would suggest to intending purchasers that they will not remain long when offerings are made known.

Mr. Balsdon has also a limited number of Shorthorn cattle, and as he is in a section where he has access to some of the best sires in the breed, he frequently has a good young bull or two for sale. This season he has an October calf that he thinks equal to if not the best he has ever raised. Watch Mr. Balsdon's advertisement.

RECENT SALES MADE BY MR. W. D. FLATT, HAMILTON, ONT.

Mr. W. D. Flatt, of "Trout Creek Stock Farm," has recently made the following sales: To Jas. Yule, manager for the Hon. Thos. Greenway, Crystal City, Man., Clara 3rd (imp.), 2-year-old heifer, of excellent quality; Village Blossom, red yearling, good enough to show in any company; Red Rose (imp.), 2-year-old, possessing strong Shorthorn character, an exceedingly good milker; Dreyfus, a 7-month roan bull; this is a really good calf, and in the hands of Mr. Yule should develop to be a winner in any company.

To W. T. Miller, Carlos City, Ind., Cecil Lady (imp.), an excellent 3-year-old, she being a remarkably heavy milker; Trout Creek Clan Alpine, a very promising red bull calf; Lustre 18th (imp.), a 2-year-old heifer, with superb quality.

To W. G. Pettit & Son, Freeman, Ont., fourteen 2-year-old (imp.) heifers, four yearling heifers, one yearling bull, and one 2-year-old bull, making twenty head in all. The above were selected by Mr. Geo. Campbell, Kinellar, Scotland, whose experience while assisting his father in the management of the famous old herd at Kinellar is the best guarantee that the lot is composed of animals of the right sort. There are five red heifers got by the Gordon Castle bred bull, New Year's sire, and out of Jeanousy, Mysie, Minerva, Lily of Towie, and Lady Annie families; the Jealousy 2-year-old red heifer, Rose of Towie 3rd, is an exceptionally wide-topped, good heifer, whose grandam, Japonica 4th, was got by the Highland Society prize bull, Lord Chelmsford, to whom a number are closely related. The roan heifer, Coquette, is a particularly well-bred heifer, that will satisfy the most critical judges, showing great wealth, good shape and constitution. There were two heifers from Neither Augustown—one, the Mary Anne, got by Maximus, tracing back to the old Kinellar Minas. Crabston Beauty 5th is also an exceptionally good heifer, descending from the Kinaldie bred cow, by Young Pacha. Muriel, a nice, low-standing, sweet heifer, with good top and attractive Shorthorn character, got by Star of Lancaster. This is a very choice specimen of the late Mr. Sylvester Campbell's highly-esteemed Mina family, so full of old Sittytown blood, her grandam being got by the noted bull Gravesend. Lily and Rosie are two exceptionally good yearlings, with lots of Cruickshank blood in them. The two-year-old bulls, Mata-bale Chief, bred by Mr. Wilson, Pirriessmill, and out of Meadow Queen, by the noted sire; Boulevard, a fine, lengthy bull, good top and ribs; the yearling bull, Red Light, bred by Mr. J. Black, Barthelchapel, by the Upper Mill sire, Capt. Ripley, and from the noted Gordon Castle Lustre tribe, this being a very sweet-topped, level bull, showing very good character.

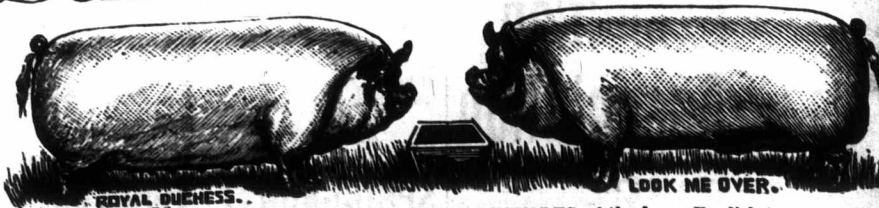
Among this lot there are seven straight Cruickshank pedigrees, the balance being Scotch. They will compare in breeding with any importation. They have not been highly done in Scotland, and are only in moderate condition. The greater number of the females have been bred to Count Aramant, he being bred by Mr. Duthie, and Mr. Campbell paid Mr. Duthie \$500 for him when a calf. This gives Mr. Pettit now a very large herd of both imported and Canadian-bred stock, and I feel satisfied this acquisition of imported stock to his already strong herd cannot help but prove profitable to him.

To George Harding & Son, Waukesha, Wis., eight head, comprising the following: Daisy of Strathallan 13th, a red 5-year-old cow; Eurilla, roan 7-year-old cow; Trout Creek Lady, 3-months-old calf; Missie of Neidpath 20th, a red 4-year-old cow; Maid, 3-year-old roan cow; Alice (imp.), a 3-year-old cow; Nonpareil 33rd (imp.), 2-year-old red heifer. Mr. Harding has in this bunch a choice lot of profitable individuals, both as regards pedigree and quality. Of the animals, I consider Missie of Neidpath 20th the most valuable cow in Ontario; in fact, every one of them are worthy of comment. Eurilla, Missie of Neidpath 20th, Maid, and Daisy of Strathallan 13th, have produced the choicest calves in my herd the past season. I still have Missie of Neidpath 20th's and Maid's calves; they are both promising enough to make show bulls. Eurilla's calf Mr. Harding takes with him. Without a doubt she is a most remarkable one, and has been pronounced by competent judges one of the very best things in my herd.

