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LONDON, ONTARIO.

EDITORIAL.

JULY 1, 1899.

WINNIPEG, MANITOBA.

No. 481

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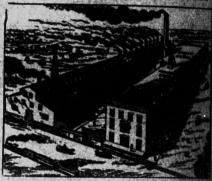
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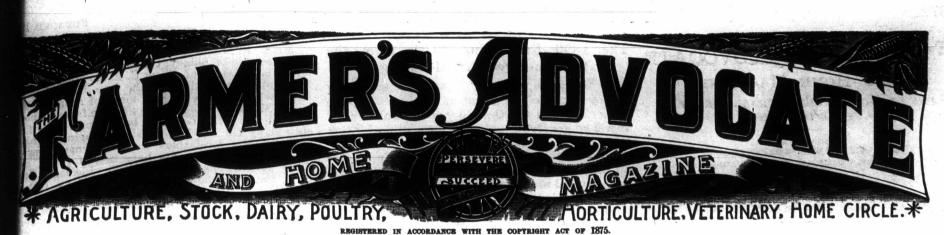
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OL. XXXIV.

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

No. 481

EDITORIAL.

The Farmer's Dwelling House. CASH PRIZES OFFERED. The observation is frequently made in many ctions of the country that the farmer erects tter buildings, comparatively speaking, for his imals than he does for himself and his family. e is charged with putting more thought and sults of observation into barn plans than into buse plans, and that he seems to be more conrned for the ventilation and sanitation of stables an for the comfort and well-being of his wife and mily. We shall not stop to discuss how well unded the complaint may be, but as many new rmhouses will undoubtedly be erected in the ear future, and many substantial old ones can be astly improved by a little alteration, we have a lan to propose whereby helpful ideas may be laced at the disposal of our readers. Time was when the main idea appeared to be "lots of room" nclosed within four square walls, with little or no egard to obviating unnecessary steps and toil on he part of the wife and daughter or domestic help, to a tasty exterior, or to making the rooms where the members of the family spend most of heir time the most comfortable. To begin with, he farmhouse should be homelike—a place to live the associations of which will become almost art and parcel of the family as it grows up. Heretofore the ventilation, drainage, heating by urnace (more cleanly, economical and effective han an assortment of stoves), arrangement of ellar, back kitchen, etc., have received altogether oo little attention, compared, in many cases, with n ambitious but costly attempt to make a big, howy edifice. What we propose is to offer the um of \$45, divided into three prizes (1st, \$20; 2nd, 15; and 3rd, \$10), for the best and most complete plans, with written descriptions sufficient to explain the former fully, together with a good clear photograph of the house itself; the house to be one he cost of which would in the ordinary course run ay from \$1,500 to \$3,000, not exceeding the latter. lany people themselves now possess and can se cameras, or, if not, the services of a local photographer can readily be secured to "take" picture of the residence. Many persons naturally take a justifiable pride in their homes, and already have in their possession good photographs. In such cases it would only be necessary to prepare the plans of the cellar or basement and different stories, showing how they are laid out, together with closets, pantry, verandas, dimensions, etc., and forward to us, with a letter describng the house, material used, cost, etc. This competition will be open for two months (July and August), all plans, photos, and manuscript to reach the FARMER'S ADVOCATE office, London, Ont., on or before the 1st of September next. Announcement will be made as soon as our awards are made, and so soon after as practical we will publish in the ADVOCATE engravings of the prizewinning houses, and plans and the descriptive articles. We desire our friends to aid us in furthering the object we have in view, as stated above, by at once entering the competition and sending us the plans, photos, and articles. Do not put it off till a more convenient season, but decide to-day that you will do so. Prepare the plans in pencil or ink (the latter preferred), or making pencil sketch first and pen and ink afterwards. Make arrangements for the taking of the photo, if you have not one already, and writing the descriptive article. Mark your name and address on each, and wrap up the photo carefully, so as to avoid injury in coming through

Fattening Cattle Loose Instead of Tied.

Early in the year 1897 the attention of one of the editors of the FARMER'S ADVOCATE was called to the results of a comparative test between cattle fattened loose and a similar lot tied in the usual way. It was conducted on the farm of Hon. Wm. Mulock, Postmaster-General, near Aurora, Ont., in the County of York, and was under the oversight of Mr. Wm. Linton, the well-known Shorthorn breeder. The gains in flesh stated to have been made by the cattle at liberty, compared with these confined, were so remarkable as to challenge instant attention. A member of our staff visited the farm, obtained a description of the plan of feeding and particulars generally of the trial, which were published in the April 1st issue of the ADVOCATE of that year. There was not only the direct advantage of extra gain in flesh, but a simpler and less expensive plan of stabling, and lessened labor for the attendants, all of which are important items which a good business farmer will not overlook in these days of close margins, because they may mean the difference between loss and profit. That the subject deserved further investigation was, therefore, apparent on its face. On a few stock farms here and there the plan had been in use, giving satisfactory results, such as those of Mr. W. C. Edwards, M. P., of Rockland (where this plan had been in vogue for some years on an extensive scale); A. & D. Brown, Elgin Co.; the McMillans, of Huron; Baty, of Middlesex, and others, from whom we obtained and were enabled to lay before the farmers of the country a fund of definite and suggestive information. The desirability was suggested of an experiment on this subject at one of the Government institutions, and the matter was promptly taken up by Mr. Wm. Rennie, the able Superintendent of the Ontario Agricultural College Farm at Guelph. A careful trial was made during the winter of 1898, which resulted in favor of the loose system of feeding, as our readers are aware. In the 6 months' feeding period the loose steers, on similar rations, gained about 70 pounds each per head more than those confined. A good many others have since been encouraged to give this plan a trial, and the consensus of opinion seems to be that the cattle make greater gains-"do" betteron the same food with less labor. That they should thrive better with a fair amount of liberty and exercise than when tied day after day and month after month-in many cases never let out at all-during the long feeding period, does not seem unreasonable, because under the latter conditions the secretions and other processes will naturally become clogged and impeded, thus preventing the animal from making the best use of its food. Animals so fed require to be dehorned; and, as a rule, have access to water at all times. An incidental advantage arises in the fine condition in which a large quantity of manure is left for use in fertilizing the farm for future crops. Last year a number of stables were overhauled in order to change from stalls, with stanchions or chains, to open compartments, and this year some old stables are being altered and new ones constructed according to the latter plan. That feeders might be further informed on the subject, one of our staff recently spent a couple of days in Huron Co., Ont., and elsewhere we give the results of his enquiry in the case of two successful feeders, Mr. Wm. Murdock. who the past season fed 44 head loose and 18 tied, and Mr. D. A. Forrester, who delivered the other day a well-fattened bunch of 40 head, all fed loose— 5 in each pen. Both are well satisfied with the system. A plan of each stable is given. We might add that Hon. Mr. Mulock himself visited Mr. Forrester's stables last winter and was so well pleased with the details of the internal arrangement that he intends to modify his own stables accordingly this summer. He now considers it an advantage to have fewer cattle penned together. We also publish a letter with an elaborate set of

plans kindly furnished us by Mr. A. S. McBean, of Glengarry Co., Ont., in reply to a recent enquiry from one of our readers, in which he gives an admirable description of his stabling for 125 head of cattle, 100 hogs, and 8 or 10 horses, besides poultry. Mr. McBean has been fattening export cattle for 7 or 8 years, and a year ago rearranged his stables, giving up the system of tying cattle, and he is well pleased with the change. The plans which he has furnished us, as well as the others published, will repay careful study.

Preparation for the Fairs.

As the fair season approaches again, we are led to think of the need of preparation for the competition for the prizes offered in the various lines of live stock, agricultural, dairy and horticultural products. In the case of live stock, no doubt the work of preparation has been, as a rule, in process for many months. The experienced breeder and showman recognizes the fact that the preparation of prizewinners, in the broadest and best sense, begins before they are born by the mating of the best parents, with a view to the production of offspring combining a maximum of the good quali-

ties of the highest type of the breed.

Having such a foundation to build upon, the preparation of the animal for this year's showing may well have commenced at the close of last year's fair season-not by continuing to force it to obesity by feeding full rations of concentrated and fattening foods, but by varying its bill of fare, making it to consist mainly of bulky foods, such as good clover hay and early-cut, well-saved straw, corn fodder, and a liberal supply of roots, bran, and ground oats. This, together with regular and sufficient exercise, appears to us ideal treatment for at least the first half of the year since the last year's showing season. While in these remarks we are thinking primarily of cattle, yet in the main the same general line of treatment, with variations to meet the different circumstances, applies to all classes of stock. The first desideratum is the laying of a firm foundation by securing a strong constitution, with the best quality of bone and abundant muscle and vital force; then the finishing touches may safely be added in the form of a larger proportion of the more concentrated foods, such as oil cake and cotton-seed meal, peas and corn; but for variety and safety it is well, in feeding any or all of these, to add bran and oats, in order to avoid cloying of the appetite, and to produce natural flesh in preference to fat exclusively, and to prevent the tendency to lumpiness or the production of rolls of hard fat on the exterior of the carcass, on the one hand, or of excessive softness and flabbiness on the other. There is a quality of handling in the well-fed animal which responds to the touch with a certain elastic softness which pleases and satisfies a judge who knows from experience when he finds what is about right; and, other things being equal, this quality of handling may well, and often does, turn the scales and decide the placing of competing animals, since it indicates a kindly feeder in any class of beef cattle, and is found, as a rule, in the deepest milking and richest butter-producing cows. While it goes without saying that it is hardly possible to prepare stock for successful showing by allowing them to run out in the hot summer sun, where they have to fight flies and forage for a living, but that they must be kept up in well-ventilated stables with screen doors and windows to admit fresh air and exclude flies, yet it is important that sufficient exercise to keep their legs in the best condition shall be given, and to this end they should have the run of a pasture field, if not during the nights, at least for two or three hours in the evening and early morning of each day. This we know is hardly practicable in the case of bulls, but these may be given liberty to exercise in a shed, or be led out for a mile or two in the cool of the

THE FARMER'S ADVOCATE

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evening. Experienced showmen know the importance of securing a glossy and soft-feeling quality of hair, and this can only be obtained by blanketing and careful and industrious grooming, which does not mean scratching with a sharp currycomb, but frequent brushing, the use of soft woolen dusting cloths, and, what is still better, a free use of "elbow grease," or long-continued hand-rubbing which is the best possible agency to produce a gloss and a kindly feeling.

Training animals to lead gently and naturally by the halter or line, to walk freely with a proud and sprightly carriage, and to stand well in the best positions to show themselves to advantage, counts for much more in the showring than many exhibitors reckon upon. We have seen prizes awarded to animals judged in a fixed standing position which we apprehend would not have gone to their credit had they been required to walk around the ring before the ribbons were tied. Judges are now rightly paying more attention than formerly to this feature in all classes of stock. An animal intended for breeding purposes ought An animal intended for breeding purposes ought certainly to be capable of walking freely, and the idea contained in the axiom, "No foot, no horse," is being wisely extended so as to apply to all live stock, for it is certain that quality and strength of fact and logs and their proper placing are of no feet and legs and their proper placing are of no small importance as indications of constitutional

vigor and prepotency.

The same general idea of early planning and thorough preparation as is outlined in the foregoing remarks apply to all exhibits intended for competition, whether they be agricultural or dairy structured on families and flowers. Strict attention to products, or fruits and flowers. Strict attention to the adoption of the most approved methods in the selection, cultivation and development of the best varieties of grain or roots, the fertilizing, thinning and protection of fruits, and the most scrupulous cleanliness in the handling of milk from which butter or cheese is made in order to secure the highest degree of perfection in quality and aroma, are absolutely necessary to success where competition is so keen and trained judges of fine discriminating taste are called upon to officiate. In every department of our great agricultural and industrial exhibitions the standard of excellence is advancing, and those who would stand among the winners in this friendly rivalry must learn to realize

that the best is none too good.

The 1899 Graduating Class from the Ontario Agricultural College.

In this issue we take pleasure in presenting photogravures of the members of the 1899 graduating class from the Ontario Agricultural College. It will be gratifying to our readers to notice that these young Bachelors of Scientific Agriculture (the degree conferred by the Provincial University) all come from Canadian farms, and also that they have decided to follow agriculture in one or other of its branches. We congratulate them on successfully completing their course, and bespeak for them, one and all, careers of usefulness, that will do credit to themselves and their alma mater.

Mr. A. M. High, B. S. A., was born on a farm in Lincoln Co., Ont. His parents are of German descent, known as Pennsylvania Dutch. Mr. High secured his associate diploma at the end of his second year, in 1891, and did not re-enter the College till October, 1898, and graduated at the end of the 1898-9 College year. While at the College Mr. High was appointed by his fellow students to the office of treasurer of the Young Men's Christian Association, and editor of the Horticultural Column of the O. A. C. Review. He has given especial attention to horticulture, which line he intends to fellow from now forward.

Mr. Chester D. Jarvis, B. S. A., of Guelph, was born near London, Ont., in 1876, being the son of Mr. L. G. Jarvis, the well-known poultry judge and late manager of the Poultry Department of the Ontario Agricultural College. Mr. Jarvis, after receiving a good general education, worked on his father's fruit and poultry farm at Port Stanley, Elgin Co. In 1896 he entered the O. A. C.,

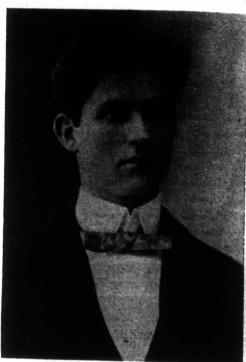


A. M. HIGH, B. S. A.

where he passed all examinations with good standing. Two years later he received his associate diploma, was awarded the scholarship in veteridiploma, was awarded the scholarship in veterinary science, won first place in the essay competition at the College, and was awarded the Minister of Agriculture's prize. During his third year he was elected president of the O. A. C. Literary Society. Mr. Jarvis specialized in horticulture, and intends to follow this line of work. He is now employed at the Horticultural Department, assisting in experimental work in fruit and flowers. ing in experimental work in fruit and flowers.

Mr. Wm. N. Hutt, brother of Prof. Hutt, Horticulturist at the Agricultural College, was born in the Township of Stamford, in the County of Welland. He comes from a long line of farmers of U. E. Loyalist stock, who were the pioneers of the Niagara district. His father, F. A. Hutt, is one of the leading farmers and fruit-growers of his county, and has always taken a deep interest in agricultural and municipal matters. Mr. Hutt was brought up on the farm, and attended the public and high school in his township. For two years he attended the St. Catharines Collegiate Institute, and there obtained honor matriculation and a first and there obtained honor matriculation and a firstclass certificate. For a couple of years he taught school near home, and spent his summers on the farm. Mr. Hutt has always been a close student of agricultural problems, and has kept in close touch with the current agricultural literature of Canada and the United States. He has also been a speaker at local Farmers' Institutes, and a writer for the agricultural press. In the fall of 1897 he entered the O. A. C., taking the first two years' work of the course in one year, and has graduated this year as a specialist in horticulture. At the College Mr. Hutt took prizes for oratory and essay writing. It is his intention to follow the science and practice of agriculture, which he considers well worthy of any man's best thought and energy.

the oldest in the country, being one of the first cleared by the U. E. Loyalists on their advent to Canada. His forefathers for five generations on the side of both parents have been farmers, and three generations on his father's side have lived upon the farm now in possession of his father. Mr. Mallory attended the public school until the age of thirteen, when he passed the entrance examinations. He then worked upon his father's farm until the age of fifteen. In January of 1896



CHESTER D. JARVIS, B. S. A.

he entered the Commercial Department of Albert College, Belleville; concluded his commercial course in April of the same year. With the purpose of following agriculture in view, he entered the firstyear class at the Ontario Agricultural College in October of 1896. In his first-year examinations he stood well up in general proficiency and passed with honors. In his second year he passed with honors in nearly all subjects. Entered the third year in October of 1898 and obtained the degree of B. S. A., being an honor man in nearly all subjects, and distinguished himself by writing the best thesis handed in by those who were candidates for B. S. A. In his third year, Mr. Mallory was agricultural editor of the O. A. C. Review. In his second year he held the position of secretary of the Young



WM. N. HUTT, B. S. A.

Men's Christian Association. Mr. Mallory at present intends to assist his father in managing and working the farm, upon which is kept herds of Holstein cattle and Berkshire and Tamworth swine.

Mr. W. J. Price, B S, A., was born at Conings-by, Wellington Co., Ont., on September 9th, 1877. His father, Enoch Price, was born in Ireland, and for many years has followed the occupation of farming, formerly in the County of Wellington, but at present in Dufferin. His mother was born but at present in Dufferin. His mother was born in Canada, of English parents. During Mr. Price's ('ollege course he won several prizes. Some of these were: first prize in general proficiency in the first year, first in English, first in natural science

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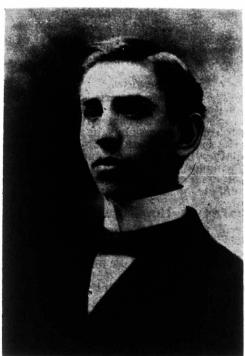
nd of and the Geo. A. Cox scholarship in natural science. A prize won later was the special prize given by the College to the graduate who stood highest in his class with first-class honors in his special course. He held during his second year the office of secretary treasurer of the Athletic Association. Other offices held were corresponding secretary of the Y. M. C. A., critic for the Literary Society, business manager for the College paper, the O. A. C. Review, and a year later he was appointed managing editor of the same paper. It is now Mr. Price's intention to pursue the study and practice of agriculture on scientific lines.

