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FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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EDITORIAL.

In many sections of Central Canada the want of rain for several weeks has caused a serious failure of the pastures and a consequent falling off in the milk product of dairy cows, and a loss of condition in young cattle. These conditions serve to emphasize the necessity of making provisions for some succulent fodder to supplement the supply of feed when the pastures fail, as they are liable to do and as they generally do in the summer months. It is better to be sure of a supply than sorry for having neglected it.

The unusually large amount of space devoted to stock gossip in this issue may fairly be taken as an indication of the healthy condition of that branch of farming and of the increasing interest taken in improved stock in all lines. The fact that so much attention is being given to this industry in the busy days of the harvest season is a wholesome augury of the brisk trade in breeding stock which is sure to follow the "harvest home," and breeders will do well to put themselves in touch with prospective buyers, before the fairs begin, by advertising what they have to offer.

The fall wheat crop in Ontario has been harvested in excellent condition, and will yield well in most sections of the Province. Even in the localities where it did not promise well in the spring it picked up well before harvest time, and has proved better than was expected. The dry, hot weather of the last three weeks has not been conducive to the best returns from the crops of oats and peas. The former will in consequence be generally short in straw and, from rapid ripening, probably imperfectly filled, but the straw will be of excellent quality.

In passing through the country in the summer weeks one is struck with the fact that a very large proportion of farmers fail to adopt the best methods of handling plowed land in preparation for a wheat crop. It is common at this season to plow a clover sod or a barley stubble field for the purpose of seeding it with fall wheat. In the majority of cases the land in the field so plowed is left in the furrows as they have been turned, exposed to the influence of the sun and wind, which thoroughly evaporates every vestige of moisture from the soil, leaving it in a condition in which little, if any, decomposition of the sod can take place to convert it into plant food to feed the crop of wheat when sown, and at the same time rendering the land much more difficult to reduce to a fine state of tilth. There is no time when the soil will so readily crumble under the application of the roller and harrow as on the day it is plowed; to leave it exposed to sun and wind for more than half a day makes the work of fining the soil much more expensive by reason of the added time and labor required. To make the best use of the time and of the land, it should be rolled with a heavy roller immediately after plowing, to press the soil, which aids moisture to rise from below into the plowed land, and to hasten the decomposition of the sod. The rolling should be followed by thorough harrowing to prevent the escape of moisture. The harrowing should be repeated, especially after each shower of rain, in order to get the greatest benefit from it. A field so treated will be found to contain sufficient moisture to start the growth of the seed when sowing time arrives, even though little or no rain has fallen in the interval. Knowing how liable we are to late summer drouths, it is wise to treat the land intended for wheat on the assumption that a drouth will occur, and thus be prepared for the worst that may come.

The Fair Season.

The list of fairs for 1898 has been reduced by the number of those which have been held in Manitoba in the month of July. The Winnipeg Industrial, thanks to the good management of the directors, the improved aspect of business, and the fine weather, proved a grand success, the stock show being the best ever seen there and the attendance the largest in its history, as our report in this issue indicates. Winnipeg has set the pace for the fairs of this year. Toronto, with its mammoth Industrial, has fixed its date at August 29th to Sept. 10th, and all indications point to the usual success, if not the realization of a higher standard than ever before attained. The prize list promises \$35,000 in premiums, by far the most liberal list of all the Provincial and State fairs on the continent, and the Association has undoubtedly the greatest aggregation of exhibition buildings in the Dominion. No show within our ken gives better value for the admission fee, nor so varied and extensive a combination of interesting, instructive and useful demonstrations of the capabilities of our country in agriculture and the arts and sciences.

The Western Fair at London follows close upon the heels of the Toronto event, with its silver jubilee exhibition, and has its dates fixed at Sept. 8th to 17th, the live stock section being planned to open on the Monday after the close of the Industrial. The Western Fair has had a singularly successful career, and is one of the most attractive and satisfactory exhibitions on the continent. Its grounds are charming, its buildings extensive and convenient in every department, its officers competent, courteous and energetic, its prize list liberal and comprehensive, and its location in one of the most beautiful cities in Canada. Visitors all and always carry away pleasant recollections of the Forest City and a favorable opinion of the Western Fair.

The Central Canada Exhibition at Ottawa ranks as one of the very best shows in the Dominion, and each succeeding year finds the exhibition improved, the grounds and buildings enlarged, the attendance increased and the interest enhanced. The buildings for the accommodation of stock are now among the most comfortable, complete and satisfactory to exhibitors and visitors to be found on any fair grounds in Canada. The prize list has been increased, and no fewer than thirty gold medals are this year offered in as many classes, in addition to the regular liberal cash prizes. Exhibitors are agreed that at no other exhibition are their needs and requirements more cheerfully met or their wishes more courteously heard and considered by the officers and directors than at Ottawa. The Capital is, at the season of the exhibition, one of the most interesting cities in the Dominion to visitors, and such favorable railway excursion rates are secured for this, as well as for all the exhibitions named, that an opportunity is afforded to the people to enjoy a pleasant and profitable outing at small expense.

The leading shows in the Maritime Provinces are the Provincial fixtures of New Brunswick and Nova Scotia, the former at St. John, Sept. 13-23, and the latter at Halifax, Sept. 22-29. These events are growing in interest from year to year and promise to be better this year than ever before. Prince Edward Island is not holding a Provincial Fair this year, and Quebec has its Provincial at the Ancient Capital, Quebec City, September 12-21. There is no announcement of a show at Montreal for this year. We confidently anticipate more than the usual amount of interest in the fairs of 1898. Times are better than for many years. Crops are abundant and prices improved. There is a vastly more cheerful aspect in all lines of business and a more hopeful outlook for the future. Farmers as a class have had a hard time for several years past,

but the clouds have passed away and the sun shines on them now. They are entitled to a little outing, and the fairs afford the opportunity of combining business with pleasure. There are many valuable lessons to be learned by careful observation of the results of the skill and application of improved methods by our fellow farmers and stock breeders, and nowhere can these be more satisfactorily studied than at the fairs, where comparisons may be made. Who has not noticed that in many cases an animal seen at home on the farm and estimated as being up to the standard of first-class has fallen many degrees in our mental barometer when brought alongside others of superior quality and more up-to-date in type and quality. The fairs set the standard of excellence in all lines of stock and many other products of the farm, and no one desiring to be reckoned a progressive farmer can afford to miss the opportunity they provide for studying the highest types of animals and the most approved methods of producing the best quality of products in all lines of agriculture and manufactures.

Canadian Bacon Capturing the British Market.

"There is no doubt," said an observant Ontario man, who had just returned from a trip to the Old Country with his fat cattle, to a member of the FARMER'S ADVOCATE staff a few days ago, "that Canadian bacon has caught the British market." This is evident from the fancy position held by the Canadian product on the weekly lists of quotations issued by Old Country provision dealers, and from the increase of Canadian exports to Britain during the past ten years. In that short period the value has mounted up from about half a million dollars per annum to \$5,844,841 worth in 1897, a jump of \$1,397,907, compared with 1896, and 1898 will probably show another advance even greater. Canadian packers are reporting a depreciation in the quality of Danish and Irish bacon, which is stimulating the demand for the Canadian product. As a matter of fact, Canadian hams are frequently sold as English "Wiltshire," Irish or Danish, by unscrupulous dealers, so that Canadian hog raisers and curers are not getting full credit, as has also been the case in the cheese trade, but which is being overcome by careful branding. But Great Britain imports nearly \$55,000,000 worth of these pork products, and last year Canada sent less than \$6,000,000 worth. We send England more than half of all the cheese she imports; our butter trade is developing rapidly, and we know of no reason why our shipments of bacon, hams, etc., should not at least correspond with that of cheese, or reach the vast sum of \$25,000,000 worth per year! Swine raising is the natural adjunct of dairying.

From some of our packers we have received warning reports that during the past three months they have been getting from some parts of Ontario too large a proportion of hogs that dress soft or "flannelly" pork, attributed by some to corn and clover feeding. However this may prove, we again warn our readers, as we have done repeatedly for years past, to guard against the wholesale and uncleanly methods pursued by Western States corn-feeders, which result in big, fat carcasses, and too often bring hog cholera in their train, a touch of which Essex and Kent farmers have had, to their sorrow, in years gone by. Stick to safe, successful plans.

Within a comparatively recent date we have witnessed the introduction and development of the bacon enterprise in the Maritime Provinces to the East and Manitoba in the West, while numbers of new establishments, such as those in Collingwood, London, and Toronto, have cropped up in Ontario—the old center of industry. We noticed a few days ago that the Wm. Davies Packing Co., of Toronto, were spending about \$60,000 in extending their works; and Park, Blackwell & Co., a new concern

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in the same city, were making a similar expenditure, and will have a capacity of 1,000 hogs per day. The packers evidently have faith in the future of the trade, and in the capacity and intelligence of the Canadian farmers to produce the right sort of hog.

Some time ago we published particulars of the result of a trial shipment of Western Ontario hogs to the Armour, of Chicago, where they were slaughtered along with a specially selected lot of light Western hogs. The meat was found of excellent quality, very firm, and the fat perfectly white. "It was a revelation to us," write the Armour people, "to see the splendid condition and fine appearance of the Canadian hogs, and we feel sure that the Canadian system of careful breeding and feeding is the correct one. We have seen some very fine hogs raised in dairy districts, and we believe that Ontario is singularly fortunate in this respect, having such a large number of dairy farms. These always bring good, healthy pigs with a very fine quality of meat. The Canadian hog-raiser is away ahead of the American at present, at least in so far as the English market is concerned. The Canadian singed Wiltshires command a very high premium, and rank almost equal with the finest Danish bacon on the London market."

Compare Chicago and Toronto prices on July 22: Chicago, for best hogs, \$4.02½ per cwt., live weight; Toronto, \$5.85.

The Armour Packing Company on Raising Bacon Hogs.

In a letter from the Armour Packing Company, of Chicago, regarding a trial shipment of Canadian hogs, which they state were all Yorkshires, cured by them, they add:

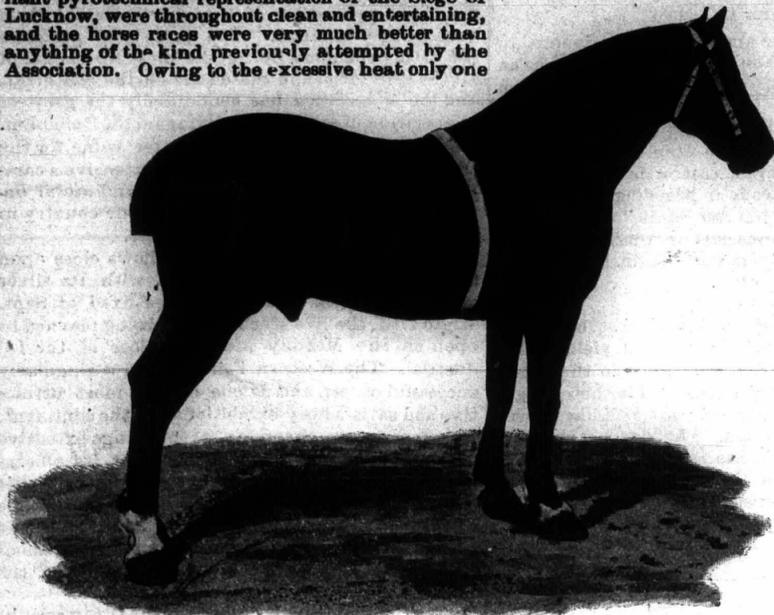
"We have come to the conclusion that the best breed of hogs for the fancy export trade is a cross of a Tamworth boar and Yorkshire sow. The food for the first four months of the pig's existence would make really very little difference whether it be corn or smaller grains. However, from four months up to the time it is marketed, say for six months, we are of the opinion that the use of corn should be discontinued entirely, and the animal fed on peas, barley or crushed oats, with a fair proportion of green vegetable food. We are also of the opinion that the weight of the hogs should not exceed 200 pounds, nor do we think that more than six hogs should be fed together in a pen, as then there is no crowding among them at feed-time, and it is necessary that the animal should be given all the comfort possible."

The statement in regard to the early feeding of the pig being immaterial is probably the most absurd that has yet been put on paper, being without support either in scientific theory or proper practice. No food could be much more deficient than corn for a young and growing animal, which should receive such foods as skim milk, shorts, peas and the like, with some green food and exercise in order to develop a strong, healthy, well-fleshed frame for the finishing or fattening period. It is just such nonsense as the above that disgusts intelligent farmers with the scribbling of impractical men on this subject.

STOCK.

The Winnipeg Industrial Exhibition.

To be an all-round success, a great agricultural and industrial fair must be progressive, and in reviewing the great Industrial Fair of Western Canada for the year 1898 one is justified in comparing it with its predecessors to see if progress is being made. An emphatic answer in the affirmative must be the universal answer by all close observers. In some departments there were not as many entries as a year ago, but unquestionably the average quality was decidedly superior. During the 1897 fair the rainfall of the whole season seemed to be concentrated into fair week, but this year the excessive downpour of the last of June and first of July appeared to have exhausted the waterspouts, and instead of rain the heat of a whole summer was focused on the fair. This, while making life somewhat of a burden, did not interfere with the attendance, and thousands from almost every part of the Province and Territories, as well as from Minnesota and Dakota, thronged the grounds during the week. The arrangements for handling the crowds of fair visitors were so perfect that in spite of all the crush, not one person was seriously injured. The special one-day excursions relieved in great measure the congestion in the city and worked most satisfactorily. American day was again a decided success, and the blending of Union Jacks with the Stars and Stripes on buildings, as well as on the persons of residents and visitors, was a pleasing and suggestive sight. The platform attractions, climaxed each evening by a most brilliant pyrotechnical representation of the Siege of Lucknow, were throughout clean and entertaining, and the horse races were very much better than anything of the kind previously attempted by the Association. Owing to the excessive heat only one



PRINCE DANEGELT. IMP. (4937) OWNED BY J. A. S. MACMILLAN, BRANDON, MAN.; FIRST PRIZE MATURE HACKNEY STALLION AT WINNIPEG; SWEEPSTAKES OVER ALL LIGHT BREEDS AT BRANDON, MAN.

complete live stock parade was attempted, and this proved one of the most attractive features before the grand stand on American Day. This is a feature of the fair that should be made more of, as undoubtedly it affords one of the very best possible object lessons of the development of the country and serves besides as a capital advertisement to the individual exhibitors of live stock.

The judging arena for horses and cattle proved so far satisfactory, but is capable of considerable improvement. More seating capacity around the ring is needed; the live stock catalogue and numbering of the animals is still incomplete, but the experience gained this year will assist the management in perfecting arrangements for next year.

The selection of judges throughout all departments seems to have been most fortunate, and in spite of the inevitable disappointment of defeated competitors, not one protest was lodged against the decisions of the judges—a record which may not be attained again for many a year.

To live stock exhibitors perhaps the most unpleasant feature was the necessity for loading and shipping stock on Sunday following the fair. We trust some more convenient arrangements can be made in future.

On the whole the Winnipeg Industrial of 1898 was the most successful in its history and reflects credit upon the board of directors who so generously devote time and energy to the undertaking, and especially to the untiring and enthusiastic manager, Mr. Heubach, upon whose shoulders the brunt of the burden falls.

HORSES.

To those who have seen the display of horses at the two previous exhibitions, the horse show of '98 must have been disappointing in several respects. While there was a distinct improvement in the quality of horses shown in several classes, there was a marked falling off in the number exhibited, especially in the agricultural classes, and in the classes of foals, yearlings, and two-year-olds. Probably the

scarcity of feed during the winter prevented farmers from getting their young horses into condition for the showing, and they remained at home rather than exhibit animals out of condition. We cannot believe that the maximum has been reached, and confidently look forward to an increased number of competitors in all the principal classes at next year's exhibition.

Clydesdales.—In the class for Clydesdale stallions, four years old or over, a very good lot of horses faced the judge, Dr. Graham, V. S., of Claremont, Ont. Compared with last year, there were only about half the number, but with the exception of "Sir Arthur" all of last year's prize-winners were shown, together with some newcomers, and much interest was taken in the judge's award, which gave the first prize to Tully Elder's "Prince of Wales," a grand topped horse which shows great improvement over his appearance of last year. While a little too small in the feet for a Clyde, he has plenty of bone and substance, and carries himself as if he expected the red ticket. Geo. Cartwright's "Golden Hero" second, the same position he occupied last year to "Erskine's Lad," which now is placed third. "Erskine's Lad" is a grand horse as to legs and feet, and would be almost perfect if his neck, girth and croup were equally as good. A newcomer in this class was "McArthur" (imp.), shown by Dr. Swinerton. He is one of the veterans of the showing, having carried off the sweepstakes in Toronto in 1887 for the best horse of any breed. He is, no doubt, a great stock-getter, but his age tells against him in the showing. The three-year-old stallion class was represented by only three horses, but one of them, Mr. Macmillan's "Burnbrae," was easily the best Clyde on the ground. Grand legs, flat bone and plenty of it, good top and middle, he is a horse hard to find a fault in, and we congratulate Mr. Macmillan on this latest addition to his stud. He is a little low in flesh for the showing, but is all the better not to be crowded while growing. Jas. McLeod carried off

second prize with a very good horse, sweet and of good size, but a trifle rough in the hocks. "Pride of Balsam," owned by Jas. Hunter, of Dominion City, winner of third prize, is more of a rangy type and lacking in substance. Two-year-old Clydesdale stallions had only one representative, "Dargai," by Prince of Wales, owned by James Ross; an excellent colt. No yearlings exhibited. Brood mares were well represented, J. Thomson, of Hamiota, taking first with "Lady Almondale" a grand mare, good in every way. T. E. Alger & Co., of Ponoka, took second and third with two handsome mares. In the three-year-old filly section there were few entries, but the first prize winner, "Kate of Parkwood," owned by R. Reid-Byrley, was a handsome brown mare of good type; second, Alger & Company, with "Lillie," Robt.

Reid, of Forrest, had a walkover in the two-year-old filly class, no other being shown. An extra good filly was shown in the yearling class by J. Thomson, of Hamiota, and her full sister was an easy winner in the foal class. "Ware any age"—a close run between "Lady Almondale" and Jas. Mackenzie's (Burnside) mare, but the latter got it. In section for stallion and three of his get, "Golden Hero" had a walkover.

Shires were few in number, but of good quality. The old favorite, "Blacksmith," won first in mature stallions. He is owned by the Rothwell Stud Syndicate. A massive yet compact horse, with great action. Mr. Munroe, of Neepawa, second with "Ringmaster," an excellent, good horse, perhaps a little coarse in his hoof heads. Mr. Munroe also took first in the brood mare class with "Flora," an extra good mare, a little of the Clyde type about the legs.

Draft Horses.—This class was particularly good in many sections, and the judge, Dr. Graham, V. S., was much pleased with the quality displayed. Mr. D. T. Wilson again showed a splendid lot, taking first for three-year-old, first for yearling, second for foal, and sweepstakes for best mare any age, an extra good mare. Mr. Cartwright, of Russell, also had some excellent exhibits, taking first for brood mare, and second and third in two-year-old class. In this class—the two year-olds—a splendid lot were shown, the first and second "as good as any to be seen in the East, and fit for English showings," to quote the judges opinion. The first prize was taken by G. Trick, of Calf Mountain, for a beautiful bay by Erskine's Lad. Dr. Swinerton took first in the foal class with a handsome youngster by McArthur. First prize for heavy draft team in harness was won by Jas. Mackenzie, of Burnside, with a very handsome and massive team, good enough for any showing, one of them the winner of the sweepstakes in the Clyde class. Albert Lawson took second with an excellent team, and the team shown by W. J. Stinson, third prize, also deserves honorable mention. These were exceptionally good teams. For stallion and three of his get, "Golden Hero" again carried off the palm.

General Purpose Horses.—D. T. Wilson's mare "Gentle,"

by Golden Hero, a splendid mare with an extra good set of legs, carried off first for brood mare; D. Fraser & Sons, Emerson, second with "Roxy," also an excellent mare; A. Baxter, Sutherland, third. Jas. Mackenzie also showed a mare deserving mention. J. E. Morgan had a very nice one in the three-year-old class, the only entry. Of two-year-olds there was a slim showing numerically, though A. Cumming, of Lone Tree, took first and second with two nice fillies by Kintyre Hero. Of yearlings and foals, very few were shown. D. T. Wilson took first for yearling, and J. E. Morgan first for foal, the latter a perfect little cart-horse type. Of general purpose teams, only three competed, and only two of these were awarded prizes, first going to Wm. Ross, Carberry, for a very showy team of bays, strong, active and handsome; second to D. T. Wilson for a sweet pair of gray mares, half-sisters, one by Kintyre Hero, the other by Perfect Type; two grand mares; one of them carried off the prize in the next section for best mare or gelding, any age.

Standard-breds.—The four-year-old or over stallion class was a splendid show. Dr. Quinn, V. S., of Brampton, Ont., the judge, said he had "never seen it equalled in Canada." Five were shown, and not a poor one among them. After much careful consideration and minute inspection, the judge awarded first to "Touchet," a sweet horse showing quality in every point; exhibited by Wm. Armstrong, Winnipeg. "Touchet" is by Altamont, out of Teora, and has a record of 2.14. Second prize went to "Pathmont," 2.09, a lovely, smooth, brown stallion by Altamont, almost equally as good; third going to "Oliver Bunker," excellent in style and conformation, with more size, bone and substance than most of his class, and should prove a great sire. He is by Sharper, the well-known Manitoba favorite, out of Mollie Bunker. In three-year-old stallion class, I. G. Hargrave captured the red ticket with a handsome chestnut colt by Bourbonnair. In two-year-olds the honors went to F. R. Moffatt, of Souris, who showed a stylish colt by Stanton Chief; J. G. Hargrave second with a good-looking son of Sharper. The brood mare class was well represented, and after a keen competition the red ticket went to "Belle W.," owned by H. Connelly, Winnipeg, a grand mare of good size and quality; "Cossack Maid," owned by Knittel Bros., second; J. A. Simpson, third. The three-year-old class was poorly filled, only two entries shown, but two good ones. First prize taken by "Stonewall Maid," owned by T. Scott, Atwell; second by "Iva H.," owned by W. Armstrong, Winnipeg, a sweet little mare, lacking only size. The foal class was well filled, and several good ones were shown. First prize went to H. Connelly for a fine, straight colt by Oliver Bunker, out of Belle W.; second to J. A. Simpson; and third to a colt by Sharper, owned by J. G. Hargrave, Winnipeg.

Roadsters.—The first class—brood mares—brought out a large field of good ones, in which the honors were easy until the judge picked out Mr. Raymond's fine mare for the red ticket. In the three-year-old and two-year-old classes some excellent young geldings and fillies were shown by Messrs. Scott, of Atwell; Morgan, of Shoal Lake; Corrigan, of Pilot Mound; Goggin, of Carberry; and others. The yearling class also brought out some good ones, D. Fraser & Sons taking first with a colt by Disturbance; Dr. Shaw, second; R. H. Riggs, Thornhill, third; three excellent colts. In the foal class, first went to a lively colt of D. Fraser & Sons, Emerson. In team roadsters in harness, three extra good teams competed. Dr. McFadden won first with a pair of beautiful blacks, perfectly matched, sound as a dollar, and active as kittens. They are half brother and sister, one by Wildmont, the other by Sharper. The second prize went to A. F. Elliott for a rangy pair of bays; while the third was taken by W. E. Fursman's handsome team of chestnuts, with light manes and tails, full brothers by Amber, perfectly matched and a picture to look at, but deficient in speed and action. A large class of single roadsters in harness faced the judge, some thirteen being shown, a very fair lot. T. F. Thompson, of Morden, took first with a beautiful chestnut mare; McLaren Bros., Winnipeg, second with "Casey," a handsome black by Wildmont; third prize went to Dr. Rutherford's brown mare "Gleam," a beautiful animal which has never been passed over in the showing.

Carriage Horses.—The aged class of stallions was well represented by the old favorite "Knight of the Vale," owned by Knittel Bros., of Boissevain. He is a sweet horse and fills the eye in every particular, appearance, style and action. He never fails to bring rounds of applause when he appears before the grand stand in the parade. G. Napier, of Austin, showed a very handsome two-year-old stallion, "Banker," of the Cleveland Bay stamp. He gives every indication of developing into a grand horse, and may dispute the honors with Knight of the Vale yet. The brood mares and three-year-olds do not call for special mention, unless we specify a handsome chestnut shown by James Bray, of Longburn, in the three-year-old class. In the two-year-old and colt classes some good youngsters were shown, several of them the get of Knight of the Vale. Pairs in harness was contested by only three teams, T. D. Stickle, harness was contested by only three teams, T. D. Stickle, of Carberry, carrying off first with a stylish team of bays; Raymond & Armstrong, Winnipeg, second with a speedy pair of good lookers, but more of the roadster than carriage type. In the single carriage horse class the red ticket went to Knittel Bros., of Boissevain, who also carried off the honors in the class for stallion and three of his get, "Knight of the Vale" and several handsome colts and fillies being shown; also the veteran "Disturbance," and some good young colts in poor condition.

Hackneys.—This class did not take long to judge, as there were few entries, and we need dwell only on Mr. J. A. S. Macmillan's "Prince Danegelt" (imp.) by Danegelt, which took first in the four-year-old class. He is a lovely dappled dark bay, with plenty of bone and substance, a splendid top and body, and is a good mover. He was imported from England last year and makes his first appearance in the Winnipeg showing. He should prove a valuable producer when bred to the proper stamp of mares.

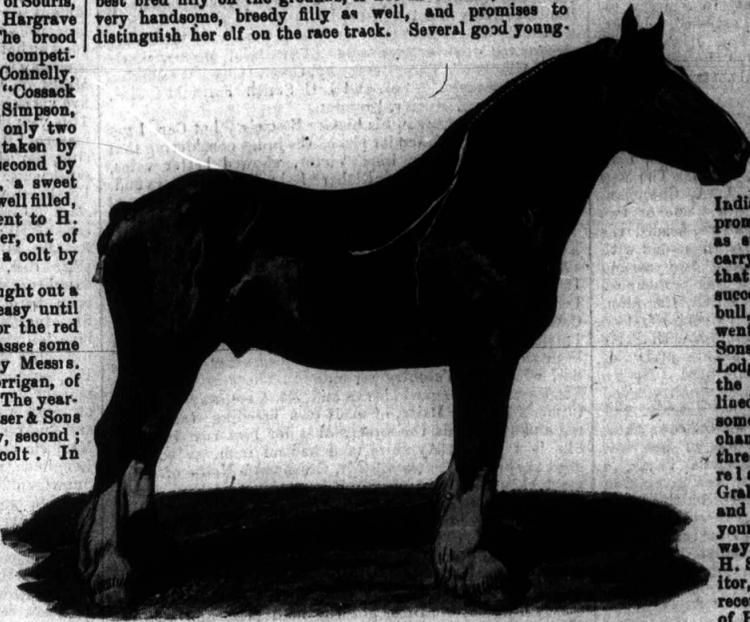
Thoroughbreds.—The display of this breed was larger

than usual in most of the sections, and especially large in the four-year and over stallion classes, in which eight horses were shown. These were divided into two classes, one of the ordinary thoroughbreds, the other competing for a prize offered for the "Thoroughbred stallion best calculated to improve the common stock of the country." In the former class D. Fraser & Sons took first with "Disturbance," by Terror, an old horse, but a good one; R. J. Manly Power, of Carberry, second with "Hard Lines," by Umpire, both prize winners of last year in reversed positions. Third prize went to Hudson's Bay, a good-looking chestnut with more of substance than quality, owned by John Fowler, of Carberry. Weigate, owned by Glen Campbell, was in excellent form, and many were surprised that the judge, Dr. TenEyke, V. S., passed him over. The other class, for Thoroughbred stallions test calculated to improve the common stock of the country, was easily won by Dr. Rutherford's Kilburn, a grand little horse of the big-bodied, short-legged type, which nicks well with the ordinary mares of the country, as the examples of his get shown at the fair abundantly prove. Second in this class went to Wm. Bennie's "Saber." Kilburn also took first for stallion and three of his get. In two-year-olds several good ones were shown, first going to Reville, a handsome chestnut colt of good quality, shown by W. Coultry, Winnipeg. J. Mitchell, of Brandon, also had a good one, "Idler," by Jas. Phillips. The brood mare class was keenly contested, and by an unfortunate mistake in the entry ticket, Dr. Shaw's mare, Lady Kavanagh, was not allowed to compete. G. A. Campbell, Glenlyon, first with Nora Campbell; Dr. Shaw second and third. The three-year-old filly class brought out several very finely bred ones of true race horse type. R. I. M. Powers carrying off the red ticket with "Willowina," and second on "Wawanesa"; N. Royd's "Orphanet," by Order, third. The latter was probably the best bred filly on the grounds, if not in Canada, and is a very handsome, breezy filly as well, and promises to distinguish her self on the race track. Several good young

He is a marvellously even, thick-fleshed bull, with wonderful quarters, level, well-fleshed back, great width of shoulder and depth of fore ribs, straight underline, full heart girth and deep flank. His head is not perhaps as taking as it might be, nor is it set on the neck as smoothly as one would like, yet he is a great show bull and no mistake. Second place went to G. Allison's Manitoba-bred Jubilee Chief, a dark red and a bull that has thickened up and developed greatly since last year. Third went to Mr. Greenway's Hillary, the sweepstakes bull of 1895. Three three-year-old bulls faced the judge. Mr. Lister's roan, Barmpton Chief, a son of Indian Chief, got the red; a great-fronted bull, but scarcely as well balanced as he should be. Wm. Chalmers, Hayfield, was 2nd with the dark red Aberdeen 2nd, and Alex Morrison, Carman, 3rd with Sir Walter 3rd, both Ontario-bred bulls.

The two-year-old class was a stronger class, containing four really good bulls; 1st going to the Greenway bull, Judge, a light roan of Watt's breeding, and a bull of exceptional merit; a low-set, lengthy, level bull, with an extra well covered back and loin, wide, thickly fleshed quarters, thighs and ham, standing well on his legs; a beautiful head and neck and bosom, his only fault perhaps being a slight flatness of fore-rib. His pace in this ring was undisputed, but when the judge awarded him sweepstakes over his stable companion, Caithness, many good judges round the ring failed to follow the decision, and we believe most men would have given the red bull the coveted honor. Second place went to What-For-No, a low-set, lengthy, thick-fleshed, smoothly turned roan son of Village Hero, bred by the exhibitor, Mr. Lynch. The judge halted for some time on the 3rd prize, which he finally sent to F. W. Brown's Lyndhurst 3rd, a rich red of Israel Groff's breeding; 1st in the two-year-old class last year; he was smooth and well-meated. This left Robb's O'Day without a place. He was shown by Andrew Graham, who recently imported him from Wm. Redmond, Millbrook, Ont. He is by Prime Minister, out of Marigold dam, and promises to make a topper yet. He has ample size, is straight and level, with good head and fine style. He was, however, in rather low flesh for the showing, but will come again.