To C. Hintz, Fremont, Ohio, Mina Lass 10th, a dark roan 2-year-old. This is a show heifer, and choicely bred. Mr. Hintz has purchased her to fill up his herd for exhibition purposes.

Like the "Farmer's Advocate," W. P. Harned, proprietor "Idlewild" Shorthorns, Vermont, Cooper Co., Mo., writes: "I consider the ADVOCATE a very progressive paper, and am glad to do anything to advance any publication so advanced in its ideas. Beg to thank you very much for the binder, as I wish to keep them on file."

Summer Hill Herd



The largest herd of imported and Canadian-bred YORKSHIRES of the large English type in Canada. Twenty-five matured imported sows, among them being several Royal winners. Six imported sows sired by Ruddington Lad, Royal winner and gold medal boar for the best pig of the white breed. Have three imported stock boars bred by such noted breeders as Sanders Spencer and Philo L. Mills. Twenty-five April pigs (imported) of both sexes for sale. Also a number imported in dam. Two hundred Canadian-bred pigs of all ages for sale. Write for prices. Personal inspection preferred. I prepay express charges, and guarantee stock as described. **D. C. FLATT, MILLGROVE, ONT.**

Large Yorkshires.

Have a very fine lot to select from, of good length, and easy feeders. Pigs farrowed from March to September. Can furnish pairs not akin. Stock shipped to order. Satisfaction guaranteed.

E. DOOL, - HARTINGTON, ONT.

Yorkshires and Berkshires

BOARS and sows, both breeds, all ages. Sows safe in pig. Pairs supplied not akin. All of the best breeding and most approved type. Write for prices.

JAS. A. RUSSELL, Precious Corners, Ont.

SPRING OFFERING

Yorkshires and Berkshires



A fine lot of boars and sows eight weeks old. Pairs and trios supplied, not akin, of the best breeding and individual merit. A number of Yorkshire boars fit for service, and fine lengthy sows in pig to an imported boar. Berkshires, all ages, quality of the best. Write **H. J. DAVIS, BOX 290, WOODSTOCK, ONT.** Breeder of Yorkshires, Berkshires, Shorthorns.

MAPLEHURST BERKSHIRES.

Modern Bacon Type.

OUR early litters are all sold. We offer only a few choice sows and boars of May and June farrow. Orders booked now for August and September pigs—distinct strains. Correspondence invited.

J. J. FERGUSON, BOX 373, SMITH'S FALLS, ONT.

- Snelgrove - BERKSHIRES AND COTSWOLDS

High-class Berkshires of the large English bacon type, bred from the best specimens of the best importations. Young Boars and Sows of breeding age for sale. Two boars farrowed last June. Also choice spring pigs six to eight weeks old. Can supply pairs not akin. Yearling Cotswold Rams and Ewes for sale.

R. P. SNELL, Snelgrove, Ont.

LARGE ENGLISH BERKSHIRES.

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

GEORGE GREEN, - FAIRVIEW P.O., ONT.

Telegraph and Station: Stratford, G. T. R.

Large English Berkshires.

HERD headed by two imported boars—Nora B's Duke and Royal Star III, half-brother to Columbia's Duke, which recently sold for \$1,200. Choice pigs, all ages. Write for prices.

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

BERKSHIRES FOR SALE.

Boars and sows of all ages. Choice young pigs at \$6 each, registered.

JOHN RACEY, JR., Lennoxville, Que.

Springridge Poland-Chinas

Now offering the 2-year-old sire, Blackmoore, and a few of his young females, and booking orders for young stock from the royally-bred Goldbug, lately added to the herd.

WM. J. DUCK, MORPETH, ONT.

POLAND-CHINA SWINE.

Young stock, both sexes. Eggs for hatching from B. P. Rocks and L. Brahmas, \$1 per 13; Rouen Ducks, \$1 per 11. Turkey Eggs in season. Farm three miles east of town.

J. F. M'KAY, PARKHILL, ONT.

OXFORD HERD OF POLAND-CHINAS

The home winners of the

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

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

DUROC - JERSEY SWINE

We have a fine lot

First-Class Stock

of all ages and either sex. Address,

- ONT. TAPE BROS., Ridgetown, Ont.

REGISTERED CHESTER WHITE PIGS.

Eight weeks old, at \$5.00 each.

REGISTERED JERSEY BULL CALVES \$20.00 each.

F. BIRDSALL & SON, BIRDSALL, ONT.

CHESTER WHITE SWINE.

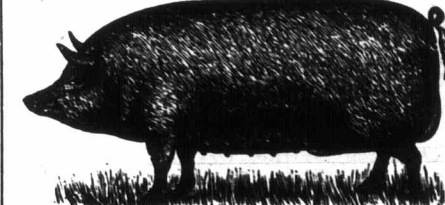
Young stock, both sexes. Booking spring orders.

W. E. WRIGHT, - GLANWORTH, ONT.

Ohio Improved Chester White Pigs.

Choice stock, both sexes, 2 to 4 months old, bred from imported stock, fit to show, for sale. Also one imported boar and a few sows. Write for prices.