Mr. G. H. Murdock, B. S. A., was born on a farm near Wyevale, Simcoe Co., Ont., where his father, 5th, 1873, and lived on the farm until 19 years of age, thus serving a splendid practical apprenticeship to the profession of agriculture. He attended public school until he had passed the examination for entrance to high school, came to the O. A. C. in the autumn of 1892, and secured his associate diploma in the summer of 1894. Since then Mr. Buchanan has been engaged in the office of Mr. Zavitz, the Experimentalist, excepting three months in the winter of 1898, when he took a course in the Western Ontario Shorthand Academy. In October, 1898, he re-entered the College for his final year. During his course in college he endeavored to take as practical a course as possible, giving a fair share of attention to Athletic, Literary and Y. M. C. A. Associations. He took a good standing in class-

stock, the exams. on which included written and practical work on sheep, swine, dairy cattle and beef cattle. For the present Mr. Marshall will remain at home, where mixed farming is followed, but he expects to take postgraduate work in agriculture.

Mr. John A. Nelles, the New Western Fair Secretary.

In consequence of the appointment of Mr. Thos. A. Browne as Postmaster of London, Ont., Mr. J. A. Nelles, of this city, has been appointed Secretary of the Western Fair, and has already actively undertaken his new duties. Mr. Nelles was born in London Township. Middlesex Co., 46 years ago,



F. R. MALLORY, B. S. A.



G. H. MURDOCK, B. S. A.



JOHN BUCHANAN, B. S. A.

H. Murdock, was a successful farmer. Mr. Murdock's parents were born in Victoria County, near Lindsay, Ont. He entered the College in the fall of 1896, with the intention of preparing himself for farming, which is the line he intends to follow in after life. He will handle his father's farm and pay special attention to live stock.

Mr. M. Raynor, B. S. A., was born on his father's farm at Rosehall, Prince Edward Co., Ont., in 1879. His parents are both Canadians, descendants of the U. E. Loyalists. While at the College, Mr. Raynor was president of the Young Men's Christian Association during the College years of 1898 and 1899. He was also one of the agricultural editors of the O. A. C. Review published monthly for the College year by the Literary Society. In his first year he

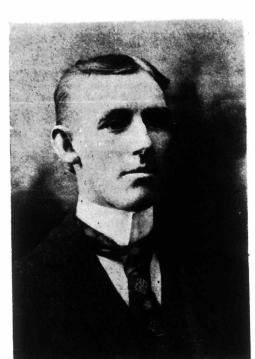
work, however, securing first-class honors in several subjects, and standing sixth in general proficiency at the end of his second year. In graduating year he gave special attention to essay work and thesis, and won first-class honors in these branches. He held the position of personal editor of the O. A. C. Review during his second year, and College reporter for same in his third year.

Mr. Fred. Rupert Marshall, B. S. A., was born and has always lived at Westbrook, six miles west of Kingston. His parents are of English and Scotch descent, and his father has always made farming his occupation. On finishing public school work Mr. Marshall attended high school for one year, and then spen two years at the Kingston Collegiate Institute. He then remained three years

being the son of a pioneer farmer, Mr. John Nelles, who came to the locality before there was a tree cut where the city now stands. With the exception of two years spent in the Western States, his home has been in London, where he stands high in the esteem of the business community. For 17 years past he has been actively engaged in the general insurance business, during all of which period he has been Secretary of the London Board of Trade and also of the London Cheese Board, the incorporation of which this year was mainly brought about through his efforts. All arrangements for the forthcoming show on Sept. 7th to 16th are well advanced, and prospects were never more auspicious. We bespeak for the Western Fair under the new Secretary continued progress and prosperity.



W. J. PRICE, B. S. A.



M. RAYNOR, B. S. A.

stood third in general proficiency and won a prize awarded by the College. He also won a \$20 scholarship for the Department of English in the same year. This was awarded by G. A. Cox. Mr. Raynor purposes to remain on the farm at home for a few years at least. At one time he says he felt like leaving the farm to enter some other work, but thanks to the training at the Ontario Agricultural Cellege, he has changed his views, and now believes farming is an occupation which is not to be despised.

Mr. John Buchanan, B. S. A., was born of Scotch parentage, in the County of Huron, Ont., on April

on his father's farm, and entered the O. A. College in his nineteenth year. In his first-year work he obtained honors in all departments, with first-class honors in mathematics and natural science, being awarded the Cox scholarship in the first-mentioned department. For the year he stood fourth in general proficiency. In his second year he obtained honors in all departments and retained the same place in proficiency with those of the class who took the first year at the same time. In his final year he was assistant managing editor of the Review, and captain of the Rugby football team. On the final examination he obtained honors in several branches, with first-class honors in live



F. R. MARSHALL, B. S. A.

A Wise Precaution.

In Denmark very stringent laws have been enacted to prevent tuberculosis in cattle and the spread of infectious diseases in man. All dairies are prohibited from giving out milk or buttermilk to be used for food of man or beast unless it has been subjected to a temperature of at least 185° F., and the residue in the separator bowl must be burned. This latter plan might well be followed by everyone using a cream separator as a commonsense safeguard.

STOCK.

The Royal Counties Show.

This very popular society was honored this year by the acceptance of its presidency by Her Majesty the Queen, and its grand exhibition of live stock was during the week honored by visits from H. R. H. the Prince of Wales and their Royal Highnesses the Dukes of York and Connaught, as well as other members of the royal family. H. R. H. Prince Christian undertook the duties of acting president, which were carried out in a thorough and efficient manner by His Royal Highness, assisted as he was by a most energetic council. Under such high patronage, and favored with an ideal showyard, under the shadow of the royal residence at Windsor Castle, it is no wonder that there was in all



KING CLOVIS 6794.

WINNER OF CHALLENGE CUP AND GOLD MEDAL AT ROYAL DUBLIN SOCIETY'S SHOW, 1899.

sections a record entry and a high standard of quality. This society is one that fully recognizes the claims of sheep, and gives them the place of precedence in its catalogue; therefore we will, in our brief and necessarily much condensed report of this excellent show, follow the same order.

Hampshires were the first breed placed in the catalogue, and its total entry was one hundred pens. The general high merit, even and uniform type and true character of this breed was such that we think that it has at no previous exhibition of this society been exceeded. The yearling rams were a capital class—uniform in flesh and fleece, the old rams a notable class for great merit of type and character, particularly the leading sheep The single ram lambs, a class of twenty-nine, were an exceptionally grand lot, showing, in the best sense of the word, early maturity. There have been larger classes of single ram lambs, but certainly not in recent years-at any rate, one that was equal in merit to this. The pens of three ram lambs were fully equal in merit to the former, but not quite so uniform in respect to character, for in selection there is always experienced the great difficulty of being able to get all three alike. The yearling ewes were a capital class, of nice merit and type, notably the leading pen; and the ewe lambs exhibited in a marked degree the chief characteristics of this breed. The principal prizewinners were: Mr. J. Flowers; Mr. A. Henderson, who took champion prizes for best pen of lambs and for best pen of females; Mr. R. W. Hudson, who secured championship for best ram or ram lamb; Cary Coles; R. Coles; W. T. Twidell; H. C. Stephens; T. F. Buxton; E. Whalley-Tooker; J. Bonham-Carter, etc.

Southdowns, with an entry of ninety-two pens, made a large exhibit, but there was entirely lacking that uniformity of type and character, especially in respect to quality of fleece and color of faces and legs, that one would desire to find in a a breed that has behind it so grand a reputation. No matter how one may regret to record the fact, it becomes clearer every year that unless a more careful system of mating and breeding is observed by a larger number of breeders than are doing so at the present time, it will be a long time before this breed regains that uniformity of type and character it once possessed. The yearling rams were a useful lot, the Prince of Wales being particularly fortunate in securing premier honors and championship for his entry in this class, which was far too feminine in appearance, especially in its head. for a ram. The old rams were a useful class, the leading sheep being a very good one from Mr. C. R. W. Adeane's. The ram lambs, both in the class for singles and for pens of three, had many very excellent specimens amongst them, though in many instances these, for some cause or other, failed to secure the judge's approval, whose method of selection was somewhat sharply criticised. The yearling ewes and ewe lambs were very useful, and, we thought, far more credit to their breed than the rams. In addition to H. R. H. the Prince of Wales, the following noblemen and gentlemen were amongst the prizewinners: Earl Bathurst, who took the female championship: Lord Ellesmere; Sir James Blyth; W. Toop: the Pagham Harbour Co.; Mr. H. L. B. McCalmont; H. Penfold; and A. Hearman.

Kent or Romney Marsh sheep had an entry of twenty-nine, and there was disclosed throughout the whole of the classes far greater uniformity of type than a few years ago, previous to the work of registration being undertaken. Yearling rams were not particularly strong, but the three specimens in the old ram class to which the awards were made were of grand type and quality. Yearling ewes and ram lambs were small but highly creditable classes, the principal winners being Messrs. W. Millen, C. File, and F. Neame.

Shropshires made a large entry, there being no less than furty four works present as a conjuct with the state of the state of

Shropshires made a large entry, there being no less than forty-four pens present, as against nineteen last year. Their general average of merit and quality was high in all respects, and it is much to the credit of this breed that so great uniformity is and can be shown. The yearling rams were headed by a typical Barrs ram, followed by one of Mr. A. E. Mansell's, whilst one of A. Bradburn's came in for third honors. The old ram class found Mr. Tanner's ram at its head—a ram bred by Mr. A. Mansell, and Barrs' flock came next. A very creditable lot of yearling ewes were shown, whilst the ram lambs were hardly up in condition, though the winning pen was a typical one, of high merit and quality; the more successful winners being Messrs. M. Barrs, A. Tanner, A. Mansell, R. P. Cooper, P. L. Mills, and A. Bradburne.

Oxford Downs were more fully typical of their breed, owing to an increased entry and to the reappearance of Mr. A. Brassey's exhibits, which for the past year did not compete. His unbroken success has, however, been stopped, for in yearling rams Mr. Treweeke's flock secured the lead, but in the classes for ram and ewe lambs the known merit and quality of the Heythorpe flock held its own, Mr. W. A. Treweeke winning champion in the yearling ram, Messrs. Brassey and W. Arkell also being winners in the different classes open to them.

Agricultural Horses (principally, if not entirely, Shires) numbered ninety-nine entries, and these were undoubtedly of a far higher merit and quality than we have ever seen before at the meetings of this society. The present high value of the Shire horse and the increased number of studs, combined with its present-time popularity, all tended to make this exhibit, which will probably hardly be equalled at the Royal, one of the greatest merit and quality throughout. We tabulate below some of the principal winners, giving first those who se-cured the champion and special awards. The best The best stallion or colt was Buscot Harold, Mr. A. Henderson's champion at Islington in 1898 and 1899; best mare or filly, Sir J. Blundle Maple's Dunsmore Gloaming, champion female at the last Shire horse show, bred by H. R. H. the Prince of Wales. Lord Wantage's Hendre Crown Princess won the Shire Horse Society's medal for mare or filly, and Mr. R. W. Hudson's Traitor that for colts. In addition to the above, the following breeders secured first prizes: A. Ransom, Lord Wantage, Lord Llang-attock, and Sir J. B. Maple; Mr. R. W. Hudson being perhaps the most successful.

Hackneys were considerably in excess of the previous year's entry—forty as against fifteen—Sir Walter Gilbey's Gay Danegelt being a most prominent winner: a grand type of this breed, and one whose improvement is most noticeable; Orange Blossom securing the Hackney Society's medal for mares, and amongst the other winning studs we noticed those owned by Messrs. A. E. Evans, W. Foster, J. Barker, and Sir Charles Piggott were very successful.

CATTLE.

Shorthorns numbered one hundred and sixteen entries, as against forty-one last year; the high merit, typical character and good quality of many being very noticeable, particularly the winning animals, many of which, we are pleased to note, were bred and owned by Her Majesty the Queen, amongst whose deservedly popular successes (for in every instance the merit of the animal fully justified the award) were the following: Champion of the yard and best female (Fairy Queen); 2nd and R. N. for bulls calved in 1897; 2nd and 3rd for bulls calved 1898; 1st and 2nd for heifers calved in 1897; and 1st for those calved in 1898. Messrs. George Harrison, J. Deane Willis, Miss A. de Rothschild,

J. Thorley, H. Dudding, etc., were also winners. Aberdeen-Angus were entered to the number of forty-two, and the general high merit has, we think, been seldom equalled at any previous show of this society, which has been only recently induced to include these cattle in their schedule. The Rev. C. Bolden, who secured two out of the three special awards, was the more successful exhibitor, though Col. Tufnell, who took the other special, was a very strong competitor; Mr. W. B. Greenfield, Sir J. B. Maple and R. W. Hudson also being successful winners.

The Sussex breed of cattle were only thirty-three in number, but that which was lacking in respect to number was fully made up by their very high and uniform quality. The Earl of Derby and Mr. P. Lalliard were the winners of the specials, two falling to Earl of Derby's share, and it may be remarked that the herd of this breed owned by His Lordship is one of exceptional merit, true type and character. The Hon. R. P. Nevill's herd was also very successful.

Decons made a very excellent entry of twentyfive, Her Majesty the Queen's herd securing the R. N. for the specials, which were won by Hon. W. E. B. Portman.

Herefords, with a typical entry of first-class merit and quality, were honored by a valuable

entry from Her Majesty the Queen's herd, whose uniform success was very popular, the premier prizes in both bull classes going to the royal herd, as well as R. N. for the special prize, which was secured by Mr. A. E. Hughes' cow, Mr. J. Tudge securing the leading place for heifers.

The entries in the *Jersey* classes numbered two hundred and twenty-seven, a record entry of the breed at this show, and remarkable as being one of very great quality and merit. N. S. Freeman-Thomas won the bull championship, and Mrs. McIntosh that for females.

McIntosh that for females,

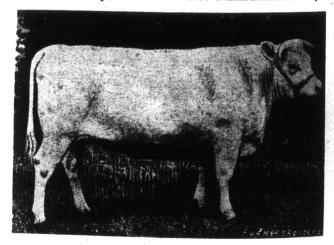
Guernseys made an equally large entry, one hundred and thirty being the number. Their general average merit, even quality and type was admirable throughout the whole of this large entry, Mrs. F. A. Montefiore securing the female championship, and Mr. E A. Humbro that for the males,

Thirty-six Kerry cattle were entered—grand animals, of very excellent type—Messrs. Robertson being the principal winners; and an entry of forty-one was made in the sister breed, Dexter Kerries, wherein Mr. E. S. Woodiwiss won the principal awards.

The Berkshire pigs were largely and well shown, the entry numbering no less than seventy-two, as against forty-eight last year. Mr. Edney Hayter's Highelere Topper, a grand boar, was made champion of the breed, and Mr. G. T. Tomkins secured the special for best sow. Amongst the other successful winners were Messis. J. Jefferson, E. Burbridge, N. Benjafield, A. Hiscock (Jr.), Earl of Carnaryon, etc.

Shorthorns at the Royal Counties Show.

The red, white and roan were in force at this show, held this year at Windsor, June 5th to 8th, the entries numbering 116. There were, however, some absentees. In the class for bulls calved previous to 1897, nine had been entered, but five only came into the ring. The quintette were, however, all well-known old competitors, and the first winner was found in Mr. P. L. Mills' celebrated champion Marengo, which is now so massive that he weighs over 25 cwt., but he is said to be as active for service as ever. Second to him was placed Mr. J. Deane Willis' Bapton Victory, of grand character and very perfect build, and H. R. H. the Prince of Wales brought a very shapely roan called Stephanos, with a handsome head, broad, level back, wanting perhaps a little better covering at the shoulders, but otherwise of excellent mold, which proved a worthy third winner. He was bred by H. M. the Queen. Thus it happened that Mr. John Handley's Prince of the North, the champion of the Oxfordshire Show, and the second winner at Exeter, could only obtain reserve. The only other animal that appeared was Mr. Richard Stratton's six-year-old Flag Signal, which has developed into considerable length, and, with his good middle and hind-quarters, fully deserved the H.C. ticket awarded Bulls calved in 1897 mustered to the number of sixteen, and were headed by Mr. George Harrison's shapely and grandly-ribbed Count Beauty, bred in Scotland, and a son of Mr. W. Duthie Golden Count. There were two very good bulls in the class from the Royal herd of H. M. the Queen, and Matchless, by Captain of the Guard, was selected for second prize. He carries a handsome head,



SHORTHORN HEIFER, FAIRY.

BRED BY AND PROPERTY OF H. M. THE QUEEN. WINNER
OF CHAMPION PRIZE AS BEST SHORTHORN AT ROYAL
COUNTIES SHOW, AT WINDSOR, 1899.

stands wide, and is of full substance, filling the eye well, but on close inspection requires a little more packing at the shoulders. Robin Nonpareil, the other Royal bull, a handsome roan, obtained reserve; Mr. J. Deane Willis' Bapton Count, with his broad back and uniform build, making an excellent third prize winner. Three other very useful animals were noticed, Mr. G. F. King's Viceroy, of a rich dark color, a son of Mr. Deane Willis' Count Lavendar, a handsome roan, belonging to Mr. W. Heaton, from Lancashire, called Prince Arvon, and Mr. D. A. Green's Bapton Emigrant, another of Count Lavender's sons, a well-shaped roan of admirable character. Mr. H. Dudding had three very useful animals in the class, one of which, Pride of Fortune, bred by Mr. W. Duthie, did not seem to be appreciated sufficiently. Mr. Morgan Richardson's Cavalier, bred by Mr. J. D. Willis, also seemed well worthy of notice no less than Mr. J. Thorley's Ringdale Rover. The judges were certainly not liberal enough in their honorary awards.