The yearling class contained two good bulls, Mr. Lister's Indian Nobleman, one of the last and best sons of Indian Chief, and a youngster of remarkable promise, lengthy, deep, smooth and level, as straight in lower lines as on top and carrying flesh evenly all over. He is a bull that will make his mark and is a worthy successor at Marchmont to the grand old bull, Gravesend Heir 2nd. Second place went to Talisman, shown by D. Fraser & Sons and bred by A. W. Smith, of Maple Lodge, a son of Caithness, the winner in the aged class. Eleven bull calves were lined up and most of them good ones, though some of them were too young to stand much chance for honors. Mr. Lynch had forward three red sons of Village Hero, a good straight red and white and a pair of twins out of Ruby, Graham showed two sons of Manitoba Chief and one by Golden Royal; two were quite young. Mr. Lister had one entry, Mr. Greenway two, J. S. Robson, Manitou, one, and H. S. McDairmid, of Medora, a new exhibitor, one. Mr. Greenway's Crimson Knight, recently purchased from Mr. W. D. Fatt, of Hamilton, Ont., was accorded the red—a nice, smooth roan of the Crimson Flower family; but he found a very strong competitor in Robson's son of Marchmont Ear, which was awarded 2nd prize, the



BURNBRAE 8878, SIRE ROSEWOOD (7207), DAM YOUNG BLOOM (7554); OWNED BY J. A. S. MACMILLAN, BRANDON, MAN.; SWEEPSTAKES AND 1ST PRIZE THREE-YEAR-OLD CLYDESDALE STALLION, WINNIPEG EXHIBITION.

sters were shown in the colt classes, and some of them will no doubt require an extended notice in a year or two, but at present we have no space to spare on them.

The Saddle Class was represented by a large field which kept the judge occupied for some time; finally the first prize was awarded to Mr. E. G. McBain's "Dolly," a handsome brown mare and well trained; second to Dr. Rutherford's "Souvenir," and third to H. C. McDairmid's "Biddy." Only a fair class as a whole.

Ponies were not by any means numerous, but there were some beautiful specimens shown. W. A. White took first for pony in harness, an elegant little turnout. In saddle ponies first went to A. B. Fleming, of Brandon, with a very pretty gray; T. W. Dykes 2nd.

CATTLE.

The cattle barns were comfortably filled, and the several beef and dairy breeds creditably represented. There was some falling off in grade and fat cattle, owing, doubtless, to the scarcity of feed during the past winter and spring. The single judge system, as usual, prevailed, and, as previously noted, such general satisfaction given throughout the entire class that not a protest was made. Mr. Thos. Russell, Exeter, Ont., placed the awards on the beef breeds, and Mr. G. W. Clemons, St. George, Ont., on the dairy breeds.

SHORTHORNS.

In point of numbers, quality and finish the "red, white and roans" held undisputed supremacy. Several exhibitors that have come to be looked upon as fixtures were unfortunately absent. By a lamentable accident Mr. Barron, Carberry, was prevented from coming out, and consequently did not send his herd, to which he had made a number of valuable additions during the year.

In the class for four-year-old bulls there were four entries. Mr. Lynch's eight-year-old Village Hero, a bull of immense scale and many strong points of Shorthorn character, was well brought out, and carries his age remarkably well for a bull of his weight. Hon. Thos. Greenway's Caithness, recently imported from his breeder, A. W. Smith, of Maple Lodge, and well known in Ontario showings, proved too much for all competitors, and was awarded pride of place.

third going to the young but very smooth, sweet calf shown by Mr. McDairmid, a mossy-coated rich roan, bred by J. S. Dilliot, of Ridgetown, Ont. When the aged cow class was called an even dozen heavily-fleshed matrons lined up, Mr. Greenway showing Daisy of Strathallan 12th, Vanity, Imported Missie 142nd, Village Flower and Begonia, a great constellation, selected from the crack herds of Ontario. The rich red Strathallan of C. M. Simmon's breeding was "done to a turn," showing a marvellous wealth of flesh and yet carrying it with much sweetness and grace. She was accorded the red, second going to Vanity, the beautiful roan daughter of Mr. Lynch's Village Hero, bred by H. & W. Smith, Hay, Ont. She is thick, smooth and level, but perhaps with not so much scale as the red. Third went to Lister's Rosabella, by Vire-Consul, a low-down, thick block—a typical Cruickshank. A whole string of good ones was thus left unplaced. In three-year-olds there were four from the Greenway stall and one from Lister's. To the former went 1st, 2nd and 3rd on Freide, (bred by H. & W. Smith, sired by Abbotsford), a roan of great scale, wide, deep and full of flesh, a topper in any company; Bridal Belle, of the Hon. John Dryden's breeding, a thick, smooth, low-set red, second; with Rcan Mary, another of Mr. Dryden's breeding, third. The latter had produced a calf last year and was well along in calf again, and was perhaps the most useful looking of the trio and might have been placed higher up with no injustice. This left unplaced Lister's Isabella 27th, bred by J. D. Howden, a good straight red, and Greenway's Mina Lass, a useful, breezy looking roan, from John Isaac's herd. In two-year-olds the Greenway herd again scored with last year's first prize yearling, the red Gem of Athelstane, bred by Groff. She is truly a great heifer, with size, symmetry and finish, a wealth of flesh, smoothly laid, a good head, good before, behind and in the middle, and a nice handler. She was afterwards accounted worthy of being crowned champion female. The blue ticket went to Lister's Ruby Hill 3rd, a remarkably smooth, sweet red daughter of 10th Crown Jewel, bred by the Crerars, of Shakespear, Ont. Third was sent to Starling, of Greenway's string, leaving two really good entries from the Marchmont Herd unplaced.

The yearling class contained another long string of nice heifers, the judge finally sending the red to Jubilee Queen, a big, thick, light roan, bred by J. Lawrence and shown by Mr. Greenway; second to Rosabel 5th, a smooth, straight, white daughter of Gravesend Heir, from Lister's stalls; third to Violet, last year's third prize calf at Toronto, bred by W. C. Edwards and forward with Mr. Greenway's lot. There were left two other sweet heifers of Edwards' breeding in the Greenway contingent, two of Lister's, and two strong, growthy Village Heroes from the Westbourne Herd. The calf class was headed by a sweet red, Prairie Flower, by Abbotsford and out of Village Flower, from Mr. Greenway's Prairie Home Farm; 2nd to F. W. Brown, Rosamond, bred by Jas. I. Davidson, and 3rd to another from the Premier's herd. The other entries were rather young for the class.

The Family and Herd Prizes.—Bull and two of his got went to Village Hero, with the cow Routh 10th and the two-year-old bull What-For-No. Mr. Lynch again scored with the neat little cow Ruby and her twin bull calves by Village Hero in class for cow and two of her progeny. For herd, bull and three females, females bred in Manitoba or N.-W. T., Mr. Lister got 1st, and Mr. Lynch 2nd, while Mr. Lynch got 1st for bull and three females, all bred in Manitoba. The young herd all under two years went to Mr. Greenway. The agony was about over and the anxious look on Jimmy Yule's face began to melt into an expression of quiet satisfaction as it dawned upon him that he had succeeded in scooping the pot for the Farmer Premier. He proceeded to range up two mighty herds as a final puzzle for the judge. He drew the color line, and sent in a solid red and a roan herd. To the reds the judge gave 1st place. They were made up as follows: Calithness, Daisy of Strathallan 12th, Bridal Belle, Gem of Athelstane (the sweepstakes female), and Starling. The roans consisted of Judge (the sweepstakes male), Vanity, Freida, Roan Mary, and Jubilee Queen. It's just doubtful if such another ten head could be sent into the showing from any other herd in America today. No wonder Manager Yule looked satisfied. If Mr. Greenway carries out his present intention of sending a picked herd to contest for honors in some of the great showings of the Western States this fall it will certainly prove a big advertisement for Manitoba.

HEREFORDS.

The competition in white-faces was very materially increased over former years, and Mr. Sharman, Souris, need no longer count on a walkover in this class. The new exhibitors were J. K. Marples, Delean; J. A. Chapman, Beresford; John Baird, Winnipeg; besides one or two single entries. Sharman's aged bull Valentine headed the first class called; John Cramm, of Pilot Mound, second with Protector from the Stone herd. Marples' two-year-old Spotless of Ingleside headed this class and was pronounced best champion. He was bred by H. D. Smith, Compton, Que., and is a smooth, evenly turned bull of strong Hereford character. Sharman headed the yearling class with Pride of Eastview, recently imported from the herd of D. M. Wilson, Moe's River, Quebec, to head his herd. He is a very sweet, smooth bull, of good handling quality, good head and beautiful horns. Sharman also had 1st and 2nd on bull calves, 1st and 2nd on aged cows, 1st on cows three years old with Countess of Aberdeen, one of his best numbers. In two-year-old heifers, Sharman's Peach, a growthy, smooth, well brought out heifer, was given first over Marples' Daisy of Ingleside from H. D. Smith's herd. The latter was rather thin and not looking her best. Mr. Marples had forward one of the best things in the class in the first prize yearling Duchess of Poplar Grove; Sharman 2nd on Isabel. The latter also had 1st and 2nd on heifer calves and the herd prize.

POLLED ANGUS.

The exhibitors of the polled blacks do not fash themselves about extra fitting, but are content in sending their cattle forward in just nice grass condition, but year by year the quality of the entries improves. The principal exhibitors in this class were: John Traquair, Welwyn; A. Cumming, Lone Tree; Hon. Walter Clifford, Austin; and A. B. Fleming, Brandon. The two former sent in their cattle in best shape, and got most of the prizes, Traquair having the male champion in the two-year-old Athelstane, bred by Robert Hall, Griswo'd; also the champion female and the herd prize, his cattle having more size and substance than the others. Mr. Cummings' heifer calf, Rosebank Beauty 3rd, was referred to by the judge as being the most typical Angus on the ground.

GALLOWAYS.

There was but one exhibitor of Galloways, Mr. J. A. Simpson, of Poplar Point; he showed one entry in each class, and made a very creditable showing.

THE DAIRY BREEDS.

HOLSTEINS.

The black-and-whites were more numerous represented than usual, although the herd of R. McKenzie, High Bluff, was missed this year. For several years the Holsteins have had to submit to the judgment of breeders of Ayrshire or Jersey cattle, but this year they had their innings and a judge of their own in Mr. G. W. Clemons, the well-known breeder, of St. George, Ont. Six aged bulls responded to the call, and the judge, after carefully comparing the dairy indications of each individual, sent the red to Glennie's Yekma Mercedes King, shown in very thin flesh, but showing a great network of milk veins, good chine, thin thighs, and a good skin. Second went to C. C. Castle's Ometta's Mink Mercedes Count; and third to J. Oughton's (Crystal City) son of the first prize bull, out of Glennie's famous cow Daisy Teak's Queen; this bull was in high condition, and has previously been a winner.

In two-year-olds J. T. Hutchinson, Hayfield, got 1st on Hayfield Prince Clothilde. Wm. McCoy, Silver Springs, 2nd, and A. B. Potter, Montgomery, Assa., 3rd. Hutchinson again scored 1st in yearlings and also 3rd, and Glennie 2nd, all being bred by Mr. Hutchinson. In bull calves Potter's entry was 1st, Glennie's son of Daisy Teak's Queen 2nd, with Hutchinson's Parloa's Aaggie Clothilde 3rd. Glennie's aged bull was declared champion male.

Ten aged cows lined up, and the judge was not long in

sending the red to Glennie's Daisy Teak's Queen; to this cow also went the sweepstakes for best female, and the special for best dairy cow any pure breed or grade, the judge pronouncing her one of the best cows in America today. The blue ticket went to Hutchinson's May Abbecker, a cow showing good veins, chine and skin, although her udder is not quite as shapely as might be. Third went to one of Oughton's entries. Hutchinson got 1st on three-year-old, a granddaughter of Daisy T. Queen, 2nd on two-year-old, 3rd on heifer calf, 2nd on herd, and 2nd on bull and his get. Potter got 1st and 3rd on two-year-olds; Oughton 1st on yearling heifer; Glennie 1st and 2nd on heifer calves, 1st on herd, and 1st on bull and two of his get.

JERSEYS.

In numbers these famous little buttermakers were hardly up to previous years. The herd of Mr. Bray, having been dispersed since last Industrial, was represented in the herds of the Munroe Creamery Co., Winnipeg, and Mr. Byres, McGregor. In the aged bull class Mr. Byres' Rover Pogis got the red; W. J. Buxton's (of Moosomin) Lord Pogis of St. Lambert, 2nd, and Wm. Murray's Belvedere 3rd. The two-year-old class was headed by Jas. Walsham's Mrs. Jones bred bull, Belvedere Signal, who was afterwards declared best champion. He is a bull of fine dairy type, showing strongly dairy indications, and is shown in extra fine fit. W. V. Edwards, of Souris, showed a good second in Dean of Highfield. Munroe Creamery Co. with Linda's Pride had a first prize yearling bull, with Murray's entry 2nd. Edwards' Souris Chief, out of Yankee Rosebud, was 1st in calf class, with Murray 2nd. In aged cows a very nice lot of six lined up, the Munroe Creamery Co. getting all the tickets on Manitoba Lady, Daisy Dean and Prairie Rose in the order named. Edwards' Yankee Rosebud, by Yankee Pogis, was 1st three-year-old, Duchess Malone 1st two-year-old, Baby Malone 1st yearling, and Mayflower 1st calf. Munroe Creamery Co. had sweepstakes female in Manitoba Lady and 1st on herd.

The Ayrshires held their own and were very creditably represented with entries from the herds of Messrs. Steele Bros., Glenboro; Thos. Greenway, Crystal City; Wellington Hardy, Pomeroy; W. M. and J. C. Smith, Fairfield Plains, Ont.; and And. Mutter, Brandon.

For the first time in his history Steele's What Care I got turned down from premier place, the judge considering that the Greenway entry, imp. Victor, showed better veins, thighs and skin. Smith's Richard B, by Tam Glen, was 2nd. Greenway had two entries in two-year-old class—Surprise of Burnside, by Glencairn, out of Nellie Osborne, with a splendid skin, fine typical head and strong dairy indications, and Leo of Rockton, a son of McCormick's Sir Laughlin. These stood in the order named, followed by Mutter's Sir Park. In the section for yearlings, Steele Bros. had the red on Perfection, bred by R. G. Stacey, a typical son of imp. Carlyle of Lessnessock; 2nd going to Hardy's Saint Patrick. In bull calves, Steele's Wee Willie, with good head and horns, splendid skin and good veins, headed the list, with Hardy's entry second. In the aged cow class, Steele had three good entries and Mr. Greenway two; the former's Heather Daisy, of their own breeding, taking the red and afterwards the sweepstakes for best cow in milk. She is a typical Ayrshire, and had an immense udder of good shape and fine teats. Mr. Greenway's Nellie of Rockton took second. In the three-year-old cow class, Hardy scored with two good, milky-looking cows, Jessie and Pride of Percy. Greenway's Lassic Jean, with a beautiful skin and good veins, headed the two-year-olds, with Steele's Nancy Hanks and Whoo Emma following. The same exhibitors got 1st and 2nd in yearlings, and 1st on calves with Lady Diana, bred by R. G. Stacey; Greenway 2nd; Hardy 3rd. Steele Bros. got the herd prize and also the Dom. Ayrshire Breeders' special for best herd.

GRADES.

D. Fraser & Sons, of Emerson, and Geo. Allison, Burnbank, were the principal exhibitors in this class, and every entry except one by Sharman were grade Shorthorns. In the grade dairy class Sharman's Shorthorn-Jersey got first, with an Ayrshire grade second.

In fat cattle D. Fraser & Sons had things pretty much to themselves. Their three-year-old steers, Laurier and Tupper, and heifers, red and roan, were walking monuments of what careful breeding and feeding will do for the bullock. Clinker, a fine two-year-old, will stand further feeding and will doubtless come again. D. W. Mills, of Carman, showed several good entries.

SWINE.

The accommodation for swine was increased by the addition of a building just double the length of that erected a year ago. This furnished ample room for all exhibits, and the only complaint heard was the lack of air for the swine during the excessive heat; this could easily be improved by replacing the close board front of pens, in part, by slats. A judging ring adjoining the pens, floored and with railing round it, would be a great improvement. All classes were judged by Jos. Featherstone, M. P., Streetsville, Ont., and his decisions met with general approval.

Berkshires.—Although several well known exhibitors were absent, there were about thirty entries forward, and the quality of former years well sustained. The heavy fighting in this class was between R. McKenzie, of High Bluff, and F. W. Brown, Portage la Prairie, while the Hon. Thos. Greenway, Crystal City, and Andrew Graham, Pomeroy, had entries in a few classes, with one entry from John Cram, Pilot Mound. Five aged boars lined up in the first ring called, they being placed in the order named: Brown's Tippitance, a boar of good scale, length, depth and evenness; Greenway's King Clere, a hog of good quality, with excellent legs and feet, but maybe lacking slightly in depth; McKenzie's Milton Lad, not as fresh as he once was; leaving unplaced Brown's Barton Duke and Cram's Sambo. Boars under two brought out McKenzie's Perfection, a Baron Lee 4th, bred by Teasdale; this is a young hog of great quality, with good length and depth. Proud Victor, another son of Baron Lee 4th, bred by J. G. Snell, from the McKenzie pens, stood 2nd, and Graham's O. A. C. 3rd. In the under-year class Brown had the winning number in the Teasdale

hog, Western Boy, with length, depth and fine Berkshire quality, and brought out in the perfection of fitting. He was afterwards accorded the male championship of the breed. In this class Graham had 2nd on another of Teasdale's breeding, by Tom Lee, a Berkshire of something of the Tamworth type, and a boar that may develop into an extra hog of the bacon type. In boars under six months McKenzie got 1st and 2nd on a couple of Lady Bluff's pigs, Victor and Proud Ben, by Proud Victor. But three aged sows were out, Greenway's Snell-bred Kathleen, of great length and extra quarters; McKenzie's Silver Maid making a close 2nd; with Brown's Highclere 3rd, the latter a magnificent sow, but turned down by a defective udder. Sows under two years contained the sweepstakes female in Brown's Cora Bella, a Baron Lee, bred by Snell, a sow of great perfection, and good enough to win in any company; the same exhibitor's Alma, a Highclere, ranking 2nd. McKenzie's Painted Lady headed the under year class, with two Highcleres from Brown's pens following. McKenzie's Lady Bluff furnished the 1st, 2nd and 3rd prize winners in sows under six months, members of the same litter as the 1st and 2nd prize boars of same age. Brown had the red on sow and litter on Highclere Fame, also 1st on boar and three females any age.

Yorkshires were strongly represented by something over 40 entries. Premier Greenway made the strongest showing, and all his entries were presented in capital fit. Among his winnings were: 1st on yearling boar, Yorkshire Bill, bred by A. Graham, of Pomeroy, who later on repeated his performance of last year by capturing the diploma for best boar any age. He is a lengthy, level, well-balanced hog, with strong breed character. In the under year class the same exhibitor again an easy 1st on the Brethour boar Oak Lodge Mighty 7th, a good hog in every respect, but may be a trifle heavy on shoulder. Among the nine aged sows were some grand old matrons, but Greenway's importation from Brethour, the famous sow Stamina, could not be beaten. She is a sow of immense scale, great depth and length, well-balanced, and good at both ends; she was also awarded diploma for best sow any age. In this ring Mr. Greenway also showed Markham Maid, a grand old sow of Pike's breeding, that for five years in succession has captured the sow and litter prize. This year she had ten strapping youngsters tugging at the maternal font, but the Maid did not get a place in the aged ring, nor did another good entry, Oughton's Six, from the same pens. First again went to the Greenway pens on the Featherstone sow, Jubilee Queen, in the under two years class. First and 3rd in boars under six months went to sons of Markham Maid. The herd prize, boar and three females, all bred in Manitoba, went to Greenway on Yorkshire Bill, Oughton's Six, and two under six months, daughters of Markham Maid by the Diploma boar. The open herd prize went to same pens on Yorkshire Bill, Stamina, Markham Maid and Jubilee Queen, a strong combination indeed. Andrew Graham, Pomeroy, made the following winnings: 2nd on yearling boar, on Clear Grit, of Featherstone breeding; 2nd on Snowman 3rd, under six months, by Snowman, out of a Marjorie sow; 2nd and 3rd on sows under six months, on pigs of same litter; 1st and 2nd on sows under a year, on pigs by Snowman, out of Marjorie dams; all of his own breeding. James Bray, Longburn, also exhibited in several classes, winning 2nd on Snowman 2nd, of Graham's breeding; 2nd and 3rd on sows under a year; and 2nd on sow and litter. A. B. Potter, Montgomery, scored 1st on aged boars with Montgomery Giant, a good, even hog with plenty of bone, bred by Bray. In under year, 3rd on Brampton Paddy, and 2nd on aged sows with Brampton Baconer. Wellington Hardy, Pomeroy, a new exhibitor here, won 3rd on the aged sow Primrose, a good sow very well brought out.

Chester Whites made a very creditable showing. The old exhibitors in this class, R. S. Preston, Pilot Mound; R. McLeod, Dugald; Ed. Vance, Emerson; and M. Oughton, Wood Bay, were reinforced by a new competitor in Mr. Wm. McBride, Portage la Prairie, who succeeded in carrying off several prizes in young pigs, 1st on boar under six months, and 1st, 2nd and 3rd on sows under six months. Preston scored 1st on an even, strong-boned, well-balanced, aged boar, and afterwards sweepstakes on same animal; also 1st on boar under two years, 2nd on sow under two years, and 1st on sow under one year, 1st on sow and litter, and 1st for herd, boar and three sows any age. McLeod got 1st, 2nd and 3rd on boars under a year, 2nd on boars under six months, 1st and 2nd on aged sows—the first a particularly good sow, the second a great brood sow, though a trifle coarse about the head. She has produced 125 pigs in five years, not a bad record surely. McLeod also got 2nd and 3rd on sow under a year. Oughton got 1st and diploma on aged sow, and a right good one she is, long and deep, good hams, fairly light shoulders, and a nice head. Mr. Vance's entries were not brought out in the best of fit, owing, doubtless, to his very serious illness for some months past.

Tamworths.—In this class there were two exhibitors, both new exhibitors here: L. A. Bradley, Portage la Prairie, who procured his foundation stock from E. H. Carter, and W. E. Baldwin, Manitou, whose foundation stock was bought from H. D. Hallman, New Dundee, Ont. The Baldwin entries were of extra fine quality and of true Tamworth type, long and deep of side, nicely hammed, light shoulders, with long, typical heads. He got 1st on boar under six months, sow under a year, and on sow under six months. Mr. Bradley's entries were nicely brought out, but are hardly as uniform a lot. He got a number of prizes.

Duroc-Jerseys.—W. M. & J. C. Smith, Fairfield Plains, Ont., had forward some good Durocs and got 1st on everything shown. Gillespie & Snary, Winnipeg, had a number of entries. Their pigs were not fitted and did not make a very attractive exhibit.

Poland-Chinas were more numerous represented than usually, there being four exhibitors: Messrs. Smith, Fairfield Plains, Ont.; D. Fraser & Sons, Emerson; M. Oughton, Wood Bay; and W. L. Trann, Crystal City. The quality in this class was certainly better than it has ever been. The Ontario herd was shown in fine finish and contained several winners at the leading fairs of Eastern

Canada. Most of the red tickets fell to this herd—on aged boar, boar under two years, boar under one year, boar under six months; also, on aged sow and sow under year, sweepstakes sow and boar, herd, and second on sow and litter. M. Oughton, a new exhibitor in this class, had forward some good pigs and got red tickets on sow under six months and on sow and litter. W. L. Traun, also a new exhibitor, showed a few good entries and secured several blue tickets.

Any Other Pure Breeds.—Under this heading K. McLeod, Dugald, showed Suffolks, and being the only competitor, and his entries being of real good merit, he was awarded the prizes for which he entered, being 1st and 2nd nearly all the way down the list.

Pork-packers' Special, given by J. Y. Griffin & Co., for pair pigs not to exceed 250 lbs. First to L. A. Bradley, Portage la Prairie, on Tamworths; 2nd to Andrew Graham, Pomeroy, on Yorkshires; with a pair of Berkshires of R. McKenzie's a good third.

SHEEP.

This was one of the most disappointing departments of the show, and one of the poorest exhibits of sheep that has been made at the Industrial. It is lamentable that so few farmers take an interest in sheep in this country. Many of the entries sent in were in miserable condition, even for home pastures, let alone the showing, and sent forward with no pretense at fitting, evidently with the hope of scooping up a little prize money where no competition would be met. Of course, there were a few noticeable exceptions to these remarks, and these helped to save this department, which is housed in one of the best sheep barns in Canada, from utter disgrace. Joseph Featherstone, M. P., Streetsville, Ont., judged all classes of sheep.

Cotswolds were shown by A. B. Smith, Moosomin; M. Oughton, Wood Bay; and F. W. Brown, Portage la Prairie. Some good individuals were shown in this class, but without any special fitting. Most of the prizes went to the Moosomin flock.

Leicesters were shown by Jas. Murray, Lyleton; A. D. Gamley, Branlon; Duncan Sinclair, Oakville; and D. F. Preston, Glenewan. Murray got most of the firsts, but his flock were not looking as well as they have done on former occasions. A. D. Gamley, a new exhibitor, showed shearing and aged rams in nice fit and got 1st in both classes and diploma on best ram any age.

Lincolns.—This breed was represented by one exhibitor only, W. T. Lytle, Beaconsfield, who showed full classes, all in ordinary field condition.

Shropshires.—In this class were the best sheep and the best brought out flock, that of J. A. S. Macmillan, Brandon, who deservedly won all the firsts throughout the class on sheep of extra fine quality and finish, exceptionally well brought out. J. Oughton, Crystal City, showed a number of good, strong, useful entries throughout this class, but without extra fitting.

Oxford Downs.—Three exhibitors competed in this class. P. B. McLaren, Clearwater, who has previously shown in good condition, presented his sheep thin and unfitted. A. Wood, of Souris, a new exhibitor here, but many years with Henry Arkel, of Guelph, showed throughout the class some good sheep in nice condition and won most of the red tickets. R. W. Jickling, Carman, also a new exhibitor in this ring, showed some creditable entries of home-bred sheep and got a good share of the tickets.

Southdowns.—W. M. & J. C. Smith, Fairfield Plains, Ont., got most of the 1st and 2nd prizes throughout this class, the only other exhibitors being D. Fraser & Sons, Emerson.

Dorset Horns were shown by Edward Vance, Emerson, securing the prizes in class for any other pure breed. The sheep were shown in very ordinary field condition.

Quality Tests in Experimental Hog Feeding.

To the Editor FARMER'S ADVOCATE:

SIR,—In reply to your inquiry, "Is Danish bacon losing its strong hold on the British market by deterioration in quality?" please note:—In a letter from our London agent, before us this morning, we have the following: "The quantity of soft and inferior product coming from Ireland is 50 to 60 per cent., and from Denmark about 30 to 40 per cent. You, of course, must be amazed to see the vast quantity of seconds and soft bacon you are at present shipping us from Canada. We have our work cut out to find buyers for it at any price."

When the writer was in England recently, the complaints were very earnest and very general as to the deterioration in quality of an important percentage of the arrivals of Danish bacon. In many instances buyers who had hitherto refused to have anything to do with Canadian were induced to try it because of the dissatisfaction they felt with Continental (Danish). Unfortunately, Canada has missed reaping the full advantage of the most favorable conditions which she has ever had for putting a large quantity of high-class bacon into competition with this poorer quality of Irish and Danish. She has missed this opportunity because of the very large percentage of soft hogs marketed, which have made hundreds of boxes weekly of soft bacon. Canadian farmers have fallen into precisely the same error as Irish and Danish, and have failed in consequence to reap the full advantage which would have been theirs if all the stock going forward had been first-class.

We do not know to whom you refer in your article on "Opportunities for Investigation in Swine Feeding," when you state "A good many deliveries have lately been tendered on this subject by parties possessing little accurate information or experience"; but this much we know, that through faulty feeding Canada has made serious losses, and has never in her history produced such a large percentage of soft product as during the past three months. All the "Points in experimental pig feeding for profit" (July 15th issue FARMER'S ADVOCATE) are of little value, inasmuch as the whole

soul of the situation is in your paragraph (referring to one Ottawa experiment). "Unfortunately no record is given as to quality." Experimental records that do not give as an ultimate result of the experiments the actual quality of the meat cannot be treated seriously.

The exceedingly interesting article, based on a visit to Mr. Freeman's piggeries in Oxford, has, unfortunately, the same inconclusive result. If Mr. Freeman marketed his hogs with some representative export packer, he should have supplemented his statement by adding that his hogs produced first-class bacon of proper sized sides. You would then have had a complete case.

We are inclined to think that the method recommended by Mr. Freeman—"When they are weaned (eight weeks old) they are turned immediately into fattening pens to go forward without an hour's delay"—is a mistake. Altogether too large a proportion of the hogs which are being marketed in Canada are finished when they weigh between 155 and 165 pounds. These hogs, too, which are finished so rapidly generally have a lack of flesh and a predominance of fat. As far as our own operations are concerned—because the hogs from Oxford and adjoining counties have been forced in this manner, and have produced such an undue proportion of stout, short sides—we have withdrawn from the purchase of hogs in those counties altogether.

We make no pretense to skill in feeding. We do not profess that this is in our line, but we know that the best interests of Canada call for a maximum amount of best bacon hogs out of every thousand hogs marketed. To this end we think journals like your own should become fully acquainted with the character of product produced by certain systems of feeding, and then you will perform a large service to the community by pointing out results. Of all the matter on this subject given in the very important number of your journal of July 15th, only one practical bacon result is attested, and that is in a trial made by Prof. Robertson with soaked frosted wheat.

Yours truly, J. W. FLAVELLE.

Managing Director, The Wm. Davies Co., Limited, Toronto, Ont., July 19th.

EDITORIAL NOTE.—The members of our staff have raised and fed a few thousand hogs for local dealers and export packers, and think that Mr. Flavelle has probably touched the weak point in Mr. Freeman's system, that of hurrying the pigs into and through the fattening period too rapidly, good health and a well-fleshed carcass considered. We favor a little longer run in an orchard or plot where there is short grass to pick, with moderate grain feeding, till the last month or so, when they may be more confined and the ration increased. In winter fattening, access to a small yard is desirable, and a few pulped roots with the ration consisting of mixed grains.

Our correspondent complains that Mr. Freeman did not state that his hogs produced first-class bacon of proper sized sides. Mr. Freeman sells to dealers, and the live hogs have been going for years, we understand, to leading packers. As he has been getting top prices, he did not follow them further, naturally concluding that the buyers knew what was wanted and that the pigs were satisfactory. If they were not right, he stood ready, like any intelligent farmer, to vary plans.

Mr. Flavelle says his (the Davies) Company has quit buying hogs from Oxford and adjoining counties. The counties adjoining Oxford are Norfolk, Brant, Waterloo, Perth, Middlesex, and a corner of Elgin. It would be interesting to know where there is a territory that produces more good bacon hogs than that great dairy district, and were the facts known it would probably be seen that a large proportion of the hogs that have gone to build up Canada's bacon reputation came out of that very country. It may be that the cream of its hogs have been absorbed by the Ingersoll Packing Co., which has built up a splendid English trade, and the Canadian Packing Co., of London, Ont., which is run on very strict Danish principles; latterly a Collingwood concern has been taking some hogs out of part of the territory specified. We noticed that while the "Oxford and adjacent counties" hogs were getting the above rap on the nose the Toronto market buyers were cutting prices 50 cents per cwt against the hogs from Essex and Kent.