T. E. BOWMAN, Berlin, Ont.



One hundred Tamworth and Improved Chester White Spring Pigs of a true bacon type, our herd having won the best prizes offered at the leading exhibitions throughout Ontario and Quebec for the past ten years. Stock for exhibition purposes a specialty. We pay express charges between stations, and guarantee safe arrival of all stock shipped. Pairs furnished not akin. Write for prices.

H. GEORGE & SONS, Crampton P.O., Ont.

SPRING BROOK HERDS OF

HOLSTEIN-FRIESIANS AND TAMWORTHS.

One boar, 7 mos. old; one imported boar, 8 mos. old. A choice lot of boars and sows ready to ship. Pairs not akin. All stock sired by imported prize-winning boars. A few sows to spare, in farrow. Prices right.

A. C. HALLMAN, NEW DUNDEE, ONT.

TAMWORTHS, YORKSHIRES, BERKSHIRES.

1 Tamworth Boar, 4 months old, \$12.00.
4 Tamworth Boars and 1 Sow, 11 weeks old, \$8.00.
Yorkshires (both sex), from 2 to 3 mos. old, \$6-\$8.
Berkshires, 3 Sows, 6 months old, \$12.00.
Berkshires, 3 Sows, 3 months old, \$8.00.
All pigs registered, crated, and shipped to order.

COLWILL BROS, Box 9, Newcastle, Ont.

Chatham HERD OF Tamworths

1 yearling boar, 4 sows 7 mos. old, 5 sows 5 mos. old, 6 boars 4 mos. old, 8 sows 4 mos. old, 10 sows and 10 boars 3 mos. old, 8 sows and 10 boars old. Write for prices.

J. H. SIMONTON, Box 304, Chatham.

CHOICE SPRING PIGS

Of choice breeding, in pairs not akin. Prices reasonable to reduce stock.

JOHN FULTON, Brownsville, Ont. o

THE ONTARIO VETERINARY COLLEGE

(LIMITED), TEMPERANCE ST., TORONTO, CANADA.

Affiliated with the University of Toronto.

Patrons: Governor-General of Canada, and Lieutenant Governor of Ontario. Fee, \$65.00 per session. Apply to ANDREW SMITH, F.R.C.V.S., Principal. 18-2-y-om

INGLESIDE HEREFORDS.

UP-TO-DATE HERD OF CANADA!

TAMWORTHS CHOICE PIGS SIX TO SEVEN WEEKS OLD.

Send for Illustrated Catalogue. Address, - ONT.

H. D. SMITH, COMPTON, QUE.

F. W. STONE ESTATE, GUELPH, ONTARIO.

The first Hereford herd established in Canada by importations in 1859 of the best prizewinners of England, followed by repeated further importations, including winners of first prize at Royal Agricultural Show. Choice young Hereford Bulls for sale. Also McDougall's Sheep Dip and Cattle Wash, fresh imported, non-poisonous and reliable; thoroughly tested by over forty years' use on farms of above estate. - ONT.

GUERNSEYS.

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

Address— **SYDNEY FISHER,**

17-y-o **ALVA FARM, KNOWLTON, P. Q.**

GUERNSEYS

Two Choice Bull Calves AND Five Heifers for Sale.

— ALSO —

Tamworth and Berkshire Pigs.

W. H. & C. H. McNISH,

LYN, ONT.

PINE GROVE FARM HERD OF LARGE YORKSHIRES.

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

JOSEPH FEATHERSTON, Streetsville, Ont.

Yorkshires, Holsteins, & Cotswolds

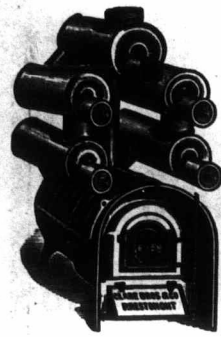
Boars and sows not akin for sale, of the bacon type. Thoroughbred and high-grade Holsteins, also a three-sheared ram for sale.

R. HONEY,

WARKWORTH, ONT.

W. R. BOWMAN, MT. FOREST, ONT.

Is offering Yorkshire Boars and Sows weighing 75 lbs. at \$7 each; Sows safe in pig, weighing 150 lbs., at \$12 each; Shropshire and Suffolk Ram Lambs weighing 110 lbs. at \$10 each. All stock registered. - O



"Money Saved is Money Earned."

WHY NOT SAVE THE PRICE OF HEATING YOUR HOUSE

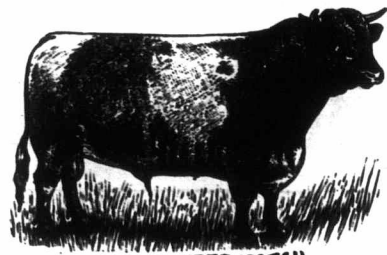
Hilborn Wood Furnaces

This Furnace has been on the market for the past fifteen years, and has given the very best results. DURABILITY is attained by a proportionate arrangement of weights; EFFICIENCY by means of the immense radiating surface, and EASE OF MANAGEMENT by provision for easy cleaning.

Winnipeg, Man. CLARE BROS. & CO. Preston, Ont.

2 Imported Shorthorn Bulls 2

4



4

2 - YEAR - OLD

HEIFERS.

1 - YEAR - OLD

HEIFERS.

HEIFERS ALL IN CALF TO IMPORTED BULLS.