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The yearling bulls were in still greater force, numbering nearly a score, and quite filling the ring. The high merit of about eight of them also entailed a severe task on the judges. The chief difficulty, however, lay between the Queen's pair of grand-looking roans and Mr. J. D. Willis' Bapton Emperor and Rosedale Jeweller. The latter two are well known to have beautiful character, and the former is so perfect in outline that it is hard to find his equal. He is a son of the far-famed Ingram Yet, but the Queen's Marmaduke, with his beautiful coat and full outline, was so even a competitor that one of the judge's would have made him first, while the other was as steadfast in preference for Bapton Emperor. Lord Brougham was therefore called in as arbitrator, who decided in favor of Mr. Willis' being first and reserve, and the Queen's two having the second and third prizes. Half a dozen others received barren honors, consisting of Mr. Cookson's Gustave, Mr. Sidney Hill's Langford Lavender, Mr. D. A. Green's Lavender Yet, Mr. Leopold de Rothschild's White President, which was first prizetaker at the Oxfordshire Show, and Mr. G. F. King's two useful white bulls. Mr. Morgan - Richardson's Major - General appeared superior in symmetrical molding, and certainly in wealth, to the others, except the prizetakers.

The half dozen cows which came into the ring seemed to puzzle the judges almost as much as the young bulls had done, and, indeed, it was difficult to decide amongst the respective merits of three or four of them. Mr. George Harrison's well-known Welcome was moved up until she got quite to the top, one of the judges favoring her claims in preference to those of the Waddesdon Manor Miss Belladrum 6th, and, indeed, the type of the two animals is different, Welcome excelling in evenness, but not having the wealthy substance and large scale of Miss Alice de Rothschild's cow. Lord Brougham, as referee, gave preference to Welcome, and after Miss Belladrum 6th came Mr. Brierley's Queen of Hearts and Jewel 2nd for third prize and reserve, Mr. Leopold de Rothschild's Sittyton Bride and Mr. John Little's Ruby being both H.C. Of Mr. Brierley's pair Queen of Hearts has preserved her grand form perfectly, and, strange to state, her defect at the tail does not appear so noticeable as when she was younger. Some will have it that Jewel 2nd has lost form since last year, but this does not seem very perceptible, although she has certainly lost bloom owing to breeding so fast. She has a good calf at foot now. The three-yearold breeding heifers formed a class well-nigh equal to that of the cows. Mr. Sidney Hill's Evelyn 2nd, a full-shaped, grand roan, bred by Mr. G. F. King, was selected for the first prize above Mr. Henry Dudding's Blossom, which, with a little more packing at the shoulders, would be very perfect. Mr. Leopold de Rothschild's Mayflower 4th, with her well-sprung ribs and substance, made a worthy third winner. She was a first winner at the Oxfordshire Show, when not having such strong competitors as here. A reserve was found in Mr. D. H. Mytton's Silene, also very broad, deep and massive; Mr. John Little's Butterfly 2nd, of nice character, and having a fine calf at foot, being, perhaps, the most useful of the lot for dairy purposes. The twoyear-old heifers formed a very superior class. Her Majesty had two therein, a beautiful level white called Fairy, which was not only first, but eventually carried off two champion prizes, and Feodora, more wealthy, with finely-sprung ribs, but not quite even. To her was allotted third prize, a second winner being found in Mr. J. D. Willis' Banton Pearl telerably well known as a full-shaped Bapton Pearl, tolerably well known as a full-shaped heifer, of very uniform build and nice character. Mr. Heaton had reserve with the well-known Daisy IV. Mr. Deane Willis' Bapton Fluff could only get H. C. a distinction bestowed also on Mr. only get H. C., a distinction bestowed also on Mr. George Harrison's Fairy Queen, Mr. Leopold de Rothschild's President Bride, and Miss Alice de Rothschild's Princess Ida. The yearling heifer class was large as well as good, as many as nine-teen competing, and there were some half dozen teen competing, and there were some half dozen absentees from those originally entered. The Queen got another first prize with her very handsome roan Cicely, by Prince Victor, a full-shaped heifer, very uniform and handsome. Of course she must have been very good to have been placed in must have been very good to have been placed in front of Mr. J. Thorley's beautiful pair, Ringdale Memory 3rd and Nonpariel 2nd; the former with her handsome head and lovely coat satisfies the eyes more and more the oftener she is seen; her herd companion is very compact in build, and very wealthy. These deservedly received second and third prizes, leaving reserve to Mr. Deane Willis' White Heather, of stylish form and nice character. The Prince of Wales had a good roan heifer by his bull Stephanos, called Glisten, which received H.C., as well as Mr. Sydney Hill's Crocus, which, with a little more packing at the shoulders, would be very

perfect.

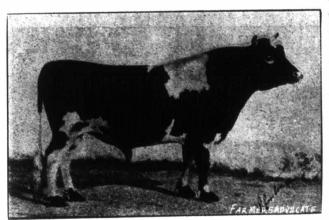
The Shorthorn dairy class for cows in profit should perhaps have been noticed before, it having been the first to enter the ring. Miss Alice de Rothschild's Bructer Queen, bred by Lord Lovat, in Scotland, of large scale, and a cow combining grazing and dairy property admirably, was selected for first prize; Mrs. Francis Pratt's Dairymaid's Daughter, whose deep milking causes her to carry little flesh on her bones, getting the second premium: Lord Rothschild's Princess 2nd being reserve. The Shorthorn Society's special prize for the best bull in the three counties of Berks, Wilts, or Hants

The Shorthorn Society's special prize for the best bull in the three counties of Berks, Wilts, or Hants was awarded to Mr. J. D. Willis' Bapton Emperor, to which the Queen's Marmaduke was placed reserve. A champion prize for the best female in the

Shorthorn classes, offered by Viscount Baring, was taken by the Queen's Fairy, which also carried off Mr. Martin J. Stutton's 20-guinea champion prize as best animal in the Shorthorn classes. As Mr. George Harrison's Count Beauty was placed reserve for it he was deemed the second best Shorthorn. The reserve for the female champion prize was the Queen's heifer Cicely.

Weaning and Feeding Lambs.

BY J. M'CAIG, PETERBORO The time of weaning lambs will depend to some xtent on the time at which they have been dropped. Four months is not too young, and more mistakes are made by delaying it too long than in doing it too soon. If lambs have thrived well, an earlier age is preferable, both on account of the lambs and for the good of the ewes. The time to prepare for a successful lambing season next year is before the time of coupling in the fall, and an important consideration is to have the ewes properly rested and recuperated between weaning and coupling time. Those who leave their lambs too long with their dams are usually the ones who make the poorest provision for the lambs after they are weaned, and the lambs are taken off the ewes either in the brown pastures of harvest or after the grass has been stricken with early frosts and has become indigestible and innutritious. In either of these cases lambs will fall away if not properly looked after, and will not have the constitution and vigor that will fit them to go into the breeding flock as either sires or dams. By having lambs as early as March, they may be weaned before the pastures become dry, and the more experience one has with early and late lambs the more he finds the possibilities for excellence in favor of the early ones. A grass lamb may be little trouble and may turn out fair at a low average cost, but in order to force a lamb, and this seems to be the profitable and inevitable tendency on our valuable lands, the lamb requires vigor, hardiness, and good appetite, and for these qualities a sniff of the March blasts and taste for concentrated grain food in the creeps is necessary. A lamb dropped on the grass will not take to grain foods as well as one whose run is



GUERNSEY BULL, SHEET ANCHOR. OWNED BY H. M'TWOMBLY, MADISON, N. J.

limited to the pen and that has a comparatively roomy end of it available with tempting foods in it

for himself alone. A March lamb may be weaned by the end of June. If he has had grain food while sucking, so much the better; he will be large, lusty, and strong, and will not loose flesh. It will be advisable in all cases to feed some grain before weaning, and only a small quantity is necessary. A mixture of equal bulk of bran with a combination of chopped peas and chopped oats in equal weights is good. A good single handful of linseed meal mixed with a gallon of this will be profitably added and will help o preserve and increase the bloom of the young things. Mature sheep show no unground grain in their manure and may be left to do their own grinding. Many prefer whole grain for lambs even. For rapid gains I prefer ground feed before and even after weaning. Lambs eat and masticate ground food slowly. Of course, with ruminating animals all food goes pretty well through the mill. I cannot give any satisfactory reason for my choice of ground feed. I have a decided preference for it. however, as I feel that a little less will do them and they seem to fill out on it from the beginning. It may be that the fine grinding of the food lessens the work of the paunch itself, which triturates the food to some extent, and that the grinding likewise makes the elements of the food more easily acted on by the fluids secreted by the paunch. The slowness with which lambs lick up ground food suggests the idea of its passing directly over the gullet into the fourth stomach. In either of these cases there is an economy in the energies of the organism just as there is in feeding a sheep in the fold or pen instead of making him travel long distances for it. Experiments with ground and unground foods go to show that the grinding brings no more than enough advantage to pay for milling the grain. The experiment, to be valuable, should begin with the life of the lamb and last until matured or sold, as it is probable that in fattening lambs that have been rustling over rough foods the mastication of whole oats would be no tax on their energy compared to the increased and concentrated nutriment it would yield, and conversely the relief from feeding ground food would be no advantage.

The method of weaning need not be elaborate. Both ewes and lambs probably adapt themselves to the changed conditions most quietly by a total separation at once. The little care that is necessary in milking ewes after weaning shows that the milk supply gets very small in three or four months, so that the advantages a lamb would get from a protracted weaning are small compared to the trouble of frequent separations and the uneasiness caused by the lengthening out of the weaning process. The ewes should be watched for three cr four days to prevent spoiling of the udder. Some will need no milking at all, some will require it once, and very few will need it more than three times. They should not be milked dry, and once a day is often enough at first, with longer intervals later if the milking has to be continued. They should be turned on dry pasture for a few days. have found it a good plan in the case of ewes with twins to leave the smaller of the two with the ewe for a week or ten days after the other has been taken off. It helps the weaker lamb and dries the ewe gradually, and it is generally a ewe suckling twin lambs that has the greatest quantity of milk and requires attention at weaning time.

The lambs after weaning should have the best grazing the farm affords. Rape is good sheep feed at all times, but is at its best after the cool weather of fall has begun. The after grass of good clover meadows is ideal lamb food and should be saved for them. New-seeded meadows are good for them also — better than the lambs are for the meadows. The practice of sowing rape thinly in spring grain crops furnishes a lot of valuable feed and improves the land at the same time. Adjacent pieces of rape and meadow have proved to be the very best arrangement for fall feeding of lambs — better than rape alone and just as profitable as rape and grain. Rape seems to be such a complete ration for lambs that for ordinary purposes grain feeding is unnecessary with it, but to the man who is possessed with the idea that the best lamb is none too good for him, a feed of grain will be found a good tonic for his young things in the morning, and he will find no difficulty in creating an appetite for the same thing in the evening. An important difference between the feeding of young and old stock is that with the young stock feed, by causing growth, is creating an increased capacity for more food, while in the case of old stock the capacity is fixed. Young stock running out is not likely to be fed off its leg. Generous feeding of young stock is profit able likewise because that growth in bone, frame, etc., as well as flesh, appropriates food elements more completely than the making of flesh alone does, as in the case with old sheep.

Ewe lambs require plenty of muscle and bone-making rather than fat-making food, and their ration should consist principally of bran and oats. Wethers require more fattening rations, but the demand is not for fat sheep to such a degree that wethers and ewes should be separated. What will put the wethers in good shape will be none too good for your future ewe flock. In the case of ram lambs for breeding purposes heavier feeding is both desirable and necessary. The additional size, strength, and coarseness of the sex means grosser appetite; the restlessness of rams on the approach of fall means more food to keep them in good flesh; and to take the market well for breeding purposes, size from rapid growth and good looks from generous feeding are necessary. It is harder to get a ram fleshed up on top than it is a ewe. For these reasons peas and oil cake may be added to the rations of bran and oats, and the rams should be kept well filled all the time. The grains may constitute a larger portion of the whole ration for rams than they do for ewe lambs. Feeding suitable rations as to kind and quality, the only measure as to quantity is the appetite of the lamb. Feed enough to satisfy you that the lamb is ready to quit when the trough is empty.

The Honor Roll Again.

SIR,—In the construction of the notes under the record of 1888, in the Honor Roll of the Royal, I presume you took your data from the London Live Stock Journal of July, 1888, which reads as follows: "Mr. Robert Thompson (of Inglewood, near Penrith) takes five out of the eight first prizes; having also the champion prize for females, and holding reserve for champion males. Hardly ever before in the history of the Society have so many of its honors gone to one man. And the Inglewood win-ners were curiously alike. If it be a feat to accomplish — to have bred a lot of cattle with a strong pinsi — to have bred a lot of cattle with a strong family likeness running through the whole, and to have assured that that family type is a very fine type — Mr. Thompson (thanks to a very impressive sire) has achieved that feat." Speaking of the female section, it is said that Mr. Thompson's Molly Millicent is "almost an ideal Shorthorn. It is impossible to maintain that milk and meat cannot be combined when such cows are presented. They all have frames like Christmas bullocks and udders like dairymen's cows." Perhaps your historian might have given the Sheriff Hutton herd a little credit also for Mr. Handley's bull, Self Conceit (55026), and done no one an injustice. We had supposed Mr. Gibson intended to give us an elaborate description of a great many of the winning animals individually, but, with very few exceptions, it is a repetition of the report of the Royal Agricultural Show. With regard to the Duke of Northumberland, your historian says: "He must have been a fréak, or our breeders have been standing

still. I never yet met a breeder who knew him at his best but what said he was better than any they had since seen." I believe there are a very great number of breeders of the present day who would like to know wherein his superlative goodness con-sisted. His picture, reproduced in connection with the Honor Roll, is said to be a true likeness of the bull. If so, looking from the cut of the Duke to those of the other bulls illustrated, or to that of Bracelet on the same page, it is very easy to see where his defects lay, and he never was a remarkably good bull. There have been thousands of bulls that were his peers since his day. We knew Thos. Bates and we knew his cattle in his lifetime,



LINCOLN RAM LAMB "A1." BY KIRKHAM BROS., BISCATHORPE. IMPORTED MAY, 1899, BY F. S. PEER, MT. MORRIS, N. Y., FOR MR. ROBERTS, PHILADELPHIA.

and he never owned as heavy-fleshed cattle as many we have seen since. We will admit that he was an artist, and that he put a finish on his cattle that we do not see to-day; but he bred his cattle in and in so much that he ruined them constitutionally. At the same time, it was wonderful how they retained their beauty of outline; and whenever they got onto any other family they invariably put that beautiful finish to their progeny. Mr. Bates never won a prize after the Booths stepped into the arena; nor were his cattle able to win in other hands until they got a cross of the blood of other good families, but were still called Bates cattle; and perhaps this same statement applies to all breeders who have tried to hold a monopoly of certain families of Shorthown. tain families of Shorthorns. WM. LINTON. York Co., Ont.

Summarized Notes from English Shows.

At different county shows through England one or other of the different breeds are generally found more numerous than others; hence, to see an entry of Hampshire Downs alike remarkable for its number and quality we would find that the Wiltshire County Show was one at which this breed's entry is sure to be seen to great advantage. At this Society's show, May 31st to June 1st last, there certainly was on exhibition as fine a lot of this particular breed as we would desire to see. this particular breed as we would desire to see. The Chilmark flock, property of Mr. James Flower, fully maintained its high reputation for the merit and quality of its exhibits, which were well-developed and grand typical specimens of this very excellent variety of sheep. The whole of the first prizes offered went to Mr. Flower, who also secured the champion award. Mr. Carey Coles, with a grand ram, came in for second honors in the yearling ram ram, came in for second honors in the yearling ram R. N. in the ramb lamb class (pen of five), and H. C. for ewe lambs. Mr. H. C. Stephens' big, well-developed pen of five ram lambs secured the second prize in their class; Mr. E. Whalley Tooker being second for single ram lambs, running Mr. J. Flower very close for first place; and Mr. R. W Hudson was second in the ewe lamb class for pen of five; Mr. G. Palmer being the owner of a typical and level pen that came in for R. N.

The Suffolk County Show at Bury St. Edmunds.— The most notable features of interest at this show were the grand display made by the Suffolk sheep, the Suffolk Punch horses, and the Red Polled cattle. Taking the sheep classes first, we find that Lord Ellesmere's flock were most successful, winning all the champion awards and the special for best collection of Suffolk sheep with his entries, the whole of which displayed a grand typical character, with excellent conformation and first-class wool and flesh. Mr. S. Hubert Smith, a young exhibitor, came in for first honors in both the house and the field ram lamb classes, the former of which numbered forty entries and the latter fifteen. Mr. H. L. B. McCalmont's flock was successful in the old ram class, securing the second prize with a grand specimen. Mr. R. Burrell's flock, as well as those of Messrs. A. Paley, J. W. Eagle, S. R. Sherwood, and R. W. Barclay, were also successful. The exhibit was a remarkable display of this breed, whose reputs for putter production of the bishest whose repute for mutton production of the highest quality rivals that of the Southdown, which breed made but a very small entry, but of capital quality, Earls Ellesmere and Cadogan being the successful

The Red Polled cattle, alike useful as milk and beef producers — in fact, a breed many consider one that more nearly than any other represents the ideal general-purpose cattle—made a display of excellent quality and great merit, many of the successful animals being those bred by the late Mr. J. J. Colman, whose recent lamentable death

herd some time since at a very high average. There were three classes for bulls, and the following were owners of the winning animals, which were grand in type and character: Sir J. T. Rowley, Bart., James G. Platt, and T. G. Methold; whilst Messrs, R. H. Mason, Alfred Smith, the Hon. W. Lowther, and J. B. Dimmock were also successful. The female classes numbered four and contained as grand a lot of cows and heifers as one could wish to see, to the number of 23 entries, Mr. J. E. Platt leading in three classes, and Lord Amherst, of Hackney, in the other.