Our July 15th issue article on "Experimental Pig Feeding" gave the results of all the records at hand of experiments bearing on pig feeding in relation to (1) animal health, (2) gains from various foods and mixtures, and (3) quality of flesh produced, the latter being about quarter of the article, chiefly the results of work done by the Danish Government, with special reference to quality and the British markets and "attested" by experts. The conclusions were strongly against a corn diet. The points in regard to animal health and gains for food consumed may not concern the packer specially, nor the little coterie of political editors who lately appeared on the scene as authorities on swine raising, and who would deprive the long-depressed cattle industry of a greatly needed boon—freer access to U. S. corn, but they are important to the farmer, being vital items in the cost of production. But quality of product is an all-important point, and Mr. Flavelle's letter emphasizes the need, which we have pointed out in previous issues, for accurate investigation with various foods and methods of feeding different types of animals. Given certain pigs, fed in a certain way at our public experiment stations,

and the animals numbered, then killed and cured by competent packers who know the market requirements thoroughly, we will have effect traced directly to cause, obtaining accurate and valuable data not available in the ordinary course of the trade in which thousands of hogs raised on hundreds of farms in different ways go forward weekly from local buyers to packing-house centers. We trust our experimenters will not neglect the opportunity to serve a growing industry.

Our Scottish Letter.

THE HIGHLAND AND AGRICULTURAL SHOW.

The most important event in the agricultural world here since I last wrote was the seventy-first show of the Highland and Agricultural Society, which took place at Kelso during last week. As at the Royal, in the Shorthorn section animals of Scotch breeding were fairly triumphant, but an excellent Booth bull, named Border Reiver, owned by Lord Polwarth, was first in the aged class. He was second at the Royal, being beaten by the Scotch bull, Marengo. The championship of the Shorthorn section went to a young breeder, Mr. C. Home Graham Stirling, of Strowan, Oriff, with a bull named Star of Dawn, bred by Mr. Alexander M. Gordon, of Newton, Msch. The sire of this bull, Star of Morning, is, in our opinion, the best individual bull at the head of a Shorthorn herd in Aberdeenshire. He was sire of Mr. Duthie's champion bull, Pride of Morning, which carried all before him at the Highland Society's Show in Aberdeen in 1894. Star of Dawn, the Highland champion of 1898, is a remarkably straight bull, and it would be hard indeed to find one of straighter lines either above or below. Another excellent bull bred by Mr. Gordon has been winning at the principal shows in Ireland, and several heifers he has bred have also taken high honors at the Royal and Highland. The bull classes at the Highland this year were particularly meritorious, but the same level was not reached amongst the females. The best female at the show was also owned by Mr. Graham Stirling. She is known as Strowan Marchioness, and not only did she lead the cow class herself, but one of her daughters was well placed among the heifers. In the Aberdeen Angus section the awards at the Royal were somewhat vigorously dealt with at the Highland, and rightly or wrongly, especially amongst the bulls, were overturned. The judge did not seem to favor the type chiefly identified with Ballindalloch so much as some other judges who have officiated at different times. The Royal champion, Lord Roseberry's bull, Edenhall, was dethroned, and another Ballindalloch bull, named Proud Duke, secured the male championship. He was only placed third at the Royal, but at Kelso was promoted over the head of every bull that was there, with the exception of the first prize two-year-old Delamere, which was not exhibited at the Highland. Proud Duke is owned by an English clergyman in Buckinghamshire. He came a long distance, but was certainly well rewarded for his labor. Mr. Clement Stephenson is this year showing a very massive bull named Best Man of Benton, own brother to his famous Smithfield champion, Benton Bride. He is a bull of great substance, carrying tremendous flesh, and much bigger than the other bulls of his age. He was placed second at the Royal and first at the Highland. Mr. Adamson, of Careston Castle, Brechin, a young breeder, was successful in winning first prize at the Highland with his yearling bull, named Dias, own brother, if we mistake not, to Delamere, the first two-year-old at the Royal. Both were bred by Mr. P. Chalmers, of Aldbar, Brechin, a gentleman who owns quite a superior herd.

Females of the A. A. breed at the Highland were stronger than the males. The breed championship went to Lord Strathmore's lovely heifer, May of Glamis. She defeated all the bulls as well as the other female winners, and is one of the best two-year-olds exhibited for many a day. His Lordship also won in the class of yearling heifers, and it must be acknowledged that his late herd bull, Siberian, has made an impression on the breed second to that made by few in its history. The older females were not characterized by anything like the same quality as the younger ones, but the stock as a whole reached a high average of merit.

Galloways are usually seen to good advantage at the Highland Society, but this year somehow the numbers were weak, although the quality was first-class. Mr. John Cunningham, Durbamhill, Dalbeattie, maintained his family's reputation and secured by far the largest share of first prizes. His stock excel in quality, and he is at once a good judge and a right handler of cattle. The breed championship went to his two-year-old heifer, Louisa II. of Durbamhill, and he was, altogether, first in four classes out of six.

Highland Cattle are only exhibited in numbers in Scotland at the show of the National Society. This year, as usual, they formed perhaps the most interesting feature, and were clearly entitled to all the attention bestowed upon them. The championship of the breed went to the Duke of Atholl, K. T., for a two-year-old bull which last year was second in his class. Another bull bred by His Grace was first in the aged class, and the first prize yearling bull came from Mr. William Nimmo, County Durham. He was bred by the Earl of Southesk, and was highest-priced yearling at the Oban bull sale in spring. Mr. V. Smith, of Ardtornish, a wealthy gentleman who owns land extensively in Western Argyllshire, was very successful in many of the classes, and not a few of the best animals

were bred by him, although owned by others. His cattle are brought out to perfection. The climate of Argyllshire seems to agree well with the hardy Highland breed.

Ayrshires—The Highland Society is not the best show at which to see a large exhibition of Ayrshires, but this year the quality was above the average, and the championship went to Cherry Ripe, a splendid milk cow, owned by Messrs. R. & J. McAllister, Mid Ascog Bute, and the best bull of the breed was declared to be the first prize two-year-old, Gigantic Stunner, shown by Mr. Robt. Osborne, which was also first at the Royal.

Clydesdales have often been represented in larger numbers, but seldom has the average of the quality been higher than at the Highland Show of 1898. The breed championship in the male section went to Messrs. A. & W. Montgomery, for their two-year-old colt Benedict, a son of the remarkable breeding horse, Baron's Pride 9122. Benedict is a strikingly handsome two-year-old colt, well colored, of a good size, and like a show horse all the time. The same owners were also first in the aged class with an excellent horse named Montrave Sentinel, one of the most typical cart horses exhibiting at the present time. The first three-year-old horse, Prince Thomas, was both owned and bred in the County of Durham. He was bred by the Marquis of Londonderry, and is owned by Mr. H. Webster, a comparatively new fancier, who has had remarkable success during his short career. He took first in two classes at this Show, and last year had the championship of the females. Mr. W. S. Park, Hatton, Bishopton, was first in the yearling class with a superior colt, bred in Aberdeenshire. The championship of the females this year went to Sir John Gilmour, of Montrave, for his celebrated mare, Montrave Maud. This mare gained the Cawdor Cup in 1896, and has again won it. She is a daughter of the renowned Moss Rose, which

although, as their name indicates, originated in the border district, the fact that the prizes at this show held at the headquarters of the breed were gained by exhibitors far removed from the center proves the cosmopolitan nature of the Border Leicesters. The championship of the breed went to a three-shear ram, named Challenge Cup, bred in Cumberland, and owned by Mr. Matthew Templeton, Kirkcudbright. The first prize shearing ram came from Ross-shire, the first prize gimmer from Ayrshire, and the first prize ewe from East Lothian. Altogether we have had a fine show at Kelso. "SCOTLAND YET."

The Flock at Weaning Time.

According to the decision of our best shepherds, as indicated by their practice, March and April lambs should be weaned early in August or before that date. This is important for the better doing of the lambs, as well as for the ewes, which have by this time become considerably reduced, owing to the dryness of the pastures and the frequent tugging by the lambs. The lambs, by more than half depending upon their dams for nourishment, do not assert their independence by seeking to get a living apart from their mothers. It becomes at this stage within the province of the breeder who has the well-being of the lambs and their dams at heart, to interfere on behalf of each branch of the flock, and not only separate them but provide the conditions and pastures most conducive to the well-being of each. Weaning will result in less setback to the lambs, and especially the younger members, by accustoming them to a daily feed of oats and oil cake, or oats and crushed peas, some weeks before weaning takes place. They will then have learned to look to the troughs as foster mothers, which they will soon adopt after the separation has taken place.

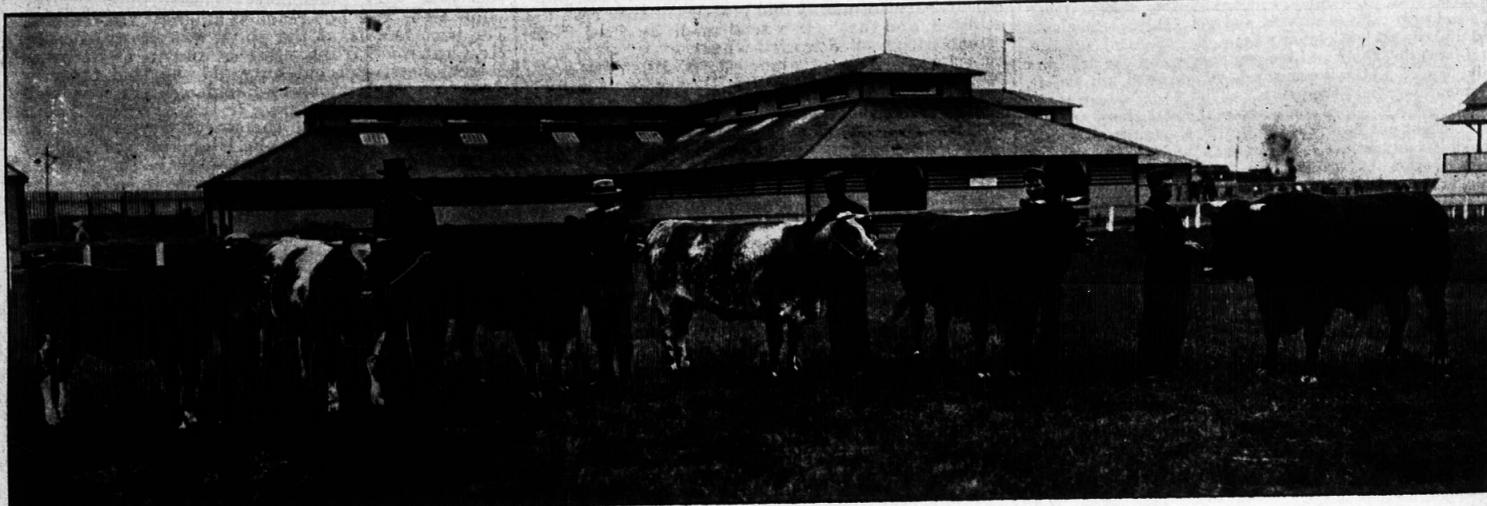
The wise breeder will have provided a special

back, so as to give them an even, smooth and plump appearance, which makes them more pleasing to a visitor. It requires some skill to do this well, but every owner of a pure-bred flock should be able to do this bit of dressing in a creditable manner.

Some sheepmen recommend and practice weaning the lambs gradually, principally to prevent injury to the ewes by their udders becoming overstocked with milk; but our plan has always been to turn them into a dry pasture a couple of weeks and have them brought up, and those that need it milked out two or three times a week till they have become nearly dry, when a better pasture should be provided, which will soon show its effect in their improved condition. A shepherd who takes a pride in his charge will go over the ewe flock and trim them into neat form, removing the more prominent ridges from the last shearing and other unevennesses. There is no occasion for grain feeding to breeding ewes at this season, but the flock should be got into nice thriving condition by the time the mating season arrives. There is no better treatment to this end than ten days or two weeks, run in a well-grown rape patch, which not only tones them up but brings them into season in good time.

Selection of Rams.

The demand for well-bred sheep for breeding purposes has not been so good for many years as at the present time, and prices have reached a fairly satisfactory point. As usual, the best are most sought after, and bring the highest price. No class of stock can be more rapidly improved by the use of good sires than can sheep. A pure-bred ram of strong character will make a wonderful improvement in the quality of the offspring, even



FIRST PRIZE WINNERS IN THE SHORTHORN CLASS AT THE WINNIPEG INDUSTRIAL, 1898; THE PROPERTY OF THE HON. THOS. GREENWAY, "PRAIRIE HOME" STOCK FARM, CRYSTAL CITY, MAN.

PRAIRIE FLOWER—1st prize heifer calf. JUBILEE QUEEN—1st prize yearling. GEM OF ATHELSTANE = 28324 = ; 1st prize 2-year-old and sweepstakes female. FRIEDA = 27621 = ; 1st prize 3-year-old. DAISY OF STRATHALLAN 12TH = 26107 = ; 1st prize aged cow. CAITHNESS = 22065 = ; 1st prize aged bull.

twice gained the Cawdor Cup, and her son, Montrave Mac, was second at this Show in the aged class. Two of his daughters again were in turn second and third in the yearling class. The first prize brood mare, Mary Kerr, and the first prize two-year-old filly, Diamond Queen, were both got by the famous prize horse, Prince Alexander 8899, the first winner of the Cawdor Cup for stallions. Mary Kerr is owned by Mr. William Dunlop, Dunure Mains, Ayr, and the Diamond Queen by Mr. A. B. Matthews, Newton-Stewart, and both were bred in the Girvan district. The first prize yield mare was Mr. Webster's Lady Lothian, which last year won the Cawdor Cup, and the first prize three-year-old mare, Golden Belle, is owned by Messrs. G. & J. Cocker, Fyvie. She was got by Gold Mine, a fine type of cart horse, who won the championship at Glasgow as a yearling. The first yearling filly was the unbeaten Maid of Athens, owned by Mr. A. Guild, and, like the champion horse and many other good ones, got by Baron's Pride. Altogether, the show of 1898 has been a most successful one.

A BORDER LEICESTER FLOCK BOOK.

Apart from the individual animals exhibited, possibly the most important event of the week has been the inauguration of a Flock Book Society for Border Leicester sheep. These sheep occupy the same place in the sheep world as is taken by Shorthorns in the cattle world. They are undoubtedly the best tups for crossing purposes, and whether put to Blackface ewes or Cheviot ewes the result is always a most satisfactory commercial lamb. It was high time the Border Leicester men pulled themselves together and attempted the institution of a flock book, as there can be no doubt they lose to a large extent in the foreign trade from the absence of such a record. These sheep will undoubtedly become popular throughout the world when their merits become as well known as they are in Scotland. They are widely diffused, and

lamb pasture to be ready to turn into at this season. An aftermath clover field is generally accessible at this season, and answers a good purpose in sending the youngsters forward. Of course, it is wise to separate the sexes, as the more precocious bucks incline to tease the ewes, and thus prevent the best advancement of either sex. It is, therefore, necessary to have two pasture fields or a line of hurdles to run through the lot to be used. Here is where a patch of early sown rape, near the barn, is of great advantage. As it is generally desired to hasten the ram lambs forward as fast as possible, so as to be ready for the buyers later on, a couple of feeds of grain daily along with the rape will cause them to grow rapidly and lay on flesh. A quart per day of oats, peas and bran, in equal proportions by measure, for three or four lambs, is quite heavy enough feeding, except they are to be sent to the shows, when they should have all they will eat up clean twice a day. Free access to a grass pasture will afford a wholesome change and keep the flock contented.

The ewe lambs on fresh clover will grow well, even with no grain adjunct, but a breakfast of oats and bran, a quart for four, will not be lost on well-bred lambs, whether they are to be sold as lambs, shearlings, or kept in the breeding flock. Fresh water should be provided at this warm season, even on succulent pasture, as the frequent drinks of milk the dams provided heretofore will now be missed. It need hardly be stated that rock or loose salt should be within reach at all times.

Before separating the ewes and lambs all pure-bred lambs should have their ear labels put in, and their numbers entered in the private flock book, along with the numbers of sire and dam. They can then be registered whenever the owner desires, when no doubts will be entertained as to their correct parentage. It is well, too, to go over the flock with the shears, squaring their tails and taking off outstanding locks about the head, neck, breast and

from a very ordinary flock of ewes, and the continued use of a ram of the same class will in a very few years raise the standard of the flock to one of uniform type and quality, if the young ewes are retained and the old ones weeded out as they should be. It is advisable to select and purchase the ram early in the season—two to three months before he is needed for service. The change of feed and surroundings, everything being strange to him, is not favorable to the surest and best results in breeding, but, in our opinion, largely accounts for so many rams being unsure for the first two or three weeks after being brought into a flock of ewes. If a ram is brought from a considerable distance, considerable time is necessary for him to become acclimated. Besides these considerations, a better selection may be secured early in the season before the stock has been culled, and there is generally much greater difference between the value for breeding purposes of the first choice and the third than the difference in the price may seem to indicate. It is well to act on the assumption that the best is none too good, if the price is within our means, or is likely to be justified by all the circumstances. Many farmers seem to think a ram is troublesome to keep before the breeding season arrives, but there is little ground for this notion. The ram lambs should be separated from the ewe lambs in order that both may do well, and the stock ram may safely and quietly be kept with the ram lambs, or, if these are sold, two or three old ewes intended for the butcher may be placed with him for company. The practice of changing rams every year is not, as a rule, commendable. If a satisfactory sire has been secured, it is safer to keep and use him for two seasons at least, and if his lambs are extra good, it is wiser to retain him for breeding with the older ewes, while a young ram is used with his daughters, rather than let him go at an indif-

ferent price, and trust to an untried ram for the whole flock. It is well to hold the older ram if he is satisfactory until you are pretty sure you have one as good to succeed him.

The principal point to be observed in the selection of a stock ram is a robust constitution, as indicated by a broad chest, good heart girth, a short, strong neck, a masculine head, and strong, straight legs and feet. In addition to these features, he should have a proud, confident bearing, be active and spirited, looking like "a prince among his peers," and showing what is known among breeders as *character*. His testicles should be a good size and hanging loosely in a large and well-covered sack, and if he has a determined disposition, all the better. Close attention should be given to the quality of his fleece, as to fineness, density, luster and evenness of the staple on all parts of the body; avoid coarseness of the wool on the thighs, and see that there are not two or three kinds of wool on as many different parts of the carcass. Having secured these essential qualities, the fancy points may have attention, but they should be regarded as secondary.

FARM.

Preparing for Wheat Sowing.

Advantage should be taken of any opportunities which may occur during the harvest weeks owing to rains which delay harvesting operations, or to the possible lapse of time between the ripening of the various grain crops, to keep the teams at work preparing the land on which it is intended to sow fall wheat. If a summer-fallow has been worked for this purpose, and it is not too wet to plow to advantage, it is well to have it plowed early so that the land may have time to get settled and impacted before the wheat is sown, and in order to do this it may be well to roll immediately after the plowing, and to harrow the surface freely in order to form the earth mulch necessary to retain the moisture in the soil which will be needed to give the wheat a good start when it is sown. If at any time during the harvest, from heavy rain-falls, the fallow is too wet to work, and the corn and root land is too wet to cultivate, a piece of clover sod, or even of old grass land, may with advantage be plowed for wheat, but the chances for a good crop will depend very much upon the amount of surface cultivation the land receives between the time of plowing and the sowing. The plowing should be done at least four or five weeks before seeding time. The roller should invariably follow the plow the same day, and the harrow should follow the roller immediately, or within a day after, the harrowing being repeated after each shower of rain to hasten the decomposition of the sod and to conserve the moisture in the soil. Wheat may be successfully grown after peas which have been sown on inverted sod, and if the land is loose and friable, as it generally is after the peas are harvested, and if the field is tolerably clean of thistles or other weeds, there is nothing to be gained by plowing it for wheat, but a better preparation may be made by cultivating it both ways with a broad-toothed cultivator, well sharpened to cut all thistles and move the soil to the depth of three or four inches, to be followed by a vigorous harrowing, repeated especially after each rain until seeding times arrives. The best time to sow wheat is just after a rain, and from the first to the fifteenth of September is a suitable time in the greater part of Central Canada. When sown much later than this it does not have time to stool out and make sufficient growth to cover the ground before winter sets in, and to get strong enough to endure the vicissitudes of winter and of the chilly months of spring. Just before sowing, the land should be well harrowed, and if necessary to give it firmness, it should be rolled before sowing. It should be so firm that a team will not sink more than an inch when walking over it. Soil in this condition, firm below and loose on top, will hold moisture even during a very dry time, such as was experienced in many districts in Canada last fall. Land prepared as we have indicated, last year produced full crops of wheat, while late plowed and hastily prepared fields had no moisture stored, the wheat sown got a poor start, went into the winter weak, and proved a partial or a total failure. The selection of good seed is important. It is well to choose a variety which has proven a good yielder in your own neighborhood, on your own farm or on similar soil and under similar conditions. Change of varieties had better be made on a limited scale until tested on your own farm, and when you find a sort that does well for you, stick to that sort until you are sure of another variety that will do better. There is much difference of opinion as to the proper quantity of seed to sow upon an acre. Sown with a drill, we believe, as a rule, a bushel and a half is sufficient where the land is well prepared and in the best condition to receive the seed, but no fixed rule can be laid down. Much depends upon the conditions of soil and seed and weather. Five pecks may be enough in one case, and two bushels may not be too much in another. The quantity to be used depends upon the condition of the soil, the time of sowing, the stooling qualities of the particular variety, and the size of the seed grain. The special points to be observed in successful wheat-growing are to plow early, to continue surface cultivation, secure a firm seed-bed with loose surface. Sow in good

season in a moist soil, and trust a beneficent Providence for the harvest. It is well to sow timothy seed at the rate of 5 to 6 lbs. per acre at the time of sowing the wheat or very soon after, even if the intention is to sow clover in the spring, as for some reason the clover may not catch and it is better to have a crop of timothy than no grass and no hay. If from a heavy rain the land becomes packed and baked after the seed is sown, we would not hesitate to harrow it freely to loosen the surface and admit the air.

Hints on Preparation for Fall Wheat.

The dry weather which occurred during the season for fall wheat seeding last year has taught us that land for wheat must be plowed early, and thoroughly pulverized at once, with frequent cultivations up to seeding time in order to attract and conserve sufficient moisture to ensure the prompt sprouting of the grain when sown.

Land which was thus treated last season contained sufficient moisture, notwithstanding the continued drouth, to bring up the crop promptly and evenly, while land which was plowed and left lying without further working until seeding time, or plowed just before sowing the crop, produced a very uneven stand, and will not thresh 50% as much grain as early prepared land.

Clover sod and barley stubble plowed as soon as possible after gathering of the crops have given best results. If the manure is applied to the wheat crop direct, instead of the preceding one, I would advocate turning it under instead of using as a top-dressing, and by after-cultivation incorporate it with the soil and bring it as near the surface as possible. Each day's plowing should at once be rolled and harrowed to thoroughly pulverize the soil and check evaporation. If the soil is afterwards frequently stirred with cultivator or harrow, especially after showers, an abundance of moisture can be stored to ensure prompt germination of the grain. Rolling the land before sowing is essential to secure a firm seed-bed; but rolling after seeding tends to produce a crust if heavy rains occur, and permits the snow covering to blow away more readily than from an uneven surface, and also favors heaving by alternate freezing and thawing. I believe an eight pace land to be sufficiently wide, even when land is thoroughly underdrained, and favor having the drills cross the lands to assist surface water to get away more rapidly while the ground is frozen. Drilling the seed to a depth of from one and a half to two inches we think gives best results, and one and a half bushels of well-cleaned seed is ample for an acre. Too much stress cannot be placed upon the necessity of clean seed, for whatever seed is sown will invariably reproduce itself, whether it be wheat, cockle or chess. Red Clawson promises a heavy yield this year, but taking it one season with another we believe that Democrat will hold its own with any variety yet produced. This belief is shared by most threshers whom we have conversed with upon this subject. Sowing about the 10th of September has given best results for this locality, as the crop makes its appearance too late to be much injured by the fly, and yet is sufficiently early to ensure a heavy top before winter sets in. ELLIS F. AUGUSTINE, Lambton Co., Ont.

Dawson's Golden Chaff the Principal Sort.

To the Editor FARMER'S ADVOCATE: SIR.—Dawson's Golden Chaff is the principal variety of fall wheat grown here, with a little Red Clawson thrown in. I have grown Dawson's and Diamond Grit and Genesee Giant, all of which have proved good wheat. Though the spring was unfavorable and wheat was considerably hurt through April, these new varieties made up exceptionally well and stood thick with heavy head, but we have not had a season to try the real merits of any variety—no rains or damp to cause rust and smut; we never have to any extent. Where wheat has been a failure or even poor, it is due to the closing of winter and opening of spring, and where it is even light it is due to impoverished soil and not sufficient plant food to bring it along. W. G. BALDWIN, Essex County, Ont.

Fall Wheat After Peas.

To the Editor FARMER'S ADVOCATE: SIR.—I always grow my fall wheat on pea ground, which I prepare as follows: I turn down clover stubble in the spring, on which I draw and spread the manure during the winter; after peas are harvested I plow as soon as possible, harrow, and roll it, and if not fine enough, use the disk once or twice on it, so as to get a fine seed-bed, and have never lost a crop with this treatment. Another successful method is to either pasture clover or cut it early for hay; give it a coat of manure, plow, and then use the roller and harrow, and if weeds should come up, use the gang plow, but only work it shallow. When land is well drained, either natural or artificial, I prefer wide lands (about twenty yards wide). I regulate the drill to sow to the depth of two and a half to three inches; prefer to have the drills run north and south, but cannot say that I have seen any material difference from other directions.

As to varieties, we must be guided by the nature of our soil. On heavy land, Democrat, Walker's Reliable, Rumsey, and Genesee Giant do best; while on a lighter and sharp soil, the white varie-

ties will probably surpass them in yield. My best wheat this year is a mixture of Reliable, Dawson, Golden Chaff, and G. Giant, grown on barley and fall wheat stubble, on part of which was used Bradley's fertilizer, about 200 lbs. per acre. The advantage of the fertilizer was quite noticeable in a thicker stand, larger heads and early maturity. It was only tried as an experiment in alternate strips over the field. The fertilizer was sown broadcast before drilling the wheat. From the 28th August to the 5th of September I find the best time to sow, and sow one and three-quarters bushels to the acre. Oxford Co., Ont. H. BOLLERT.

Fall Wheat on Fallow or Pea Stubble.

To the Editor FARMER'S ADVOCATE: SIR.—We usually sow fall wheat either on summer-fallow or on pea stubble. If summer-fallow, the ground is usually plowed three times, and it is allowed to stand after plowing last time for ground to firm up some before sowing; that is, if it is too loose, like "an ash heap," we use a cultivator and finishing harrow, if lumpy; roll before sowing and usually after sowing, although we are not sure that it is best to roll after sowing, especially if seeded with timothy. However, if left to roll until spring it is often neglected altogether. If nicely undulating, 20-yard lands answer; if level, 12 yards. Sowing not too deep, but that all is covered a good depth; from 1½ to 1¾ bushels per acre, from north to south, thinking the west wind will keep it better covered. We will sow Red Clawson, but there are other varieties in this locality that have done well. We have been sowing the last week in August and first week of September with good success. If we sow on pea stubble, we gang plow as soon as possible after the crop is off, then leave it for seeds and peas to start, when we plow it well with the single plow, sowing it a little thicker than on summer-fallow, with same treatment. Perhaps I have not made it quite plain about the cultivating and harrowing. Our usual method is first to use a spring-tooth cultivator the direction the field was plowed, followed with the finishing harrow, then, if necessary, rolling; then cross with the cultivator and again follow with finishing harrow and roller. If in good order, we only use the finishing harrow to cross it with, and not the cultivator, but always use cultivator and harrow the direction it was plowed. ALEX. HUMR, Northumberland Co., Ont.

Fall Wheat Forty Bushels to the Acre.

HARROW AND ROLL IMMEDIATELY AFTER THE PLOW.

To the Editor FARMER'S ADVOCATE: SIR.—The fall wheat crop in this district is very variable, some fields only yielding ten bushels per acre, while others have gone over forty bushels. The light soils that have been generously tilled have proved their superiority, not only in sample, as usual, but also in yield.

As to the varieties, without doubt Dawson's Golden Chaff is again proving its superiority over all other sorts; it seems to suit a greater variety of soils than any other, and is as free from rust, and stands up well. Jones' varieties have been about all discarded, except Golden Cross and Genesee Giant; the latter will be largely sown again this season, but I can't say as much in its favor as I can for Dawson.

Partial failures may mostly be ascribed to the lateness of sowing the seed last fall. Owing to the drouth it was almost impossible to plow heavy soils; and, again, those who neglected working and rolling quite up to the plow evaporated what little moisture was in the soil; the consequence was, much seed did not germinate for fully a month after seeding, or when the late rains set in, and then came weak and never got a "foothold." A good top and a good root are the strongest protections against winter-killing. Rust was anticipated at one time, as the fungus attacked the blade very severely, but the atmospheric conditions changed so that it never got fairly established on the straw. Some fields of very heavy grain were badly beaten down by storms at such a stage of growth that they cannot possibly turn out plump grain. These storms, of course, are misfortunes over which we have no control. Summing up, I see no cause why we can't grow as good crops of fall wheat as ever has been grown in Ontario or in any portion of this continent. We have no especial insect enemies to fight—no blights or hot winds to fear. Storms occasionally visit, but not to the extent that prevails elsewhere. With the soil properly fed and tilled there is encouragement yet. But do, Mr. Editor, impress upon all the necessity of sowing good, clean, plump seed. This rye and wheat has got to be stopped, or our good name will suffer in the Liverpool market. In some districts are to be found field after field one-third or more rye. Every kernel is worse than a weed seed, the latter may be removed. R. GIBSON, Middlesex Co., Ont.

Mr. A. McD. Allan, of Goderich, Ont., well known to the older horticultural readers of the FARMER'S ADVOCATE, has been appointed Fruit Commissioner for Canada at the Paris Exposition of 1900. He was an early director and president of the Ontario Fruit Growers' Association, and has had a long and intimate acquaintance with our fruit industry, being Canadian Commissioner on fruits at the Indian and Colonial Exhibition, London, Eng., a few years ago.

Good Crop Follows Good Preparation.

1st. Almost the only variety of wheat sown in this neighborhood at present, and the one that is giving the best satisfaction, is the Early Clawson. The only objection farmers have to it is on account of it not weighing as heavily per measured bushel as many of the other varieties.

2nd. The fall wheat is all good this year where the land was in good heart and the grain sown in time to make a good full growth. Much of the land sown last fall was very badly prepared and made a poor start, with the result that there was nothing left to make a crop this summer. Much of the wheat was sown too late also to make the necessary fall growth that produces strong, vigorous plants for the following spring.

Bruce Co., Ont.

JNO. B. MUIR.

Good Drainage and Rich Soil for Fall Wheat

To the Editor FARMER'S ADVOCATE:

SIR.—To grow fall wheat successfully, there are two prime essentials. First, you must have good drainage, either natural or artificial; and, secondly, you must provide sufficient plant food in the soil to nourish the plant during its babyhood days. Now, there is no doubt whatever that the best crop to precede fall wheat is one of clover, either meadow, pasture or Alsike stubble. Plow early, not later than the middle of July, and plow deep and thorough. I am one of those who have never been convinced that it is all nonsense to get down to the subsoil. I was taught the old maxim in my early days—"To plow thorough and deep while slugs sleep, and you'll have corn to sell or keep," and I always remember this when I go to plow for fall wheat. Keep the land well worked after the plowing with cultivator, harrow and roller, so as to compact it well. As to width of lands, I think you need not be very particular about that, any convenient size will answer where drainage is good. I usually sow about seven pecks of finest quality seed to the acre, about three inches deep, and always up and down the longitudinal slope of the field, be it ever so little. For our latitude I consider the first week of September the best time to sow, and the variety best adapted to this section is undoubtedly Dawson's Golden Chaff, with Genesee Giant a good second. I have noticed a few fields treated as here described in this neighborhood last year, and they are, without exception, the finest crops of fall wheat that have been grown around here for a great many years. It will be no surprise to find when threshed that they will yield forty bushels per acre.