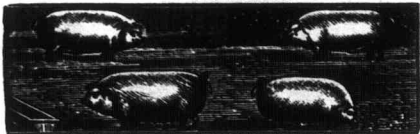
Correspondence or a personal visit solicited. Catalogues on application.

H. CARGILL & SON, CARGILL, ONT.

Cargill Station and Post Office on G. T. R., within half a mile of barns.

PURE-BRED GUERNSEY CATTLE

Chester White Swine.



Duroc - Jersey Swine.

FOR SALE—Two young Bulls ready for service, and Heifers bred. First-class Pigs of all ages from imported and prizewinning sires and dams. Twenty head of HOLSTEINS for sale. Write for particulars and prices to WM. BUTLER & SONS, DEREHAM CENTRE, ONT.

TAMWORTHS

Of the Most Approved Type.

WE have a dozen vigorous sows to farrow this spring to O. A. C. 419, and can book orders for right good stock. Our stock was not only represented at the Illinois State Fair, but won the best prizes offered in '98.

P. R. HOOVER & SONS, GREEN RIVER, ONT.

TAMWORTHS.

Upwards of 100 head to select from, bred up from Middleton Mimulus and other noted females, to which have been mated such sires as King George, Amber Smith and other prizewinning boars.

NORMAN M. BLAIN, St. George, Ont.

Tamworth BOARS and SOWS, from Elliott, Bell, and Nourse foundation. A choice bunch of Shropshire ram lambs for fall delivery, extra well covered, imported foundation.

CHAS. LAWRENCE, COLLINGWOOD.

CHOICE TAMWORTH & YORKSHIRE SWINE

Of both sexes. Also five pair Toulouse geese; six pair of good Rouen and Pekin ducks; one pair Golden B. Poland (McNeil's).

John Hord & Son, Parkhill, Ont.

OAKHILL TAMWORTHS.

FOR SALE—One boar, 16 months old. Sows in pig, and young pigs from 6 to 10 weeks old, sired by Sandy III. 639, a prizewinner wherever shown, and out of first-class sows. Prices reasonable.

R. J. & A. LAURIE, WOLVERTON, ONT.

HELLO! HELLO THERE!!

What would you like to get in Victoria Hogs at present? Let me know at once; also write for my new catalogue.

CHRIS. FAHNER, Crediton, Ontario.

OXFORDS

Bred up from Arkell, Tolton, and Evans foundation, upon which have been employed sires from imported stock. Bronze Turkeys and Collies later.

ANDREW ELLIOTT, POND MILLS, ONT.

LIORSTERS.

100 head to select from, among which are some specially good shearing ewes and rams. We employed two rams last fall, bred direct from imported stock.

C. & E. WOOD, FREEMAN, ONT.

JAMES COOPER & SON, KIPPEN, ONT.

IMPORTERS AND BREEDERS OF

Registered Shropshires.

SHROPSHIRE of the best English blood. Fashionably bred and true to type. Only the best specimens of the breed kept. Selection in breeding our stronghold.

50 ram and ewe lambs for sale. 20 yearling rams also to sell. A limited number of yearling ewes.

SHROPSHIRE

FOR SALE: 30--Ram and Ewe Lambs--30

Mostly sired by the imp. ram Newton Stamp 99631. A prizewinner at Toronto in 1897.

GEORGE HINDMARSH, AILSA CRAIG, ONT.

SHROPSHIRE.

Shearing rams and ewes; also this season's crop of lambs; extra well covered; from the highlands of Simcoe Co.

Chas. H. Rowe, Orillia, Ont.

SHROPSHIRE!

We are offering twenty-five strong, well-covered lambs from descendants of Miller importation.

ROWAT BROS., Hillsdale, Ont.

SHROPSHIRE

Shall have a fine lot of choice early lambs for the fall trade. We import and breed only the best.

J. P. PHIN, Hespeler, Ont.

GOTSWOLDS.

Females of all ages; also this season's crop of ram lambs; all from imported stock; extra well covered.

John I. Balsdon, BALSAM, ONT.

HENRY ARKELL, ARKELL, ONTARIO.

IMPORTER AND BREEDER OF

OXFORD-DOWN SHEEP.

Animals of all ages and both sexes for sale. Have some imp'd RAM LAMBS. Prices reasonable.

PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

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

DANESFIELD SHIRES, POLLED ANGUS, AND HAMPSHIRE.

With this issue commences the advertisement of Mr. R. W. Hudson's pedigree stock, kept at Danesfield, Marlow, Bucks, England. The classes of stock kept are Shire horses, Polled Angus cattle and Hampshire-down sheep, all of which are popular in England and wherever else they are known.

WM. THORN'S Ayrshires AND POULTRY.

While in the vicinity of Lynedoch, Ont., a representative of the FARMER'S ADVOCATE called upon Mr. Wm. Thorn and took a hasty run through the stock, finding the Ayrshires in their usual good form. Mr. Thorn laid a wisely selected foundation in purchases made at the dispersion sales of Messrs D. Morton & Son, Hamilton, and the late Thos. Guy, Oshawa, selecting cows with a view of establishing a dairy herd of high order, and in that selection he not only attained the end desired, but has been able to win many of the best local prize offerings at the fall exhibitions in strong competition.