Suffolk Punches, a grand breed of most valuable draft horses, whose value for hardiness of constitution, great endurance, and quick action, appears not yet to have become well known to Canadian The demand for the geldings of this breeders. breed is a large one, and as this breed is one that can move, it would, we feel sure, be of value to your own farmers, for they would find them to be excellent horses for general farm work, and their produce would no doubt meet with a ready, lucrative sale if sent here broken at four or five years of age. Visitors from Canada are strongly recom-mended to take a trip in East Anglia and see these excellent horses at their home. The entry as a whole was one of sterling merit and high quality. As evidence of this we quote the fact that the judging took from 8.30 a.m. to 5 p. m. in the opening day to complete. Thirty-five entries filled the four classes of males, and the principal winners therein were W. H. Hewitt, Alfred Smith, and A. H. E. Wood. Sixty-four entries were made in the mare, filly and foal classes, representing as level, even, and typical an exhibit as we have ever seen of this breed, whose trueness to type, color, and character is well known. The leading winners, which represent the principal study of the breed, were A. Smith, whose stud is one of the foremost in the breed; R. W. White, Sir Cuthbert Quilter, A. H. E. Wood, and John Symons.

A Canadian's Visit to the Old Land.

To the Editor FARMER'S ADVOCATE:

SIR,—Having just returned from a visit to England and Scotland, I thought a few items of what I



AUCHENBRAIN (£80).

ER RAM. CHAMPION OF THE BREED AT GLASGOW AND PAISLEY, 1899.

saw there would be of interest to your many readers. I attended the Bath and West of England Show at Exeter, which is second only to the Royal, and was somewhat disappointed in the exhibit of Shorthorns, especially in the male sections. I believe we can make as good a show of Shorthorns in Canada at our fall exhibitions. I saw no

such animals as Royal Windsor, Lord Irwin, SirArthurIngram, Telemachus, Lord Zelland, Bolivar and Edgar, Lady Fragrant, Vivan-diere, Molly Millicent, and Queen Mary, as described by Mr. Gibson, and which I have seen shown at the Royal and other large shows in Great Britain. Mr. Mills' grand bull Marengo was not shown at Exeter. He is more of the stamp of the earlier Shorthorns, having great scale, very deep in his quarters, having great scale, very deep in his quarters, and beautiful character. I had the pleasure of inspecting Mr. Duthie's fine herd at Collynie. His stock bulls are a very grand lot, and the cowe are just what a breader. and the cows are just what a breeder would want to select a stock bull from, having large, deep frames and splendid udders. I find Mr. Duthie directs special attention to the milking qualities of his Short-horns in using bulls from deep-milking

dams. Mr. Marr was absent at Exeter, and we had only time to make a hurried visit. His cows have much of the fine character of his neighbors', and the fine old bull Wanderer heads his herd. Importers will find it very difficult to purchase cattle in Great Britain, as most breedwill not price their animals subject to the tuberculin test, and when a price is asked it is generally advanced about forty per cent., which, together with the cost of the testing, is a very serious item to the importer. I went across with Mr. W. D. Flatt, Hamilton, to assist him in selecting his importation, and he has now in quarantine at Quebec twenty-three head, which will be a great acquisition to his already very fine herd.

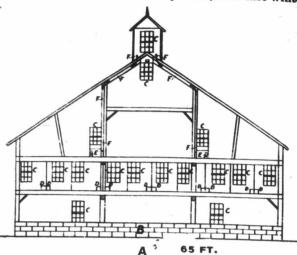
JAMES SMITH. Brant Co., Ont., June 24th, 1899,

necessitated the dispersal of his world-renowned Stables for Fattening Cattle and Swine on a Large Scale.

To the Editor FARMER'S ADVOCATE:

SIR,—In your issue of June 1st I notice an inquiry from Mr. John Wallace for plans of a barn for feeding 200 or 300 head of cattle. I herewith submit plans of my barn calculated to accommodate 125 head of steers to be fed loose, 100 hogs, 125 fowl, and from 8 to 10 horses, the principal object in view being to save labor in the feeding of

I have been feeding cattle for export during the winter months for seven or eight years, and until within the last year I fed the cattle tied in stalls, but last summer I altered my barn, and last winter



END VIEW OF STABLE RUNNING BACK FROM BARN OWNED BY A. S. M'BEAN.

-End view of cattle stable running off from barn.
-Three-foot stone wall.
-Windows in this end of building.

D—Small doors leading from hen coops to yards below.

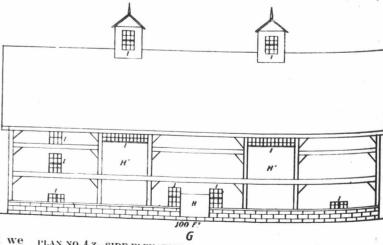
E—End view of boxes running full length of stable in which chains for raising and lowering feeding racks are attached and through which hay is passed to feed racks when up. Boxes also used for ventilating, and from which spouts run up to cupola, marked with arrows.

F—Ventilator shaft to cupola.

fed the cattle loose and all running together, with much better results.

My barn is 100 x 50 feet, feeding stable 105 x 65 feet, which is joined to the barn, forming the letter L reversed, as seen by plans. The whole building stands on a wall 2 feet thick and 2 feet above the ground, making a basement for cattle, pigs and horses; the basement in barn being 8 feet high, in which is the horse stable, implement shed, grinding apparatus, two stalls for sick animals, space divided off for hogs to sleep and feed in, and space for surplus roots. The boiler and engine are in a small building adjoining the barn on a level with basement, as seen in plan No. 1. The floor beneath the cattle is of earth, and beneath where the pigs are fed of cement concrete.

The basement of feeding stable varies in height: The two outside sections being 16 feet high, running from the ground to the loft; the middle section being 8 feet high, leaving a floor 23 feet wide on the second floor of the feeding stable, running from one end to the other on a level with the second floor of the barn, and a section 15 feet wide at each end of the stable on second floor, as shown in plan No. 2. The section nearest the barn, on the second floor, is used for large water tank, two stalls for milk cows, and hoisting apparatus for feed racks, and a bridge leading to basement, used in bringing up cattle to be weighed, and doors leading



PLAN NO. 4 Z-SIDE ELEVATION OF BARN OWNED BY A.S. M'BEAN.

G-Front view of barn.
H-Horse stable door.
H1 - Barn doors.
I-Windows on this side of barn.

to barn floor.) The farther end of section is divided off into 10 pens for hens; the center section, with the exception of two feeding passages 5 feet wide on east side, is used for a turnip bin and pens for breeding cockerels, as shown in plan No. 2.

The third floor of feeding stable is used as a mow; the middle section being used for storing hay, the two outside sections for straw for bedding, as seen in plan No. 3.

The second floor of barn is used for granary, grinding room, tool room, office, barn floors, large mow over horse stable, weighing scales, hopper bins for oats used in feeding horses, root cellars,

and space where corn and straw cutter stand. The root cellars (f. f., plan 2) are rendered frostproof by being double boarded, with felt paper between, and a dead-air space of 6 inches between the lining and outside boards of barn. There is also a 2-inch space between the turnips and wall, and a 4-inch space on floor. This is made by nailing a 2 x 4 inch scantling on walls and nailing boards on this, leaving the boards about 4 inches apart. There is also a shaft running down through the center of the bin, arranged with slats, and in this way air circulates all around the turnips. The root house is filled by carts being dumped on the floor and the roots thrown back by men. Doors open off this floor into round silo adjoining barn, as seen by plan No. 2. The bottom of silo is about 6 feet lower than the floor of second flat, and the silage from the bottom

floor of second hat, and the snage from the bottom is forked up into large trucks which stand on floor.

The third floor of barn over granary contains hopper bins, mows for hay and other feed, as shown in plan No. 3. In the peak of the roof of barn and stable is a track by which the mows are

filled from the barn floor.

The horses are fed their hay through trapdoors opening off each barn floor, as shown in plan No. 2, and are watered from the tank in basement of cattle stable, and which is directly under a large supply tank on second floor of stable, and which is filled by a windmill or steam pump, as shown in

plan No. 1. The water can have the chill taken off it by a steam pipe, which runs from the boiler into the tank, as shown in plan No. 1. The capacity of the large tank is about 2,000 gallons, sufficient for three days' water supply. The cattle have constant access to water supply.

The stable is ventilated by bringing the fresh air in through a large box, which runs underground the full length of the stable, and which is brought up to the ceiling of middle section in basement, and runs back the full length of stable, with openings to distribute the fresh air into the stable. The air coming such a long distance underground has the chill taken off it, consequently no condensation takes place. The outside end of the ventilator is about ten feet above ground, and arranged with a wide-mouthed funnel with vane attached, so that the opening always faces the breeze. The warm and foul air is taken off by ventilators running up into cupolas, which have slides that can be opened or shut as required, regulating the temperature. A yard about 40 x 100 adjoins the stable, in which the cattle are allowed out on

The feeding racks are 16 feet long by 4 feet wide, divided into 16 boxes, 8 on each side, each box 2 feet square and 1 foot deep; 18 inches above top of boxes is the bottom of the hay rack, which is 1 foot wide at the bottom and

fine days.

4 feet wide at the top, and 4 feet deep, having slats on the sides 6 inches apart. The boxes and rack are in one, and move together, as shown in small cut. There are four of these racks on each side of middle section, making a total number of feeding boxes 128. Chains are attached to each end of each rack, and run up and pass over pulleys, and join on to a main chain,

which runs the full length of the stable over the top of joists of loft floor, and which is covered by a box 3 feet wide by 3 feet high, the top of the box being arranged to open so as to allow racks to be filled with hay. On the end of the chain nearest the barn a large box is hung which contains sand, and weighs about 1,000 pounds heavier than the four racks when empty, so that when the box filled with sand is down in the basement the tops of the racks are up to the joists of the mow which contains the hay the hay racks being filled through trapdoors. The feeding boxes are level with the floor of the middle section, and are filled from the 5-foot passages. When the racks are full they weigh from 1,000 to 1,500 pounds more than the box containing the tion. A brake is attached to the main chain at the point where it passes through the floor, reguating the speed ascending and descending, and which is left on when racks are empty or full, so that they cannot move until brake is released. It will be seen that these racks work automatically, and require no power to raise or lower them. The racks slide on grooved posts, which run from the basement to the upper joists, and which hold the racks in position. These racks work on the same principle as a hoist

in a warehouse. It will be seen in plan No. 1 that there is space for five feeding racks on each side, but the center one is left out opposite each door, leaving a passage straight through the basement, making it more convenient for teams hauling out

The pigs are fed in the space allotted to them in basement of barn, as shown in plan No. 1, so that the cattle cannot eat any of the pigs' feed. The pigs roam about among the cattle nearly all the time, picking up any feed that is dropped by the cattle. When the litter is changed in hen pens and dropped down through trapdoors into the basement the pigs pick any odd grain that is left in the straw. This shows the advantage of having the hogs running loose with the cattle, as they are always foraging, allowing nothing to waste. never had pigs that did any better.

The cattle are all dehorned when put in the stable. Very little crowding is noticed, each animal soon learning to choose a box and stay there until he empties it. The racks are filled and lowered, and remain down until within an hour or so of the next feeding time, the cattle having hay before them all the time.

The manure is not moved until some time in February, fresh straw being put down each day. The manure becomes packed, and is almost as hard as a wooden floor. No evaporation takes place nor

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PLAN NO. 2-SECOND FLOOR OF BARN OWNED BY A. S. M'BEAN. PLAN NO. 2—SECOND FLOOR OF BARN OWNED BY A. S. M'BRAN.

A—Granary; al, grinding room; a2, grinding apparatus which goes through floor; a3, elevator; a4, pulley just under floor; a5, shafting just under floor; a6, opening to hopper bin from barn floor where grain is dumped in from wagons and elevated to bins on top of granary for grinding.

B—Stairs leading to upper part of granary which contains the hopper bins; b1, passage leading to door at the end of barn; b2, tool room; b3, office; b4, stairs to basement and engine room.

C—Barn doors; c1, barn floors; c2, large scales on barn floor.

D—Large mow over horse stable; d1, trapdoors arranged to feed horses from barn floors; d2, stairs leading to horse stable from barn floor; d3, hopper bin over horse stable used for storing oats for horses; d4, door for filling hopper bin from barn floor.

arn floor. E—Shed over horse stable door.

barn floor.

E—Shed over horse stable door.

F—Root cellars; f1, space where corn cutter stands, also elevator; f2, corn and straw cutter; f3, elevator in position for filling silo; f4, elevator in position for putting cut straw on loft over cattle; f5, silo; f6, steps leading to loft over cattle.

G—Doors leading into cattle stable on a level with barn floor.

M—Large water tank, capacity about 2,000 gallons; m1, pipes from windmill and steam pump and boiler.

I—Apparatus for raising and lowering feed racks.

J—Two stalls for milk cows.

K—Large turnip bin; k1, feeding passages on either side of bin used for filling feed boxes of racks, also passage leading to hen coops; k2, feeding racks when lowered.

H—Ten hen pens divided by wire; h1, three-foot passage running along in front of pens, used to feed hens and gather eggs; h2, nests with roosts on top; h3, space for keeping feed; h4, pens used for keeping breeding cockerels during winter season.

L-Two-foot walk running along wall, used for opening and

shutting windows.

N—Windows in feeding stable and hen coops.

O—Small doors to allow hens to go down to yards.

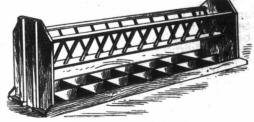
P—Doors in different parts of barn.

-Roof of engine room. --Approaches to barn floors.

any of the gases escape. We did not use much more straw than when the cattle were tied, and a very much larger quantity of manure was made in the same length of time. The amount of straw used for 125 head of cattle, 60 hogs and 8 horses was

about 1,800 pounds per day.

The labor required to feed 114 head tied in stalls, that number being the capacity of the stable when cattle were tied, was 2½ men, while the labor required in feeding 125 head loose, and 60 hogs, was 1 man. The wear and tear on the building was comparatively nothing, as the animals stood on the ground. No joist to rot out, no stanchions to repair, no chains to fix, nor water troughs to level and repair. We never had to curry an animal during the whole feeding period. We sprayed during the whole feeding period. We sprayed them three times with coal oil emulsion, using the Spramotor Co.'s spray pump, which gave excellent



satisfaction. The spray was pumped on the cattle from the middle section above, the cattle all being driven to one side, and we were not troubled with When they were vermin of any description. shipped out they were as clean as race horses. Glengarry Co., Ont. A. S. McBean.

SKETCH OF FEED RACK.

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PLAN NO. 1-GROUND FLOOR OF BARNOWNED BY A. S. M'BRAN. A—Implement room; al, grinding room; a2, leg of elevator; a3, hopper bin, which is filled from barn floor; a4, large driving wheel; a5, engine room; a6, engine; a7, boiler room; a8, boiler

as, boiler

B—Large well and windmill; bl, pipes from well to tank and steam pump; b2, pipes leading to tank.

C—Stairs leading from upper floor from outside.

D—Room for wood; dl, boiler used to cook pig and chicken feed; d2, pipe from boiler; d3, stairs leading up to barn floor.

E—Horse stable; e1, furnace room; e2, stairs leading to barn floor; e3, bottom of hopper bin where oats are drawn for feeding; e4, bottom of hopper bin; e5, stalls.

F—Space used for storing turnips; fl, two stalls for sick animals; f2, space used to enter horse stable and water horses.

G—Hog pen; g1, troughs for feeding; g2, bottom of silo; g3, small door through which hogs go out into cattle stable, being too small to allow cattle to enter hog pen; g4, door leading into hog pen.

H—Doors in different parts of the basement; h1, windows in different parts of basement.

H—Doors in different parts of the basement, in different parts of basement.

I—Approach to horse stable.

J—Tank were cattle and horses are watered.

K—Large basement for cattle.

L—Feed racks down ready for feeding.

M—Bridges graded to doors over stone wall; m1, doors into cattle stable; m2, passage running from one side to the other.

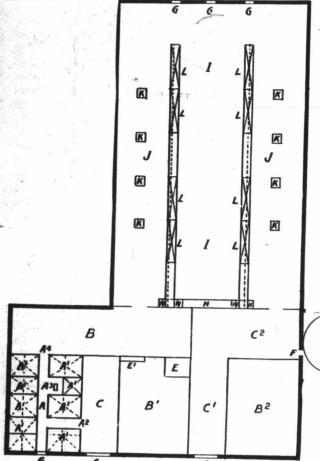
N—Bridge leading up to barn floor used in weighing out cattle.

N-Bridge leading up to parn non used in cattle.

O-Hen yards; ol, doors leading from one yard to the other; o2, small bridges leading from pens to yards; o3, large yard for ducks during summer; o4, small shed for ducks to lay yard sleep in; o5, door leading to duck yard; o6, stairs leading to hen yards from pens on the outside of building.

P-Large yard where cattle are turned out in mild weather; pl, gate leading from yard.

Q-Box under ground bringing fresh air distributed from(R).



PLAN NO. 3—THIRD FLOOR OF BARN OWNED BY A. S. M'BEAN.

OWNED BY A. S. M'BEAN.

A—Top floor of granary and passage from stairs; at, hopper bins; a2, passage and door opening opposite barn floor; a3, top of elevator on which is a swivel spout, which can be adjusted to put any grain or feed into hopper bins; a4, door leading to second floor.

B—Mow over tool room, office and barn floor; b1, mow over horse stable; b2, mow over root cellar.

C—Space over barn floor; c1, space over barn floor where hay and straw are put in mows, either in barn or feeding stable; c2, space over straw and ensilage cutter, which allows elevator to swing into silo and over cattle barn.

D—Silo.

which allows elevator to swing into silo and over cattle barn.

D—Silo.

E—Top of oat hopper bin; el, top over stairs leading to horse stable.