JOHN BURNS.

Perth Co., Ont.

Destruction of Wild Mustard by Sulphate of Copper Solution.

In July 15th issue of the FARMER'S ADVOCATE information is asked by Mr. Eustace Smith regarding the operation of spraying a crop of corn and wild mustard with sulphate of copper solution with a view to destroy the latter. Until recently we have seen very little regarding the treatment, but the *Farmer and Stockbreeder* of a late issue contains references to trials conducted on various crops with sulphate of copper solution at the Technical Laboratories of Chelmsford, Essex, England, from which we quote as follows:

"About the middle of April a field of barley was selected in which an abundance of charlock (wild mustard) was making its appearance. By means of a strawsonizer (sprayer), several strips of this, under varying conditions of weather and at different periods of growth, have been sprayed with 1, 2, 4, and 6 per cent. solutions of sulphate of copper applied in quantities varying between 10 and 100 gallons per acre. A 1-per-cent. solution was found to be too weak to kill all the charlock; a 6 per cent. solution was found to be strong enough to slightly damage the barley. Applied at the rate of 10 gallons an acre, some of the charlock escaped the spraying; 100 gallons was found to be far more than was necessary. A 2-per-cent. solution applied at the rate of 25 to 50 gallons an acre during dry weather, and at an early period of growth, was found to be completely successful in destroying the charlock without injuring the barley. At the time of writing, when the rest of the field is yellow with charlock, the strips thus sprayed are entirely free, and the barley is growing stronger and has a better color than in the rest of the field, there being no charlock to use up the nutriment of the soil.

"Of the crops to which this treatment can be applied, no doubt barley is the most important, but it may be assumed that, if the necessity arises, any other cereal crops may be safely sprayed in the same manner. It has been found that peas, although at first the spraying slightly injures the young leaves, are in the long run quite unaffected, and this method may therefore be used to destroy the charlock in this crop.

"With regard to roots, mangels were found to be uninjured, but swedes and turnips, and some other plants allied to the genus *Brassica*, being of the same nature as charlock, would certainly be destroyed by this treatment. Of other weeds few seem to be effected by the spray, but thistles, though not killed, are blackened and stunted.

"A convenient spraying apparatus is the 'knap-sack strawsometer.' Two men will be required, one to spray and the other to fill the reservoir when empty, and it will occupy two hours to spray one acre. From this the cost of labor in any locality

can be calculated. The cost of the sulphate of copper is 3d. per pound, and if five pounds are required per acre, the total cost of material is 1s. 3d."

The following specific directions will be found useful:

Procure ground sulphate of copper (bluestone or blue vitriol); dissolve 2 lbs. in every ten gallons of water. Or, procure a saturated solution of the sulphate of copper (about 32 per cent.), and dilute one pint of this solution to two gallons with water.

How to Spray.—When spraying, pump hard enough with the one hand to make the finest possible spray, and with the other direct the spray; walk down the field sufficiently slowly to ensure every leaf receiving some of the liquid. For this, from twenty-five to fifty gallons of the solution will be required per acre. Choose a still day for the spraying, or the fine spray will be blown off. The operation must be carried out in fine weather; a shower of rain falling before the solution has been absorbed is found to wash it from the leaves and leave the charlock uninjured. Spray the field, if possible, when the charlock first appears. At a later stage of growth, the charlock is shielded by the crop, and may partly escape. If sprayed when the charlock is in flower, although the solution does not adhere to the petals, and the bloom is not directly injured, the charlock is sufficiently damaged to prevent it from seeding.

POULTRY.

To Preserve Eggs.

When it is desired to use a pickle in which to preserve eggs fresh and wholesome the following mixture will give good satisfaction when newly laid, sound shelled stock is put in each day as laid: Place 4 pounds of unslacked lime, 1 pound of salt, and 1 ounce of cream tartar in an earthen jar; then add 3 gallons of boiling water, stir well and allow the mixture to stand for two days, when it is ready to receive the eggs. The vessel should stand in a cool place where it is not likely to be disturbed. There should be quite two inches of the liquid standing above the top layer of eggs. As the water evaporates, add cold water up to where it previously stood in the vessel.

Chickens Dying Suddenly—Lice the Cause.

In our Questions and Answers Department of July 15th issue, we replied very briefly to G. L. Lamb's enquiry regarding a serious trouble with chickens. We regretted we could not tell just what was wrong and just how to treat the flock successfully. Since then we have met a similar case in which a flock was dying rapidly. The same experience was encountered last year without the trouble being found out, but recently the cause was discovered to be lice on the head. One or two applications of grease on the head stopped the trouble at once, but we would warn those who have charge of poultry against applications of grease beneath the wings, as it is apt to prove fatal to the chickens, but on the head it does no harm.

It seems difficult to understand how lice on chickens' heads can result in sudden, fatal termination, but other results of lice infestation are as difficult to understand as the one we have named. Bowel trouble in summer, drowsiness, refusal to eat, slow growth, sudden death, gradual wasting away, constant crying, loss of feathers on the head, and other remarkable symptoms indicate lice in chickens. Brooder chickens never have lice, and as a rule grow better than those with other poultry. Large lice kill ducks suddenly and cause the death of many young turkeys. Whenever a sick fowl is found dusting itself it should be examined for lice. Many who understand how to get rid of lice do not believe their chickens are infested, and therefore do nothing for them. It is not the little red lice seen in the poultry house that does the great damage, but the large gray body lice which work on the heads, neck and vents, and which never leave the birds, that cause the serious trouble. These are not easily discovered, but require a diligent search to locate them. A single one of these voracious fellows on the head or throat of a young chick will sometimes cause the youngster to droop and die.

A dust bath in a cleanly kept house will enable the hens to keep the little mites down, but the larger lice are not so easily disposed of. An ounce of carbolate of lime in a half bushel of dry, fine earth, or finely-sifted coal ashes, makes an excellent dust bath, but under no circumstances should wood ashes be used.

To make a thorough job of getting rid of a bad infestation of lice, the house should be sprayed every day for a week with kerosene emulsion, made as follows: Cut up (slice) half a pound of hard soap in half a gallon of soft water. When the water boils, and the soap is dissolved, remove it from the fire, and add half a gallon of kerosene (coal oil). Agitate it with a spray pump for ten minutes, and a creamy mass will be formed, which becomes a jelly when cold. Add two ounces of crude carbolic acid to the kerosene before mixing with the soap. When you have finished agitating the mixture, add five gallons of water, or soapuds from the family washing, and you have the cheapest and best mixture that can be made. Grease the heads of the chicks every second day until the lice are gone with lard, sweet oil, linseed oil or butter. The nits as well as the lice must be destroyed. Dust freshly-slacked lime freely every-

where—in the nests, on the floor, walls, and over the yard. A good dry mixture is: slacked lime, one peck; tobacco dust, two quarts, and carbolate of lime, one pound. Mix thoroughly, and dust liberally into the feathers of the mature fowls, as well as throughout the house.

Unfertilized Eggs.

There seems to be various opinions among poultry breeders as to the merits and demerits of allowing the males to occupy the same pens with the hens, or in keeping males with the flock if the poultry is allowed free range. Some claim that the hens lay better when no male bird is present, as he molests them and disturbs their usual placidity. Some claim that the hens lay better, as they get more exercise, because of the many calls of the male bird to "Come and see what a nice worm I have." Some think there will be no eggs at all unless a male bird is present, and following out this idea to extremes, they keep nearly a dozen males with a small flock of hens. The result is, usually, very few chickens. I might here add that I usually find one male with a flock of thirty or forty hens gives more fertilized eggs than does two or more, provided the flock is not confined in pens. I have come to the conclusion that it is not so much the absence or the presence of males that cause the difference in the number of eggs laid, as it is in the breed of hens kept. Perhaps the advocates of the "no male" plan have active exercisers, while those who approve of numerous males have a lazier breed, which will sit in the shade till called to food. From experience I should favor keeping male birds, for with a large flock of hens laying few eggs when a couple of roosters were present, I found, after killing them, a flock of hens laying "fewer" eggs. But all agree that an unfertilized egg is better than a fertilized; but very few merchants, buyers, grocers or ordinary consumers know this, or, if they do, they do not appreciate the difference. I find they will not pay one cent on a hundred more for guaranteed fresh and unfertilized eggs than they do for a lot of ordinary eggs, which, for all they know, may contain a germ which has already begun to decay. In speaking to a dealer on the question of supplying unfertilized eggs, he asked, "What kind of eggs are they?" evidently considering "unfertilized" to be a new variety of hens, or, perhaps, a different kind of fowl. A consumer said to me, "I would like to buy a crate of eggs for winter use when they are cheap, but I am afraid I could not pack them so that they will keep." I replied, "Get them from someone who keeps no male birds with his flock, or unfertilized eggs, and they will keep forever." She enquired, "What difference will that make," and when I explained that where there was no life there could not be death and decay, she said she had never heard of it nor had ever thought of it before. The question then arises, "How shall we educate the dealers and the consumers to know the value of unfertilized eggs?" We know they are much nicer for eating, even when new laid. Some writer has said, "Where no males are kept the hens are not so inclined to hatch, instinct teaching them it is useless." This does not prove true in my experience, as I have had a hen bring out chickens from a stolen nest about six weeks after the male was killed. Of course, that was not an exception, but I have also had them sitting for some time, and on breaking the eggs I have discovered no life germ in any of them. So that the fertilization or lack of it does not seem to be a cause of the propensity to hatch which is exhibited by some hens when they have the slightest encouragement. Another benefit to be derived from unfertilized eggs, where fowls have unlimited range, is the absence of those late flocks of chickens which come unexpectedly in the late summer and autumn, just when we do not want them; yet we hate to have them come out and get our attention, and are of very little value when they are raised.

Middlesex Co., Ont.

GTRA.

Summer Treatment of Chicks.

LOOK OUT FOR LICE.

Now that hot weather is here, and chicks presumably all hatched, it behooves us all to find out the best means of hurrying them along—the cockerels to the block, the pullets to the laying pens. This is more especially true in the west this year on account of scarcity of food supplies and consequent high prices. The first thing to look out for, and keep looking out for, is lice. The direct cost of fighting lice is small; the indirect, if neglected, is very heavy. At present we will consider that chicks have been well looked over; on the heads for large head lice, on necks for lice usually found there, and fluff examined carefully for the lively body lice, and all found clean. But do not be too sure that because you cannot see any lice that none are present. I once knew a man offer a dollar apiece for all lice found upon his chicks—a well-kept small flock of beauties. A mutual friend caught a hen, and astonished the owner by showing him that lice were present in considerable numbers. Lice, I firmly believe, are the cause of the death of one-half of all chicks that die young. For young chickens hatched twenty-four to thirty-six hours I have found nothing to equal stale bread soaked in milk and squeezed nearly dry. I sometimes buy the cheapest grade of flour obtainable, mix equal parts, by measure, of shorts, and make bread of it, but make sure of having it made at least forty-eight hours before it will be required. They relish it and show by their growth that it is

good for them. I vary this by means of a mash made of equal parts of cracked corn and bran moistened with boiling water, if possible using that in which meat has been boiled. This is fed in a crumbly state, never by any means sloppy. I also use rolled oats, feeding them dry. At the age of two weeks or thereabouts I introduce cracked corn, coarse, as we get it at feed stores. Shake it in a sieve until all powdered portion is out, then throw larger pieces into the grass and allow the little fellows to search for it. Owing to high price of rolled oats I discontinue its use at this age. About ten per cent. of all food after this is meat, nearly always cooked, sometimes cut into suitable size pieces, sometimes adhering to the bone, but whichever way it is fed, the mad scramble of the youngsters shows how they enjoy it. At this age wheat cracked or cut into quarters is a most excellent food. Fresh bones crushed or smashed with an old axe or hammer are also much relished. At about a month old whole grain is given—wheat, barley and oats. I scatter it well in the scrub, grass and weeds; now withdraw all baked food except as a change of diet. Up till this time all chicks are treated alike, but now the developing combs and tails indicate the sexes. The cockerels are placed in comfortable quarters, and fed chiefly upon corn meal, barley, boiled potatoes and meat, not, however, neglecting some green feed. I feed all they will eat up clean at least four times a day, and hurry to market. The pullets are given free range, housed in boxes scattered here and there. Their food in the morning consists of a mash made of cracked corn and bran, equal parts by measure. At noon whole grain scattered around, and also meat or bone scraps. At night, if they appear hungry, a further supply of grain is given, but usually they are filled up, happy, contented, and tired. No hard and fast rule is possible as to quantity of feed to be allowed; so that they are filled up at night, which can readily be seen by appearance of their crops, I am satisfied everything is as it should be. Being at liberty, they get their own green food. The well-known weed, shepherd's-purse, is acceptable to all kinds of fowl. Now, in closing, let me advise all to take every possible care of pullets. The numbers hatched are this season, I am convinced, much fewer than usual, and of those hatched, owing to the rainy spell, a large percentage have died. Allow plenty of clean water, sharp grit, and, above all, keep a sharp lookout for lice.

Red River Valley. W.

APIARY.

A Skillful Beekeeper's System Reviewed.

Beekeeping, as an industry, or even as an adjunct to farming or other occupation, is not as general in a country so favorable to it as ours as its advantages would seem to warrant. True, it is an occupation for persons of leisure, but on a farm where the family comprises several members, a few colonies would be found to give very little trouble, and furnish an article of food which would be not only a relish but a healthful daily adjunct of diet. Going farther, we may state from experience that after the habits of the bees are commenced to be understood, and therefore the methods of manipulating them mastered, they become a source of real interest and pleasure, and if gone into on an extended and thorough scale, a means of considerable revenue. If one has the qualifications of being cautious, observing, and prompt, beekeeping can be engaged in without fear of failure, and to persons who swell up and become seriously affected with the stings, it may be some comfort to know that after a few stings the system becomes inoculated against the effects of the poison, when a prod from an angry bee becomes of little more account than a mosquito bite.

The management of an apiary is not a difficult matter, and needs very little outlay to commence with. One handy with tools can make the hives and nearly all their attachments. True, no matter how full instructions are received, or how many bee books are read, many points will have to be picked up by experience and observation, so that to succeed in getting the most from the colonies, observation, perception and invention play an important part. These and many other necessary qualifications have assisted the very successful apiarist and proprietor of "Evergreen Farm" and bee yard, Mr. S. T. Pettit, of Elgin County, who now, at the end of twenty-five years of studious experience, is looked upon by the more advanced beekeepers of Canada and the United States as one of the first authorities on apiculture. On July 20th we spent most of the day with Mr. Pettit, who, with his son, was busy taking off the last of this season's extracting. This will be finished in a few days, when the fine harvest of fat comb sections will be removed. By observation and conversation we gathered many important features of Mr. Pettit's system, which we will endeavor to give to our readers.

COMB HONEY THE SPECIALTY.

Mr. Pettit, like most advanced beekeepers, makes a specialty of comb-honey production. The proportion taken is largely governed by the extent of the swarming, as new swarms are better suited to comb-honey production than

those that have come out from winter quarters. This year swarming has been under the average, and, as a result, Mr. Pettit has only about one-third of his hives supplied with comb-section supers. The spring is usually commenced with 75 to 80 colonies, which come out in vigorous condition from the cellar. The hives used are of Mr. Pettit's own invention, having brood frames 9 inches deep and 14 inches long, and extracting combs 14 inches deep, and of the same length as the brood frames. The hives are built to hold 12 frames. When the bees are first brought out in spring they are confined to the brood-chamber until maple blossom commences. Shallow supers are then put on, and the brood is spread in the brood-chamber by placing the center frames, which contain most brood, on the outside and exchanging for them the outside frames, which contain more or less honey. This is uncapped, so that the bees can readily remove it to the super, leaving room for the queen to lay in these combs when emptied. This exchanged position of frames is only safe when the bees are sufficiently numerous and strong to keep the outside frames of brood warm. When clover honey-flow commences, the strongest colonies are given comb-supers in place of the shallow supers first put on, but the others are given extracting-supers 14 inches deep. Usually two comb-honey supers, each holding 36 sections, are put on, but when the strength of the colonies and copiousness of honey-flow will warrant it, three supers, or 108 sections, are put on. Sometimes the third super is added after the others have become filled or nearly so. At the time of our visit nearly half of the comb-honey-producing colonies had three supers, which in most cases contained about 14 ounces of beautiful, well-capped honey per section.

EXTRACTING HONEY.

Mr. Pettit has his own method of taking off extracting honey. As soon as the frames become filled the first time in the season, the six fullest frames are selected out of each hive, and the remaining six are shoved to one side, and empty frames placed in the empty half of the super. The date and side removed are written on the back of the hive, and as soon as full and capped the other side is extracted. By this means the bees are not delayed for a moment and the work of extracting is facilitated. This is the means adopted till the last extraction (which was in operation at the time of our visit), when all the combs are exchanged for empties. It is remarkable the amount of honey these bees are made to produce, viz.: from 150 to 160 pounds per colony of extracted honey. Mr. Pettit has an ingenious and simple method of removing the full combs. When it is desired to remove six frames, as is the custom early in the season, the hive cloth is stripped off just the width of the six frames, a few puffs of smoke sends the bees down, when the frames are quickly lifted out and the empty ones placed in before the bees have commenced to return. The cloth and cushion are replaced with very little disturbance to the bees. As the full combs are lifted out they are each given a shake before the hive and then stood up at the back of the hive till the cover is put on and they are ready to be taken to the extracting room. The few remaining bees, which by this time feel lost and lonesome, are swept off with a feather, and all is over in very little more than a minute, with no commotion, no stinging, and no chance for robbing. The extracting is done by a large extractor which handles four frames at once.

The empty frames last put on continue to receive a little honey throughout the remainder of the season till brood-rearing has ceased, about the middle of September, when the supers are all removed. This is done throughout the whole yard as nearly as possible at the same time. Each super is left uncovered and placed on the ground a few feet in front of the hive from which it was taken, and which is now covered with cloth cushion and hive cover. This sets the entire working population in active service carrying the honey into the brood chambers for winter stores.

True, a big commotion is set up, but practically each swarm is attending to its own case, and no evil results from robbing or any other cause. About the end of September the hives are examined to see what stores are needed, and feeding is proceeded with as it is deemed necessary. The food given consists of four-fifths granulated sugar and one-fifth honey. It is calculated to allow each colony 30 pounds of stores for the winter months.

SOME NICE POINTS IN MR. PETTIT'S SYSTEM.

Beekeepers know generally how difficult it is to have the outside, either comb or extracting, frames as well filled as those in the center of the super. Mr. Pettit has quite overcome this difficulty by allowing the entrance to extend clear across the hive, and by raising the front an inch and a quarter above the bottom or floor, by a wedge on either side of the entrance. This allows the bees to enter the hive the full width, and compels them to walk up sides or back of the hive, so that they always fill the outside frames first instead of last, as is the case with the narrow entrance. Another means to this end with comb sections is to create a bee space between the outside comb sections and the walls by inserting a perforated divider held out from the wall by tiny blocks of wood a bee space wide. This allows the bees to pass up and down freely, which they do the same as between the sections, and holds more bees at the outside of the outside sections. Another advan-

tage afforded by the wide and deep entrance is the ventilation and comfort afforded the bees, especially in hot weather. Undue swarming is thus prevented. The extracting-honey hives are ventilated at the top at back, but no top ventilation is given the comb-honey hives, except for a few days after a new swarm is hived, when it is necessary to afford them comfort in order to commence them working at an early date. This is usually permanently closed up on a cool evening when all have settled down.

Another practice with a newly-hived swarm is to substitute two frames on either side of the brood-chamber for dummies, so as to contract the brood-chamber and get the bees working in the sections above. Late in the season six dummies, or three on either side, are inserted, but it requires the judgment of an experienced bee-master to manipulate these nice points.

Regarding the capture of swarms, Mr. Pettit always keeps his queens clipped, so that they are not able to take flight with the swarm, but commonly fall on the ground in front of the hive. She is picked up and placed in a cage which is placed in the entrance of a new hive, which takes the place of the old one, which is moved about two feet back and left there about six days. As soon as the issuing swarm find their queen is not with them, they return to the old stand, but new hive, find their queen, and at once proceed to occupy the hive. Some of these ingenious methods may be used in general practice, but not a few of the most valued of them originated with Mr. Pettit, who delights in giving to the beekeeping world the benefits of his experience and invention.

SHOWS AND SHOWING.

Exhibitions for 1898.

Trans-Mississippi, Omaha	June 1 to Nov. 1
Stanstead, Rook Island, Que.	Aug. 24 and 25.
Toledo Tri State	Aug. 22 to 27.
Toronto Industrial	Aug. 29 to Sept. 10.
New York, Syracuse	Aug. 29 to Sept. 3.
Ohio, Columbus	Aug. 29 to Sept. 2.
Bedford, Ont.	Aug. 31 and Sept. 1.
Minnesota, Hamline	Sept. 5 to 10.
Eastern, Sherbrooke	Sept. 5 to 10.
Metcalfe	Sept. 6 and 7.
Morrisburg	Sept. 6 to 8.
London Western	Sept. 8 to 17.
Indiana, Indianapolis	Sept. 12 to 17.
Quebec	Sept. 12 to 21.
Prescott, Vankleek Hill	Sept. 13 to 15.
Richmond	Sept. 13 to 15.
New Brunswick, St. John	Sept. 13 to 23.
Bay of Quinte, Belleville	Sept. 14 and 15.
Northern, Walkerton	Sept. 14 and 15.
Renfrew	Sept. 15 and 16.
Bowmanville	Sept. 15 and 16.
Ottawa Central	Sept. 16 to 24.
Brantford	Sept. 17 to 22.
Wisconsin, Milwaukee	Sept. 19 to 23.
Napanee	Sept. 20 to 23.
Northern, Collingwood	Sept. 20 to 22.
Peninsular, Chatham	Sept. 20 to 22.
Prescott, Prescott	Sept. 20 to 22.
St. Thomas	Sept. 20 to 22.
Stratfordville	Sept. 21.
North Bay, Ont.	Sept. 21 and 22.
Lanark, South Perth	Sept. 21 to 23.
Stratford	Sept. 22 and 23.
Lindsay	Sept. 22 to 24.
Halifax	Sept. 23 to 29.
West Williams and Park Hill, Park Hill	Sept. 24 and 27.
Illinois, Springfield	Sept. 26 to Oct. 1.
Shedden	Sept. 27.
Cayuga	Sept. 27 and 28.
Lanark, Almonts	Sept. 27 to 29.
Centre Bruce, Paisley	Sept. 27 and 28.
Northwestern, Goderich	Sept. 27 to 29.
Peel, Brampton	Sept. 28 and 29.
Prince Edward, Picton	Sept. 28 and 29.
Barrie	Sept. 28 to 30.
Dalhousie, Ontario	Sept. 29 and 30.
Oxford, Kempsville	Sept. 29 and 30.
Elgin West, Wallacetown	Sept. 29 and 30.
Ontario and Durham, Whitby	Sept. 29 to Oct. 1.
Peterboro, West Peterboro	Sept. 29 to Oct. 1.
St. Louis, St. Louis, Mo.	Oct. 3 to 5.
Woodstock	Oct. 3 to 5.
Norfolk, Tilsonburg	Oct. 4 and 5.
Tara	Oct. 4 and 5.
Markham	Oct. 5 to 7.
New Westminster, B. C.	Oct. 5 to 13.
Caledonia	Oct. 6 and 7.
Norfolk, Simcoe	Oct. 11 to 13.
Woodbridge	Oct. 16 and 19.
Ontario Fat Stock Show, Brantford	Nov. 30 to Dec. 2.

[NOTE.—If Secretaries of Fair Boards will send us dates of their shows we will include them in the lists of succeeding issues of the FARMER'S ADVOCATE.—EDITOR.]

Visitors to Ottawa's great fair in September will see many changes and improvements at Lansdowne Park, where the exhibition is held. Ottawans confidently assert their fair park and accommodation are now the very best in Canada. The size of the grounds has been increased by the acquisition of some eight or ten acres and the canal bay has been transformed into a beautiful lake with a running fountain. A new main building, fireproof, in which all the exhibits will be on the first floor; additions to all the other buildings, and the construction of a wharf near the Elgin street gate are among the other improvements. As usual the fair directors have secured a fine list of special attractions. The night spectacular will be the "Siege of Delhi," a costly and thrilling military spectacle. Balloon ascensions, comedy acrobats, triple bar performers, "the high diving horses," and the "guideless wonders," horses that trot against each other without drivers, will be pleasingly carried out.

The Toronto Exhibition.

Everything points to a more than ordinarily successful exhibition in Toronto this year from August 29th to September 10th. Enquiries for printed matter have been more numerous than ever and have been received from every State in the American Union, from every country of Europe, and from far-off Australia. For the first time classified exhibits in distinct departments are to be made by manufacturers and exporters of both France and England. Recently an official letter was received from the Minister of Foreign Affairs at Paris asking for particulars of the exhibition, which, of course, were promptly sent. This of itself says volumes for Canada's great fair. Excursion agents and railway agents in the United States say that it is the best inducement to draw business they know of, and this year excursions are to be run from many points never touched before. It is even anticipated that a quarter of a million will flock to Toronto from August 29th to September 10th. But after all the most gratifying feature is the warranted announcement that this year the indications favor a larger individual exhibit of live stock—horses, cattle, pigs, sheep, and poultry—than usual. Dairy products will also be more generally represented, while a special exhibit of bees and their honey is to be made by the Ontario Agricultural College, and Mr. R. F. Hollermann, lecturer at that institution, is to deliver daily addresses and give illustrations. Altogether 1898 promises to be a banner year for Toronto's famous exhibition, entries for which in all departments, as per price list, close with Manager H. J. Hill, 33 King Street East, Toronto, on Saturday next, August 6th.

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.

Fits Due to Constipation.

WILLIAM SHEA, Muskoka, Ont.:—"I have a valuable hound which has taken four fits at intervals of three weeks. When he goes into a fit he stiffens up for awhile, then kicks for awhile, froths at the mouth, and lasts about five minutes. Can you tell me what is the cause and if it can be cured?"

[Among all carnivora there is an infrequency of the action of the bowels, and the feces as passed are dry and hard; if the food be given irregularly and contain a large quantity of borica, costiveness will result. This must be dealt with by a careful regulation of the diet; some such laxative element as cabbage, boiled liver and plenty of fat, with regular feeding, must be enforced. Symptoms are very well described, but do not cover all cases. The fits most frequently come on when the animal has been exerting itself. Its pace becomes slow and face looks distressed, although it apparently was in perfect health at starting. It falls to the ground, the limbs become rigid and quivering or violently convulsed, it foams at the mouth from champing the jaws, and very often bites the tongue severely. The eyes protrude, the eyeballs rolling, the lids opening and closing spasmodically; urine and feces are expelled involuntarily. The fit may pass off in a very short time, five to ten minutes, rarely any longer, and the animal seems dazed and very weak and anxious to sleep. Treatment: The animal when seized with a fit should be secured by collar and chain and cold water sponged on the head and face, not doused with it, as is the usual custom. Give a dose of aperient medicine every week, and careful attention to feeding will certainly prevent them. Aperient for dose: Aloes, 5 grains; nit. pot., 10 grains; piper nigr., 2 grains; gentian, 10 grains. Mix and divide into six pills, one every day. DR. WM. MOLE, Toronto.]

Ophthalmia Prevalent in South-western Ontario.

A number of letters have been received from Western Ontario readers giving symptoms of sore eyes in their cattle, practically the same as the case mentioned on page 336, July 15th issue. One letter asks if the disease will affect the meat of animals killed for beef, and another whether or not the milk will be injured.

In reply we refer to last issue of the FARMER'S ADVOCATE on the page mentioned above. With regard to the systemic effect upon the animals, it may be stated that neither the meat nor the milk will be influenced to any appreciable extent.

Ophthalmia—Ear Tags.

L. C. McC., Elgin Co.:—"(1) We have a disease here that affects cattle in the eyes. The first symptom is that the eyes begin to run water, then in a few days a film comes on and renders them totally blind. It seems to be contagious; at least, it goes through the whole herd when it once gets started. It has been doctored in different ways. Some put in burnt alum; some use dry salt; others a decoction of white vitriol. None of them seem to have a very decided effect. What is it and what is the remedy; also, does it affect the milk so that it would not be fit to use? Where in Canada can I get ear tags for sheep?"

[(1) The eye is too delicate an organ to doctor with uncertain applications. A qualified veterinarian should be consulted in such cases as above. See July 15th issue, page 336. (2) We have frequently been asked for the address of sheep ear-tag manufacturers. Will some manufacturer make his business known through our advertising columns.]

Peculiarity of Horse's Coat.

MR. GEO. DUNNING, Prescott Co., Ont.:—"I have a horse seven years old that changes his coat

every summer, when it turns in different directions about the size of one's hand, making him look spotted. He is in good health apparently. Could you give me a reason and is there any cure?"

[The external covering or skin of the horse is generally smooth and thick and much more dense on the back, flanks and exposed portions of the limbs, and thinner on the under and more protected parts. Over a greater portion it forms an exceedingly thin layer, but in certain breeds, more especially those of a mixed character, say a Clydesdale or a pure-bred, it accumulates in solid masses of various forms. Under ordinary conditions the epidermis is continually being removed at the surface, flaking or peeling off in minute fragments. When they persist, as in this case, they give a ragged, uneven appearance. The amount and coarseness of this growth of hair varies much with the breed of the animal. This may or may not be the explanation, but the interesting part of this case is what part heredity plays in causing the modification, and details as to age, color, size, date and season of birth of sire and dam. In fact, observation only could in any way determine the peculiarity with these particulars.]

Miscellaneous.

Sows Aborting.

SUBSCRIBER, Compton Co., Que.:—"Will you please inform me what is the cause of sows losing their pigs before their time of farrowing, say from eight weeks to three months from date of service? Is there any disease in hogs to cause such to happen? Pigs seemed perfect, half-grown in some cases, and in others not larger than walnuts. Is it any weakness of boar? This boar is healthy, only he occasionally grates his teeth. Can a disease be carried from one sow to another? These are valuable brood sows. If there is a disease, is there any cure?"

[Abortion in the case of sows is not a very common complaint, but occasionally a case occurs. We have not known it to become epidemic or contagious as it does in cows, though it may possibly assume that form. If there have been several cases in one herd, it will be wise to isolate those which have aborted; indeed, if there is only one, it is well to do so. It is possible it may arise from some weakness or defect in the sire, or from his having been allowed to serve aborting sows, thus carrying the infection to others. This is a likely cause, in which case it would be well to change the boar. Sows which have aborted should not be served again for two or three months after aborting, or till they get into a healthy condition again, and to this end they should be allowed the run of the fields for exercise, and, if necessary, to keep up their strength, a little good feed should be given them in addition to what they find for themselves.]

Clover, Ashes, and Round Silo.

ARCH. MANSON, Lanark Co., Ont.:—"(1) I send you two plants of the clover species which I would like to find the names of. No. 1 seems to grow naturally, and I find it in patches around the fields. No. 2 I find in a field of clover. No doubt the seed has come in the clover; it seems to be troublesome and not to be desired on the farm. (2) What quantity of wood ashes per acre would you recommend for hay crops; how scattered; and what time of the year to apply? (3) There is one matter in connection with the construction of a stave silo which I would like some hints on. If a stave silo were constructed of dry planks, when it was filled would the moisture from the ensilage not cause the lumber to expand to such an extent as to force one or more of the planks inward? Again, when the silo is empty would the staves not shrink and become loose?"