In the poultry department much advance has been made since our last visit. A fine new poultry house, 20x75 feet, constructed upon the most modern ideas, was erected, and though not yet completed, is a great help in producing choice stock. In the pens we found Light and Dark Brahmans, White, Buff, Black and Partridge Cochins, White and Black Minorcas and Barred Plymouth Rocks, and as with the Ayrshires so with poultry, the best is none too good for Mr. Thorn.

MORE SHORTHORNS FOR MICHIGAN.

Mr. A. Chrystal, Marshall, Mich., has recently made the following purchases of high-class Shorthorn cattle in the Dominion, in addition to the list of his purchases published in the FARMER'S ADVOCATE of July 15.—From Arthur Johnston, Greenwood, Duchess Co., N. Y., a worthy representative of the famous Cruickshank family of that name. She was sired by imported Grand Sweep (64121), of the grand old Lady Ythan tribe, long and favorably known in the north of Scotland as a most excellent dairy tribe, as well as producers of excellent show cattle. From the same well-known herd was secured the beautiful heifer Mina Girl, by imported Clan Campbell (63794), of the grand old Kinellar-Glenalta tribe, so long and carefully bred by that master breeder, Mr. Sylvester Campbell. Her dam was by the famous imported Indian Chief, of Mr. Cruickshank's Victoria tribe, and out of the same dam as Col. Harris' well-known Baron Victor, one of the very best Cruickshank bulls ever imported to America.

From the herd of Messrs. Cargill & Son, Cargill, Ont., Mr. Chrystal secured the two choice young cows, Early Bud 2nd and Ury of Cargill 2nd, the former a red 3-year-old, by imp. Rantin Robin (by the famous Field Marshal), bred by Mr. Duthie, Collynie, out of imp. Early Bud, by Strong Bow, and of the Kinellar Rosebud tribe. The Ury heifer is a red 2-year-old, by the grand imported Kinellar-bred Royal Member, by Royal James, and of the Nonpareil tribe. The Urys were long looked upon as one of the best of the Sittyton sorts, and have produced many prizewinners.

From Messrs. G. W. Pettit & Son, Freeman, was purchased the red 2-year-old Daisy of Strathallan 18th, by Bampton M., and of the favorite Strathallan family, descended from imp. Rose of Strathallan, a prizewinner at the Highland Show in Scotland and at Provincial fairs in Canada, and whose descendants have probably won more first prizes and championship than those of any other cow imported. Bampton M. won first prize at Toronto, Montreal and Ottawa in 1898, and was by the famous Provincial fair, a championship winner at the Highland Show in Scotland and at Provincial fairs in Canada, and whose descendants have probably won more first prizes and championship than those of any other cow imported.

EUROPEAN ADVERTISEMENTS.

Hampshire Down Sheep.

SPLENDID MUTTON. GOOD WOOL. GREAT WEIGHT.

This highly valuable English breed of sheep is unrivalled in its

Rapid and Wonderfully Early Maturity,

possessing, too, a hardness of constitution adapted to all climates, whilst in the quality of

MUTTON AND LARGE PROPORTION OF LEAN MEAT IT IS UNSURPASSED.

Full information of JAMES E. RAWLENCE, Secretary, Hampshire Down Sheep Breeders' Association, SALISBURY, ENGLAND.

HENRY DUDDING, RIBY GROVE, GREAT GRIMSBY, LINCOLNSHIRE, has always for inspection and sale from the largest and most noted flock of pure Lincoln Longwool Sheep in the country, both Rams and Ewes of all ages. Representative specimens from this flock have secured for many years past at the Royal Shows champion and other prizes; whilst they have also at both the Paris Exhibitions, Vienna, Amsterdam, Chicago, Palermo, secured champion awards, and at all the leading shows in Australia, New Zealand, Canada, and the States, Riby sheep and their descendants have secured the highest honors. Wool is a leading feature in the flock, its quality being amply testified by the fact that wherever exhibited it has each time secured the premier prize including that at Windsor in 1880. The record of its careful breeding and consistent success is worldwide, and the present members of the flock are fully equal to any that have preceded them during the past 130 years in which it has been in existence, descending from father to son without dispersal. The flock holds the record for the highest price ram of 1898 (i. e., 1,000 gu.), and for the highest recorded average for an auction sale of fifty-two rams (i. e., £26 19s.) at the annual sale in July, 1898. A grand selection of yearling and other sheep on offer, sired by the most carefully selected sires obtainable, in which are contained all the best strains of the present day. Telegrams: "Dudding, Keelby."

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IMPORTERS desirous of securing selections of either Shire horses, Aberdeen-Angus cattle or Hampshire Down sheep should inspect the stud, herd and flock, property of Mr. R. W. Hudson, which are kept in the highest degree of purity that care and selection can produce at Danesfield, Marlow, Bucks, England. Specimens of horses, cattle and sheep have been largely exhibited at the principal English shows during 1890 with very prominent success. For full information, etc., apply:

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BRITISH STOCK selected and shipped to all parts of the world. Write for prices to ALFRED MANSELL & CO., Secretaries of the Shropshire Sheep-Breeders' Association, Shrewsbury, England.

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BENEFITS THE FLOCK ERADICATES INSECTS AND DISEASE

Used and endorsed by Hon. John Dryden, Minister of Agriculture, Toronto, Ont., and leading breeders everywhere.