F—Door into silo.

G—Windows in different places.

H—Passage to allow man to pass from one side of loft to the other when loft is filled with hay.

I—Large mows used for hay.

J—Spaces used for keeping cut straw for bedding.

K—Trapdoors through which straw is dropped to basement for bedding.

deding.

L—Top of feed racks and trapors through which they are filled
ith hay. Dotted line is the main
ain used in raising and lowering

out three times during the winter. Each pen has an 8-foot door, which makes it possible to back a wagon or sleigh inside to haul away the manure. Above each door is a 6-foot window, 20 inches high. The windows are hinged at the bottom, and when open provide ventilation without direct draft upon the animals.

The 49 head that were tied were fed on ensilage and cut straw and cutoat sheaves, with 6lbs.corn chop per day. They were not quite as even a lot as the loose ones, nor did they present as thrifty an appearance. Some of their skins were scurfy and dry, while the loose ones presented a bloom and mellow ness that indicated a very thrifty condition. The tied cattle had water before them constantly, and were never out of their stalls from fall till they went away on June 17th. They were mostly threeyear-olds, but a few two-year-olds were scattered amongst them. They were not weighed when put into feed, but Mr. Forrester estimated the 89 head at about an average of 1,100 pounds each. When they went away the 40 head fed loose averaged 1,401\(\frac{1}{2}\) pounds each, and the 49 tied ones 1,335 pounds each. This difference cannot be taken as a basis for comparison between the two methods of feeding, as the loose cattle were of perhaps a bit better average class of cattle. They were selected for the box stalls

on account of being dehorned. Mr. Forrester has fed cattle loose two winters, and holds a very high opinion of that method of feeding, as they take not more than half as much work as tied cattle. They are always apparently contented and ready for their meals at feeding time, and undoubt-edly they gain some faster. Mr. Forrester's basement stables are not of a suitable form to divide up

ing them for that purpose. We might add that when Mr. Forrester was in Scotland a few years ago he looked into the systems of cattle feeding followed there, and found the plan of fattening cattle loose in compartments followed by many feeders altogether.

for loose feeding, but he thinks seriously of adjust-

PASSAGE 4 FT пини ROOTS 28'x 42 TWENTY-TWO STEERS STEERS SILO FEED 17'x 19 STABLE CATTLE AND HORSES

GROUND PLAN OF MR. WM. MURDOCK'S BASEMENT, SHOWING PENS WHERE 44 STEERS WERE FED LOOSE.

has fed 18 steers tied in double stalls, so that he has had a fair chance to estimate the relative advantages of the two systems. The pens in which the loose cattle are fed are floored with cement. They are furnished with water in each pen, and feeding mangers on two sides. The mangers of the old stalls, which were seven feet wide, are each divided into three compartments, separated only by a scantling at the top, so that stronger cattle cannot crowd the weaker ones away from the feed. The mangers are about 30 inches high, so that the feed is easily put in from the passage.

When the cattle were put in at the approach of cold weather they were fed on cut hay and straw and ensilage, with a light allowance of crushed grain. The hay and straw were mixed in equal parts and put into the mangers first. The chop was mixed with the ensilage, along with ten pails of water, twelve hours before

feeding. This softened the granular particles, which were thus rendered easily digestible. At the commencement each beast received 20 to 25 pounds of ensilage mixed with four pounds of bran and chopped oats in equal parts. This was placed in the mangers on top of the cut straw and hay. With the feed was mixed half an ounce of salt for each animal daily. The ensilage was increased up to almost 30 pounds per day, and the meal ration to 10 pounds per day by New Year's, and then the grain consisted of three pounds of corn, one of peas and six of oats. Mr. Murdock considers corn more economical than peas at the prevailing prices, but as the peas he used were broken and buggy, he could not sell them to advantage. also favorable to bran feeding-especially in the

early part of the season.

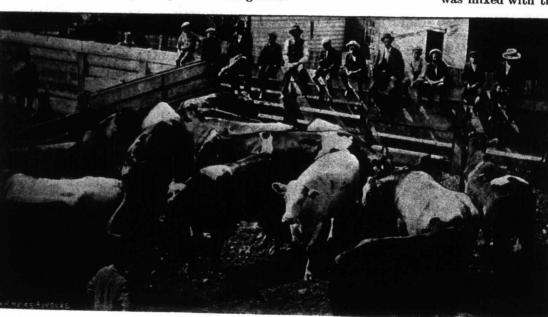
The cattle were bedded for the first month, and cleaned out once a week. After that they received no bedding for a time, but the cement floor was scraped twice a day and cleaned out once a day.

Mr. Murdock would prefer to use bedding, but his farm of 100 acres is not large enough to furnish sufficient straw. During the last six weeks they were bedded with cut straw, which gave them a chance to get cleaned up before being shipped The 18 head of tied cattle were fed in the same way as the loose ones, but they received water only once a day and that when they were turned out.

On February 3rd, 52 head of the cattle were sold. On April 5th, 40 of those fit to ship were selected out from the entire herd. Of the 44 loose animals out from the entire herd. Of the 44 loose animals 34 were chosen and six were selected from the 18 tied up. That is, about 75 per cent. of the loose-fed cattle were ready to ship early in April, when only 334 per cent. of the tied ones were equally well finished. The lots were very uniform when put in and were fed alike, but Mr. Murdock attributes some of the advantage of the loose eattle over the some of the advantage of the loose cattle over the tied ones to their free access to water at all times. He claimed that when the cattle were in one month he could plainly see the loose cattle doing better. The last of the cattle went away about the last week in May, a well-finished lot. They were not heavy cattle, but well finished, weighing upwards of 1,250 pounds. Mr. Murdock is so well pleased with the loose feeding that he intends to enlarge his loose-feeding pens for the coming winter, and his loose-feeding pens for the coming winter, and feed all his beefing cattle in that way. He is greatly in favor of ensilage, and is growing 14 acres of Learning and Butler dent corn for his silo.

LOOSE FEEDING FAVORED AFTER A TRIAL. Near the farm of Mr. Murdock is that of Messrs.

John Kitchen & Son. For lack of stall space, Messrs. Kitchen fed six head of steers loose, in 1897-8, in a pen 16 by 18 feet. The cattle were considered too crowded, and last winter just three head occupied the box stall, while 14 head were fed tied. Their feed consisted of well-cobbed silage and cut straw, half of each by bulk, and a mixture



A SAMPLE BUNCH OF D. A. FORRESTER'S STEERS, FED IN LOOSE BOXES. AVERAGE WEIGHT, 1,4011 POUNDS EACH.

Feeding Cattle Loose in Pens of Five. MR. D. A. FORRESTER, OF HURON CO., ONT., FED 40 LOOSE AND 49 TIED.

It is but a very few years since the fattening of steers in loose boxes was commenced in this country. We believe Mr. W. C. Edwards, M. P., Rockland, Ont., was among the first to discover its advantages, and the plan was soon investigated and adopted by other progressive spirits, until today we find the system growing in favor in almost every district where beef-raising is engaged in. There is perhaps no county in Canada where more good cattle are fattened than in Huron, and there we find loose feeding rapidly coming into vogue. Near the town of Clinton is Mr. D. A. Forrester's farm, from which he delivered, on June 17th, 89 head of nicely finished beeves. They were shipped by E. Watson, of Blyth. Forty of them had been fed loose in pens, and 49 tied in stalls. The loose lot were kept in hunches of five in the

15 x 15

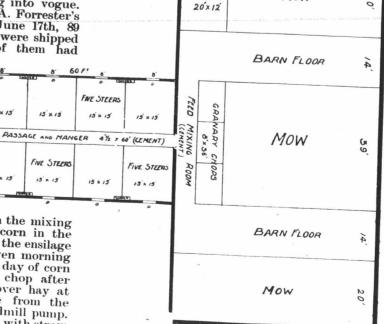
kept in bunches of five in the pens, the plan of which we show in this issue. The building of eight pens was planned and put up for loose feeding two years ago. The pens are each 15 feet square. The passage down the center is 4½ feet wide, floored with cement, which is raised 21 feet above where the cattle stand. This passage forms the manger for the cattle on both sides. They

were fed from a truck which is filled in the mixing room. The feed consisted largely of corn in the form of ensilage and corn chop. With the ensilage form of ensilage and corn chop. With the ensilage was mixed cut straw, which was given morning and evening, along with 6½ pounds per day of corn chop, with a light admixture of oat chop after January 15th. They also received clover hay at noons, and drank at their pleasure from the troughs, which were supplied by a windmill pump. A hove the pens is a loft, which is filled with straw Above the pens is a loft, which is filled with straw direct from the threshing machine. The cattle were kept well bedded, and the pens were cleaned

Forty-four Steers Fed Loose --- Bedding Not Used.

The plan we give of Mr. Wm. Murdock's cattle-feeding barn, in Huron County, Ont., represents clearly the arrangement of the part where he has for two winters fed steers loose. Each of the two pens is 28 by 42 feet, and sufficient to accommodate 22 head. Mr. Murdock

MOW



SILO

GROUND PLAN OF MR. D. A. FORRESTER'S BARN, SHOWING ANNEX WHERE 40 STEERS WERE FED LOOSE.

of oats, barley and chop. Each beast received four pounds of chop per day at the commencement, increased to ten pounds as the season advanced. They were turned out to water once each day. Messrs. Kitchen turned off two lots of finished cattle last winter, the first going about the middle of February and the others at the middle of May. They were in nice thriving condition to commence with, and averaged about 1,300 pounds when shipped. Messrs. Kitchen intend to extend their loose-feeding capacity, and put water in the stables in the near future. They will not, however, abandon all their single stalls at present.

FARM.

Michigan State Agricultural College Visited by North Middlesex (Ontario) Farmers' Institute.

Within the last few years the farmers over the major part of Ontario have had an opportunity, through the excursions arranged by the Farmers' Institutes, of visiting the Agricultural College and Experimental Farm at Guelph, Ont. During the month of June, 1898, some 30,000 excursionists visited that institution, and within the last few weeks the place has been thronged with visitors, which is doing a very great deal to popularize the institution and break down groundless prejudices that many persons have held concerning it.

The Farmers' Institute of North Middlesex, whose president is R. J. Robinson, and its secretary S. P. Zavitz, this season conceived the idea of visiting the Michigan State College and Farm on June 22nd, with the purpose of picking up, if possible, some helpful ideas. Some 650 persons, including a few ladies, took advantage of the occasion, and arrived at Lansing about noon, and had till 7.15 to examine the various departments and reach the station for the return trip. The College farm embraces 676 acres. The lawns and building sites, the gardens and orchards, cover 114 acres; the original forest 150, and the remainder is devoted as follows: 47 acres to experiment, 320 to systematic rotation of crops, and 45 to woodland pasture. The chief field experiments this year are with fall wheat and sugar beets, but some other lines are receiving attention. Compared with similar work at the Guelph institution, the Michigan farm falls far short in detail and extensive effort.

Regarding the live stock kept at the Station we have nothing but praise to offer, so far at least as some of the breeds of cattle are concerned, especially the Shorthorns, Holsteins, and Jerseys. The Shorthorns are represented by such notable families as Mysies, Victorias and Duchesses, headed by Royal Mysie, by Double Victor, and bred by Col. Harris, of Linwood, Kansas. They are all excellent specimens, of greater size than we are accustomed to see, even in our best herds. The Holsteins include some of the most noted cows of the breed, including Rosa Bonheur 5th (1063 pounds of milk in one day), and three of her daughters, Houwtje D. (3.45 pounds butter in one day and 933.2 pounds butter in one year) and 5 of her daughters; Bell Sarcastic (3.96 pounds butter in one day and 841.96 pounds in one year) and three of her daughters. We were informed also that five of the Holstein cows have each produced over 500 pounds of butter in a year. This breed is headed by the stock bulls, Colantha Lad and Maurice Bonheur. The Jerseys are headed by Pedro's Marigold Duke, a bull of are neaded by Pedro's Marigold Duke, a bull of rare breeding and promise, recently purchased at the dispersion sale of Mr. T. S. Cooper, Coopersburg, Pa. The cows are an exceedingly fine lot, and are descended from Pogis Baron, by Pedro's Stoke Pogis. As high a record as 629 pounds of butter in twelve months is claimed for some of the Jerseys. Other pure breeds represented are Brown Jerseys. Other pure breeds represented are Brown Swiss, Aberdeen-Angus, Galloway, and Red Poll. The Station also supports and is experimenting with a herd of 30 general purpose cows. They are largely graded Shorthorns, of the roomy, business type. They were selected throughout the State from farmers, and the first year were made to produce an average of 300 pounds of butter. Owing to the lack of a proper pasture near the barns, these cows are being soiled on corn ensilage, which will be followed by green oats and peas. They are kept housed in Bidwell stalls during hot days and turned into a great state of the state of into a small grass plot at nights. They are being bred to the Shorthorn bull.

The hogs kept on the farm are Poland-China, Duroc-Jersey, Chester White, Berkshire, and Tamworth. We did not learn of any definite experimental work being conducted with the hogs. They are fed on skim milk, corn meal and middlings, with

The poultry department, referred to elsewhere in this issue by a correspondent who accompanied the excursionists, is not an elaborate one, although some very fine specimens of various breeds are included in the flocks. The apiary department seemed to be in a flourishing condition, and is conducted

along the line of experimental work and in connection with the lectures to the students. The dairy department is a small affair compared with the corresponding school at Guelph. We presume it is because Michigan is not particularly a dairy State that comparatively little attention is devoted to that subject at the State College of Agriculture. The farm generally, which is of sandy soil, presented the appearance of being in a good state of cultivation, but the dry weather that has prevailed for several weeks was telling heavily on the spring crops and pastures.

The sheep flock includes specimens of Hampshires, Shropshires, Oxfords, Suffolks, Cotswolds, Dorsets, and Merinos. We judge from their appearance that the farm is not particularly suitable for sheep pasture. A number of very fair specimens of the various breeds were seen. The produce of a Merino-Shropshire cross much resembled the former in color and form, and a Hampshire-Cotswold cross much resembled an Oxford.

On the whole the stock presented a very creditable appearance. With the exception of the three breeds of cattle we have especially mentioned, and one or two breeds of swine, the Guelph Station stock loses nothing by comparison, while it has a much fuller list of the best recognized breeds.

The Michigan Agricultural College was formally opened on May 13, 1857, and claims to be the oldest agricultural college in America. For some seven or eight years it led a precarious existence, being dependent on the bounty of the State Legislature but, fortunately, it was placed on a solid foundation by the national land grant of 1862. This endowment has grown into a large interest-bearing fund, rendering the College practically independent of the State for its running expenses. In this respect it has an immense advantage over the Ontario Agricultural College, which is entirely supported by the Provincial Government. The Michigan State Legislature, however, has continued to do gener-ously by its State College. It has provided buildings and apparatus at an outlay of some \$500,000, and for the current year the State appropriation reaches \$140,000, of which \$83,000 goes for a new women's building, and \$12,000 towards furnishing the same. The sum of \$10,000 is given for repairing buildings, \$15,000 towards the dairy school, \$4,000 for the farm barn, \$5,000 for student labor, \$2,500 for improved heating, and the balance for minor purposes. The College gets this handsome sum of \$140,000 in addition to its running expenses (about \$100,000 annually), which, as previously stated, come out of a national endowment fund. This is very liberal treatment, indeed, when it is considered that the whole agricultural appropriation for Ontario this year is \$204,217, of which only \$51,267 goes to the Guelph College for current expenditure, while the outlay on capital account this year is

only \$4,110.
The Lansing College covers a wider range of instruction than the Ontario institution, the agricultural course being supplemented by the mechanical course, which was established in 1885. In this latter department particular emphasis is laid on the study of mathematics, the study of theoretical principles underlying the science of machines, and the practice of constructing machines. The equipment is admirable, the carpenter shops, boiler house, electrical laboratory, and various working apartments attracting much attention. This course is covered to some extent in Ontario by the Toronto School of Practical Science, and is not considered there as a necessary complement to the work of an agricultural college. The women's course is also a feature of the Michigan institution which has no parallel at Guelph. It was inaugurated three years ago, and has proved very successful, the attendance last year being 93. The present accommodation is inadequate, and the State Legislature, as already mentioned, has provided amply for a new building. The young women are instructed in domestic science and household economy, and at the same time receive a training in music, art, modern languages, literature, and the usual accomplishments f a regular ladies' seminary. It will be seen from all this that the Michigan Agricultural College is very broad in its scheme of education, and by no means confines itself to scientific and practical agriculture. Of the students entering last year, their proposed occupations after leaving college are given as follows: Farming, 45; mechanical engineering, 53; teaching, 32; electrical engineering, 4; physicians, 2; law, 2; not fully decided, 106. The College enrollment has nearly doubled in the past three years, the number of students in all courses being now 540. The average cost to the pupil for the agricultural course is estimated at from \$140 to \$175 per year, including uniform. This may be reduced if the attribute to some to come to come the state of the state if the student cares to earn money by working for the College. Many do this, and labor during vacation to aid in paying for their education. It is estimated that this summer \$2,000 will be paid to

The institution is well officered, and other good men are being looked for. We were favored in being escorted by Prof. Herbert W. Mumford, the newly-appointed Professor of Agriculture, who has for four years acted in the capacity of Professor of Animal Husbandry. President J. L. Snyder and Professor Town also accompanied the excursionists about the farm. Among the Ontario guests of the party were the Hon. John Dryden, M. P. P.; Mr. H. J. Pettypiece, M. P. P.; Mr. Wm. Taylor, M. P. P.; and Mr. V. Ratz, M. P. It was expected that State Governor Pingree would receive the excursionists, but he was unable to be at the Capital.

Prof. Robertson at Brandon.

[FROM OUR MANITOBA AND WESTERN EDITION.]