[(1) No. 1 is *Trifolium agrarium*. It somewhat resembles Alsike (*Trifolium hybridum*), but grows to less size and has a silkier, more delicate bloom. It grows from 10 to 20 inches high and flowers in July and August. It is not objectionable in hay or pasture, and should not be difficult to kill in a cultivated field. No. 2 is *Medicago lupulina*, common yellow clover or Trefoil. It is sometimes called Black Medick from the black color of the seeds, which grow in clusters and are about the size of red clover seed. It is a fibrous-rooted biennial, flowering from May to August. It is not a bad plant in permanent pastures, but does not grow high enough to afford a crop to mow. It seeds liberally and thereby propagates itself increasingly in grass land. It makes good sheep pasture, as it is relished and is of rich composition. It grows freely on almost any soil, but shows a preference for those containing plenty of lime. (2) From 30 to 40 bushels of unleached ashes sown broadcast per acre is considered a good dressing. During the early spring, while the ground is still frozen after the snow is gone, is a good time to make the application. They may be scattered from a wagon or stoneboat by means of a shovel if one has not access to a fertilizer sower. (3) The articles on round silos in June 1st, 1898, issue of the FARMER'S ADVOCATE partially answer the questions asked by Mr. Manson on this subject. It is necessary to keep an eye on the bands for a couple of weeks after the silo is filled, and the nuts loosened if necessary. There is little, if any, danger of the planks forcing in, but it has occurred that hoops have been burst by the extraordinary pressure. A few turns of the nuts is all that is required to prevent this. If iron blocks are used they are

inclined to draw out of true, bending the rods if they become too tight. If scantlings form the stays, the washers drawing into the wood indicate a need of loosening the nuts. It is found necessary to tighten up the bands in the spring after the silo has been emptied a few weeks. This is easily done and prevents them or the planks from getting out of place.]

Bulldog Wanted—Bats in Summer Cottage.

O. M. F., Parry Sound, Ont.:—"1. Could you or any of your many readers tell me where I could procure a pure or half bred bulldog, and what would be the price of a, say month old, pup of the same? 2. What could I get to prevent bats from lodging in a summer cottage? Have been a great trouble in the attic of same cottage. Please advise and oblige."

[1. A breeder of bulldogs has a customer waiting to buy a pup just as soon as he offers him in our advertising columns. 2. It should not be a difficult matter to render a cottage bat-proof by using screen doors and windows, and covering all places of entrance with wire screen. Will some reader having experience along this line please reply to this question.]

Lumpy Jaw.

"INEXPERIENCED," P. E. Island, asks if the prescription given for cure of lumpy jaw, in FARMER'S ADVOCATE, February 15th, 1897, is the one now advised, or is an outward application preferred? The case is a useful seven-year-old grade cow, in calf, which six weeks ago developed that trouble.

[Veterinarians generally, we believe, have more faith in the efficacy of the iodide of potassium treatment referred to than to any outward application, but some very satisfactory cures have been reported to us from the application of the specific advertised in the FARMER'S ADVOCATE, especially when used in the early stages of the disease.]

Sheep Hurdles.

R. MACONACHIE, Victoria Co., Ont.:—"Could you or any of your readers give practical details as to the use of sheep hurdles, particularly in the following points: 1. What length is best, and what height? 2. How many bars are used; at what distance from each other? 3. Is a slanting diagonal bar necessary, i. e., from top of one side to the bottom of the other? 4. What wood can be used—birch or ash durable enough; and of what thickness? 5. What thickness should the end posts be; will cedar do for the purpose?"

[See FARMER'S ADVOCATE, March 15th, 1898, issue, page 132. 1. Twelve feet long and three feet two inches high answers for sheep. 2. Four bars, four to seven inches apart. 3. Cross stakes driven in the ground may be used instead of the end piece shown in Fig. 1 on page referred to. 4. Pine or cedar are light and durable and answer best. Birch or ash should last fairly well, if piled up and covered waterproof during season not in use. Five-eighths to three-quarters of an inch would answer. 5. End posts are not necessary; cedar stakes two by three inches should answer. Board hurdles have been discarded at the Guelph Experimental Farm, and wire ones like Fig. 2, page 132, Vol. 33, FARMER'S ADVOCATE, are being used in their stead.]

Incomplete Creamery Statement.

PATRON, Middlesex Co., Ont.:—"The following table is a copy of a monthly statement received from creamery. Would you kindly criticise it, and tell what information it lacks."

STATEMENT.	
Lbs. of Milk.....	3,707
Test.....	3.4%
Lbs. of Fat.....	126
Price per Lb.....	14c.
Total.....	\$ 17 95
To Drawing.....	\$ 3 70
To Butter, 15 lbs. at 16c.....	2 47
	\$ 6 17
To Cheque.....	11 78
	\$ 17 95

[The above monthly statement is complete, so far as it goes, but it lacks information as to details. Unless the milk were sold outright to the manufacturer furnishing this statement, the patron has a right to know how much butter was made from the milk, and what price this butter sold for, together with other details. It is not the wish of the writer to stir up strife or discontent among patrons of creameries and cheese factories, or cause trouble between patron and manufacturer, but he does think that some manufacturers treat patrons as if they were not worth the trouble of furnishing them information. As we understand the case, except where the milk or cream is sold outright, the milk or cream and its products belong to the patrons and not to the manufacturer. He simply has the raw material committed to his care for a time, and at certain times—monthly is convenient—he is expected to render reasonable account of his stewardship in a manner which patrons will easily understand. I cannot do better than refer readers to page 230, FARMER'S ADVOCATE for May 16th, 1898, for a suitable form of monthly statement to be used in creameries. It may be modified to suit special cases or it may be shortened in some particulars. H. H. DEAN, Dairy Dept., O. A. C., Guelph.]

MARKETS.

FARM GOSSIP.

Maritime Provinces.

Dr. Wm. Saunders, Director of the Experimental Farms, has just returned from the Maritime Provinces. He reports the crops everywhere as very promising, although somewhat later than in Quebec and Ontario. The hay crop is almost universally heavy, and the cereals and roots are everywhere vigorous and healthy, with a promise of abundant returns.

On the Experimental Farm at Nappan, N. S., haying was in progress and the crop was very heavy. Some fine fields from the uplands were already cut and the hay safely housed in the barn. Oats, barley and spring wheat were just heading and all looked very healthy, with an excellent color. Potatoes and corn were somewhat backward, although growing rapidly. Field roots promise remarkably well.

The outlook for a good crop is promising in every direction. The apple crop in Nova Scotia promises to be a much lighter one than was expected. Although the trees blossomed freely, the fruit has not set well. Some varieties, however, are yielding very fairly. Small fruits are producing well.

In the eastern townships of Quebec haying was well advanced, and the crop being rapidly saved. The weather was excellent and the yield abundant. The crops of grain throughout this section also looked remarkably healthy and were just heading.

Ottawa, July 16th, 1898.

Crops in the Northwest and British Columbia.

Favorable accounts continue to be received as to the crop prospects in Western Canada. Recent reports received by the Director of the Experimental Farms from the superintendents of the branch farms are most encouraging. In Manitoba in the early part of the season the growth was retarded for want of moisture; but copious and timely showers since have brought on a rapid growth. During the past fortnight grain has made great progress. The weather has been warm and seasonable, and the soil in a favorable condition of moisture. Wheat, oats and barley are all well headed. In some districts in the north-west and south-west parts of Manitoba the general condition of the grain is scarcely up to the average, but in many other sections, especially in the large wheat-growing districts east of Brandon, including the plains about Carberry and Portage la Prairie, grain looks remarkably well and promises heavy returns.

The dry weather in the early part of the season has resulted in a light crop of hay. Roots and fodder corn are now growing very fast.

In the district about Indian Head, in Eastern Assiniboia, grain is growing very rapidly. The early part of the season was dry, but timely and abundant rains have given favorable conditions of moisture, and crops of all sorts are now making a healthy and vigorous growth. The grain crops have been very good throughout this section of the country for the past two years, and with another good crop and reasonably good prices the outlook for agriculture in this part of the Dominion is most promising.

In British Columbia the hay crop is reported as very good in all parts of the Province. Clover especially has given a heavy yield. The grain crops in most districts are healthy and vigorous and give promise of satisfactory returns. Roots and fodder crops are also growing well.

In the coast climate, where large quantities of fruit are now produced, the crop of plums is very heavy. The season has been generally favorable. The apple and pear trees blossomed very freely, but the fruit has not set very well, and the crops of these fruits will probably be below the average. Small fruits are producing abundantly.

Ottawa, July 21st, 1898.

Oxford County, Ont.

We were favored with most delightful haying weather, and we got the crop saved in really first-class condition. I never saw better; 41 loads from less than 12 acres. We trust that some of the dealers and exporters will look out for a foreign market for our surplus hay, for in our neighborhood it is of gilt-edge quality and would do us credit any where. Fall wheat and barley are now in barns and stacks, and the threshing machines are commencing their work at \$10 a day. Wheat and barley are both generally good. Some expect their fall wheat to yield 30 bushels to the acre. We had two or three local showers which helped the roots and pasture very much. Roots are generally doing well; heard of one farmer who had mangolds four inches in diameter at the middle of the present month. Corn generally is good, but is tasseling out earlier than usual. Potatoes have a splendid appearance, and we have been using the new crop for ten days and they are fine in quality. Cows are milking fairly well, but cheese does not rise as we were expecting, 7 1/2c. to 7 3/4c. being the price. Lambs have been doing well and are selling at 4c. I saw a Shropshire cross-bred lamb that weighed 36 lbs., that was dropped about the first of May. Some of the grass-fed steers are going off at from 4c. to 4 1/2c., but the dealers here generally like to buy by the lamp. Farmers are commencing to plow sod for fall wheat when they have a spare day with the team. The farmers are very busy and day-wage men are trying to get from \$1.25 to \$1.50, which is higher than has been paid for some years. Berries have been very plentiful and are cheap, selling at 4c. to 5c. per lb. Live hogs are bringing 5c. per lb., but there will not be many ready until after the stubble fields are cleaned up.

D. L. July 22, 1898.

Canadian Products in Britain.

The London Canadian Gazette says: Canadian food products are being brought more and more conspicuously to the notice of the English consumer, in essentially the right way, i. e., as Canadian produce, which by virtue of its excellence is entitled to top price in the market. Thus at the Army and Navy stores Canadian bacon, cheese and ham are

on view, labelled as such, cheek by jowl with similar "American" produce, and commanding prices one penny per pound higher than the latter. What better object lesson could be devised? Similarly significant testimony is, however, to be found in the leading trade journals. One large firm, of admitted position, advertising in the Grocer, refers to the great hold which Canadian bacon now has with the trade throughout the country, and predicts that the day is not far distant when the Dominion "will enable us to entirely ignore the foreigner."

Refrigerator Car Service for Butter and Cheese.

To the Editor FARMER'S ADVOCATE. SIR.—The hot weather which at present prevails puts the refrigerator car service to a severe test and makes it imperative that the shippers as well as the transportation companies should take extra precautions to ensure against any possibility of the butter becoming heated at the creamery, on the way to the station, or at the station before it is loaded into the car. Information which comes to hand goes to show that some of the creamery men are not as careful as they ought to be in handling the butter from their own refrigerators to the cars. Cars have arrived in Montreal lately with the butter from some creameries in good conditions, while that from others was very soft, indicating clearly that the butter must have been put into the car in that condition. If the butter is allowed to get warm and soft on the way to the station, or at the station, no refrigerator car is cold enough to harden it much, if at all, before it reaches Montreal. If the car keeps the butter in good condition after receiving it in good condition it serves its purpose admirably. Those who have to deal with the matter should see to it that the butter is taken as direct from the creamery cold storage to the car as it is possible to arrange, for every hour that the butter is exposed to the heat means so much deterioration which can never be corrected. It might be well to point out in this connection that if butter is once allowed to become soft through heat it will take a much lower temperature to harden it again than that at which it was formerly held. To illustrate: The average melting point of butter is about 91 to 92 degrees Fahrenheit, but once it is melted the temperature must be reduced to about 74 degrees to solidify it again.

J. B. W. ROBERTSON, Comm'r of Agr. and Dairying.

Ottawa, July 26th.

EDITORIAL NOTE.—To some extent we believe the above remarks will apply to cheese, which is generally drawn from the factories to point of shipment unprotected either from storm or sun, though in some cases cases oilcloth or canvas has been used. What have our dairymen found useful for this purpose? An exporter complained to us last week that when he looked into the car where his cheese had been placed the oil was running in streams from the boxes as a result of heat coming to the station. Curing-room ventilation and temperature in summer is another subject needing more attention than it has yet received.

Harvesting at the Ottawa Experimental Farm.

At the Central Experimental Farm the hay has all been saved well; 683 acres have given 1284 tons, an average of nearly two tons per acre. The heaviest yield was obtained from a field of 17 acres of first crop, which gave 53 tons, being an average of more than 3 tons per acre.

Kent County, Ont.

We had ideal haying weather, and now wheat is nearly harvested, with very little rain. Threshing has commenced and the yield is from 25 to 35 bushels per acre. The sample is splendid, some of it testing as high as 64 pounds per bushel. Highest price paid so far is 72 cents, but the present price is 70 cents. The general opinion is that the price will slump, consequently nearly everyone is selling as fast as it can be threshed. Oats are turning, and although a very heavy crop, are standing up well. Corn looks splendid, but unless rain comes soon beans will be very light. Pastures are simply drying up, and this, in addition to the abominable horn fly, is almost driving the milk cow out of business. It is only with the aid of supplementary foods that she can be kept milking at all. Prices for cows are simply "out of sight," \$35 seems the rock-bottom figure for any kind of a scrub. Prices are higher here than on Toronto market. There is a spec. in it for someone who will ship in a carload of good milkers. Beef seems scarce, and good prices are realized for butcher stuff. Early potatoes sold for \$1 per bushel for some time, but now retail at 90 cents per bag. Small fruits are abundant and prices low. Butter and eggs are both advancing in price. Since last writing a gentleman, experienced in dairy matters, has taken the creamery problem in hand, and has already procured 325 of the 500 cows required to start, and if nothing happens it will be running by September.

W. A. MCG. July 21, 1898.

Toronto Markets.

A better enquiry for export cattle, but the fat cattle were not of as good quality as those of last week. Prices were a shade easier. Good export cattle sold at \$4.50 to \$4.75 per cwt. The bulk of the shippers sold at \$4.40 to \$4.50 per cwt. W. H. Dean bought five carloads of exporters at \$4.65. Mr. E. Gould bought four carloads, average 1,280 lbs. each, at \$4.00 per cwt. Messrs. Dunn Bros. bought six carloads, 1,270 lbs. average, at \$4.90 per cwt.; two carloads, 1,330 lbs. average, at \$4.95 per cwt.

Butchers' Cattle.—Supplies of butchers' cattle have been rather easy for two weeks past, choices picked lots selling at \$4.20 to \$4.45 per cwt. Loads of good cattle sold at \$4.20. Very inferior rough cows and bulls sold down to \$2.75 per cwt. Mr. Wm. Levack bought 145 cattle, mixed butchers and exporters, at from \$3.85 to \$4.50 per cwt. Mr. Alex. Levack bought 30 butchers' cattle, 1,080 lbs. average, at \$4 per cwt.

Bulls.—The export trade in bulls is light; a few sold at \$3.50 to \$3.60 per cwt. Light export bulls sold at \$3 to \$3.50, and heavy at \$3.80 to \$4.12 per cwt.

Stockers.—The demand for Buffalo slack, prices low, selling at \$3 to \$3.70 per cwt., the bulk selling at \$3.25 to \$3.50 per cwt.; some picked lots fetched \$3.65 per cwt. Two carloads sent forward.

Feeders.—Heavy feeders were not in demand. The prices quoted were \$3.75 to \$3.90 per cwt.

Culves sold at \$3 to \$6 per head; a few choice heavy-weight veals at \$7 to \$8 each.

Sheep were more plentiful, in fact exceeded the demand, many remaining unsold at the close of the market, consequently prices lower, ewes selling at \$3 to \$3.10 and bucks at \$4.50 to \$2.75 per cwt.

Lambs.—Spring lambs at \$3 to \$3.60 each or \$5 per cwt. Mr. Wm. Levack bought 120 spring lambs at \$5 per cwt., 30 yearlings at \$3.25.

Milk Cows.—About 20 milk cows on offer, fairly good quality, selling at from \$30 to \$44 each; supply not equal to the general demand.

Hogs.—Hog deliveries are light; prices continue to advance; \$5.55 per cwt. for choice selections of cleaners off ear, unled or watered; these must not exceed 150 lbs. weight. Light fat \$5.25 to \$5.75; heavy fat \$4.90 to \$5. Essex and Kent corn-fed hogs are called at \$5 to \$5.25 per cwt. The prospects are good for a further rise. Choice may go to \$6 next week.

Dressed Hogs.—Unchanged and steady, selling at \$6.75 to \$7 per cwt.

Hay.—Twenty-five loads of new hay caused the market to slump down to \$5 per ton.

Straw scarce and selling at \$3 per ton.

Butter.—Market inclined to be easy; supply liberal. Dairy tubs at 10c. to 11c. per lb.; choice dairy pound prints at 12c.; creamery pounds 17c. to 18c.

Cheese.—Very quiet in Toronto. Dealers quote new stock scarce at about 7 1/2c. to 8c. per lb., and old choice at 9c. to 10c. per lb.

Hides.—Prices very steady. No. 1 steers 9c., green. No. 2 green at 8c. per lb. Hides, cured, 9c. per lb. Sheepskins at \$1.10 to \$1.25 each. Calfskins at 10c. per lb.

Wheat.—New Ontario wheat is held at 70c. per bushel. No. 1 hard Manitoba 85c. per bushel.

Oats are quoted at 30c. per bushel; 300 bushels sold on Saturday at 30c.

Brass sells at \$9 and shorts at \$14 per ton. Toronto, July 25th, 1898.

Chatty Stock Letter from Chicago.

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

Table with columns for CATTLE, HOGS, SHEEP, and LAMBS, listing prices for various grades and weights.

The live stock situation is fairly satisfactory and there is a very hopeful feeling among breeders, feeders and traders.

A report from Galveston, Tex., says:—The initial shipment of 200 Kansas, Texas and Missouri steers made by way of Galveston to Cardiff, Eng., a distance of 4,500 miles, has just arrived at its point of destination in such excellent order that the citizens of Cardiff, as well as those interested in the shipment, are considerably elated that a trade in live cattle has at last begun between the United States and that city. The project has been under consideration for some years, the desired point of embarkation always having been carefully watched by the officials of the Department of Agriculture at Washington, and the bureau even dispatched an inspector to Cardiff to investigate thoroughly the facilities there for the exportation of live cattle from this country.

Cattle feeders are generally feeling quite hopeful of the near future, and are disposed to hold for stronger prices. Files are forcing in some shipments. There are some big feeders who make it a point to have no feeding operations on hand in fly time. Reports from many sections say cattle are not doing any good on account of the annoyance of flies.

Mike Kellert, Mount Leonard, Mo., sold 35 head of 1075-lb. fed Texas cattle at \$6.

W. L. Hawkins, of Midlothian, Texas, marketed 17 head of 1425-lb. cattle of unusual good quality at \$5 and 35 head, 1297 lbs., at \$4.90.

Such figures demonstrate the fact that Texas when she wants to can make as good cattle as can be made anywhere.

The 100,192 hogs received here last week averaged 233 lbs. against 228 lbs. the previous week, 225 lbs. a month ago, 240 lbs. a year ago and 245 lbs. two years ago.

There is considerable hog cholera reported from different parts of the west. July hog receipts about 625,000, the largest July receipts ever recorded at the Chicago Stock Yards. The 625,000 does not include about 50,000 received during the month by a packing concern billed direct to their packing houses.

Henry James, from the neighborhood of Folsom, N. M., states that there will be 60,000 fewer lambs in New Mexico this year than last. The shortage in lambs was due, he thought, to the drought that prevailed over a large area in Western New Mexico, where are located some of the most extensive sheep ranges in the territory. The lambs reared in the Rioos country, however, will this year greatly exceed in number those of last year. Neither have the Fences Valley people deteriorated their flocks by selling out their stock animals, as many have done further west. The Rowell country has also kept up its immense sheep interests and has been greatly benefited by being able to market a fine wool crop this year at good prices.

A western man says: "If the present price of lambs for feeding does not go down within the next few weeks comparatively few lambs will be fed in Colorado this winter. At present the prices are too high to warrant farmers and feeders in making purchases. Last year at this time the feeders sold in the Southwest at from \$1.90 to \$2.25 a head, freight paid as far as the Missouri River. Such lambs are now selling at \$2.50, with no freight paid."

A shepherd said: "Prices have held up remarkably well at Chicago, being considerably higher than at other markets. There is danger of a severe drop, especially in lambs, for the Western ranges are overstocked with them. The proportion of lambs that will come to market during the next few months will be much larger than usual."

Live Stock Exports.

The live stock reports for the two weeks ending Wednesday, July 20th, as prepared by R. Blockdike, of the Live Stock Exchange, Montreal, show that 4,747 cattle and 3,245 sheep have been exported to London, Liverpool, Bristol, Glasgow, Newcastle and Manchester.

The practical sheepman who gives proper care and attention to the details of the business will find as much money in sheep as in any other live stock, and that with the expenditure of less labor and capital than is required in any other line.



THE RED-HEADED LEAGUE.

Startling Detective Story with Thrilling Incidents.
BY A. CONAN DOYLE.

I had called upon my friend Mr. Sherlock Holmes one day in autumn of last year, and found him deep in conversation with a very stout, florid-faced, elderly gentleman with fiery red hair. With an apology for my intrusion, I was about to withdraw, when Holmes pulled me abruptly into the room and closed the door behind me.

"You could not possibly have come at a better time, my dear Watson," he said, cordially. "This gentleman, Mr. Wilson, has been my partner and helper in many of my most successful cases, and I have no doubt that he will be of the utmost use to me in yours also."

The stout gentleman half rose from his chair and gave a bob of greeting, with a quick little questioning glance from his small, fat-encircled eyes.

"Try the case," said Holmes, relapsing into his armchair and putting his finger-tips together as was his custom when in judicial moods. "I know, my dear Watson, that you share my love of all that is bizarre and outside the conventions and humdrum routine of everyday life. Now, Mr. Jabez Wilson here has been good enough to call upon me this morning, and to begin a narrative which promises to be one of the most singular which I have listened to for some time."

"Perhaps, Mr. Wilson, you would have the great kindness to recommence your narration. I ask you not merely because my friend Dr. Watson has not heard the opening part, but also because the peculiar nature of the story makes me anxious to have every possible detail from your lips."

The portly client puffed out his chest with an appearance of some little pride, and pulled a dirty and wrinkled newspaper from the inside pocket of his great coat. As he glanced down the advertisement column, with his head thrust forward and the paper flattened upon his knee, I took a good look at the man, and endeavored, after the fashion of my companion, to read the indications which might be presented by his dress or appearance.

I did not gain very much, however, by my inspection. One visitor bore every mark of being an average, commonplace British tradesman—obese, pompous and slow. He wore rather baggy gray shepherd's-plaid trousers; a not over clean black frock-coat, unbuttoned in the front, and a drab waistcoat, with a heavy, brass Albert chain and a square bit of metal dangling down as an ornament. A frayed top-hat and a faded brown overcoat, with wrinkled velvet collar, lay upon a chair beside him. Altogether, look as I would, there was nothing remarkable about the man, saving his blazing red head and the expression of extreme chagrin and discontent upon his features.

"Can you find the advertisement, Mr. Wilson?" asked Holmes.

"Yes, I have got it now," he answered, with his thick, red finger planted half-way down the column. "Here it is. This is what began it all."

"You just read it for yourself, sir."

I took the paper from him and read as follows:
TO THE RED-HEADED LEAGUE: On account of bequest of the late Heskiah Hopkins, of Lebanon, Penn., U. S. A., there is now another vacancy open which entitles a member of the League to a salary of four pounds a week for purely nominal services. All red-headed men who are sound in body and in mind, and above the average of twenty-one years, are eligible. Apply in person on Monday, at eleven o'clock, to Duncan Ross, at the League, 7 Pope's Court, Fleet Street.

"What on earth does this mean?" I ejaculated, after I had twice read over the extraordinary announcement.

Holmes chuckled and wriggled in his chair as was his habit when in high spirits. "It is a little off the beat-track, isn't it?" said he. "And now, Mr. Wilson, off you go at scratch, and tell us all about yourself, your household and the effect which this advertisement had upon your fortunes. You will first make a note, doctor, of the paper and date."

"It is the *Morning Chronicle* of April 27, 1890—just two months ago."

"Very good. Now, Mr. Wilson."

"Well, it is just as I have been telling you, Mr. Sherlock Holmes," said Jabez Wilson, mopping his forehead. "I have a small pawn-broker's business at Coburg Square, near the city. It is not a very large affair, and of late years it has not done more than just give me a living. I used to be able to keep two assistants, but now I only keep one; and I would have a job to pay him but that he is willing to come for half wages, so as to learn the business."

"What is the name of this obliging youth?" asked Mr. Sherlock Holmes.

"His name is Vincent Spaulding, and he is not such a youth either. It is hard to say his age. I should not wish a smarter assistant, Mr. Holmes, and I know very well he could better himself, and earn twice what I am able to give him. But after all if he is satisfied, why should I put ideas into his head? He has his faults, too. Never was such a fellow for photography. Snapping away with a camera when he ought to be improving his mind, and then diving down into the cellar like a rabbit into his hole to develop his pictures."

"He lives with you, I presume?"

"Yes, sir. He and a girl of fourteen, who does a bit of simple cooking and keeps the place clean—that's all I have in the house, for I am a widower, and never had a family. We live very quietly, sir, the three of us; and we keep a roof over our heads and pay our debts, if we do nothing more."

"The first thing that put us out was that advertisement. Spaulding, he came down into the office just this day eight weeks with this very paper in his hand, and he says:

"I wish to the Lord, Mr. Wilson, that I was a red-headed man."

"Why that?" I asked.

"Why," says he, "here's another vacancy on the League of the Red-Headed Men. It's worth quite a little fortune to any man who gets it. If my hair would only change color, here's a nice little crib all ready for me to step into."

"Why, what is that, then?" I asked. You see, Mr. Holmes, I am a very stay-at-home man; and as my business comes to me instead of my having to go to it, I was often weeks on end without putting my foot over the door-mat. In that way I didn't know much of what was going on outside, and I was always glad of a bit of news.

"Have you ever heard of the League of Red-Headed Men?" he asked, with his eyes open. "Why, I wonder at that, for you are eligible yourself for one of the vacancies."

"And what are they worth?" I asked.

"Oh, merely a couple of hundred a year; but the work is slight, and it need not interfere very much with one's other occupations."

"Well, you can easily think that that made me prick up my ears."

"Well, tell me all about it!" I said.

"Well, sir, he, showing me the advertisement, 'you can see for yourself that the League has a vacancy, and there is the address where you should apply for particulars. As far as I can make out, the League was founded by an American millionaire, Heskiah Hopkins, who was very peculiar in his ways. He was himself red-headed, and he had a great sympathy for all red-headed men; so when he died it was found he had left his enormous fortune in the hands of trustees, with instructions to apply the interest to the providing of easy berths to men whose hair is of that color. From all I hear it is splendid pay and very little to do."

"But, said I, 'there would be millions of red-headed men who would apply.'

"Not so many as you might think," he answered. 'You see, it is really confined to Londoners and to grown men. This American had started from London when he was young, and he wanted to do the town a good turn. Then, again, I have heard it is of no use your applying if your hair is light red, or dark red, or anything but real bright, blazing, fiery red.'

"Now, it is a fact, gentlemen, as you may see for yourselves, that my hair is of a very full and rich tint; so it seemed to me that if there was to be any competition in the matter I stood as good a chance as any man that I had ever met. Vincent Spaulding seemed to know so much about it that I thought he might prove useful, so I just ordered him to put up the shutters for the day, and to come right away with me. He was very willing to have a holiday, so we shut the business up and started off for the address that was given us in the advertisement."

"I never hope to see such a sight as that again, Mr. Holmes. From north, south, east and west, every man who had a shade of red in his hair had tramped into the city to answer the advertisement. Fleet Street was choked with red-headed men, and Pope's Court looked like a coterie of orange barrow. When I saw how many were waiting I could have given up in despair, but Spaulding would not hear of it. How he did it I could not imagine, but he pushed and pulled and butted until he got me through the crowd, and right up to the steps which lead to the office. There was a double stream upon the stairs, some going up in hope and some coming back dejected; but we wedged in as well as we could, and soon found ourselves in the office."

"Your experience has been a most entertaining one," remarked Holmes, as his client paused and refreshed his memory with a huge pinch of snuff. "Pray continue your very interesting statement."

"There was nothing in the office but a couple of wooden chairs and a deal table, behind which sat a small man with a head that was even redder than mine. He said a few words to each candidate as he came up, and then he always managed to find some fault in them which would disqualify them. However, when our turn came, the little man was more favorable to me than to any of the others, and closed the door as we entered, so that he might have a private word with us."

"This is Mr. Jabez Wilson," said my assistant, "and he is willing to fill a vacancy in the League," the other answered. "He has every requirement. I cannot recall when I have seen anything so fine. He took a step backward, cocked his head on side and gazed at my hair until I felt quite bashful. Then suddenly he plunged forward, wrung my hand, and congratulated me warmly on my success."

"It would be injustice to hesitate," said he. "You will, however, I am sure, excuse me for taking an obvious precaution." With that, he seized my hair in both hands, and tugged until I yelled with the pain. "There is water in your eyes," said he, as he released me. "I perceive all is as it should be. But we have to be careful, for we have twice been deceived by wigs and once by paint. I could tell you tales of cobblers' wax which would disgust you with human nature. He stepped over to the window and shouted through it at the top of his voice that the vacancy was filled. A groan of disappointment came up from below, and the folk all trooped away in different directions, until there was not a red head to be seen except my own and that of the manager."

"My name," said he, "is Mr. Duncan Ross, and I am myself one of the pensioners upon the fund left by our noble benefactor. When shall you be able to enter upon your new duties?"

"Well, it is a little awkward, for I have a business already," said I.

"Oh, never mind about that, Mr. Wilson," said Vincent Spaulding. "I shall be able to look after that for you."

"Why, what are the hours?" I asked.

"Ten to two."

"Now, a pawnbroker's business is mostly done of an evening, Mr. Holmes, especially Thursday and Friday evenings, which is just before pay day, so it would suit me very well to earn a little in the mornings. Besides, I knew that my assistant was a good man, and that he would see to anything that turned up."

"That would suit me very well," said I. "And the pay?"

"Four pounds a week."

"And the work?"

"Well, you have to be in the office, or at least in the building, the whole time. If you leave you forfeit your position, forever. The will is very clear upon that point. You don't comply with the conditions if you budge from the office during that time."

"It's only four hours a day, and I should not think of leaving," said I, "excuse me, will you?"

"Mr. Duncan Ross—neither sickness nor business, nor anything else. There you must stay or you lose your billet."

"And the work?"

"Is to copy out the 'Encyclopaedia Britannica.' There is the first volume of it in that press. You must find your own ink, pen, and blotting paper, but we provide this table and chair. Will you be ready to-morrow?"

"Certainly," I answered.