SUPERIOR TO ALL LIQUID DIPS.
Twenty-five gallon packet, 50c.; one hundred gallon packet, \$2.00. If druggist cannot supply, send \$1.75 for one hundred gallon packet to

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Dogs.
SCOTCH COLLEGE PUPS, 4 months old, from best stock, \$5.00 each. Also one Bitch, a beauty. **G. A. HULL, St. Catharines, Ont.** -om

GOSSIP.

W. T. Miller, Winchester, Ind., sold on June 14th twenty-one head of Shorthorns for \$5,600, an average of \$266.66. The roan three-year-old cow Modest, by Royal Hero, was bought by S. R. Quick & Son, Brooklyn, Ind., for \$805, the highest price of the sale. Hattie of Ashburn, a roan four-year old by the same sire, brought \$580, and two bulls sold for \$310 and \$320.

OUR "GROWING TIME."

The new Canadian Government steamer, "Minto," was launched at Dundee on July 12th. Mrs. Robertson, wife of Prof. Jas. W. Robertson, performed the christening ceremony, and at the accompanying banquet the Professor, in proposing the toast, "Prosperity to the shipbuilding and shipping interests," said that Canada was greatly prospering, and would require ten new steamers yearly to carry out her increased products.

GEO. RAIKES' SHORTHORNS AND SHROPSHIRE.

Within a couple of miles of the town of Barrie, Ont., is to be found the ideal home and fertile farm of Mr. George Raikes, which overlooks Kempenfeldt Bay, reaching out from beautiful Lake Simcoe. Shorthorns and Shropshires are given much special attention and the usual activity in such circles is in no way lacking here. Shorthorns, imported and home-bred, have been selected from time to time from the leading herds most suited to Mr. Raikes' ideas. And stock from Messrs. Dryden, Johnston, Birrell, and others, make up the breeding of the present herd, to which was lately added a pair of choicely-bred young cows from the W. Stone Estate, at Onondaga, Ont., one Isabella 36th, by Telluria Duke 27698, and out of Isabella 36th, and the other Telluria 23rd, by Scottish Prince 2nd, and out of Telluria 22nd. There is also a pair of choice, well-bred young cows with calves at foot by Cedric, the stock bull at the Agricultural College farm. Another young and promising cow was added from the herd of Messrs. Fitzgerald Bros. Flower of the Mount 18818, by Marquis of Lansdowne, and out of Rosalie, which also has a nice calf at foot. The present stock bull, Almedo, by Clan Campbell (imp.), dam Crimson Fuchsia 2nd, by imported Premier Earl, was selected from his breeder, Mr. David Birrell, and he does not disgrace the worthy families which he represents, and will doubtless make a lasting impression for good in the herd of his present owner. He possesses a great wealth of natural flesh, stands splendidly on his feet, and exhibits the best of early maturing beefing qualities. At the time of our visit in May, Mr. Raikes had five young bulls on hand, one of which was ready for service, and will doubtless attract the early attention of parties requiring such. We found the Shropshires in good thrifty condition. Twenty good breeding ewes, with as many lambs, go to make up the present flock, the present sire being a strong, well-covered fellow. Little risk can be run in selecting young sires from this flock, as the females were founded upon stock obtained from importations made by Hon. John Dryden, C. C. Bridges, Lawrence, and Hamner & Sons. F. BONNYCASTLE & SONS' SHORTHORNS, COTSWOLDS AND BERKSHIRES.

The frequent rains in the vicinity of Campbellford, Ont., have had a very perceptible effect upon the pastures in that section, and at no place has it produced more marked results than on Mr. Bonnycastle's extensive acreage of rich pasture lands. The herds and flocks never in our recollection looked fresher and better. The Shorthorns, though reduced in numbers through the demands of the times, are given the same untiring attention as formerly. The usefulness of the Anchovy family (which largely predominates) is still maintained in the younger things, though sires from different noted strains have from time to time been introduced as conditions demanded, and though such sires have been selected personally and with due consideration, yet the Anchovy conformation and excellent dairying qualities are transmitted to their progeny to a noticeable extent. Members of the Cruickshank Cecelia strain are also kept, with satisfaction to their owners. Among the sires most employed, the firm look back with satisfaction to the days when they introduced Walcott Duke, by Premier Earl, and Redman, by Tothills. To the latter lies the credit for the younger females retained in the herd, and whose strength of breeding has done much towards advancing the standard of the younger matrons. The young bulls of last season's crop found ready purchasers in lots of ones, twos, and even a half-dozen going at once on different occasions. Redman's value was sufficiently appreciated as a sire to remove him to new fields, his place being taken by Prince George, the yearling son of Prince 2544, and out of Queen Ann, by Don Consul, whose pedigree traces to Miss Ramsden 6th (imp.), a family which has produced many worthy sires. In conformation he is a level, straight, smooth young bull, with lots of quality and style, an abundance of natural flesh, and a mellow handler—one that should do much to advance not only the interests of the herd, but the breed. Five young Redman bulls were remaining at the time of our visit, but at the rate enquiries were arriving for them, it is not probable that they will remain long in the herd, as some of the choicest of the crop, though younger, were still left. A few young females were also on hand, which promise well.