Prof. Robertson, Dominion Commissioner of Agriculture and Dairying, addressed a meeting of the Brandon Farmers' Institute on June 6th. The attendance was not very large, doubtless owing to bad roads. Prof. Robertson spoke on Seed Selection, much along the same lines as in his address before the Agricultural Committee of the House of Commons, a synopsis of which appeared in the FARMER'S ADVOCATE of May 15th. He first referred to the fact that the average yield and quality of the crops, not only of this Province, but of Canada, were showing a slight decrease, whereas in Britain the average yields are now 30 per cent. higher than they were 30 years ago, and in France they are 40 per cent. higher than they were 40 years ago. It is not now as easy to farm successfully as it used to be, owing to partially exhausted soil, increasing weeds, and greater injury from plant diseases and insect attacks. The causes of smaller vields could be summed up as owing to:

(1) An insufficient supply of moisture, which to some extent is controllable. The amount of vegetable matter in the first five inches of soil will largely control the amount of moisture which the soil will retain. Vegetable matter can be supplied in the form of barnyard manure or by seeding down and supplying vegetable matter in the grass

(2) Unfavorable temperature of the soil, a condition largely under control. Rapid evaporation cools the land. Evaporation is more rapid from a rough than a smooth surface, hence rolling assists in checking evaporation and thus makes the soil warmer. For this reason the Professor would roll land a few days after seeding to give the seeds a better chance, following with a light harrow just when the crop is up in order to retain moisture and to kill weeds. For the most rapid germination of seeds and growth of the young plants too much attention can not be given to the preparation of the seed-bed, which should be firm and well packed, with a soil mulch of an inch or an inch and a half of fine, loose soil on the surface.

(3) Lack of suitable plant food for the young

plant.

(4) Lack of inherited vigor in the quality of the seed. The quality of the seed depends on the life from which it came. Seed should be pure as to variety, as well as free from weeds and other seeds. Large, heavy seed germinates more quickly and gives bigger crops of better quality.

After enlarging upon these points, he referred to the two great processes of plant growth, that which conduces to the vegetative growth—roots, stems, and loaves—and that which produces seeds and fruit. This principle should be thoroughly understood and the plant supplied with the kind of food required at each stage of its growth. In speaking of the selection of seed he strongly urged the importance of selecting the best seed of the varieties that have proved themselves best suited to the locality, grown on the best land, from the largest-yielding and most perfect plants, and then, with fanning mill, select only the largest and most perfect seed. This system followed up would give better results than changing seed, as in changing seed there is nothing to be gained. Once find a variety suited to the locality, stay with it, and the longer it is grown on the same farm, under the proper conditions and always from carefully selected seed, the better would be the yield and quality. And Prof. Robertson contended that in five years under this system the yield of grain in Manitoba would be increased from 20 to 30 per cent.

Mr. Bedford, being called upon, corroborated what the Professor had said as to the benefits of selecting seed. On the Experimental Farm they had not changed their Red Fyfe wheat, and the average yield was increasing rather than diminishing, and it stood at the top of the list of varieties. The seed of the Banner oats had been obtained ten years ago, and had not been changed, but had always been grown under favorable conditions and the seed carefully selected. Their Banner oats were better in yield and quality now than ever, and were at the head of the list. The first five years' average was about 85 bushels, and the second five years' average was 90 bushels. Nearly all varieties that were poor yielders in the early years of the farm work were poor yielders still, and vice versa. He did not think any grain would run out with favorable conditions for growth and proper seed selection.

conditions for growth and proper seed selection.

Dr. Thompson, V. S., Carberry, who has been several times a prizewinner with his Red Fyfe wheat at the Winnipeg Industrial, said that he had not changed his seed for fifteen years, and it was better to day than at first. He always took the greatest care in selecting his seed and put special stress on the importance of allowing the grain intended for seed to become thoroughly ripened before cutting. He believed in the principle of rolling land, but on account of the liability of rolled land to drift he did not use the roller, but used the press wheels on his seeders and would not think of using a seeder without. Their use made the grain germinate more rapidly and ripen earlier.

DAIRY.

Milk Testing at Factories.

To the Editor FARMER'S ADVOCATE:

SIR,—I read the fog-horn blast of T. B. Scott in your last issue, in which he attacks Prof. Dean. There is about the same proportion of "fat" in it that is found in the skim milk returned to patrons from the butter factories. The point made in Prof. Dean's letter, which was easily comprehended by ordinary readers, Mr. Scott could not or would not

To assert that all men are honest, or that any particular class among men are honest, is a statement contrary to human experience. It is customary for business men to keep a check upon each other. Packages are weighed and counted when sent out and when received. No business man would think of letting his banker keep his account; hence bank books are kept by depositors, and at the end of each month, or oftener, these are examined and checked over. A man in business who would not be "suspicious and distrustful" enough to keep a tab on his business transactions would, by the great majority, be thought a fit subject to hand over to the fool-killer.

In all business transactions it is considered wisdom to keep a check on dishonest men, and to discover the mistakes, if any, of honest men.

This principle is just as applicable to transac-

tions between patrons and the proprietors of

In most cases of bargain and sale the buyer and seller are able to keep accounts, but, generally speaking, the patrons of butter or cheese factories are not, for the reason that in the keeping of the account a special and scientific instrument and technical knowledge is required. Neither are many patrons in a position to employ a disinterested party to keep the account.

If Prof. Dean can suggest any practical method whereby this account can be kept by a disinterested party, no honest buttermaker will object or set up the howl that "the tone of his article is that factory managers are incompetent and dishonest.

Granting that all factory managers are honest, the method in vogue of keeping the accounts is too great a temptation to be permitted. A factory manager's moral nature would have to be steelplated as heavily as a modern battleship to stand the pressure. A dishonest factory manager has a "snap," which he will use, with care, for his personal benefit.

The patrons of butter factories look to Prof. Dean for a remedy for the present unsatisfactory method of paying by test, the tester being one of the parties to the transaction who is interested, while the other fellow, the milk producer, has "to go it blind."

FRANK HUNT.

Elgin Co., June 22nd.

POULTRY.

A Canadian Poultrywoman's Visit to the Michigan State College Poultry Yards.

About the middle of the afternoon of June 22nd, the day of the North Middlesex (Ont.) Farmers Institute excursion to the Michigan Agricultural College, we found our way to the brooder houses and experimental yards. The heat was intense. The heat was intense, but not sufficiently so to prevent a careful inspection. The attendants were absent, otherwise much more information might have been obtained. We found an ideal situation — sandy soil on a southern The houses, or rather one house divided into several compartments, was built with the lower side at the north and large windows in the highest wall at the south. Roomy yards extend both north and south from this building. These were partially covered with tall rye, which would afford plentiful shade in spite of the absence of afford pientiful snade in spite of the absence of trees or shrubs. The first room contained a large brooder with clean straw for bedding, which the chicks occupy at night, presumably. They were a mixed lot and they did not strike one as particularly healthy; in fact, I felt strongly tempted to capture the worst of them and hunt for parasites. Their food was small grain in a self-feeding box, which did not strike me as being so good as the same grain in litter, for chickens a day old will scratch for food. In the next compartment were a different style of brooder and larger chickens, many of which showed the markings of pure Brown Leghorns. Another compartment was fitted up for laying hens, with only one stupid-looking Buff Cochin in sight. In one of the runs a Black Langshan rooster appeared to be mothering a brood of well-grown chickens.

From the brooder house we trotted off, but trotting is scarcely a suitable term, for the most leisurely walk was almost too much for weather so hot, but we found the poultry building proper. Here everything was cool and comfortable, as there were plenty of shade trees. We found everything bright with whitewash, and all the useful, combined with fashionable, breeds of fowls were represented, and there were some very fine specimens among them. The pens each contained about one male and five or six females, and were on each side of a passage and opened into yards both north and south of the building. They were built so that one run accommodated two pens; half the number

being confined when we called, the other half of the pens being opened. They made a pretty picture; the full-blooded beauties, Rocks — White and Barred, Wyandottes - Silver, Laced, Golden, and White, being my favorites, though several other of fashion's favorites were represented.

The grounds of the Michigan Experimental Farm are well supplied with water, a river (the Red Cedar River), ponds, and also hydrants from the city waterworks, but I failed to find any trace of water fowls, though they may have been at some distance from the other poultry. I suppose comparisons between Canadian and American, or Ontario and Michigan, poultry yards are unnecessary, though a visit to our neighbors does not always make us discontented with our own yards. But it will well repay us at any time, even if we raise only one dozens chickens each year, to visit and study as many poultry farms as come within our reach. GYRA.

APIARY.

Summer and Fall Work in the Apiary ---A Manitoban's System.

A question that will very soon begin to agitate the mind of the incipient apiarist, if it has not already caused him serious loss of sleep, is, When may I begin to use the extractor? This depends on the strength of the several colonies. One hive may yield a considerable quantity of honey before another has taken in more than enough for its immediate wants.

It is claimed by some that honey should not be extracted until the combs are full and capped. Until then they say the honey is not "ripe," and therefore an inferior article. While this is true, it is also true that after exposure to the air in large, open tins, this unripe honey becomes ripe, and can't e distinguished from capped honey extracted on the same date; so when honey is being brought in freely, we consult our convenience and the state of the weather only, empting capped, partly capped and wholly uncapped combs, and putting the honey all together in a tin tank 24 inches in diameter, and which holds when full about 300 pounds. This tank has no other cover than a cloth sufficiently fine to keep out dust, and in it the ripening process seems to be accomplished fully as well as in the hives. Of course any honey of inferior quality or color is kept separate.

For this operation a warm, sunny day is chosen, when the bees are too busy to notice what is being done. On such a day, too, the honey is more easily thrown from the combs. As a rule we extract from the best hives once a week during the height of the honey season. Of course, if one has plenty of combs, he may simply remove from the hives those that are full and capped, putting empty ones in their places. The extracting may then be done at leisure. for uncapping the combs a knife made especially for that purpose is required. Beginners may think the cost of an extractor too great to incur the first season. But a good extractor may be had for ten or even eight dollars, and a honey knife for one; that is all that is necessary to gather the first year's harvest; and in a favorable season the honey from one colony and its swarms will easily pay the cost. I find that my figures given in a former issue as to the yield of the last two seasons—143 lbs. per colony in '97 and 110 in '98—have been taken by beekeepers have been taken by beekeepers in other places with considerable salt. But those figures were right, nevertheless. This is what two colonies, of which I took particular account, did last summer. They each threw off two swarms (one first swarm of which I failed to secure), and rolled up the very creditable total of two hundred and forty-six pounds of honey—with the assistance of their progeny, of course. At twelve and a half cents per pound this gives \$30.75, less say \$1.75 cost of sugar fed to them for winter, or a net return of \$14.50 per colony, to say nothing of the swarms.

As the work of extracting goes on it is important to keep the question of wintering in mind. All weak and backward colonies should be cared for at this time. The condition of every one should be known, and steps taken to have it in good shape for winter when the honey flow ceases. It can scarcely be done successfully after that. Feeding may and should be done immediately after, but the uniting of weak colonies should be attended to at an earlier date. Directions for uniting swarms will be found in all reliable modern books on beekeeping. It is a simple matter, though even in it circumstances may alter cases. The only danger is that the two parties may take to fighting, with the result that ever awaits a house divided against itself. I have done it successfully in this way: After dark, when the bees are all in, bring hive No. 1 up beside hive No. 2, where it may be left for a day or a week, until a cool evening occurs. Then lift the combs with the bees on them from hive No. 2, and place them in hive No. 1 behind the division-board. Place No. 1 on the stand of No. 2, and the thing is done. If the evening is cool the chances are that the bees will huddle on the combs till morning, and everything will go on smoothly. If, however, after half an hour or so they are found to be fighting, spill a half cup of honey in the hive, letting it run down the sides and ends. The fight will be adjourned till this is looked after, by which time they wont be able to tell "one from 'tother or other from which." The next day the division-board may be removed and the combs moved up together. Of course the

queens will fight it out when they meet, and the

fittest will survive.

As soon as the harvest is over—that is, when it ceases to come in such quantities as make it worth while to extract—the hives should be contracted by removing all combs but those the bees can cover well. These should be left in the front or center of the hive, and a division-board placed behind them. Combs with honey in quantities not worth extract ing may be left for a day or so in the back of the hive till the bees empty them. Then, if they have not at least 25 pounds of honey, they should at once be fed.

A cheaper food, and at the same time one as good as the best honey, is granulated sugar. This may be fed either as syrup or as candy. The syrup is made by dissolving twenty pounds of sugar in about one gallon of boiling water. For feeding syrup there are a thousand and one sorts of feeders advertised, but anyone can make his own, if, indeed, he has not something ready made that will serve the purpose. We use boxes—made water-tight, of course—ten inches square and four deep. In one of course—ten inches square and four deep. In one or these we put as many pounds of syrup as a colony is supposed to require, floating on it enough bits of shingle to ensure the bees against drowning, and place it after nightfall in the hive, either above, or, if there is room there, behind the combs. By morning the bees will have it all stored away. If the feeder does not hold enough at once, some more may be given the following evening. Twenty-five pounds of stores is as little as it is safe to winter on, and it would be wise to give thirty—none of it is ever

If feeding is delayed till cool weather sets in, it may be found that some of the bees will not store the syrup offered them, most likely the weaker colonies, which require it most. It would then be better to feed candy, which is made to solidify in an ordinary comb frame, and so placed in the hive. When feeding is done remove the supers, and see that the quilt is in place over the frames, so as to prevent as much as possible the escape of warmth

The cellar should be seen to, too, and made clean and dry, and benches at least eighteen inches high provided to set the hives on. When winter has come to stay, the hives should be carried down and placed with alighting-boards projecting over the bench. After all are in place open the entrances, which have to be closed when moving the hives; and if the temperature of the cellar is likely to remain right throughout the winter, say ten degrees above freezing, and there is no danger of mice, the covers may be removed and a woollen cloth substituted. If the covers must be retained, it is necessary to provide the hives in some way with ventilation. Good ventilation must also be provided for the cellar; and a cheap and wholesome precaution is to place a quantity of quicklime on the floor.

The best thing to do next is leave them alone till
the willow buds begin to burst.

J. J. Gunn.

Red River Valley.

Union Beekeepers' Convention.

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(Continued from page 259.)

 $At\ what\ stage\ should\ honey\ be\ extracted\ ?$ Owing to the increasing quantities of honey being exported, it was deemed very important that every precaution should be taken to prevent inferior honey going to market, and to improve as far as possible all that is produced, as it is the quality of such products that regulates the demand. To this end all honey should be fairly well capped before being extracted, otherwise it is liable to be thin and of rank, unripened flavor. A number of the best beekeepers make a rule of allowing the combs to become from two-thirds to three-quarters capped before throwing it out. While honey in this stage is usually fairly well ripened, some careful men do not rely on this indication alone. Mr. Holtermann claimed that the honey should present a shiny, glossy appearance in the cell before being taken from the hive to be extracted. Mr. Heise goes by the weight of the honey as his guide. When he is ready to extract he throws out the honey from a couple of lightly capped combs and weighs it. If the honey weighs less than 12 pounds to the imperial gallon it is considered too light, and is allowed to further ripen before extracting more. Sometimes honey will go as high as 131 pounds to the gallon. When honey is extracted too thin it will usually thicken up and ripen fairly well if left uncovered in a warm room, but it is better to allow it to ripen

in the comb before being taken from the hive. How should honey be stored, and where ? The important thing to preserve in honey is aroma, which, when unduly exposed or agitated, is liable to be lost because of its volatile nature. It is also important that honey be not exposed to moist atmosphere or it will become thin and watery. It therefore should be kept where there is artificial heat or where a good deal of sunlight strikes in during the day and warms the room. Mr. Miller claimed he always retains the fine aroma best by not exposing the honey. It is considered good practice to seal up the honey while it is yet warm, as soon as extracted. One member finds satisfaction in storing in cans of 300 to 400 pounds capacity, and covering with 3 or 4 plies of paper held on by a string or lid. Another plan expressed is to keep the honey in large cans covered with cheese cloth in a warm room for four or five days, and then run it off into 60-pound cans, which are sealed up and kept so until marketed. The main points in storing

en it in the control of the control

ripe honey seem to be to keep it in sealed cans in a warm, clean room. Honey that is too thin should be left uncovered in a warm, pure atmosphere until reaches the proper consistency.

Where should combs be kept after the extracting

Combs should be stored so as not to become infested with moths, nor become moldy. Mr. Miller enerally keeps them in stacks in his honey room. He puts a cover on them and smokes them well with sulphur. Some leave the combs in the supers till August or September. They are then covered at the top with cloth or paper and the top put on so as to be moth proof, and are stored away in a dry, moderate temperature. If stored in a cellar they are liable to become moldy. It was claimed that moths frequently get in their work of egg-laying when the combs are left exposed over night after being extracted. They should, therefore, be returned to the supers or other places of protection the same day as extracted.

What is the best way to have the bees clean up the comb?

When there is a little light colored honey remaining in the combs, it is not important to have it cleaned out, but buckwheat honey in all cases should be thoroughly cleaned out in order to prevent its tainting or coloring the next season's light honey. The practice which some beekeepers follow of allowing the combs to be indiscrimately cleaned out by the bees by setting the extracted supers in the open yard was referred to as a good means of scattering foul brood throughout the entire beeyard, provided one or more colonies were affected with the disease. This, Mr. Holtermann considered too great a risk to run, since one might easily have foul brood in the yard without knowing it. The plan which he suggested is to move the extracted super over simply one hive, which would lessen the chances of distributing foul brood to a minimum.

VETERINARY.

The New Cure for Milk Fever.