"Then good-bye, Mr. Jabez Wilson, and let me congratulate you once more on the important position you have been fortunate enough to gain." He bowed me out of the room and I went home with my assistant, hardly knowing what to say or do, I was so pleased at my own fortune.

"Well, I thought the matter over all day, and by evening I was in low spirits again, for I had measured myself against the affair, and must be some great hoax or fraud, though I did what he could to cheer me up, but by bed-time I had reasoned myself out of the whole thing. However, in the morning I determined to have a look at it anyway; so I bought a penny bottle of ink, and with a quill pen and seven sheets of foolscap paper I started off for Pope's Court."

"Well, to my surprise and delight, everything was as right as possible. The table was set out ready for me and Mr. Duncan Ross was there to see that I got fairly to work. He started me off upon the letter A, and then he left me, but he would drop in from time to time to see that all was right with me. At two o'clock he bade me good day, complimented me upon the amount I had written, and locked the door of the office after me."

"This went on day after day, Mr. Holmes, and on Saturday the manager came in and planked down four golden sovereigns for my week's work. It was the same the next week, and the same the week after. Every morning I was there at ten, and every afternoon I left at two. By degrees Mr. Ross took to coming in only once of a morning, and then, after a time he did not come at all. Still, of course, I never dared to leave the room for an instant for I was not sure when he might come; and the billet was a good one, and suited me so well, that I would not risk the loss of it."

"Eight weeks passed away like this, and I had written about Abbots, and Archery, and Armour, and Architecture, and Attics, and hoped with diligence that I might get on to the B's before long. It cost me something in foolscap, and I had pretty nearly filled a shelf with my writings, and then suddenly the whole business came to an end."

"To an end?"

"Yes, sir; and no later than this morning. I went to my work as usual at ten o'clock, but the door was shut and locked, with a little square of cardboard hammered on to the middle of the panel with a tack. Here it is, and you can read it for yourself."

He held up a piece of cardboard about the size of a sheet of note-paper; it read in this fashion:

"THE RED-HEADED LEAGUE
IS
DISSOLVED
Oct. 9, 1890."

Sherlock Holmes and I surveyed this curt announcement and the rueful face behind it, until the comical side of the affair completely overtopped every other consideration that we both burst out into a roar of laughter.

"Pray what steps did you take when you found the card upon the door?" at last inquired Holmes.

"I was staggered. I did not know what to do. Then I called at the offices around, but none of them seemed to know anything about it. Finally I went to the landlord, who is an accountant living on the ground floor, and I asked him if he could tell me what had become of the Red-Headed League. He said that he had never heard of any such body. Then I asked him who Mr. Duncan Ross was. He answered that the name was new to him."

"Well," said I, "the gentleman at No. 4?"

"Oh," said he, "the red-headed man? His name was William Morris. He was a solicitor, and was using my room as a temporary convenience until his new premises were ready. He moved out yesterday to his new offices, No. 17 King Edward St., near St. Paul's."

"I started off, Mr. Holmes; but when I got to that address it was a manufactory of artificial knee-pads, and no one in it had ever heard of either Mr. William Morris or Duncan Ross, so I went home to Saxe-Coburg Square to seek the advice of my assistant. He could only say that if I waited I should hear by post. But that was not quite good enough, Mr. Holmes. I did not wish to lose such a place without a struggle, so, as I heard that you were good enough to give advice to poor folk who needed it, I came right away to you."

"And you did very wisely," said Holmes. "Your case is an exceedingly remarkable one, and I shall be happy to look into it. From what you have told me I think it is possible that graver issues hang from it than might at first sight appear."

"Grave enough," said Mr. Jabez Wilson. "Why, I have lost four pound a week."

"As far as you are personally concerned," remarked Holmes, "I do not see that you have any grievance against this extraordinary league. On the contrary, you are, as I understand, richer by some thirty pounds, to say nothing of the minute knowledge which you have gained on the subject, which comes under letter A. You have lost nothing by them."

"No, sir. But I want to find out about them, and who they are, and what their object was in playing this prank—if it was a prank—upon me. It was a pretty expensive joke for them, for it cost them two and thirty pounds."

"We will endeavor to clear up these points for you. And first, one or two questions, Mr. Wilson. This assistant of yours who first called your attention to the advertisement—how long had he been with you?"

"About a month then."

"What is he like, this Vincent Spaulding?"

"Small, stout built, very quick in his ways, no hair on his face, though he's not short of thirty. Has a white splash of acid upon his forehead."

Holmes sat up in his chair in considerable excitement.

"I thought as much," said he. "Have you ever observed that his ears are pierced for earrings?"

"Yes, sir. He told me that a gipsy had done it for him when he was a lad."

"Hum!" said Holmes, sinking back in deep thought.

"That will do, Mr. Wilson. I shall be happy to give you an opinion upon the subject in the course of a day or two. To-day is Saturday, and I hope that by Monday we may come to a conclusion."

"Well, Watson," said Holmes, when our visitor had left us, "what do you make of it all?"

"I make nothing of it," I answered frankly. "It is a most mysterious business."

"As a rule," said Holmes, "the more bizarre a thing is the less mysterious it proves to be. It is your commonplace, featureless crimes which are really puzzling, just as a commonplace face is the most difficult to identify. But I must be prompt over this matter."

"What are you going to do, then?" I asked.

"To smoke," he answered. "It is quite a three-pipe problem, and I beg that you won't speak to me for fifty minutes."

He curled himself up in his chair, with his thin knees drawn up to his hawk-like nose, and there he sat with his eyes closed and his black clay pipe thrust out like the bill of some strange bird. I had come to the conclusion that he had dropped asleep, and, indeed, was nodding myself, when he suddenly sprang out of his chair with the gesture of a man who had made up his mind, and put his pipe down upon the mantelpiece.

"Sarasate plays at the St. James Hall this afternoon," he remarked. "What do you think, Watson? Could your patients spare you for a few hours?"

"I have nothing to do to-day. My practice is never very absorbing."

"Then put on your hat and come. I am going through the city first, and we can have some lunch on the way."

We traveled by the underground as far as Aldersgate, and a short walk took us to Saxe-Coburg Square, the scene of the singular story which we had listened to in the morning. It was a poky little shabby-gentleman place, where four lines of dingy two-storied brick houses looked out into a small railed-in enclosure, where a lawn of weedy grass and a few clumps of faded laurel bushes made a hard fight against a smoke-laden and ungenial atmosphere. Three gilt balls and a brown board with "Jabez Wilson in white letters upon a corner house announced the place—here our red-headed client carried on his business. Sherlock Holmes stopped in front of it with his head on one side and looked it all over. Then he walked slowly up the street and then down again to the corner, still looking keenly at the houses. Finally he returned to the pawnbroker's, and having thumped vigorously upon the pavement with his stick two or three times, he went up to the door and knocked. It was instantaneously opened by a bright-looking, clean-shaven young fellow, who asked him to step in.

"Thank you," said Holmes. "I only wished to ask you how you would go from here to the Strand."

"Third right, fourth left," answered the assistant promptly, closing the door.

"Smart fellow, that," observed Holmes, as he walked away. "He is, in my judgment, the fourth smartest man in London, and for daring I am not sure that he has not a claim to be third. I have known something of him before."

"Evidently," said I, "Mr. Wilson's assistant counts for a good deal in this mystery of the Red-Headed League. I am sure that you inquired your way merely in order that you might see him."

"Not him."

"What then?"

"The knees of his trousers. Now we know something of Saxe-Coburg Square. Let us explore the parts which lie behind it."

The road in which we found ourselves as we turned around the corner from Saxe-Coburg Square presented as great a contrast to it as the front of a picture does to the back. It was one of the main arteries which convey the traffic of the city to the north and west. The roadway was blocked with the immense stream of commerce in a double tide inwards and outwards, while the footpaths were black with the hurrying swarm of pedestrians. It was difficult to realize as we looked at the fine shops and stately business premises that they really abutted on the other side upon the faded and stagnant square which we had just quitted.

"Let me see," said Holmes, standing at the corner and gazing along the line. "I should like to remember the order of the houses here. It is a hobby of mine to have an exact knowledge of London. There is Mortimer's, the tobacconist, the little newspaper shop, the Coburg branch of

and stir in with 1 teacup of brown sugar, 1 teaspoon Cayenne pepper and 1 teaspoon salt. Have a cup of boiling vinegar on the stove in a double saucepan and stir in the above mixture until it just thickens. Add 2 tablespoonfuls butter. When removed from the stove stir in 1 cup of sour cream.

STEWED CABBAGE.

Out a head of cabbage in halves; soak in cold water one hour, then drain and shake dry; remove the stalk or hard part and chop the remainder very fine; put it in a stewing pan with boiling water enough to cover, and boil twenty minutes; drain in a colander; turn into a heated dish, and pour over it cream sauce.



The Wandering Cow.

"The cow has escaped from the Ark!" cried Noah—"the cow has escaped from the ark! And wandered away and hid from the day somewhere in the nursery dark; So, Billie, be careful, and Jimmie, go slow; 'twould be horridly awful, I vow, If you in your gropings should happen to step on a poor little dun-brown cow.

"Now where shall we look for a little dun cow—just where is she likely to be? Far off in the camp of the soldiers tin or swimming hard by in the sea— A swimming with joy in the saw-dust waves and tossing the boats on her horns. Or solemnly chewing the lacquered manes of the Japanese unicorns.

"Or else do you think she has clambered up the sides of the mantel piece, And there to the tick of the nickel clock, is taking a moment of ease? Or, horrible thought, oh, terrible thought! must we fearfully search for her In the zinc flue-pipe that leads far down through the nursery register?

"Do you think that perhaps she has wandered off and has tumbled down the stairs, Or can she be up on the bureau there a-combing her painted hairs? Is she down in the kitchen or up on the roof, or hid in the attic cold, Or has she run off to the music box to list to the 'Warrior Bold'?

"Oh where, oh where, would a dun cow go? Pray tell me if you can," cried Noah, "The rain's coming on, and I want to close up and bolt fast my Arkanian door. 'Twould never do to be caught in the rain, out there on the cold, wet moor, For her color's not fast, and if it comes off she'll be a done cow for sure."

The Place to Put Riches.

"You'll help, Rufus, of course, won't you? All the boys intend to lend a hand, which in this case means giving money."

"I would if I could afford it, but indeed I've got to keep all I can earn and all I can get this summer. There's something special I want to do."

The boys in Mr. Carson's class were collecting a little sum to buy some comforts for a sick comrade. Mr. Carson heard the talk between Rufus and Ralph, and it troubled him. He had heard from others that Rufus was bent upon being a rich man, and had even now begun to hoard his earnings, hoping to have a certain sum in the bank by a given time. He was getting an anxious look on his face, and showed in various small ways that he was carrying some sort of a weight.

Hoping to help Rufus without speaking to him directly, Mr. Carson gave out this subject for the next monthly meeting of the class club, which was an institution much prized, with its informal discussions:

"The place for money—what position should it hold? How important is it, and what should we do with it?"

There was an animated discussion, you may be sure, and a helpful one too, but you shall not be treated to the full minutes of the meeting. As his contribution to the discussion, Mr. Carson read from an old, old book, words written by one Thomas Taylor, in the seventeenth century:

"When a man takes a heavy trunkful of plate, or money, it makes him stoop, but if the same weight be put under his feet, it will lift him from the ground. In like manner, if we put our wealth above us, it will press us down; but, under our feet, it will lift us toward heaven."

"How this voice," continued Mr. Carson, "rings out from the long ago! Let us take heed, boys, that we keep riches in the right place. They are to rise by, not to stagger under. Make stepping-stones of them, not weights."

The Girl Who Hadn't Time.

I know a little lassie—yes, I know her very well, Her name, you ask? I don't believe she'd like to have me tell; But I suppose I'll have to call her something in my rhyme, And so I'll name her (just *pro tem*.) "The girl who hadn't time."

This morning at the breakfast table I was much afraid Her hair had not been combed at all—'twas such a "tousled" braid! She "hadn't time to comb it"! Ha! All very well, mayhap! But I wonder where she got the time to take the second nap!

And then she "hadn't time enough" to get to school in season; And so she missed her lesson, and her teacher asked the reason. Why, she "hadn't time" to learn it! Now I think it queer—don't you!—Where she found the time to read that book of fairy tales quite through.

Oh, she's always very busy when the table should be set (If we waited her convenience, why, we might be waiting yet!) And both her brothers know quite well that she could never stop For a fraction of a jiffy, just to help them mend their top.

Ah, me! The fact, I fear, that each unblinded mind must strike Is, the things she hasn't time for are the things she doesn't like!

Ants' Cows.

Do you know that ants have cows, from which they draw milk? You can see the cows if you look for them. Sometimes you will see the ants running up and down a small bush. You may wonder what they can be doing. Look closely at the bush and you will see a number of green bugs on the leaves. These are the plant-lice, or the ants' cows. The ants run about among the bugs, touching them with their feelers, and seeming very happy indeed. They are milking their cows when they do this. Ants keep other insects besides the plant-lice, which they feed and are kind to, and their prisoners seem contented. Sometimes they keep a large, blind beetle, which is never allowed to leave their cell. They bring it such food as it needs, and kindly put the same into its mouth. The beetle, in return for such careful attention, throws out from its body a fluid which the ants are fond of, and which they lick up greedily.

THE QUIET HOUR.

A Silence and a Song.

"I am alone, dear Master— Alone in heart with Thee! Though merry faces round me And loving looks I see, There's a hush among the blithe ones, While a pleasant voice is heard, A truce to all the tournament Of flashing wit and word, And in that truce of silence, I lay aside my lance, And through the light and music send One happy upward glance. I know not what the song may be, The words I cannot hear; 'Tis but a gentle melody, All simple, soft and clear. But the sweetness and the quiet Have set my spirit free, And I turn in loving gladness, Dear Master, now to thee. I know I love Thee better Than any earthly joy, For thou hast given me the peace Which nothing can destroy. I know that Thou art nearer still Than all this merry throng, And sweeter is the thought of Thee Than any lovely song. Thou hast put gladness in my heart, Then hast put gladness in my heart, Then will I be glad! Without the secret of Thy love, I could not but be sad. I bless Thee for these pleasant hours With sunny-hearted friends, But more for this sweet moment's calm, Thy loving-kindness sends. O Master, gracious Master, What will Thy presence be, If such a thrill of joy can crown One upward look to Thee! To Thee, who hast so loved us, And whom not having seen, We love: on whom in all our joy, As in our grief, we lean."

F. R. H.

Full Satisfaction in the King.

"Yea, let him take all, forasmuch as my lord the king is come again in peace to his own house."—2 Sam. xix. 30.

It is when the King has really come in peace to His own home in the "contrite and humble spirit" (not before)—when He has entered in to take His abode there (not before)—that the soul is satisfied with Him alone, and is ready to let any Ziba take all else, because all else really seems nothing at all in comparison to the conscious possession of the Treasure of treasures.

Sometimes this is reached at once in the first flush of wondering joy at finding the King really "come in peace" to the empty soul which wanted to be "His own house." Sometimes very gradually, as year by year we realize His indwelling more and more, and find again and again that He is quite enough to satisfy us in all circumstances; that the empty corners of the "house" are filled one after another; that the old longings have somehow gone away and the old ambitions vanished; that the old tastes and interests in the things of the world are superseded by stronger tastes and interests in the things of Christ; that He is day by day more really filling our lives—we "count" (because we really find) one thing after another "but loss for the excellency of the knowledge of Christ Jesus my Lord," till He leads us on to the rapturous joy of the "yes, doubtless" and "all things!"

Now have we got as far as saying "some things" without being quite sure about "all things"? Do you see that it all hinges upon Jesus coming into the heart as "His own house,—altogether His own"? For if there are some rooms of which we do not give up the key, some little sitting-room which we would like to keep as a little mental retreat, with a view from the window which we do not quite want to give up, some lodger whom we would rather not send away just yet, some little

dark closet which we have not resolution to open and set to rights, of course the King has not full possession; it is not all and really "His own"; and the very misgiving about it proves that He has therefore not yet "come again in peace." It is no use expecting "perfect peace" while He has a secret controversy with us about any withholding of what is "His own" by purchase. Only throw open all the doors "and the King of Glory shall come in," and there will be no craving for other guests. He will "fill this house with glory," and there will be no place left for gloom.

Is it not so? Bear witness, tell it out, you with whom the King dwells in peace. Life is filled with bright interests, time is filled with happy work or peaceful waiting, the mind is filled with His beautiful words and thoughts, the heart is filled with His presence, and you "abide satisfied with Him." Yes, tell it out!

The human heart asks love; but now I know That my heart hath from Thee, All real, and full, and marvellous affection, So near, so human, yet Divine perfection Thrills gloriously the mighty glow. Thy love is enough for me!

There were strange soul-depths, restless, vast and broad, Unfathomed as the sea; An infinite craving for some infinite stilling; But now Thy perfect love is perfect filling! Lord Jesus Christ, my Lord, my God, Thou, Thou art enough for me.

F. R. HAVERGAL.

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES,—

The annual commencements are over, to the great relief of the school youth, and, I trust, also to the greater honor of many of my boys and girls. Not even the advent of jolly old St. Nicholas is more eagerly awaited than is the coming of the local paper which contains the realization of many a hope, or perchance, the confirmation of a lurking fear. Nor was your old uncle the least interested of the readers who scanned the reports of entrance, leaving, etc., examinations. "Why?" you ask. Oh, because he was interested in a certain number of boys and girls whose names he hoped to see way up in the honor list. And perhaps he was not proud to find them just where he hoped—perhaps he was not, but I doubt it!

The successful passing of an examination, difficult as they have now become, is generally attended by a certain justifiable vanity. But how many of the successful ones have given to their over-wrought teachers their proper share of the credit? How many have thanked them for the untiring zeal that has, more than anything else, placed them where they are? Just try it for once (if you have not already done so), and believe me, you will be more than repaid by the glad look of pleasure that will greet you in return. A pupil can lighten materially the arduous labor of a teacher by co-operating with and showing his appreciation of his efforts; it is only when teacher and pupils work in unison that the best results are obtained.

To many this examination is the door to higher studies, perhaps necessitating departure from home to attend high school or college, and the mingling with totally strange companions. Some years ago (not so very many, either) this was often a painful time for young pupils, for even in the best colleges the practices known as "hazing" were allowed. "Tom Brown's School-days" gives an interesting illustration of this deplorable practice. "Hazing" simply means that the older pupils forced the "fresh" ones to do all sorts of services for them, even to blacking their boots; and made them the butt of many practical jokes characterized principally by cruelty, and thus the first year of college life was generally a thing to be dreaded. Now, however, better laws prevail and no such terrors await the small boy, and the pupil who brings with him good-temper, cheerfulness and honesty, and who respects his teachers and himself, will find smooth sailing in any school or college to which he may go. If he go prepared to stand a few jokes without losing his temper, joining in the laugh at his own expense, he will soon find himself unmolested; while the surly, resentful pupil is but the more tormented.

The treatment one meets with at school, as elsewhere, is largely influenced by one's self, and he who would find himself well-used must "give his best" to others.

Give love, and love to your life will flow, A strength in your utmost need. Have faith, and a score of hearts will show Their faith in your word and deed. Give truth, and your gifts will be paid in kind, And honor will honor meet; And a smile that is sweet will surely find A smile that is just as sweet. For life is the mirror of king and slave; 'Tis just what we are and do; Then give to the world the best you have, And the best will come to you.

The following are the winners of prizes for solutions during April, May and June: 1st, \$1.50, Mr. Thos. McKim ("Toledo"), Oxmead, Ont.; 2nd, \$1.00, Mr. Richard H. Stinson ("Dick"), Harriston, Ont.; 3rd, 75c., Miss Mary M. Ross ("Madge"), Watford, Ont. Very close to them were "Margareta," Jessie Hyde, "Essex," "Brownie," Peter Hyde, and "Pansy."

Hoping to find the present competition even more closely contested, and also that a large number will take part in the "Poet's Corner" contest announced in July 1st issue,

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.—MUDDLED AUTHORS.

- 1. Mary we all make like catch a pie.
2. Play on the norio.
3. Wed, wed but you ratril.
4. Lost reach and sim of helc.
5. Jane let it fire, how orugh.
6. Nell how I deserve Moll.
7. Oh Sal pet can I trap jin.

PEARL MOTHERSILL.

2.—CROSS WORD.

In jovial, not in gay.
In June, not in May.
In card, not in whey.
In gravel, not in clay.
In black, not in gray.
In work, not in play.
In mirch, not in gloc.
In ocean, not in sea.
In bug, not in bee.
In shrub, not in tree.
The WHOLE NO one should be.

"DICK."

3.—DOUBLE DIAGONAL.

- (Words of nine letters.)
1. Ripened. 2. Contemplated. 3. Caught in a snare.
4. Perplexing. 5. Giving strength. 6. Covering with a fillet.
7. Collar bones. 8. Marked with disgrace. 9. Flowing out.
Diagonals: From left to right—A liquor made of water and honey; from right to left—To plunder.

"DICK."

4.—CONUNDRUM.

"Mala Jy x
Tho' the CC Con SI
(s the) aged } the town
(Srd.) DOOR."

The above telegram was received last week by Secretary Alger, who has not yet succeeded in deciphering it.

"THE KHAN."

5.—SQUARE.

- 1. Something we all eat.
2. A line by which we travel.
3. One of the South Sea islands.
4. A coral island.
5. What a merchant does.

"MADGE."

6.—HALF-SQUARE.

- 1. Agriculturists. 2. In a ship. 3. Path. 4. Companion.
5. Before. 6. Royal Dragons (abbr.). 7. A letter.

"OGMA."

7.—THREE DIAMONDS.

The three centrals form the name of an eminent American man of letters:

- I.
1. A consonant. 2. An elastic fluid. 3. A boy's name.
4. One who watches another's actions. 5. A consonant.

- II.
1. A letter. 2. A boy. 3. A man's name. 4. Doctor of dental surgery. 5. A vowel.

- III.
1. A vowel. 2. Total sum (abbr.). 3. Surfaces. 4. An American author. 5. Having good taste. 6. A tomato sauce. 7. A letter.

8.—CONUNDRUM.
What word will make you sick if you take away the first letter?

9.—RIDDLE.
Once there grew up in a tree,
A little house which I did see,
The outside walls were colored green,
The inside walls were white and clean,
And in this house meat was in store,
Now tell me what this queer house was,
Or never see me more. BYRON FORDE.

10.—RIDDLE.
What is that which a poor man has,
A rich man wants,
A spendthrift saves,
A miser spends. CRIEFF FERGUSON.

11.—RIDDLE.
I am a compound word of 10 letters. Divide me in the center. My first half is an area of land. My second half is a transparent substance. My whole is something much used by sailors.

12.—BIOGRAPHICAL TRANSPOSALS.

- King L. Rip; an English poet and novelist; born 1864.
Al. Harpe; the greatest of modern painters; born 1843.
Lord Balfour; an American author and traveler; born 1835.
Jemsw Lawe; a distinguished English general, 1728-1759.
Lil. Wiman-Masher; an eminent American general; born 1830.
To. Heds. Samsca; a distinguished American inventor; born 1847.
Carrie Atju Esq.; a French explorer; born 1894.

13.—DECAPITATION.

I cut off the head of a WHOLE
Because I wanted some meat.
A bird was still there
With a wise head to spare.
And yet I had nothing to eat. "OGMA."

Answers to July 1st Puzzles.

- 1.—Thunder.
2.—(1) Increase—lucase; (2) looking—loo; (3) satrap—sat; (4) sanable—sable; (5) mete—me; (6) solace—sac.
3.—Oh many a shaft at random sent,
Finds mark the archer little meant;
And many a word at random spoken,
May soothe, or wound a heart that's broken.
4.—Ada-man-thin-e; adamantine.
5.—
8 11 16
15 15 17
14 10 12
6.—Because in their youth they gambol (gambol), generally are blacklegs, and are universally fleeced.

7.— O G M A 9.— P a r i s
G R I M r e v e l
M I L E t u r i n
A M E N p e s t h
S m i t h

8.— l o o
e b b
b e y
c e r t i t u d e
o b e i s a n c e
c a u s a t i o n
a n y
a c t
f e n

10.—I remembered the gradual patience
That fell from that cloud like snow,
Flake by flake healing and hiding
The scar of our deep-plunged woe.

14.—(1) t o (2) o (3) I
s i g a l l u n a
t i b e r c l o v e I n d i a
g e m i v y a i m
r o

SOLVERS OF JULY 1ST PUZZLES.
"Dennis"; "Toledo"; Pearl Mothersill; "Fanny"; M. R. G.; Crief Ferguson; "Dick"; "Madge."

SOLVERS OF JUNE 15TH PUZZLES.
(Late or overlooked last issue)
"Browne"; "Toledo"; Mariel E. Day.

COURTESY CHAT.

"Dick."—You are doing very well, as you will see by this issue. It is always safer to come early.
"Toledo."—The puzzles never become wearisome, but I am always glad to have a chat any way. I went berry-picking on a mountain and had a fine outing—got berries, too. You're lucky this time.
M. R. G.—Please sign your name in full—not for publication. Original puzzles must be accompanied by answers to them.
"Pixie."—They were almost late last time, but in good time for this issue.
Pearl M.—Why, it's a long time since we heard from you—where did you hide yourself?
Byron F.—I am glad you mean to contribute regularly. We want our "Corner" to be full right up. Send your letter open as directed and never mind what your postman says. It will be all right at this office.
"Paul."—Do I milk cows? Well, I rather think I do; too often for pleasure. Will answer your other questions when I find a spare hour in which to write.
"Margaret."—How much do I owe you for that compliment; it is surely worth more than the proverbial quarter. By all means visit the capital and then you can come to see me quite conveniently.
"Madge."—Your answers came nearly being late, but "a miss of an inch is as good as a mile," eh?
Ask your neighbor if he reads the Farmer's Advocate. If he does not, get him to.

Clydesdales for Sale



1 three-year-old imported stallion, by Prince of Millfield, out of Connie Nairn, by Prince of Wales.
1 four-year old, by Queen's Own, out of Imp. Candour, by Macgregor.
2 imported two-year-old stallions, by Macgregor.
2 two-year-old stallions, by Prince of Quality, out of imported dams.
Have also a well-mated team of three-year-old Clyde Fillies, sired by Imp. Energy (7691), out of imp. mares.
These animals are all large size, good quality and sound. Terms reasonable.

ROBT. DAVIES, Thorncliffe Stock Farm, TORONTO.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep. The noted sire, Golden Robe = 20396 = and Nominee = 19638 =, at the head of the herd. Representatives of this herd won two silver medals and the herd prize at Industrial Fair, Toronto, 1897. Prize-winning Lincoln Sheep are also bred at Spring Grove. Stock of all ages and both sexes for sale. Apply T. E. ROBSON, Iderton, Ont.

Hawthorn Herd of Deep-Milking Shorthorns

Stock of both sexes for sale, of choicest breeding and good quality, prices right. WM. GRAINGER & SON, Londresboro, Ont.

GOSSIP.

A GOOD HACKNEY SALE. Sir Walter Gilby's name is intimately associated with the Hackney interests, and it was not to be wondered at that when representatives of his world-famed stud at Epsom, Eng. were to be sold at auction a large concourse of horsemen were drawn together. The sale occurred on July 31st, when 53 representatives were disposed of at prices running into the three figures in many instances. The highest price received was 625 guineas (\$3,125) for Lady Kensington (2925), by Danegelt, and out of Dorothy (2016).

Summary table with columns: Average, Total. Rows: 15 Brood mares, 14 Colts and fillies, 6 Four-year-olds, 7 Three-year-old fillies, 6 Two-year-old fillies, 8 Yearling fillies.

MR. J. E. BRETHOUR'S IMPORTATION. Mr. J. E. Brethour, Burford, Ont., writes us from Liverpool under date July 11th: "I will from Liverpool under date July 11th. To-day I have completed my purchases of live stock in England; they number forty sheep and thirty-eight pigs. Among the sheep I have four prize-winning Southdowns for Mr. John Jackson, Abingdon; seven Oxford Downs for Messrs. J. H. Jull & Sons, Mount Vernon, of these two are ram lambs, selected from the highly commended pen at the Royal, from the highly commended pen at the three ewe lambs which won third prize at the same show, and a pair of splendid shearing ewes. I have also a shearing Dorset ram, purchased from the celebrated flock of Hugh MacCalmont, M. P., for R. H. Harding, of Thorncliffe. The balance of the sheep are Shropshires. I am bringing out pigs for the following well-known breeders: Mr. A. Elliot, following well-known breeders at the Royal Galt, first prize Tamworth since January, 1898; in pen of three farrowed since for A. J. Hall, a prize-winning sow and boar for Mr. man, New Dundee; also Berkshire and Tam-John Bell, of Amber; also Berkshire and Tam-worth sows for D. C. Flatt, Millgrove, Ont. Mr. George Green, of Fairview, is getting a Berkshire sow in pig and a yearling boar. The balance of the pigs are Large White York-shires to add to the Oak Lodge herd, and I shires to add to the Oak Lodge herd, and I think that I am safe in saying that there was never a better lot of Yorkshires taken to Canada. I have visited the largest and best herds in England in search of what I wanted, and I have made selections from the different herds. The following prize-winners are included in my purchases: First prize boar and second prize pen of three young boars farrowed in 1898, which was won by Mr. Daybell, with six pigs all of one litter. The same breeder won second prize in the sow class with three sows that were also from this celebrated litter of nine pigs, a feal which I

suppose was never accomplished by any breeder before. I was fortunate in securing these three sows. I also purchased two of the young sows from the pen that won first prize in the same section. Three young sows of the highly commended pen are also coming to the Oak Lodge herd, together with a number of splendid sows in pig, and a few boars, all of a type which I hope will assist in keeping up the reputation of Canadian bacon.

DEATH OF THE CHAMPION STALLION "BANQUO."

The superb and justly celebrated Hackney stallion, Banquo—sired by Jubilee Chief (Imp.), out of Mona's Queen, owned by Robert Beith, M. P., Bowmanville, Ont., died on Sunday, July 22nd, from an attack of indigestion of a few hours' duration. He was valued at about \$5,000. Foaled in 1892; he has been a remarkable prize-winner. When a year old he won second prize at the New York Horse Show. The following year he won first prize as a two-year-old at the same show. At the Chicago Horse Show in 1897 he won first prize. Twice in succession he won the English Association's medal for the best Hackney stallion bred in Canada. He was also winner of other first prizes at Ottawa and Toronto. Banquo had proved himself an excellent stock horse. Along with Squire Rickell and a string of females he was being fitted for the Toronto Industrial Exhibition.

Arthur Johnston, Greenwood P. O. and Telegraph Office.



— OFFERS FOR SALE —
FORTY PURE-BRED SHORTHORN HEIFERS AND COWS,
FEW YOUNG BULLS
Berkshires
Good as we have ever had. Also a few young bulls.
Send for Catalogue and prices. "No business, no harm." is our motto. Claremont Station, C.P.R.; Pickering Station, O.T.R.

W. D. FLATT, Hamilton P.O. and Telegraph Office.



..... OFFERS FOR SALE.....
FASHIONABLY-BRED
5 YOUNG SHORTHORN BULLS 5
Also cows and heifers representing the leading popular families. Imported Golden Fame—20665—at head of herd. A few good Roadster horses. Farm six miles from Hamilton. Catalogue sent on application. Visitors met at G. T.R. or C.P.R. if notified.

OAK PARK STOCK FARM.

FOR SALE.—One three-year-old and two young SHORTHORN BULLS. Excellent pedigrees. Also, SIX YOUNG HORSES, sired by Capt. Hunter, Forest Leland and Bookkeeper. Good steppers. CAPT. D. MILLOY, Prop., PARIS, BRANT CO., ONT.