The Cotswold flocks were found in excellent shape again this season, and not only a large, but a uniform lot of lambs were on hand. The flock is made up of twenty-five breeding ewes and their lambs, nine shearing ewes, and the stock ram lately selected from Mr. C. Garbutt, Claremont, Ont., being the personal choice from a large pen. Mr. Bonnycastle informed us that he is a descendant of the ram Fitzsimon, imported by the late Mr. J. G. Snell, and we found his quality in keeping with the other sires selected by the firm. A splendid, strong, well-covered and uniformly choice bunch of ram lambs are on hand, which are in prime health and growing fast, from which little mistake could be made in a selection, either personally or by correspondence, and we will be surprised if some prizewinners do not come from this bunch. The shearing and aged ewes have done well since our last visit in the winter, and showy material is also to be found amongst them.

In Berkshires the firm were able to show us some choice young things. The Baron Lee and Enterprise quality cannot be hidden wherever it exists, and the firm's management is such as to promote growth. Watch the firm's advertising space in the first issue of each month.

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Our Metallic Ceilings and Walls
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They can be easily cleaned; don't need re-newing; and are made in such artistic designs that they give a more beautiful effect than any other interior finish.

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If you wish an estimate, mail us a rough outline showing the shapes and measurements of the walls and ceilings.



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Size..... Built with Thorold Cement in 1898.

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Put on in One minute. No Sewing. Fits any Frame.



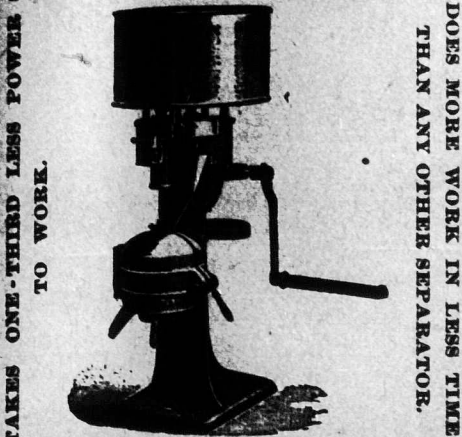
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Take the measure (in inches) of your old umbrella; count the number of outside ribs; state if the center rod is of steel or wood. If you cannot get the Jones Umbrella "Roof" of your dealer, send \$1.00 to us, and we will mail, postpaid, a UNION TWILLED SILK 26-INCH Adjustable Roof" (28-inch, \$1.25; 30-inch, \$1.50). Umbrella "Roofs" at all prices from 50 cents to \$3.00 each, according to quality. If not entirely satisfactory, your money promptly refunded, including stamps you have used for postage. Booklet, "Umbrella Economy," with simple instructions necessary, mailed with your order. **THE JONES-MULLEN CO. (Incorporated), 396-398 Broadway, New York, N. Y., U. S. A.** Manufacturers of the highest grades of Umbrellas to the largest stores in the world.

\$1.00 for a new UNION TWILLED SILK Adjustable Roof

CANCER CURED WITHOUT KNIFE OR PLASTER. FULL PARTICULARS FREE. -om
F. STOTT & JURY, Bowmanville, Ont.

Barred Plymouth Rocks (EXCLUSIVELY).
40 good breeding hens for sale at 40c. to \$1 each. Order at once and secure first choice. (MISS) P. J. COLDWELL, Constance, Huron, Ont. -om

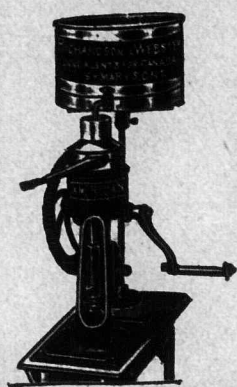
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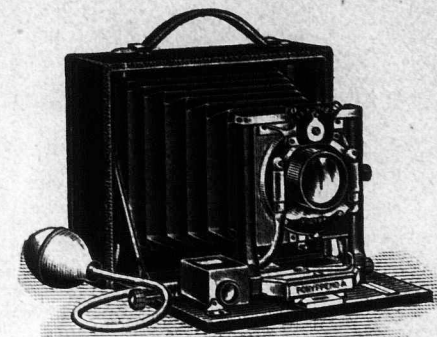
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Also manufacturers of Cheese-factory and Creamery Apparatus.

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CONTAGIOUS ABORTION AND HOG CHOLERA

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WEST'S FLUID,
which is a tar product, is also a cheap and effective **DISINFECTANT.**

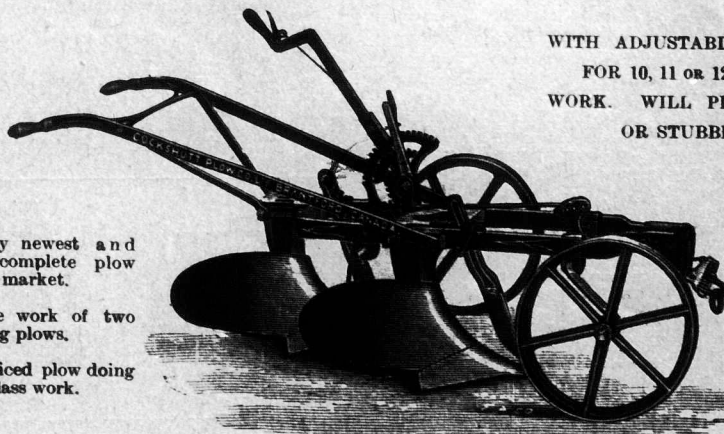
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WITH ADJUSTABLE FRAME
FOR 10, 11 or 12 INCH
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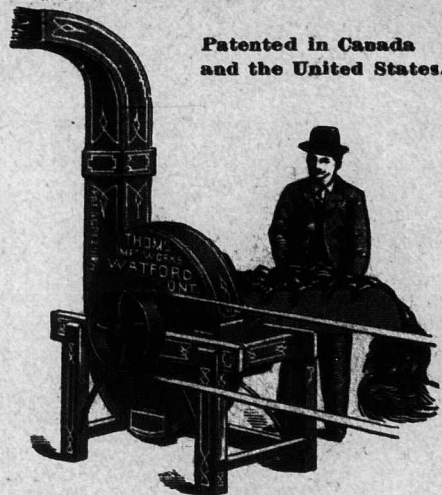
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Patented in Canada and the United States.