Some months ago the FARMER'S ADVOCATE published a statement regarding the German, or Schmidt, treatment for milk fever, concerning which the Farmer's Gazette, of Ireland, gives the following statement: "Several correspondents have recently written to us for instructions as how to use the iodide of potassium, recommended in these columns some months ago as a cure for milk fever in cows. For the information of the querists in question, as well as such others of our readers as may be interested, we now repeat the gist of the information already given on this subject. The "new cure," as it has now come to be described, consists in the injection into the udder of a solution of iodide of potassium. The first thing to do is to obtain some clear warm water and to add to it a little Sanitas, or other disinfectant, and then thoroughly sponge the udder with it. About fifty grains of iodide of potassium should then be taken and dissolved in one and a half pints of water prepared by first heating it to the boiling point and then allowing it to cool down until it reaches 100°F. It is at this stage that the iodide of potash should be added. An India-rubber syringe with a teat syphon fitted should then be procured, and immersed in boiling water in order to render it perfectly clean, as if proper precautions are not taken in this direction inflammation of the udder may be brought about. The syringe, after being duly cleaned, should be filled with the iodide of potassium solution and one fourth of the quantity specified injected into each teat. Two or three hours after the injection the udder will usually be found to have become full and hard; when this is the case a little milk should be gently drawn, but the whole contents of the udder should not be abstracted. A Scottish veterinarian, who has had very successful results with this treatment, and who recently communicated some interesting details of his experiences to one of our contemporaries, advises the administrationdirectly after the injecton into the udder of the iodide of potassium—of 2 lbs. of treacle and a pint of castor oil, given in two quarts of warm ale. This he recommends, however, only where the animal is conscious; if insensible, no attempt should be made to administer anything, but the animal should be trussed up so as to rest on her breast bone and abdomen, and should then be left alone until sensibility returns. This gentleman also considers it a good plan to offer the affected animal some small quantities of cold water to drink at frequent intervals, and when the cow gets on her feet he advises giving her small portions of any kind of food she relishes best, and leaving the calf with her for five or six days, or failing in this, to take small quantities of milk from her three or four times a day, but on no account to remove all the milk from the udder at once before five

or six days elapse after calving."

In our issue of April 1st of this year, page 178, we referred to two cases of milk fever that were Successfully treated by the new treatment by Dr. Tennant, V. S., of London, Ont. Since that time the Doctor has met with ten pronounced cases, bringing them all successfully through the disease, and all long the disease, and all but one of them has made complete recovery. The exceptional case so far recovered as to be able to walk around and eat grass, and was apparently doing well, when her owner administered several draughts of homemade painkiller, which, it is supposed, caused complications that robbed her of life and her owner of a cow. Of the

twelve cows treated by the Doctor with the potas sium iodide udder injections, they were all, with one exception, down and helpless when he reached them. The first four were given physic, either before the injection was given or as soon after as the action of the injected medicine would make it possible. Since then no physic has been given, but in every case stimulants are used in the form of whiskey, with nux vomica or other drug. The cows were all milked out as soon as reached and the udder injected. Great precaution is taken not to give the cow anything whatever for six hours after the injection. At the end of ten hours the udders of the cows were again milked out and injected. This is all the treatment that he now uses and it is proving to be all that is now uses, and it is proving to be all that is necessary. The cases have all gotten onto their feet in from six to eighteen hours, and with the one exception made a rapid recovery. We interviewed a number of the owners of the cows treated, and found them very sanguine over the new sys-tem, as they had invariably lost several previous In some cases the cows were milked for a few days before calving, and one of these took the disease before her calf was born.

GARDEN AND ORCHARD.

The San Jose Scale Commission.

The commission appointed by the Ontario Government, consisting of Dr. Jas. Mills, President of the Agricultural College, Guelph; Mr. John Dearness, I. P. S., London, ex-President of the Ontario Entomological Society, and Mr. W. H. Bunting, a well-known fruit-grower of St. Catharines, opened their investigation in the Town Hall at Niagara-onthe-Lake, Ont., on Tuesday, the 20th inst. This is the center of one of the two largest known areas of infestation, the other being in the County of Kent. The Niagara deputation, in its memorial to the Government, urged that the operation of the Act is

(1) Because the orchards are being destroyed without adequate compensation; that it is impossible (2) For the staff, or even one many times as large,

to inspect the vast number of trees in the district. (3) That birds, winds and other agencies are distributing the insect faster than the inspectors are discovering it.

That it is rampant in the adjoining part of New

The commissioners examined between 20 and 25 witnesses at this point, the evidence being taken upon oath. Without any exception, the witnesses held that the compensation is not nearly sufficient. Some had received 50 cents on an average for cheap trees, and \$2 for apple trees. Mr. Hutchison had lost 2,500 trees, and received about \$1,150; Mr. T. A. Stewart, between 1,300 and 1,400, and received about \$650. Mr. Nelles said the amount received was about the cost of rooting up the trees and burning them. Mr. Benn testified that it took a team and three men three weeks and four days to clean off a plot of 359 trees out of his orchard, and that besides the loss of his trees his property had depreciated so much that for one of his places, for which two years ago he had refused \$7,000, he would gladly give it to anyone now who would take it at the mortgage of \$3,050.

The majority of the witnesses declared their

belief that the insect itself has not produced serious damage to infested trees. On peaches they do not dread it so much as the yellows or rosette, and that with very few exceptions it had produced no perceptible effects on trees of any kind. Mr. G. B. Wilson would defy any man to prove that a single tree had been killed by the scale in the Niagara district. Mr. Green said he believed some trees had been killed by the scale in an orchard adjoining his. Mr. Healey had seen trees that he thought were

dying from some cause.

There was pretty unanimous agreement that the resent staff of twelve inspectors working in the lownship of Niagara could never overtake the scale. Mr. Benn testified that in his orchard single apple trees had taken a man half a day, and at that rate he calculated that it would take the staff 400 days to inspect the apple trees in the township, not to speak of the greater number of peach, plum, cherries, and other kinds of fruit trees.

As to the question whether it establishes itself on other shrubs and trees than those usually cultivated in the orchard, no evidence was given to show that it has been found on any others except black currant bushes. Mr. Green had seen the latter killed, he thought, by the San José scale.

No witnesses offered personal knowledge of its presence in the adjoining part of New York State, nor, apart from tracing it by nursery stock, of the means of its distribution. It was suggested that it may be carried by winds and by birds. Several urged that inspection should not be made at the season when the young scales are moving—from June to the fall—as the inspectors are liable to carry them from tree to tree on their hands and clothing.

The commissioners, after viewing a number of affected orchards, will continue the inquiry at St. Catharines on Thursday.

SHOWS AND SHOWING.

Fairs of 1899.

CANADA.

CANADA.			
Winnipeg Exhibition, WinnipegJuly	10	to	15.
Western Manitoba, Brandon	18	,,	21.
Stanstead Live Stock, Stanstead, Que. Aug	.23	n	24.
Industrial Exhibition, TorontoAug. 28 t	o S	ep	t. 9.
Dundas County, Morrisburg Aug	.29	to	31.
Eastern Exhibition, Sherbrooke, Que. Sep	t. 4	. 11	9.
East Elgin, St. Thomas, Ont	6		8.
Western Fair, London, Ont	7	"	16.
South Lanark, Perth, Ont			13.
Kingston District, Kingston	11	"	14.
New Brunswick Provincial, St. John "	11	"	20.
Central Canada, Ottawa	11	"	23.
Wellesley & N. Easthope, Wellesley "	12	"	13.
Owen Sound, Owen Sound	12	"	14.
Bay of Quinte District, Belleville "	13	"	14.
Southern, Brantford	16	"	21.
West Middlesex Union, Strathroy "	18		20.
Northern, Walkerton	19	"	20.
Prescott, Prescott	19		21.
Central, Guelph	19	"	21.
Central, Guelph	19		22.
North Oxford, Woodstock	21		
Nova Scotia Provincial, Halifax, N.S "	23	"	30.
North Brant, Paris	25	"	26.
Center Bruce, Paisley "	26	"	27.
Haldimand County, Cayuga	26	n.	27.
Central, Peterborough	26	"	28.
	26	"	28.
Northwestern, Goderich "	26	"	28.
Peninsular, Chatham "	26	"	28.
North Lanark, Almonte	26	"	28.
Center Wellington, Fergus	27	"	28.
Ontario and Durham, Whitby "	27	#	28.
South Renfrew, Renfrew "	28	"	29.
North Perth, StratfordOct.	3	"	4.
East York, Markham		"	6.
North Renfrew, Beachburg	5	"	6.
South Norwich, Otterville "	6	er	7.
"World's" Fair, Rockton "	10	*	11.
Norfolk Union, Simcoe	17	"	19-

UNITED STATES

Ohio State, Columbus, Ohio	.Sept.	4	to	8
New York State, Syracuse, N. Y				
Cambridge, Cambridge, N. Y	. "	5	"	8
Monroe County, Stroudsbury, Pa				
Inter-State, Trenton, N. J				
Michigan State, Grand Rapids, Mich.	. "	25		30
Illinois State, Springfield, Ill	. "	25	"	30
St. Louis, St. Louis, Mo				
		15.00	335	

[Note.—If Secretaries of fair boards will send us dates of their shows we will include them in list of succeeding issues of FARMER'S ADVOCATE.—ED.]

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.

STRINGHALT.

SUBSCRIBER, Assa.:-"Please answer the following inquiry: 1. Is stringhalt in horses an unsoundness? 2. Is it incurable? 3. Is it hereditary?"

[1. Yes. 2. Confirmed or chronic stringhalt is incurable, but when aggravated by the presence of bone spavin, or any other local lesion of the limb which would cause irritation or undue pressure of the nerves, the proper treatment of the latter will sometimes greatly relieve the spasmodic action of the former. 3. It is not classed as an hereditary disease, but it is not wise to breed from an animal that is suffering from any chronic or incurable disorder.l

HYDROPS UTERI.

R. R., Roden, Man .: - "Please advise me as to cause and treatment of the following: 1. A heavy Clyde mare, in foal, was quite healthy until about three months before she should have foaled, when she took sick. She appeared heavy in foal, but had a discharge of a large quantity of bloody water, and was very weak while walking for about a week. This continued until her belly drew up so that she showed not the least sign of being in foal. Then while she was feeding she lay down and died without a struggle. She was very fat. 2, Also, could you tell me how to bring up a colt when its mother has no milk for it? What is the reason a mare sometimes has no milk, and how could it be prevented?"

[Dropsy of the womb, technically called hydrons uteri, occasionally follows copulation and simulates pregnancy. It may be due to what is sometimes termed a spurious or false conception, which, instead of developing into a normal feetus, produces either a fleshy mass called a "mole," a uterine kyst, or dropsy of the womb. The pathology of this abnormal state is not well understood. The condition may also be due to disease of the womb. The treatment (providing a correct diagnosis is made, which is imperatively necessary) consists in sufficiently dilating the mouth of the womb so that the contained fluid will freely escape. The womb should then be injected daily, for a few days, with creoline one part to forty parts water.

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Give, internally, one dram iodide of iron, morning and evening, for one week. Keep the bowels open with wholesome laxative diet.

2. Cow's milk slightly diluted with water—water, one part; fresh cow's milk, four parts—is the best available substitute for mare's milk, and, until the foal is three or four months old, the milk should be fed at blood heat. For the first week or two it is necessary to feed the little animal frequently, say every hour and a half or two hours, and, as it becomes older, gradually decrease the number of feeds until three or four times a day will suffice. If there is a deficient secretion of milk at the time of parturition the mammary glands may be stimulated to action by warm fomentations locally, encouraging the foal to suck, and feeding the mare succulent, sloppy, milk-producing food. W. A. DUNBAR., V. S, Winnipeg.]

Miscellaneous.

LUCERNE CLOVER FOR SEED.

J. C. Cox, Huron Co., Ont .: "Will you be kind enough to tell me which crop in the season best produces lucerne clover for seed? Is it hard to thresh? Will a common threshing machine take the seed out? Is it worse than other clover seed for not growing when two or three years old? I have heard that will not grow if two or three years old.'

[Second crop of lucerne is the one usually taken for seed. It should be cut when the seed pods are brown. An ordinary threshing machine will thresh it, but clover screens have to be used to separate it properly. It is not difficult to thresh when well ripened and dry. Lucerne seed, like other clover seed, is fairly well charged with oil, and is therefore not subject to serious degeneration from two or three years' storing in a dry place. Lucerne will in suitable soil continue to produce good crops for six to ten years.

MARKETS.

FARM GOSSIP.

Oxford County.

Oxford County.

We had fine rains some time ago, and our crops are doing very well. I think so far oats and barley appear to be doing the best. We have barley now coming out in head. I am glad we sowed salt on it, or it would likely have all gone down. Peas, as a rule, are not doing so well, but they are improving. New meadows are looking well, but old meadows will be light. We had a field that yielded over three tons to the acre last year, which at present has no appearance of yielding half that weight. Pastures are extra. We had to shut the cattle out of one pasture field, and will now mow it for hay. Old hay brings from \$7 to \$8. With us our corn is doing remarkably well, but some had to replant, and of course it cannot amount to so much. Crows and blackbirds and tame pigeons are doing considerable damage to some cornfields. Mangels are coming on rather unequally. Turnips have brairded nicely. There was a report that the past severe winter had annihilated Mr. Potato Bug. While it may have decreased his numbers, I am sorry to say that he is still in evidence, and the demand for Paris green to supply the demands of his voracious stomach will be considerable. Potatoes are doing well. The old tubers are nearly unsalable now. Cows are getting all they can eat in the pasture, and the flow of milk is good, as the flies have not yet begun to get in their work. Cheese took a drop to 71c, but has taken a reaction, and our last shipment (of the first of June) went off at \$c. We are paying by the result of the Babcock test +2. Those patrons whose milk tests above the average like the plan very well, but those whose milk goes below think the test is not right. Such is human nature. So far the test has not showed any very great variation. With the exception of two or three patrons whose milk ests above the average like the plan very well. The price is now \$4.75, and it is expected to reach \$5. Four dollars is being offered freely for lambs, but wool is away down, selling at 14c. How is it so cheap? The farmers are now doi

Prince Edward Island.

Prince Edward Island.

We have had a cold season so far. Grass and grain is backward. The most of the month of May was dry, but since June came in we have had an abundance of rain. Just now we are having warmer weather and consequently good growth. Hay for the most part promises well, but there is not so much clover in the meadows as last year. Will not begin haymaking here for more than a month yet. The supply of milk at the dairy stations is larger than ever this year. The output of June cheese will be greatly in excess of any previous year. June cheese are selling just now for \$\frac{1}{2}c\$, per pound. There is quite a lot of fat cattle offering yet, and the price is 4c, to \$\frac{1}{4}c\$. The Newfoundland market take most of them. Apples will be very scarce this year, but small fruits will be plentiful. Good carriage horses and heavy drafts are in demand at fair prices, and horse breeding, which has been rather neglected of late, is receiving an impetus again. A "Cheese Board" has been organized in Charlottetown, and will hold its first meeting for business July 4th. The report of the commissioners of the Government Stock Farm, for 1898, is just to hand. From it we learn that there are at present on the farms 34 pedigreed Shorthorn cattle, 29 pedigreed Ayrshires, and 18 pigs. Six working horses are kept, but horse breeding is not carried on. This farm bred and distributed among the farmers last year 22 Shorthorn and Ayrshire calves, which realized at auction an average price of \$28 each. The acreage under crop last year was as follows:

as lonows:													
Hay, 100 acres												Yie	eld.
On acres	 					. ,						150	tons.
MILLOU ICCU. / ACTOS												9:0	
Delley, o acres.												1:0	
Turnips, 5 acres Mangolds, 1 acre	•		٠						٠		.3	000	bush.
mangonis, 1 acre												(ME)	

There is no experimental work done on this farm, but it is run as any other ordinary stock farm on the Island, with this exception, that there is always a large yearly deficit each year

amounting to nearly \$100.

The total sales from the farm this year amounted to \$1,172.79, while the expenses of running it was \$1,566.71. This

is our Provincial illustration station, and the lesson we get from it is not encouraging.

A gentleman from Sudbury, Ontario, is now trying to rent or buy 1,000 acres of land between Charlottetown and S. Side for sheep pasture. It is his intention, we believe, to purchase sheep and lambs, fatten and ship them to the American markets. We have not yet heard how he has succeeded.

June 21st 1899.

W. S. June 21st, 1899.

Central Eastern Ontario.

Since my last report a month ago we have had very little rain. Just now the soil is dried out as thoroughly as it usually is six weeks later in the season. Timothy meadows which promised well will be, except in the case of first cuttings, less than half a crop. So far as clover is concerned, it is not to be found. In many sections about one half the usual acreage of corn has been planted. Some of our best farmers have concluded that they cannot raise a full crop of hay after corn, hence the verdict, corn must go (?). Peas, oats, and barley are making good growth, especially on heavy soils. Most of the fall wheat was plowed under. Of spring wheat there is practically none sown. Two to three acres of root crop is about the maximum on the average farm of Eastern Ontario. Our farmers are more generally growing mangels as winter food for

cally none sown. Two to three acres of root crop is about the maximum on the average farm of Eastern Ontario. Our farmers are more generally growing mangels as winter food for their swine stock.

As to markets: Cheese is moving forward steadily when fit to ship. Factory patrons are fairly well satisfied with present returns and prospects for the season's business. There has been a splendid flow of milk during the present month, since pasture is good, despite dry weather. Crass-fattened beef is now moving forward. In response to a brisk demand, three cents per pound is the usual quotation on steers and heifers. Dowager dairy cows are mit yet quite fit for the canning factories. There are legions of them down here. The bottom is gone from our hog market; 3½c, is about the best quotation on choice stuff. Fat sheep are in good demand for Montreal market, at 3c. Our farmers will next year go arrayed in full-cloth, since many will not sell their wool at 13c., the present ruling price. Mill feed is hardly to be had, at almost prohibitive prices. We lately paid \$16 per ton for hay.