SPRINGFIELD FARM

HERD OF Shorthorns, Oxfords and Berkshires. Young Bulls & Heifers on hand. Also a few choice Berkshires. CHAS. RANKIN, Wythebridge, Ont., Simcoe Co.

SHORTHORN FEMALES

From Clarinda and Nellie females, and sired by the royally-bred Earl Warwick 2268. JAS. TOLTON, WALKERTON, ONT.

MENTION FARMER'S ADVOCATE

ESTABLISHED 1868
INCORPORATED 1887

OUR SILVER JUBILEE

25th Annual Western Fair
Besides 6 Provincial Fairs

THE WESTERN FAIR

London, Ontario, September 8th to 17th, 1898

THE OLDEST AND MOST SUCCESSFUL FAIR IN CANADA. AS A LIVE STOCK AND AGRICULTURAL EXHIBITION WE ARE SECOND TO NONE.

THIS YEAR'S IMPROVEMENTS:

Seventy-nine Box Stalls added in the Horse Barns; Hospitals for Sick Animals; Several important additions in the Prize List; Fine New Art Annex, latest design; 5,000 square feet built to Carriage Building; Special Excursion Train Arrangements on ALL lines of Railway. Entries positively close in all classes on September 7th. Stabling and Space allotted as Entries are received. Prize Lists now ready, free.

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

THOS. A. BROWNE,
Secretary.

FOR SALE! Good Young Cows
Two years old, yearlings and heifer calves out of imported and home-bred cows, and the imported bulls, Royal Member and Eastern Robin. Come and see them, or write, if you want something special.
H. CARGILL & SON,
Station on the farm, Cargill Sta. & P.O., Ont.



Shorthorns, Cotswolds, and Berkshires FOR SALE.
Six Bull Calves, 20 Cows and Heifers, 15 Ram Lambs; also Two Lambs and Breeding Ewes. 20 pigs from 2 to 4 months old.
F. BONNYCASTLE & SONS
Campbellford P. O., Ont.

SPRINGHURST HERD OF SHORTHORNS
Am now in a position to offer a very choice yearling Roan Bull and a few Females of the leading Scotch families.
H. SMITH, Hay, Ont.
Exeter, G. T. R., 1/2 mile.

4 SHORTHORN BULLS
from 5 to 18 months, by Elvira's Saxon 21621 and from Viola bred dams.
R. MITCHELL & SON,
Burlington Station, Nelson P. O.

ONE FIRST PRIZE BULL
A. J. C. C.
Sire King of Highfield, winner of 1st prize over all Canada; dam, St. Lambert's Kathleen, made 21 lbs. 3/4 ozs. of butter in 7 days; dam of King of Highfield. Signal Rosa May (22 lbs. 4 ozs. of butter in 7 days, and 1st prize over all Canada 4 times), also dam of Unoma May (26 lbs. 4 ozs. of butter in 7 days, and 64 lbs. of milk a day).
J. H. SMITH & SON, Highfield, Ont.

BUTTONWOOD FARM JERSEY HERD
OFFERS six richly bred young bulls from show-ring winning dams, and such sires as King of Highfield and Violet's Leo, both sweepstakes bulls. Settings from E. P. Rocks, Black Minorcas, and Grey Dorkings. Correspondence solicited.
S. Wicks & Son,
1-12-om MOUNT DENNIS, ONT.
Farm 7 miles from Toronto market.

MAPLE CITY JERSEYS.
3 JERSEY BULLS FOR SALE
Another chance to procure a choice young Bull from that grand stock bull Massena's Son (17898); will be sold cheap if taken at once; also one bull two years old by Huzzo Alpha of Oaklawn.
W. W. EVERITT,
Box 552, Chatham, Ont.

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

JERSEYS, Ayrshires, BERKSHIRES
Offering one grandly-bred Ayrshire bull calf, and a few young heifers from Snell-bred stock.
WILLIAM CLARK, o MEYERSBURG, ONT.

MEADOW BROOK JERSEYS.
Am offering a 10 mos. and a 20 mos. bull. Also a few choice females, rich in St. Lambert blood.
o EDGAR SILCOX, Shedden P. O., Elgin Co.
MENTION FARMER'S ADVOCATE

GOSSIP.
Hon. J. W. Brewster, U. S. Commissioner, Circuit Court, District of Colorado, writes to Dr. P. Harold Hayes, Buffalo, N. Y., whose advertisement appears in this issue of the FARMER'S ADVOCATE, as follows:—"I cheerfully endorse and recommend your treatment for Hay Fever. Having been a sufferer for eighteen years with an annual attack lasting from six to eight weeks, and after trying in vain all remedies to which my attention was directed; I commenced using yours. The first year I was greatly helped by the treatment; the next season the attack was not so violent, and last season was so slight as to cause me very little annoyance."

R. G. MARTIN'S YORKSHIRES AND BERKSHIRES.
In a splendid farming section of country, along the Kingston Road, some fifteen miles east of Belleville, Ont. is the well-equipped 140 well-tilled acres of Mr. R. G. Martin, lying close to the village of Maryville, upon which Mr. Martin makes a speciality of whatever he undertakes, and where nothing is done by halves or is in any way slighted. In looking over the farm we saw some splendid fields of grain, and a grand herd of Ayrshire grade cows with immense udders. A few good horses were also seen in the pasture. In no particular were we more interested than in the herds of Yorkshire and Berkshire pigs (the pride of the owner) which we were shown. The Yorkshire herd was founded upwards of a dozen years ago, and among the first animals, and to which lies much of the credit of establishing a reputation as well as an enviable showing record, was the grand old matron Maud G., from whose breeding some of the best animals ever offered to the Canadian public have had their origin. From time to time Mr. Martin has had occasion to add new blood, which was always selected with the most careful and considerate judgment, until to day we doubt if any other herd of the same number can produce more really showing animals. The noted Maria family, Maria 3rd 1640, by Model Duke 2nd 44, and out of imported Marian 18th, is now four years old. She has been a very prolific breeder of high-class stock, which has found ready buyers, and we were informed that some grand heifers are blood to her credit. In conformation she is a true type of the breed, possessing immense length and depth of body, standing well on her feet, and weighs right close to 900 lbs., and qualified for any showing competition. Next we were shown a pair of grand females with litters at their feet. Lady Hasket 2387, by Hasket 3rd 1933, and out of Maud G. 653, is now two years old, and possesses a great wealth of quality, which she transmits to her progeny. She is thick, smooth, well-formed sow. Josephine 3rd 2705, also by Hasket 3rd, and out of Josephine 2nd 929, is the same age and bears out to a remarkable degree the quality possessed by her half-sister, with sufficient size. Flossie 2973, by Hasket 3rd, is another splendid daughter of Maud G. She was farrowed in the early part of '96, and is regarded as one of the best animals on the farm. Among her last litter we saw four very choice three months old pigs (three sows and a boar), which, if we mistake not, will be heard favorably from later. They are a grand bunch and do credit to their ancestors. We also visited another pen containing four nine months old sows out of Josephine 3rd and Lady Hasket, which have not idled their time. They are the right sort and possess as much quality as any we ever saw. The Josephine sows perhaps have rather more length, but they are all good, and will undoubtedly be heard from later at the larger shows. Among the sires now on the farm we saw the worthy Hasket Jr. 2283, by Hasket 3rd, and out of Maud G., a splendid individual, in which is represented the choicest of breeding. He has not only distinguished himself as a sire of salable stock, but is one from whom many showing winners have sprung. In conformation he is a large, evenly-made animal, with plenty of bone, a splendidly shaped back and head. Look-Me-Over 2612, by Hasket 3rd, and out of Maud G., is an animal that will bear all the inspection one wishes to submit him. He is now being placed in show condition, and the opinion of him expressed by one of the best judges of the breed classes him among the first young sires in the country. Berkshires have also been owned on the farm for a number of years, and the best in the breed has been none too good for Mr. Martin to select his foundation stock from. At the head now is the grandly formed Royal 4849, by Royal Standard 12th 3296, and out of Persis 4034, by Enterprise, the quality of which this fellow bears out to a remarkable degree. He is evenly fleshed, carrying his

DENTONIA PARK FARM
W. E. H. MASSEY, Proprietor.
HIGH-CLASS REGISTERED JERSEYS
The following offered for sale to make room for additional imported stock soon to arrive:
A FEW GOOD COWS Also some splendid
HEIFER AND BULL CALVES.
Prospective buyers should visit the farm. Full information given on request. Apply—
WM. PATTON, Supt., Coleman P. O., Ontario.
Farm located near East Toronto.



Exhibition Jerseys for Sale
That cannot fail to win in any showing. Two 4-year-old cows, milking 40 lbs. a day each, superb udders; one 3-year-old, splendid udder, great beauty; one 2-year-old, tested 11 lbs. butter a week at 23 months old. These should not be separated, as they can enter in three classes and then show as a herd. Also a 3-year-old bull, a 2-year-old, a yearling and a calf. No one need apply except those who WANT THE BEST, and are willing to pay a fair price.
MRS. E. M. JONES, Brockville, Ontario, Can.

substance well down; has a splendidly formed head, and well marked. Randy (imported in dam) 5270, by Broggs (5974), and out of Victoria 5729, was farrowed October 30th, '97, and purchased to breed to the young Royal females, being very richly bred and well gotten up, with perfect markings. Among the matrons we saw the two-year-old Baron Lee sow, Marysville Girl, out of Persis 4034, which possesses good length and depth. She has been bred. Also some well-formed young stock are to be found in this herd.
A nice flock of registered Leicesters were also shown us, the quality of which is keenly watched by their owner. In the showing Mr. Martin has always taken an active part, easily capturing the honors competed for. In 1896 in Toronto he won the Yorkshire herd prize as well as many of the individual prizes for which he competed. In 1897 the show herd was disposed of, and which won many of the best prizes offered that year. He also won largely those for which he competed, in Ottawa in a very strong class. This year he intends exhibiting his own stock, and will have a grand lot out, any of which he holds for sale, and parties requiring really first-class animals cannot do better than visit him at the fairs this fall, and make personal selections.

"Gem Holstein Herd."
STOCK FOR SALE!
We only keep and breed registered Holstein-Friesians. We have now some choice young bulls and heifers, also some older animals, all of the very best dairy quality, that we will sell, one or more at a time, on reasonable terms. Correspondence solicited.
HILLS BROTHERS,
BEDFORD PARK P. O., ONT.
Shipping Station, Toronto. 7-7-om

SPRINGBROOK HOLSTEINS AND TAMWORTHS.
Great bargains in Holstein calves, both sexes, during the month of July. Stock of best breeding and most noted strains; also, one yearling bull and two yearling heifers. A very select lot of Tamworths from two to four months old, by prize-winning imported Nimrod. It will pay you to write at once.
A. C. HALLMAN, o New Dundee, Ont.

BRAMPTON JERSEY HERD
Offering high-class A. J. C. C. cows and heifers in calf, and heifer calves; choice young bulls. High-grade cows in calf, and Berkshires.
B. E. BULL & SON, Brampton

Maple Hill Holstein-Friesians
(THE GOLD MEDAL HERD OF 1897).
- SERVICE BULLS:
DeKol 2nd's Paul DeKol Duke (Imp.),
Sir Pledge DeKol (Imp.).
Can spare a few young things of both sexes from strictly first-class cows of DeKol, Empress Josephine Mechtild, and other famous butter families.
-om G. W. CLEMENS, ST. GEORGE, ONT.

CHOICE LOT Ayrshire BULL CALVES
Sired by Douglas of Loudoun, bred by D. Morton & Son, Hamilton. Prices right.
F. W. TAYLOR, o WELLMAN'S CORNERS.
PLEASE MENTION FARMER'S ADVOCATE

HOLSTEINS FOR SALE
Do you want the blood of DeKol 2nd or Netherland Hengerveld? These two cows have produced more butter in seven days than any other two cows that have been officially tested. Their daughters are large producers. Sons of these two great cows head our herd. Animals of all ages and richest breeding. Come or write.
HENRY STEVENS & SONS,
Lacona, Oswego Co., N. Y.

BROOKBANK HOLSTEIN HERD
50—Champions for Milk and Butter—50
A number of desirable young BULLS on hand from eight months to two months old, from our great milkers. Write for just what you want. Females of all ages. Also yearling Poland-China Boar, Currie's King, to be sold to make room for a new importation.
A. & G. RICE,
Oxford Co., Ont. o CURRIE'S CROSSING.

Ayrshires and Red TAMWORTH SWINE.
Still a few choice young bulls for sale, and a grand lot of Tamworth boars ready for service. Write us now and secure one.
CALDWELL BROS., Briery Bank Farm, Orohara, Ont.

AYRSHIRES AND YORKSHIRES!

AYRSHIRES.—Choice young stock of either sex, from superior milking strains, on hand. YORKSHIRES.—Several litters of young pigs, equal to any we have ever had, ready to ship, and we only ship the best. Orders solicited, which we will promptly and honorably fill, as we guarantee stock as described. If in need of anything in Ayrshires or Yorkshires, write us. ALEX. HUME & CO., BURNBRAE, ONT. Importers and Breeders. Hoard's Station, G.T.R.

AYRSHIRE CATTLE, 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. Also Leicester Sheep and Berkshire Swine. 5-1-y-o D. BENNING & SON, Glenhurst Farm, WILLIAMSTOWN, ONT.



FAIRVIEW STOCK FARM.

Ayrshire Cattle and Berkshire Pigs. Traveller of Parkhill at the head of herd, while my herd is descended from cows purchased of Mr. David Benning; are modern in type, and are of the choicest milking strains. Write for prices of young bulls and heifers. DAVID LEITCH, Grant's Corners, Ontario. Stations—Cornwall, G.T.R.; Apple Hill, C.P.R.

Maple Hill Dairy and Stock Farm. Ayrshire cattle, Berkshire & Tamworth pigs. Two bull calves dropped in February. R. REID & CO., Hintonburg, Ont. One mile from Ottawa. -o



CHOICE AYRSHIRE BULLS

FROM IMPORTED STOCK. We offer Six (6) Bull Calves, from 4 to 11 months old; good individuals, and from the very best milking strains obtainable in Scotland.

Thos. Ballantyne & Son, STRATFORD, ONT. Farm adjoins city, main line G. T. R. -om

WM. WYLIE, 225 Henry St., MONTREAL or Howick, P.Q. Breeder of high-class AYRSHIRES. Young stock always for sale; bred from the choicest strains procurable. Breeding stock selected from the most fashionable strains and prize-winning stock of the day. Farm located at Howick, Que. 5-1-y-o



GLENGARRY STOCK FARM

JOHN A. McDONALD, Jr., Williamstown, Ontario, BREEDER OF HIGH-CLASS AYRSHIRES. My aged bull, Sir Donald, is now for sale, as I am through with him. He can be had at a bargain. Lancaster Station, G. T. R. -o

Ingleside Herefords.

UP-TO-DATE HERD OF CANADA! Tamworths Berkshires. Send for illustrated catalogue. Address—H. D. SMITH, 17-y-om Compton, Que.

GUERNSEYS

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

EASTVIEW GUERNSEYS

A few Bull Calves out of full sisters of "Ada of Eastview." H. R. BROW, EASTVIEW FARM, CHARLOTTETOWN, P.E.I. HENRY ARKELL, ARKELL, ONTARIO, Importer and Breeder of Registered Oxford Down Sheep. Animals of all ages and both sexes for sale at all times. Price reasonable. -om

BRITISH ADVERTISEMENTS.

SHROPSHIRE SHEEP

KNOWN THE WORLD OVER AS THE FARMER'S SHEEP

LEAN, JUICY FLESH, best and heaviest fleeces of all DOWN SHEEP, very prolific, good nurses, robust constitutions, and noted for early maturity.

N. B.—The best GENERAL PURPOSE SHEEP in existence, and splendidly adapted for crossing on Merino, long-wool or cross-bred ewes when an IDEAL FREEZER is wanted.

FAT LAMBS.—For breeding fat lambs the Shropshire ram is unrivalled, and for that purpose it is extensively used in all parts of the world.

THE SHROPSHIRE will thrive and do well where any other sheep can exist, and no breed has such a Record for Readily Adapting itself to any Country and all Classes of Pasture.

A list of Shropshire sheep breeders entered in the last volume of the flock book may be obtained from ALFRED MANSELL & CO., Secretaries of the Shropshire Breeders' Assoc., SHREWSBURY, ENGLAND. -o

J. E. CASSWELL, Laughton, Folkingham, Lincs., breeder of Lincoln Long-wool Sheep, Flock No. 46. The flock was in the possession of the present owner's great-grandfather in 1786, and has descended direct from father to son without a single dispersion sale. J. E. Casswell made the highest average for 20 rams at the "Annual Lincoln Ram Sale," 1896 and 1897. The 1896 rams were all sold for exportation. Ram and ewe hoggs and shearings for sale, also Shire horses, Shorthorns, and Dark Dorking fowls. Telegrams: "Casswell, Folkingham, Eng." Station: Billingbore, G. N. R. -o

W. W. Chapman Secretary of the National Sheep Breeders' Association. Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown Sheep Society. Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered Stock personally selected and exported on commission; quotations given, and all enquiries answered. Address—FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W. Cables—Sheepcote, London. -o

HILL HOME FLOCK OF SHROPSHIRE

comprise the choicest of breeding from direct importation. Rams of all ages for sale. D. G. GANTON, SINCOR COUNTY. -o SAURIN P. O., ONT. FOR SALE! A NUMBER OF CHOICE, WELL COVERED SHROPSHIRE LAMBS OF BOTH SEXES. PRICES RIGHT. D. H. KETCHESON, Hoard's Station, G.T.R. -o MENIE, ONTARIO.

SHROPSHIRE SHEEP AND CHESTER WHITE HOGS

I can dispose of a few very choice, strong and well-covered Shearing Ewes, as well as about twenty Ram Lambs; all from imported stock. -om W. G. PETTIT, Freeman P. O. Burlington Station and Telegraph Office.

SHROPSHIRE SHEEP

from imported sires, also a few Ewes. GEO. HINDMARSH, AILSA CRAIG, -o ONTARIO.

Shropshire Rams

bred direct from imported stock, extra well covered. ROWAT BROS., -o HILLSDALE, ONT.

LEICESTERS

Four Shearing Rams; also this season's crop of Ram Lambs. C. & E. WOOD, -o FREEMAN P. O. Burlington Station.

JOHN LAIDLAW, Wilton Grove, Ont.

—BREEDER AND IMPORTER OF— LEICESTER SHEEP ALL AGES AND BOTH SEXES FOR SALE. -om

IF YOU WANT OXFORD DOWNS,

of any age or either sex, write us for prices. All our stock are from the best English-bred animals. PETER ARKELL, -o TEESWATER, ONT.

GOSSIP.

The Secretary of the American Shorthorn Breeders' Association gives notice that after January 1st, 1900, a fee of \$35 shall be charged for recording in the American Shorthorn Herd Book the pedigree of an animal over four years of age.

WM. CLARK'S AYRSHIRE, JERSEY, AND BERKSHIRE.

The farm of the above-named breeder lies on the main road some four miles from the village of Campbellford. Jersey cattle have here been bred since 1893. The foundation stock was obtained from Mr. J. C. Neill, when Martin of St. Lambert 8734, by Victor Hugo Beauty 2789, and out of Lisgar of St. Lambert 6155, bred since 1893. The foundation stock was obtained from Mr. J. C. Neill, when Martin of St. Lambert 8734, by Victor Hugo Beauty 2789, and out of Lisgar of St. Lambert 6155, bred since 1893. The foundation stock was obtained from Mr. J. C. Neill, when Martin of St. Lambert 8734, by Victor Hugo Beauty 2789, and out of Lisgar of St. Lambert 6155, bred since 1893.

A pair of choice Ayrshire cows are also on the farm. Duchess of Burnbrae 2694, by Dainty Davy 901, and out of Lady Louisa 1558, by General Middleton, her pedigree tracing through much of Stewart & Son's (Monie) best stock; is of fine type. She has a nice bull calf by White Prince, which is a beauty and prettily marked. The aged cow, Minnie 1524, by Earl of Fife 135, and out of Dandy 1837, has been a regular producer. Her young daughter by White Prince is regarded as the choice of the herd, her dam being a splendid producer. We were also shown a well-made yearling heifer by Prince Albert, and out of Duchess of Burnbrae 2694.

Mr. Clark founded his Berkshire herd on a well-formed Swell-bred sow, Maid of Honor, which has been a profitable producer; a bunch of three sows and two boars out of her, and by Harkwell 4557, are lengthy, well-marked stock, and kept in good form.

FITZGERALD BROS. SHORTHORN AND COTSWOLDS.

At the large breeding establishment of Fitzgerald Bros., at Mt. St. Louis, Ont., we were shown over a herd of some sixty registered Shorthorn cattle and a large flock of Cotswold sheep. The foundation of the Shorthorn cattle was laid over twenty years ago by the late Mr. Fitzgerald. Among the matrons now on the farm we saw the successful aged roan cow, Roan Lily, by Marquis of Lansdown, and out of Maggie, a cow which would have been esteemed in any herd in Canada, having not only been a regular calf producer but one of the best dairy cows ever owned on the farm. Much of her stock (females) is now on the farm, and are all regarded as valuable. Queen Caroline, by Ingram's Victor, and out of Fria Caroline, is a rangy red three-year-old cow that possesses much desirable quality to recommend her as a matron; her yearling roan sister being in possession of as much quality of the right sort, with sufficient size, as anything on the farm. She is a sappy, good, evenly-fleshed heifer. Lady Aberdeen, by Coventry Victor, and out of Village Rose, was lately purchased, and adds much to the value of the matrons in appearance, having been well kept. She was due to calve very shortly after our visit. We saw a bunch of yearling heifers that would be hard to duplicate under the same conditions, as they were in no way pampered. Molly Law, by Ingram's Victor, and out of Molly Bawn, and Cherry Watt, by same sire, and out of Topsy Roy, are a pair of choice red things of quality. At the time of our visit (May) fourteen calves in all had arrived, half of which were bulls, by a Morton-bred bull, St. Louis, purchased last year.

In Cotswolds the firm have some forty breeding ewes, a dozen shearing ewes, this year's crop of lambs and their sire, a very well-made ram, bred by Mr. Watt, Shanty Bay. The Cotswold stock is a strong well-covered bunch, and among them we saw some very fine, well-covered lambs, the bucks of which, together with a few females, are held for sale.

MESSRS. R. MITCHELL & SONS' SHORTHORNS.

Adjoining the village of Nelson, Ont., a short drive from Burlington Station, is the large farm of Messrs. R. Mitchell & Sons, whose special attention has been directed to the breeding of Shorthorn cattle, and with this in view the firm have splendidly arranged, convenient stables, constructed with all due regard to their sanitary condition, which, together with good care and careful management, their stock show its benefits. Upwards of ten years ago Viola 2nd 1939, by The Premier 614, and out of Viola 8190, was purchased, and from her some dozen head now on the farm are descended. She is a large, level, red and white cow, possessing good dairy qualities, as is evident by her immense udder and teats, in which she is rearing her calf at the foot. Viola Nelson, her seven-year-old daughter, by Master Ingram 12046, is a splendid individual of a decidedly beefy tendency, having a broad, level back and a great wealth of quality. In the showing she has always been an easy winner without special preparation. Nelson Beauty, by Waterloo Duke 18th 512, is six past, and to her lies much credit of bringing the herd to the standing in which we found it. Her two-year-old daughter, Rena, by Earl of Highfield, is a splendid young, well-matured animal, and is safely in calf. Her eighteen-months roan bull is also making progressive growth. He is a splendid handler and stands well on his feet. The present crop of calves (three) and three heifers were sired by the stock bull Elvira Saxon 21624, by Royal Saxon 10537, and out of Elvira 11th 11618, a deep red fellow purchased from his breeder, Mr. C. M. Simmons, and in his purchase we judge Mr. Mitchell has made a good selection. He has a splendid back and loin, a quality he seems to stamp upon his progeny. Parties requiring young bulls will do well to visit Mr. Mitchell early, as the present demand will no doubt remove such stock as soon as located. At present two serviceable young bulls are offered, as well as some splendid calves coming along.

HORSEMEN! THE ONLY GENUINE IS



See large advertisement on page 276 June last issue, and which is of unusual interest to the readers of the FARMER'S ADVOCATE. And any horseman interested in a reliable remedy can well afford to investigate the matter. The LAWRENCE-WILLIAMS CO., 21 Front Street West, Toronto, Ontario.

SCOTCH COLLIE PUPS

FOR SALE! Best bred Dogs in Canada. Pedigree and information for post-card. CHAS. H. AETZELL, Scaforth, Ont.

OAK LODGE HERD OF YORKSHIRES

Highest quality of bacon hogs, profitable to the feeder, and correct type for the packer. Orders now being taken for young pigs suitable for exhibition purposes. Largest herd in Canada to select from. Write for prices. J. E. BRTHOUR, BUNFORD, BRANT CO.

YORKSHIRE AND BERKSHIRE

My Yorkshires were founded on the noted prize-ring producer, Mand G., and are the best lot I ever owned. My Berkshires are of Baron Leo and Enterprise strains. R. G. MARTIN, Marysville, Ont.



ENGLISH BERKSHIRE OFFERING

Young boars fit for service, and some young sows ready to breed, and some bred; also young stock of both sexes ready to ship, descended from Crossman importation. W. H. SPENCER, -o MORPETH, ONTARIO.

MONTROSE HERD OF BERKSHIRES

Carry such blood as Baron Leo 4th and Enterprise. Young stock three months old for sale, and orders for fall litters booked now. J. W. HARTMAN & SONS, ELM HEDGE P.O., GREY CO. -o

BORNHOLM HERD IMP. CHESTER WHITES

Imp. Chester Whites for sale at all times. Nothing but first-class stock shipped. Inspection invited. Correspondence promptly answered. B. DeCOURCY, -o BORNHOLM P.O., ONT.

My Berkshires

are strictly up-to-date in style, length, quality and breeding. The present crop of young stock by Manor Prince are as good a lot as I ever raised. Prices right. J. B. EWING, Dartford, Ont.

English Berkshires.

Herd headed by three first-prize boars. Large size, strong bone, fine quality, and a choice lot of breeding sows. Orders booked for spring pigs. GEORGE GREEN, Fairview P.O., Ontario, Stratford Station and Telegraph Office.

LARGE ENGLISH BERKSHIRES.

Young BOARS fit for service and SOWS ready to breed. Write if you want a bargain. M. BENNETT & SON, -om St. Williams, Ont.

DURING July we offer York or Berk boars and sows, 2 months old, at \$6. Two York boars, weighing close to 200 pounds, growthy fellows, at \$14. We have also a choice Jersey bull to exchange for heifer of same breed. -o W. R. BOWMAN, Mt. Forest, Ontario.

GOSSIP.

Miller & Sibley, Franklin, Pa., have purchased from Mortimer Levering, Lafayette, Indiana, the three-year-old Jersey show bull, Ida's Champion Rector, to head one of their show herds this fall. This fine bull was purchased from Miller & Sibley by Mr. Levering in 1896 after an exceptionally successful career at leading shows in the States in that year, in the hands of his breeders, and under the management of Mr. Norton, who knows a winner when he sees him, and we are not surprised that he has kept an eye on this fellow. We are not informed as to whether he will be included in the expedition which is to invade Canada next month, but even if he is we predict that he will not have a walk-over by any means, but will meet foemen worthy of his steel.

D. J. GIBSON'S HOLSTEIN CATTLE, TAMWORTH, BERKSHIRE, AND CHESTER SWINE.

The Holstein herd of Mr. D. J. Gibson, whose farm is near Bowmanville, Ont., now numbers fifteen animals, half a dozen of which are males. Cecelia Princess, by Duke of Woodfield 3161, and out of Cecelia Boy, the foundation cow in this herd, and has a splendid bull calf by Lado Wedo's Mink Mercedes, which is three months past. Mr. Gibson informs us that as he is becoming overstocked for the room he has, he will offer a few young females which are not only finely bred, but from families which have proven themselves producers of high order.

The Tamworths, though not numerous, are a well-bred lot, and we saw three very choice ones due to farrow before August. Redskin 2nd 84, by imported Shortnose 88, and out of Countess 2nd (imp.) 105 (recorded in American Tamworth twice herd as No. 112), is now three years past. She is credited with two litters annually, has now one at foot. She is an even, deep-sided, smooth sow, with sufficient size. Hannah 785, by Algernon 573, and out of Flocking Queen 51, was purchased from her breeder, Mr. Wm. Major, Whitefish, when under six months old, and has lately dropped her first litter to the second prize bear under six months at Toronto last fall in the hands of John Bell, Amber. From her superior breeding and conformation she should make a valuable addition to the herd, possessing as she does good bone, with plenty of length and depth. Gibson's Choice 620, by the noted Nimrod 174 (imp.), and out of Tilly 795, was purchased from Mr. A. C. Hallman, her breeder, through Mr. R. O. Morrow, Hilton. She is a promising young sow, possessing the quality we would expect from a get of her worthy sire. She is due to farrow to Quicksilver 770, by McGlady 391, and out of Allok 84, a bear which has done service in the herd for upwards of two years.

In Berkshires the Agricultural College bred sire, O. A. C. 259, by Prince Lee 3268, and out of Lady Clara, heads the list. He is two years old this fall, and has proven himself a sire of good animals. To his credit now on the farm is a bunch of young females from a Green bred sow, by Kentucky Prince 3795, and out of Queen 3143, which are an even, well-marked bunch, possessing much of the Brama Lee quality. A splendid young McAllister-bred sow is also in the herd, which will be bred at the proper age.

In Chester Whites a choice litter is held for sale, most of which are bears, their pedigrees showing them to be directly descended from George breeding, their dam being by Sir John 333, and out of Gold Dust 448, and among them some choice young bears may be seen. During the past season Mr. Gibson reports enquiry for stock far beyond his expectations, with highly satisfactory sales. The entire litter of Redskin went to Mr. J. M. Simpson & Son, Palmer, Ill., and in a letter which we personally read from them, which was written upon their arrival, he expresses himself in terms of the highest satisfaction at their quality and condition on arrival.

SPECIAL PRIZES FOR HOLSTEIN COWS. At Toronto Industrial Fair, August 29 to September 10, a special prize of \$50 is offered in the dairy test, for the cow being the largest producer, products from milk only to be considered. The Holstein-Friesian Association of America will award \$25 if this prize is won by a cow recorded in its herd book, and also offers a second prize of \$15 under same conditions.

A special prize of \$50 will be given by the Central Canada Exhibition Association, of Ottawa, and the Canadian Holstein-Friesian Association (being \$25 each) for the cow being the largest producer (products from milk only to be considered) at the Central Canada Fair of 1906. Conditions: Rations fed to competing cows will not be considered. Cows will stand in the open stalls in full view of the public. Competition open to all pure-bred cows. The test will be conducted on Sept. 31 and 22. Mr. J. A. Ruddle, Resident Superintendent of Dairy School, Kingston, Ont., will conduct the test. Entries close Tuesday, September 12, with Secretary of Central Canada Exhibition Association. Entrance fee, \$1 per head. The Canadian Holstein-Friesian Association will give \$15 for the best Holstein-Friesian cow which is registered in the C. H. F. Herd Book, which has not received first premium, and \$10 for the next best Holstein-Friesian cow registered in the C. H. F. Herd Book.

The Holstein-Friesian Association of America will also give \$25 as first prize, and \$15 as second, for the cows making the highest product in accordance with the rules of the Fair Association in the Ottawa test; such prize-winners to be animals which are recorded in the Herd Book of the Holstein-Friesian Association of America.