OUR machines have filled more silos, twice over, than have been filled by all the other combined families of imitation machines. It's foolish boasting for any firm to say that their machines are the only practical pneumatic cutters on the market. We are the originators and the patentees, and the only safeguard against being humbugged is to see that the machine you purchase is marked "Thom's Patent." Every honest manufacturer in Canada knows that we are the leaders, and that our machines represent all that is latest and best. We guarantee to fill any silo in Canada, we care not what the height may be, at the rate of 8 to 12 tons per hour. And we remind the farmers we make high-grade plows, Riding and Walking. Our latest is the "Ideal" two-furrow gang, for two or three horses, intended to do the work of two ordinary walking plows. Wherever our plows are not already known, special prices to introduce them. Once on the farm they prove a comfort.

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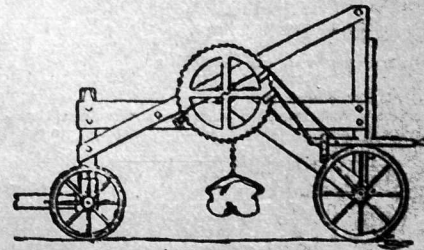
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Lifting and carrying stones, so you can make with them fences from 4 to 5 feet high. When buying this strong and durable machine, you can make your fence with big stones instead of buying spike wire for fences. You will clear your land for the mowers and reapers. To lift a stone you make the lever work, and the hooks will hold it when lifting. You can lower it in the same manner or make it fall by touching a ring fixed in the wheel. You can lift, remove and put into fence a stone in ten minutes. Agricultural Societies should buy it. Farmers, if they like, may join in club to buy it. Price moderate. For all particulars address—

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The undersigned is prepared to conduct pure-bred auction sales. 20 years' experience. References: John I. Hobson and Alfred Stone, Guelph; Jas. Hunter, Alma, and Mossom Boyd, Bobcaygeon. Thos. Ingram, Care Mercury Office, Guelph, Ont. -o

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 OFFICE OF OFFICIAL ANALYST,
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99⁹⁹/₁₀₀ TO 100 per cent. of pure Cane Sugar, with no impurities whatever."

(Signed) JOHN BAKER EDWARDS, Ph. D., D.C.L.,
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*Thousands drink Blue
 Ribbon Ceylon Tea every day.
 Ask any of them what they
 think of it.*

TEST OF
**Alpha De Laval and Reid's Improved
 Danish Cream Separators**

Made at Nilestown Factory of Thames Dairy Co.

| Date, 1899. | Machine | Amount skimmed per hour | Speed revolutions per minute. | Butter-fat left in skim milk at following temperatures. | Lbs. Milk per Lb. Butter |
|-------------|---------|-------------------------|-------------------------------|---|--------------------------|
| January 25 | Alpha | 2800 | 6000 | 80 85 90 95 .05 .02 .01 .01 | 21.10 |
| January 27 | Reid's | 2800 | 6200 | .15 .14 .12 .10 | 22.45 |
| January 30 | Alpha | 2800 | 6000 | .05 .03 .02 | |
| January 30 | Reid's | 2800 | 6200 | .15 .10 .08 | |

On January 25 Buttermilk from Cream of Alpha churned at 50 tested .05 (no water added).

January 26th Buttermilk from Cream of Reid's Improved Danish churned at 48 tested .10 (no water added).

Mr. Richardson, St. Mary's, and Mr. John Brodie, Mapleton, were present when testing Reid's Improved Danish, January 27th.

On January 30th both Separators were running at the same time, and the skim milk from the Reid's was put through the Alpha. There were 3,700 lbs. of milk received, and after it had been skimmed by Reid's Improved at a temperature of 90 degrees the Alpha skimmed 303 lbs. of Cream from the skim milk which tested 8/10 of 1 per cent.

The Cream from each Separator was ripened by the use of a pasteurized starter, and contained .65% of acid at the time of churning when tested by Farrington's Alkaline Tablets.

(Signed) T. B. MILLER,

Manager Thames Dairy Co.

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PROMPTS YOU TO BUY FROM A MEMBER OF YOUR OWN FAMILY — IF HE SELLS GOODS THAT YOU DESIRE TO PURCHASE — IN PREFERENCE TO HIS COMPETITORS WITH WHOM YOU ARE NOT CONNECTED.

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 Implements**

ARE MADE AND SOLD BY YOUR OWN COUNTRYMEN, AND THE MONEY YOU PAY FOR SAME BENEFITS YOU AND YOUR COUNTRY. THEREFORE, WHY BUY FOREIGN-MADE MACHINES.