The Smithfield Club Centenary Show.

The prize list for the centenary show of the Smithfield Club, to be held in December, has been issued. In addition to the challenge cup, value £150, for cattle, offered by Her Majesty the Queen, a challenge cup, value £100, for sheep, is offered by H. R. H. the Prince of Wales, K. G., and a challenge cup, value £50, for pigs, by H. R. H. the Duke of York, K. G. Centenary silver medals will be awarded to the exhibitor and breeder of each first prize animal or pen of animals, and a silver medal to the exhibitor and gold medal to the breeder of each breed cup winner.

ENGLISH BERKSHIRES !!



Come to headquarters for pigs of either sex if you want Berkshires that will make you money. Orders taken for spring pigs.

Write for Prices. J. G. SNELL, SNELGROVE, ONT.

A CHOICE LOT OF long, large English Berkshires from six weeks to three months old. Pairs supplied not skin.

YORKSHIRE Sows in pig of good breeding. Boars and sows, 2 months old, not skin, from prize-winning stock.

Write H. J. DAVIS, Box 290, Woodstock, Ont., breeder of Yorkshires, Berkshires, Shorthorns, and Shropshires.

HEADQUARTERS FOR DUROC-JERSEY SWINE

Our herd secured nine of the first prizes out of the eleven offered at Toronto Exhibition, and a similar portion at London and Ottawa. We are justified in saying we have the best herd in Canada. First-class stock of all kinds for sale at all times. Address—TAPE BROS., RIDGECROFT, ONT.

Oxford Herd of Winning Poland-Chinas.

Having won the herd prizes at Toronto, London, Ottawa, and Bradford Fat Stock Show, we feel justified in stating that we are in a position to offer you what you may ask for from gilt-edge prize-winning stock. W. & H. JONES, OXFORD CO. MR. ELGIN.

POLAND-CHINA BOARS

Also a pair of six mos. sows, with pedigree running to imported sires. Booking orders for spring stock from showing dams and imported sires. JOSEPH M. SMYTH, Box 618, Chatham, Ont.

The CANADIAN CORWIN HERD of POLAND-CHINAS

Are in shape to dispose of breeding stock of all ages and both sexes. Also offering a Jersey heifer calf from Snell stock. Poultry a specialty. B. P. Rocks, Brown Leghorns, 8 Hamburgs, and Silver and G. Dorkings. Eggs, \$1.00 per setting. Also 30 acres cleared land, with an abundance of natural gas. Kent Co. CAPT. A. W. YOUNG, Tupperville, Ont.

POLAND-CHINA BOARS

Fit for service, and a few six months sows. Also booking orders for spring pigs, by the imported sire, Corwin Ranger, and Orme. ROBT. L. SMYTH & SON, FARGO P. O., ONT.

Springridge Poland-Chinas

Now offering the 2-year-old sire, Black-amore, 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.

HERMANVILLE RED TAMWORTH and PIGS

DUROC-JERSEY-YORKSHIRE CROSS. Breeding stock, ready to wean, on hand and for sale. Orders booked. Stock selected and imported for us by Rattenbury himself. 257 Litter of Duroc-Jerseys, Aug. 26th farrow, for sale; ready to ship Oct. 10th. Write for prices.

Hermanville Farm, Hermanville, P. E. I.

Tamworths, Berkshires.

I have three litters of Tamworths that are bred right, of two distinct families. Also a few Berkshire sows descended from Baror Lee 4th.

D. J. GIBSON, Bowmanville, ONTARIO.

GOSSIP.

The bound volume of the Fruit Growers' Association, Fruit Experiment Stations, and Entomological Society of Ontario for 1897, recently is-ued, and a copy received by us, will be priced in our library. The subjects treated by paper and discussion are those that interest the horticulturist now, and in a manner to give the latest and best information.

W. G. PETTIT & SON'S SHORTHORNS, SHROP-SHIRE, AND BERKSHIRES.

Mr. Pettit's Shorthorn herd has this season been increased to some sixty odd head. At the Shorthorn sales held the early part of this year several important purchases were made, as well as several by private purchase, until to-day this stands among the first herds of the breed in Ontario. From the dispersion sale of John Miller, Markham, four animals were added: Rose of Monrath 3rd 16346, by imported Vice-Consul 4182, and out of Rose of Monrath 18065. She is a large, handsome, thick cow, with a splendid back, well and evenly fleshed, and has a beautiful countenance. The red five-year-old cow Cirene, by Doctor Leaton 12554, and out of Ciree 16342, since coming to the farm dropped a very choice roan bull calf to Alberdale. Lady Mara 2nd, by Rodney, and out of Lady Mara 22390, was calved in 1897, and is a good representative of that worthy family whose name she bears, possessing a wealth of their quality, which is noted for their uniformity. The red yearling bull, by Rodney and out of Cirene, is a rangy fellow, with clean-cut quality. At the dispersion sale of C. Simons, in March, a pair of choice young females were secured. The solid red Daisy of Strathallan 18th, by Hampton 2d, and out of Daisy of Strathallan, by Victor Regalis, was considered good at the sale, but has thickened out and grown very fast since arriving at her new quarters. Bracoleet, by Koan Prince (imp.), and out of Royal Bracoleet, is a richly bred young thing, having four top crosses of imported sires, all of which have been prize winners at Toronto in their day. She possesses a wealth of quality. At the recent sale of Moore, R. Gaunt & Son, Mr. Pettit succeeded in obtaining three females and a calf. Miss Buckingham, by Earl of Moray 16188, and out of Ethel Buckingham, is a grand representative of that splendid family. She is a low-set, thick, level oow, full of quality and equipped with a splendid udder. We saw her at Mr. Gaunt's last year, and felt as favorably impressed with her and the family as anything we saw on the farm. She is due to calve in March to Lord Gloster, by Abbotsford. Glorion 6th, by Earl of Moray, and out of Glorion 2nd, is a red and white three-year-old, and due in January. Gwendolyn, by Earl of Moray, and out of Fanny Buckingham, is a thick, well fleshed, red and white four-year-old oow which shows her early-maturing Buckingham quality. Other purchases brought some eight we-year-old heifers to the farm, which are a strong, growthy lot and due to calve before Jan. In the herd are also representatives of the Mina and Fidget families, both of which have been retained by Mr. Pettit, considering as he does that no families in the breed possess more real usefulness than these. They are, almost to an individual, splendid dairy cows, and as soon as they are dried up take on flesh very rapidly, a noticeable quality in the young stuff. Among the bulls now in the herd are two sixteen months old—one purchased at Miller's sale, which is coming along well, and the other, a red, is making good use of his time. The September calf out of Julia 23th 2877, and by Indian Statesman, promises to make a large, showy animal. He is very thick and evenly fleshed. At present there are ten bull calves on the place, and among them we saw some right good ones, full of substance and quality, that are being kept in the best possible form, yet are not being crowded with strong feed. The roan bull calf out of Mara 11th was dropped in February, and is considered by competent judges to be among the very best of his age ever raised on the farm; in fact, we saw half a dozen of the more advanced ones that are qualified for any herd in the country, and being grown up in the best possible manner for their future usefulness. The three-year-old stock bull, Indian Statesman, by Indian Chief, and out of Canadian Duchess of Gloster 41st, has grown into a splendid animal, and seems to possess the power so strong in his worthy sire of stamping that showy quality on his progeny. His influence will be felt in the herd in the future.

In Shropshire sheep Mr. Pettit is well equipped this season, and no ewer or more growthy bunch of shearing ewes are to be found in the Province. From the thirty breeding ewes forty lambs were obtained by the imported ram Flashlight, now two past, which was bred by Thomas Penn, England. A few shewings will be offered this season, as well as a few rams and ram lambs.

In Berkshires half a dozen brood sows were retained, and this fall a dozen young sows are being bred to Billy 4870, by Bow Park Sovereign 3439, and out of Barton Rachel 3971. We also saw a pair of lengthy and smooth young boars ready for shipment.

MOSSOM BOYD & CO.'S BIG ISLAND STOCK FARM. During a short visit to the large breeding establishment of Messrs. M. Boyd & Co., Boboysgreen, Ont., we were shown over the farm of some 300 acres, exclusive of their large range of pasture land (1250 acres). The firm are at present making a specialty of Hereford cattle, a herd of which are kept upon their Northwest range, Red Deer Hill Stock Farm, at Prince Albert, N. W. T., and in which we were informed were some splendid young bulls. Their Ontario establishment is admirably adapted for stock-raising, and is modernly equipped with stabling of large capacity. Some splendid Suffolk Punch horses have been bred here. A pair of young stallions were looked over, which are thick, blocky fellows, growing up in strong, vigorous form, being allowed their freedom in a well-shaded pasture. Various experiments have been conducted with Buffalo-Poled Angus crosses, with the result that a number of useful animals have been produced. They are thriving and growing well, and will have the special feature of producing valuable skins for robes and like purposes.

TAMWORTHS

From imported stock. One yearling boar; one boar and half a dozen sows, four months old, by Algernon 573.

WILLIAM MAJOR, WHITEVALE, ONTARIO. Locust Hill, C. P. R., 3 1/2 miles. 1-12-0

TAMWORTHS OF HIGHEST QUALITY!

I have the largest herd in Canada, of different strains. Choice Boars and Sows from six weeks to three and four months old. Orders booked for pigs from 14 sows and 4 boars. Prices reasonable.

om J. H. SIMONTON, Box 394, CHATHAM, ONT.

P. R. Hoover & Sons, GREEN RIVER, ONT.

BREEDERS OF CHOICE TAMWORTHS. Young boars and sows ready for breeding purposes at prices which should sell them. St. Locust Hill, C. P. R.; Markham, G. T. R. Correspondence solicited. 9-1-7-0m

TAMWORTHS.

5 Tamworth Boars eleven weeks old, sired by NIMROD IMP., dam Coldstream Garnet, she is bred from prize-winners. For prices write W. C. SHEARER, Bright, Ont.

Woodland HERD of Tamworths

are in good form this season, and offering young stock of superior quality and breeding of both sexes. H. REVELL, INGERSOLL, ONT.

TAMWORTH SOWS

IN FIG. WRITE FOR PARTICULARS AND PRICES. CHRIS. FAHNER, CREDITON, ONT.

MERTON LODGE

Herd of Chesters and Tamworths are in full bloom, and are offering choice stock of both breeds and sexes. Also booking orders for coming spring stock. H. GEORGE & SON, CRAMPTON P. O., ONT.

JAMES CHRISTIE, WINCHESTER, ONT.

Breeder of Chester White pigs, the foundation of which was selected with the greatest care and from only the most noted breeders in Canada.

THE AVON HERD of Chesters

Are in fine form. Orders are now being booked for April litters from notable strains. Henry Herron, Avon P. O., Ont.

SHORTHORN AND JERSEY CALVES

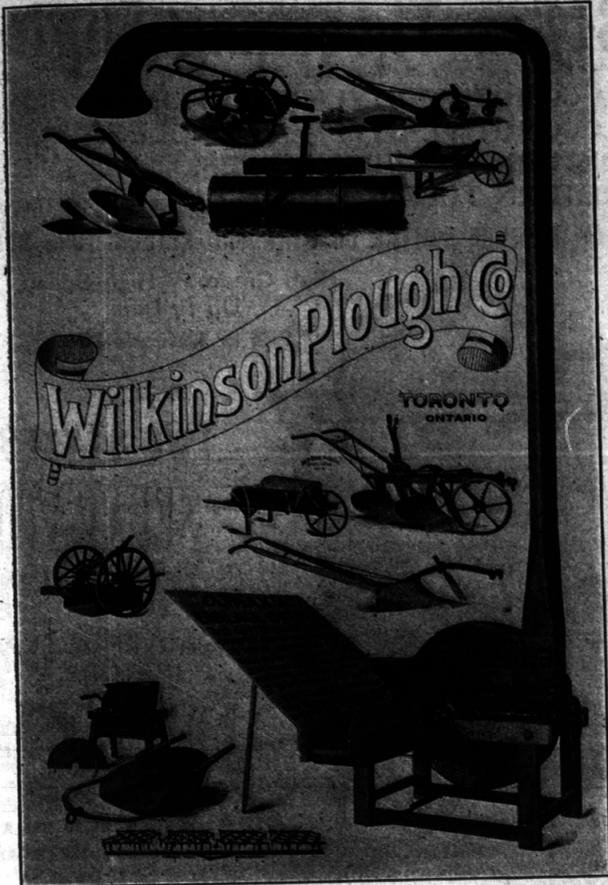
Of both sexes. Also in CHESTER WHITE PIGS. F. BIRDSALL & SON, BIRDSALL, ONT. Harding's Sanitary Iron Hog Trough

IS INDESTRUCTIBLE, PORTABLE, SANITARY, CHEAP,

and answers all requirements of a desirable Hog Trough. One price only, 60 cents per foot. VOKES HARDWARE CO., Limited, 111 Yonge St., Toronto.

CURED TO STAY CURED HAY FEVER

Dr. HAYES, Buffalo, N. Y.



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FOR BUILDING STABLE, SILO, AND OTHER WALLS, CISTERNS, STABLE FLOORS, HOG TROUGHS, CULVERTS, Etc.

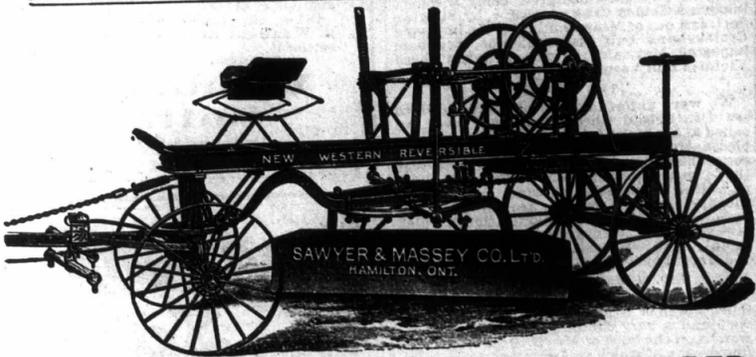
CEMENT CONCRETE WALLS ARE PERFECTLY DRY AND FROST PROOF. If use of cement is not understood we will send competent man FREE, to lay out work and give complete instructions. We warrant all structures when our instructions are carried out, and guarantee our cement quite equal to any domestic or imported Portland cement for above structures.

SEND FOR OUR PAMPHLET, CONTAINING FULL INSTRUCTIONS, FREE.

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The WESTERN REVERSIBLE ROAD GRADER

(A PERFECT ROAD MAKER). Also High-Class THRESHING MACHINES, ENGINES, HORSE POWERS, CLOVER HULLERS and SAWMILLS.

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CHAMPION "MCQUEEN" CLYDESDALE STALLION



We have a number of first-class mares and fillies of this breed in foal to the above stallion. We also have for sale a number of other choice stallions—Clydesdale, Standard-bred, Thoroughbred.

GRAHAM BROS.,
Claremont, Ontario.
25 miles east of Toronto, on C. P. R. 4-12-03

GOSSIP.

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

R. Reid & Co., Maplecliff Dairy and Stock Farm, Hintonburg, Ontario, write, July 14th: "During the past few months sales have been very good with us, and our stock are looking extra well, pastures having been extra good. We have made the following sales lately: Ayrshire bull calf, Hero of Maplecliff 9088, sire Matchless 7560, dam Whilmeona of B 6260, sold to Scobie & Ker, Cumming's, Ont. He is an extra good animal, and will likely be heard of later. Bull calf, Leonard of Maplecliff 9367, to Millar Bros., Miller's Corners; dam Primrose of Havelock 5350, sire Matchless 7560, a very promising calf from a cow of the right kind. A year old bull to the Carling Dairy Co., Perry Sound, and a two-year-old bull to Richard Clark, City View, Ont.; a heifer calf to Jos. Nesbitt, Morivale, Ontario; Berkshire boar to Alex. Browalee, Richmond, Ontario; Berkshire boar to Gordon Anderson, Kilman's, Ont.; Berkshire boar to John H. Franklin, Pendleton, Ont.; Tamworth boar to Isaac Taylor, Reid's Mills, Ont.; Tamworth boar to D. Beatty, South March, Ont.; Tamworth boar to H. Eyrre, Harlow, Ont.; Tamworth boar to J. E. Armstrong, Malakoff, Ont.; Poland-China boar to John Busby, Cumberland, Ontario; Poland-China sow to D. Beatty, South March, Ont.; Poland-China boar to Joseph Corbett, Bristol Ridge, Que."

J. B. EWING'S BERKSHIRES AND SHROPSHIRE.

The large stock farm of Mr. J. B. Ewing, near Dartford, Ont., was visited lately and looked over by one of the FARMER'S ADVOCATE staff, who found a herd of some thirty odd Berkshire pigs, the foundation of which was laid some ten or more years ago with Dona Maria 2604, by W. E. Gladstone 1841, and out of Nancy Hanks. She was in the herd several years, producing stock regularly, and to her credit now on the farm we saw three of the matrons of the herd, which are worthy of the position they have always commanded in competition—first rank. Jubilee Lass 4382, her yearling daughter, by Black Prince, is a grandly-made animal, possessing good size, with very even, deep sides, smooth shoulders and a grand back, and has a young litter at her feet, among which we saw some choice young boars. A pair of her full sisters, due to farrow in September, possess good length and evenness, and plenty of bone. Queen Anne 3320, by Daxford Boy 3602, and out of Lillian Russell 2428, is three part, and has established a well-earned reputation as a matron. Her stock (some of which we saw) are right good ones. She is a low-set, well-formed sow, having a businesslike appearance about her, and is nicely marked. The young sow by Harkwell 4557, and out of Best on Earth 4649, was purchased from her breeder, Messrs. F. Bonaparte & Sons, Campbellford, Ont., and promises well, resembling the Enterprise family, from which she is descended. In the pen we saw a bunch of splendid young boars and sows ranging from six weeks to three months, part of which were sired by Menelik 4852, and the balance by the stock boar, Master Prince 4612, by imported Master Hero 4117 (5140), and out of Thrifty 3:1 2456, an animal which we would judge would do much to maintain the present standing of the herd. Mr. Ewing is prepared to offer four young boars and a dozen sows.

The Shropshire stock were obtained from such breeders as Miller, Davis and Hamner, some of which were directly imported. The shearing stock runs was bred on the farm from an imported ewe purchased from the flock of John Miller & Sons. The present crop of lambs contains ten rams, which will be held for sale, also a couple of aged rams which have done service in the flock.

CHAMPIONS OF THE HIGHLAND SOCIETY'S SHOW.

The following were first prize and championship winners at the Highland Society's Show at Kelso:

Shorthorns.—The best animal of the breed was declared to be O. H. Graham Sterling's two-year-old bull, Star of Dawn. The same exhibitor had the first-prize cow, Strowan Marchioness 3rd.

Aberdeen-Angus.—The champion of the breed was Earl of Strathmore's two-year-old heifer, May of Glamis, and the champion bull was Proud Duke of Ballindalloch, shown by Rev. C. Bolden.

Galloways.—Mr. John Cunningham's two-year-old heifer, Louisa II. of Durham Hill, was declared the best of the breed, and the same exhibitor's three-year-old bull, Scottish Standard, the champion bull.

Ayrshires.—The championship of the breed was found in R. & J. McAllister's fine white cow, Cherry Ripe, bred by John Bauchop, Auchenblath, and the best bull was declared to be the first prize two-year-old, Mr. Robert Osborne's Gigantic Stunner, who was also first at the Royal.

Clydesdales.—A. & W. Montgomery's two-year-old stallion, Benedict, by Baron's Pride, and out of a Maregor mare, was awarded the championship as the best male in the class. Montrave Maud was the champion female.

Leicesters.—The President's medal, also the Tweedale gold medal, went to Mr. Matthew Templeton's first prize aged ram, Challenge Cup; I. Douglas Fletcher, of Rosneath, won first in a class of forty-sixty shearing rams, and the first prize for non-yearling ewes went to Alex. Cross, of Knockdon.

Shropshires.—D. Buttar's first prize shearing ram at the Royal won the championship here, and his first prize two shear ram was the reserve number.

E. & C. WOOD'S LEICESTERS.

A short call upon the Messrs. Wood at Freeman, Ont., near Burlington Station, and a run through the flock of Leicesters soon convinced us that they are alive to the times by the fine condition we found their sheep in. We saw some splendid lambs, well advanced in size, with grand fleeces, and very uniform, which Mr. Wood informs us were sired by the Kelly-bred ram Shakespear, and an Orr-bred sheep of Thompson's importation. We also saw four strong, useful shearing rams, a couple of which would easily make showing winners, and parties desirous of such should not delay in making application, as the demand this season is the best in years.

BELLEVILLE BUSINESS COLLEGE

ESTABLISHED 1886. The system of training is Normal, Specific, Thorough, comprising full instruction and practice in

- I. BOOKKEEPING—Double and Single Entry, Business Papers, Law and Practice.
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- III. CIVIL SERVICE QUALIFICATIONS—Indexing, Pencil-Writing, Statistics, English and French Options.

This College is OPEN THROUGHOUT THE YEAR. Students may enter at any time. Now is the Time.

ROBERT BOGLE, J. FRITH JEFFERS, M. A., PRINCIPALS. WRITE FOR CALENDAR.

There's No Risk In Using FLEMING'S LUMP JAW CURE

It cures any case of Lump Jaw that is worth curing. Does it quickly and for good. Hundreds of cases cured during the last year. Easily applied. Safe to use, and every bottle sold under this GUARANTEE.

That if it fails your money is to be returned. Price, \$3 a bottle. Sent by mail upon receipt of amount. Illustrated treatise on Lump Jaw FREE.

TESTIMONIAL:
Crossford, N. W. T., Jan. 26th, 1898.

Dear Sir,—I have used several bottles of Fleming's Lump Jaw Cure, and can certify that it cures every case of Lump Jaw that I have seen. I have cured the lump on young and old cattle. One application will cure any case of an early stage. Two applications never fail. It is no longer necessary for farmers and ranchers to shoot their lump jaw. All that is necessary is Fleming's Lump Jaw Cure, and a little elbow grease to rub it in.

Yours truly,
JOHN CLARK, JR.

Address:
FLEMING BROS.,
ST. GEORGE, - ONTARIO.

Central Canada Exhibition
OTTAWA, ONT.,
September 16th to 24th, '98

Entries close Tuesday, Sept. 13th.

OVER \$75,000 expended since last Exhibition in extending and improving the grounds and erecting new buildings.

Prizes increased in all the principal Live Stock Classes, including Poultry and Pigeons, also new classes added to the Horse, Cattle, and Swiss Departments.

Special prizes for Milk Test.

Thirty-two Gold Medals as Sweepstake Prizes for Horses and Cattle.

New Main Building 310 feet long, constructed of iron.

Agricultural Implement Hall and Poultry Building enlarged, New Dining Halls, all buildings reconstructed and enlarged.

Live Stock accommodation unsurpassed. Evening Entertainments and "Spectacular" as usual.

Special Low Rates on all lines of travel. For all information, address

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The only economical device for watering cattle in stables. Cheese-factory and creamery outfits, etc. Write for catalogue and price.

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Kingston, Ont.

SHEEP BREEDERS' ASSOCIATIONS.
American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LAYBURN, Sec., Lafayette, Indiana. 8-17-03

GOSSIP.

Henry Stevens & Sons, Lacoma, N. Y., write: "They appear to be a good demand for well-bred Holsteins, and our sales of late are exceptionally good, both in U. S. and Canada. Messrs. Matt. Richardson & Son, Caledonia, Ont., made a selection of five animals from our herd. Four were finely bred DeKoi yearling heifers, and a bull calf sired by KeKoi 2nd's Butter Boy 1st, and from the cow Netherland Pietertje Princess. She is a low-down, broad, level cow of a true dairy type, and as a producer is among the very best. She was officially tested one week for butter in her three-year-old form in 1891. She gave during the week 561 lbs. milk which averaged 4.02 per cent. butter-fat, making 18 lbs. 1.93 ozs. butter containing 80 per cent. fat. This would give her an equivalent record at full age of 23 lbs. 1.93 ozs. in one week. She stood seventh in the official butter prize contest of 1891. Netherland Pietertje Princess was sired by Milla's Pietertje Netherland. DeKoi 2nd's Butter Boy 2nd, the sire of Messrs. Richardson's bull, is a son of DeKoi 2nd. The records of this great cow and also of her daughters are familiar to most admirers of Holstein-Friesian cattle. The young bull selected by these gentlemen is beautifully formed and nicely marked, and has a combination of blood that we believe will prove very valuable in the fine herd of Messrs. Richardson, which he has gone to head. The heifers were also splendid individuals, very uniform in type. All were sired by DeKoi Artis, a bull of much individual merit, and exceptionally well bred, and their dams are very large producers, both in quality and quantity of milk, and we feel confident their purchase here will make a valuable acquisition to the herd they have recently established.

MESSRS. F. BOWENCASTLE & SONS' SHORT-HORN, OTS-WOLDS, AND BERKSHIRES.

This time we found Mr. Bowencastle at his home near Campbellford, out busily engaged with his stock as usual, which are showing the good results of the abundantly supplied pastures. Our attention was first drawn to the Shorthorn herd of some 40 animals, and we were pleased to see the young things in such good shape. The early-maturing qualities possessed by the Anchovy family respond readily to favorable conditions. The experience of the past few years' drouth and scarcity of feed is completely overcome by this year's abundance. The three-year-old red bull Redman 21765, by imported Tofthille 11113, and out of Canadian Duchess of Gloster 23, has made marked improvement from time to time during our former visits, but at no period has he made greater advance than since our call some six months ago. He now stands an immense, level animal, with grand amount of substance, and such a quiet disposition! And from the young stock to be seen on the farm, got by him, we judge he is proving himself highly satisfactory as a sire, aided as they are by the high dairy qualities of the dams. Among the matrons we feel again a liberty to mention the old cow Anchovy 2nd, in her thirteenth year, and it is evident she has lost none of her vigor. She has a splendid roan bull calf by her side whose level, broad back would attract attention at sight. The two Anchovy cows (8th and 9th) are looking in excellent condition. Anchovy 8th has a nice red bull calf, while her sister has not yet calved at the time of our visit. Of a somewhat different strain is the six-year-old cow Sunflower by Brighton Lad 147, and out of Cecilia 5th 8983, which is regarded as one of the profitable ones, and now suckles a fine six-months red bull calf that promises to be a thick, snappy fellow, possessing much of the growthy qualities of his sire Redman. In another pasture we visited a bunch of half a dozen useful, well-matured two-year-old heifers sired in October and November. They are good representatives of the Anchovy family, are strong in type, and extremely uniform. They were sired by Walcott Duke, by Premier Earl, and the Canadian Duchess of Gloster strain of the progeny through Redman will add greatly to the value of the pedigree of the herd. At the time of our visit eight calves had arrived, six of which are bulls (four reds and two roans), with two other cows to hear from, which with present demand will attract a host of eager buyers when the value of their pedigrees are looked into. Last year found a good, useful bunch which all went at once, but this crop will place the firm even in stronger shape with calves fully equal in quality, and of the last lot we heard (outside) some very complimentary remarks made by highly competent judges of the useful ones.

In Ots-wold sheep some 55 head are in the flock. The present crop of lambs is by a well-formed two-year-old sheep, purchased from Mr. Garbutt, Charnock, in all there are some fifteen ram lambs, among which are some right good ones, strong and well covered.

A good stock of Berkshires were on hand at the time of our visit, with four brood sows. The stock boar Hawkwell 4567, by King Lee 4350, and out of Beat on Earth 4948, has grown into a strong, useful type of an animal, possessing much of the Enterprise quality of that worthy family. The old sow Bonnie Lass 2681, by Royal Warrior 1204, and out of Dolly Varden 2277, has proven herself a very valuable matron by high-class production on the farm. She is again due in the fall. The young sow Dolly 5263, by Bonny 3209, and out of Queen of Spades 3323, is also due in the fall. We saw a splendid bunch of young stock from which many really choice animals could be selected, and the price which we heard, considering their quality, we consider extremely modest.

SHORTHORN CHAMPION AT KELOS.

Star of Dawn, a light roan two-year-old bull owned by Mr. C. Home Graham, and bred by Mr. A. M. Gordon, won the championship of the breed at the Highland Society's Show at Kelso last month. He is a son of Star of Morning, and of Marlan, by Mario. In this contest he defeated the first-prize winner at the Royal Show, Misty Morning, bred by Mr. Duthie, and sired by Pride of Morning, who is also a son of Star of Morning. So that these two fine bulls are closely related. Star of Dawn has been sold for exportation to Buenos Ayres.

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GOSSIP.

Proceedings of the New York Farms during the season 1897-98 has recently reached us from the secretary, Mr. Thomas Sturgis, New York. Three meetings are reported, which were held in December, January and February, when the following subjects were dealt with by experts: "Hardy Flowering Shrubs and Perennials," "The American Hen," "The Adaptation of the Tobacco Plant to Certain Soils." The papers are valuable, and were followed by helpful discussions.

Mr. F. A. Gardner, Britannia, Ont., offers for sale his excellent Scotch-bred Shorthorn bull, Bold Britain - 20397, having used him as the chief sire in his herd for three years. This bull has headed the first prize herd at the Peel County Fair for two years, and has proved a first-class breeder, as might be expected from his high-class pedigree, being a son of imported Golden Crown - 17086 - by Sittytown Sort, and out of Mine Lenton, by the imported Cruickshank bull, Baron Lenton, grandam imported Mermaid, by the Sittytown - bred Victoria bull Vermont.

"THE BRIERS."

We were unfortunate in not being able to see Dr. Sibbald (through illness) when we called at his beautiful home near Sutton, Ont., pleasantly situated on the shore of Lake Simcoe. The obliging herdman showed us over the farm and answered our various enquiries regarding the Shorthorns, which we found in the pastures, and which are an even lot, possessing high dairy qualifications, which always bring their young calves forward rapidly. The herd consists of some thirty head of different ages.

C. O. MORROW'S TAMWORTHS.

In the village of Hilton, Ontario, some four miles north of Brighton, on the gravel road, we found a very choice young herd of Tamworths on the farm of Mr. C. O. Morrow, the foundation of which was obtained from A. C. Hallman and Masters, New Dundee, Ontario. The stock boar, Spruce Grove Model 405, by Briery Banks Hugo 167, and out of Amber Sally 2nd 151, was farrowed in April, 1895, and since his arrival on the farm has been exhibited at all the fairs within a reasonable distance in four counties, easily landing the highest honors obtainable, frequently in a stiff competition. He weighs in present form about 800 pounds, and is capable of going much more, carrying even that weight well under command, and standing squarely on his feet, his weight being accounted for in his remarkable depth of body. Hilton Queen 569, by Wolverton Chief 337, and out of Birmingham Belle 219, is two past, and suckling a very uniform bunch to Spruce Grove Model, this being her fourth lot. In condition this sow will weigh over 500 pounds; in possession of a good amount of bone, with splendid length of body and her substance evenly distributed. Tilly 796, by Sir Nicholas 583, and out of Briery Banks Belle 175, is a year old past, and carrying her third litter, due in October. We also saw a pair of choice young six-months sows out of Hilton Queen that have made good use of their time, and which are true models of the breed. Morrow's Choice 712, by Hilton Hero 509, and out of Honor 703, was purchased from Mr. Bates, by whom her dam being a George-bred sow. She is also due in September. Mr. Morrow has also the nucleus of a splendid Ots-wold flock if he continues in the way he has started, and we would be surprised if some red tickets do not fall to him this fall.

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