On the whole there is, perhaps, a slightly better feeling among our farmers than there was twelve months ago. Business men say farmers' accounts are better met, but money is still slow. On the 19th inst, a severe storm of hail passed over a portion of Lanark Co., completely destroying the young grain and corn in its path.

Leeds, June 23, '99.

Manitoba June Crop Report.

AN INCREASE OF 230,000 ACRES IN CROP.

The June crop report of the Manitoba Department of Agriculture contains some very interesting figures, showing a marked increase of crop area throughout the Province. This is attributed not so much to an increased acreage on the part of individual farmers as to the number of new settlers that have located in the Province during 1893, the number being estimated at 2,500. It is also pointed out that a considerable amount of the increased area is attributable to the extra railway facilities in many districts.

		AREA UNDER CROP.	
Total area	under	wheat	acres.
**	**	oats 575,136	**
••	**	barley 182,912	44
**	**	flax 21,780	44
**	**	rye 3,217	**
**	**	peas	* 6
**	**	corp : 3,480	44
		buckwheat 32	
**		brome	44
**	**	potatoes 19,151	44
	44	roots	**

Total area under all crops is 2,449,078 acres. The following statement gives the comparative acreage for

1091, 1090, 8	and 1899.		
	1897 acre		1899, acres.
Area unde	r wheat 1,290,8		1,629,995
**	oats 468,1		575,136
44	barley	66 158,058	182,912
**	flax 20,6		21,780
**	potatoes 13,5		19,151
	roots 6,1	30 8,448	10,079
	-		

Total crop, incl'd'g rye, peas, corn, etc. 1,958,025 2,210,942 2,449,078

Kent Co., Ont.

The latter part of May and June to date has been beautiful growing weather—warm and showery—consequently the fall wheat and meadows have improved wonderfully. Haying has begun already and will be well along by the last of the week, but wheat harvest will be a week or ten days later than usual. All our spriog crops, viz., barley, oats, corn, and beans, are looking unusually fine. There is a larger acreage of the three former crops and a marked decrease in the average of the latter, which is in keeping with the price obtained for them, which is from 60c, to 70c, per bush. Wheat has advanced to 72c, per bu. Very little doing in coarse grains. Hogs are about the same price. Fat cattle are scarce as yet, but the excellent pasture is rapidly rounding them into shape, so that the supply will soon more than meet the demand.

The San Jose scale inspectors seem to be having a hard fight against bulldogs, guns, and angry horticulturists, who apparently do not think the inspectors understand their business. On the other hand, the inspectors claim they have the pest pretty well cornered and only require the assistance of orchard owners to completely stamp it out.

W. A. McG. The latter part of May and June to date has been beautiful

Chatty Stock Letter from Chicago.

FROM OUR OWN CORRESPONDENT.

Following table shows current and comparative live stock

prices:				o second
Doof cottle	Extreme	Two wee	op Prices ks	
Beef cattle.	prices now.	ago.	1898	1897
1500 lbs. up	\$4 95 to 5 50	\$5 60	\$5 15	\$5 15
1550 to 1500 lbs	4 80 to 5 55	5 60	5 25	5 20
1200 to 1330 lbs	4 60 to 5 50	5 00	5 15	
1050 to 1200 lbs	4 40 to 5 10	5 35		5 20
900 to 1050 lbs	4 25 to 5 95		5 10	5 00
Hogs.	1 30 10 3 23	5 20	4 90	4 75
	9 05 4- 9 031		2	
Mixed	3 65 to 3 924	$392\frac{1}{2}$	4 12	3 47
Heavy	3 50 to 3 92½	3 95	4 15	3 45
Light	3 65 to 3 95	3 95	4 05	3 50
rigs	3 20 to 3 85	3 80	3 90	3 50
Sneep.			0 00	0 00
Natives	2 65 to 5 40	5 25	5 25	4 10
western	4 60 to 5 15	5 10	5 25	
Yearlings	4 50 to 6 40	5 25		3 70
Lambs	1 00 to 7 00		5 75	4 40
Else time ?	1 00 10 7 00	6 65	6 85	5 80
Fly time is a se	rious one with	cattle feed	ore It i	v anita

Fly time is a serious one with cattle feeders. It is quite discouraging to have cattle consuming feed and requiring care and attention and hardly holding their own for weeks. A successful Chicago cattleman has a simple home remedy which he has found effective on his own cattle at Little York, Ill. He takes whale oil and mixes about a small tablespoonful of carbolic acid to, say each quart, and then getting the cattle bunched into close quarters puts it on their shoulders and along their backs with an old broom. He says a very little of it will keep the flies away for three or four weeks, when the application needs to be repeated.

Cattle marketing is light in the West. Referring to the run of cattle at Kansas City last week — only 15,291 head — the

Drovers' Telegram says it was so small it is necessary to go back to 1892 to find a week that is smaller. Even holiday weeks at Christmas time have not dwindled so low. It was the week of June 11, 1892, that only 14,969 head arrived, the last week in which fewer were received than in the present week. A good many reasons might be assigned for the meager arrivals: the drop in prices, the urgency of farm work, the advent of the berry season, the off time between fed and grass cattle. Some Illinois-fed Texas cattle, 1,163 lbs., sold at \$5.19. One of the most serious of the winter losses recently suffered in Montana and elsewhere in the Northwest by stockmen and ranchers is seen in the destruction of great areas of alfalfa. The winter and spring of 1898-99 constituted the worst season for alfalfa ever known, and there will be less than one half the usual yield, for the plants are killed by freezing. Some fields which last year were a rich waving mass of dark green forage are almost entirely bare, showing only a few spots where the hardy plant has survived.

The demand in Montana, Dakota, and Wyoming for young cattle is very great and will not be half supplied.

G. F. Swift, the great packer, has lately bought two great herds and ranch outfits in Oklahoma and the Panhandle of Texas. He has for many years owned a big ranch outfit in Colorado.

They are marketing western corn-fed cattle in big bunches

herds and ranch outfits in Oklahoma and the Panhandle of Texas. He has for many years owned a big ranch outfit in Colorado.

They are marketing western corn-fed cattle in big bunches now. The Standard Nebraska-fed rangers, 180 head, 1,241 lbs., sold at \$5.20; a week ago 180 head, 1,402 lbs., sold at \$5.20; and Friday the 1,457 to 1,461 lb. steers sold at \$5.05 to \$5.15. Jepp Ryan, of the firm of Ryan & Richardson, Leavenworth, Kansas, marketed 1,292-lb. branded cattle, which sold at \$5.40, and one load averaging 1,117 lbs. at \$5.15. There were nine cars or 171 head of the 1,292-lb. cattle at \$5.40. These cattle were Aberdeen-Angus cattle bred in Texas and fed in Kansas.

The hog market is well supplied at present. The demand is generally good, but buyers are taking advantage of the good quality and liberal supplies.

While wooled, Colorado-fed New Mexican lambs sold up to \$7, spring lambs sold as high as \$7.65 lately. W. A. Drake, of Ft. Collins, Col., had in 541 lambs, which sold at \$7, averaging \$2 lbs. A lot of 398 114-lb. Ohio sheep sold at \$5.40. L. G. Hershey, Earlville, Iowa, sold a load of spring lambs at \$7.25. The lambing season in Southern Colorado is about over, and, taking all in all, has been a most successful one. Ft. Collins lamb feeders will try their luck the coming year in feeding more western-bred lambs than usual, unless they can buy New Mexicans lower.

Toronto Markets.

Receipts at the Western market were large—94 loads, composed of 1,400 cattle, 800 sheep, 60 calves, 1,500 hogs. The receipts for last week were: Cattle, 3,635; sheep, 1,790; hogs,

receipts for last week were: Cattle, 3,635; sheep, 1,790; hogs, 4,500.

Export Cattle.—Trade fairly active. The last of the distillery-fed cattle shipped out this week. Stall-fed cattle are scarce, and command top price. Choice well-selected stall-fed cattle sold at an advance of 10c. per cwt. over last week's prices. All good-quality heavy-weight, 1,200 to 1,250 lbs. cattle sold at from \$5 to \$5,15 per cwt. Mr. I. Vance bought one load, 1,300 lbs. average, at \$5.10 per cwt. Mr. W. J. McClelland sold 35 export cattle at \$5.15 per cwt. Messrs. J. & W. Dunn bought two carloads of exporters at \$5.12\frac{1}{2} per cwt. Messrs. Lunness & Halligan brought through four carloads of export cattle from Chicago, and shipped through this market via Montreal to Liverpool.

Butchers' Cattle.—Stall-fed butchers' cattle, equal to export in quality, average 1,000 to 1,150 lbs. weight, sold at \$4.65 to \$4.75 per cwt. Common butchers' cattle sold at \$3.85 to \$4.10, and inferior at \$3.50 to \$3.75 per cwt. Mr. W. Crealock bought 15 butchers' cattle, 1,140 lbs. average, at \$4.30 per cwt., and 23 cows and heifers at from \$3.50 to \$3.80 per cwt.

Feeders.—Heavy feeders in good demand. For well-bred steers weighing not less than 1,000 lbs. each, \$4.40 per cwt. was paid.

For any over 1,050 lbs., \$4.60 per cwt. was paid.

Stockers.—The demand good. Not many on offer. Choice picked lots sold for a little over \$4 per cwt.

For ordinary run, \$3.75 to \$3.80 was paid.

\$3.75 to \$3.80 was paid.

Bulls.—Heavy choice export bulls sold at \$5 per cwt.;
rough, inferior bulls sold at \$3.75 to \$3.80 per cwt.; a few scrub
bulls sold as low as \$3.25; two or three stock bulls sold down

to \$2.75 per cwt.

Sheep.—Deliveries heavy; about 800 on offer. Prices were firm on all choice grades - \$3.75 to \$3.90 for best ewes; \$2.75 to \$3 for bucks. Not a single wether sheep out of the lot on

Lambs.—Prices easier, selling at \$3 to \$4.25 each. Yearlings sold at \$4 to \$4.50 per cwt. Spring lambs in good demand at \$3.50 to \$4.25 per head.

Calves.—Very few choice veals forward. About 60 on offer. Sold at from \$4 to \$8 per head, according to size and quality.

quality.

Milk Cows.—About 15 cows on offer. Springers sold at

Milk Cows.—About 15 cows on offer. Springers sold at from \$30 to \$45 per head, whilst extra good milkers sold up to \$50 per head.

Hogs.—Several drovers sold their hogs at a loss, caused by shrinkage and culling for soft, corn-fed animals. Many of the men positively declare that corn-fed hogs cannot be distinguished. We have endeavored to follow the method of culling, and it is not difficult, after a little experience, to distinguish those coming from the western district and those from northern Ontario. It must be remembered that up to the present time 26,000 hogs per week have been marketed for all Ontario, and that unless the quality is kept up the price must fall on the excessive supply. We can give very little encouragement, as the price of bacon on the Liverpool market continues to be very low. For best singers, \$5 per cwt.; light fat, \$4.37\frac{1}{2} per cwt.; thick fat, \$4.25 per cwt. Prices for unculled car lots ranged from \$4.50 to \$4.75 per cwt. Mr. John Dowling sold a double deck of hogs, unculled, at \$4.85 per cwt., but they were the right kind of packers' hogs. Sows, \$3 per cwt.; stags, \$2 per cwt. Four carlads of rough hogs shipped to Montreal. Dressed hogs unchanged at \$5.85 to \$6 per cwt.

Wheat.—There is an enquiry on our market for a special wheat suitable for the manufacture of macaroni. On enquiry of Mr. Bartolo Maiorana, of 113 Elizabeth street, Toronto, the only manufacturer of macaroni in Canada, he said the brand that is used in his factory is known as Home Ruler and Happy Thought, both produced by the Gladstone Flour Mills, Gladstone, Manitoba. He believes that if this brand was brought to the notice of the French and Italian macaroni manufacturer that there would be an increasing and constant demand for it. He also informed me that the Buffalo manufactories used the Manitoba flour exclusively, although he did not know the particular brands. The receipts of grain were large at the St. Lawrence market. Wheat easier; 1,200 bushels sold as follows: White, 74c. to 75c. per bushel.

Barley

Peas.—Scarce, at 60c. per bushel.

Page Scarce, at 60c. per ousnel.

Hay.—The supply very good; price steady.

Timothy.—\$9 to \$10.50 per ton.

Clover.—\$7.50 to \$8.50 per ton.

Straw.—\$6.50 per ton; baled at \$4 to \$4.50 per ton.

Butter.—Choice tubs from Quebec, via Montreal, 13c. to 14c.

1b. Dairy rolls, 13c. to 15c. per 1b.; creamery at 17c. to 18c.

1b.

Eggs.—Choice new-laid eggs in good supply, at 14c. to 16c.

Eggs.—Choice new-laid eggs in good supply, at 14c. to 15c. per dozen.

Hides.—No. 1 green, 8½c. per lb.; No. 1 steers, 8¾c. per lb.; No. 1 cured, 9c. per lb.; calf skins, 9c. per lb.; sheep skins, 80c. each; lamb skins, 25c. each; pelts, 15c. each. Wool, fleece, 13c. per lb.; wool, pulled super, 16½c. per lb.

Fresh Meats.—Beef hind quarters, \$7.50 to \$8.50 per cwt. Lambs, 9c. to 10c. per lb. Lambs, spring, at from \$3 to \$4.50 each. Veals at from 8c. to 9c. per lb.

Fruit Market.—Receipts good, trade fair, with prices firm. Strawberries 4½c. to 8c., with a few extra choice at 10c. per basket. Cherries at 50c. to 75c. per basket.

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AN AFRICAN MILLIONAIRE.

EPISODES IN THE LIFE OF THE ILLUSTRIOUS COLONEL CLAY.

BY GRANT ALLEN.

(Continued from page 357.)

It was capitally done. We arranged the thing to perfection. We had a constable in waiting in our rooms at the Metropole, and we settled that Dr. Polperro was to call at the hotel at a certain fixed hour to sign the warranty and receive his money. A regular agreement on sound stamped paper was drawn out between us. At the appointed time the "party of the first part" came, having already given us over possession of the portrait. Charles drew a cheque for the amount agreed upon, and signed it. Then he handed it to the Doctor. Polperro just clutched at it. Meanwhile, I took up my post by the door, while two men in plain clothes, detectives from the police station, stood as men-servants and watched the windows. We feared lest the impostor, once he had got the cheque, should dodge us somehow, as he had already done at Nice and in Paris. The moment he had pocketed his money with a smile of triumph, I advanced to him rapidly. I had in my possession a pair of handcuffs. Before he knew what was happening, I had slipped them on his wrists and secured them dexterously, while the constable stepped forward. "We have got you this time!" I cried. "We know who you are, Dr. Polperro. You are—Colonel Clay, alias Senor Antonio Herrera, alias the Reverend Richard Peploe Brabazon."

I never saw any man so astonished in my life. He was utterly flabbergasted. Charles thought he must have expected to get clear away at once, and that this prompt action on our part had taken the fellow so much by surprise as to simply unman him, He gazed about him as if he hardly realized what was happening.

"Are these two raving maniacs?" he asked at last, "or what do they mean by this nonsensical gibberish about Antonio Herrera?"

The constable laid his hand on the prisoner's shoulder.

tonio Herrera?"

The constable laid his hand on the prisoner's shoulder.
"It's all right, my man." he said. "We've got warrants out against you. I arrest you, Edward Polperro, alias the Reverend Richard Peploe Brabazon, on a charge of obtaining money under false pretences from Sir Charles Vandrift, K. C. M. G., M. P., on his sworn information, now here subscribed to." For Charles had had the thing drawn out in readiness beforehand.

beforehand.
Our prisoner drew himself up. "Look here, officer," he said, in an offended tone, "there's some mistake here in this matter. I have never given an alias at any time in my life. How do you know this is really Sir Charles Vandrift? It may be a case of bullying impersonation. My belief is, though, they're a pair of escaped lunatics."

"We'll see about that to-morrow," the constable said, collaring him. "At present you've got to go off with me quietly to the station, where these gentlemen will enter up the charge against you."

"We'll see about that to-morrow, the constable said, collaring him. "At present you've got to go off with me quietly to the station, where these gentlemen will enter up the charge against you."

They carried him off, protesting. Charles and I signed the charge sheet; and the officer locked him up to await his examination next day before the magistrate.

Next morning, when we reached the court, an inspector met us with a very long face. "Look here, gentlemen," he said, "I'm afraid you've committed a very serious blunder. You've made a precious bad mess of it. You've got yourselves into a scrape; and, what's worse, you've got us into one also. You were a deal too smart with your sworn information. We've made inquiries about this gentleman, and we find the account he gives of himself is perfectly correct. His name is Polperro; he's a well-known art critic and collector of pictures, employed abroad by the National Gallery. He was formerly an official in the South Kensington Museum, and he's a C. B. and LL. D., very highly respected. You've made a sad mistake, that's where it is; and you'll probably have to answer a charge of false imprisonment, in which I'm afraid you have also involved our own department."

Charles gasped with horror. "You haven't let him out," he cried, "on those absurd representations? You haven't let him slip through your hands as you did that murderer fellow?" "Let him slip through our hands?" the inspector cried. "I only wish he would. There's no chance of that, unfortunately. He's in the court there this moment, breathing out fire and slaughter against you both; and we're here to protect you if he should happen to fall upon you."

"If you haven't let him go I'm satisfied," Charles answered. "He's a fox for cunning. Where is he? Let me see him.'

We went into the court. There we saw our prisoner conversing amicably, in the most excited way, with the magistrate (who, it seems, was a personal friend of his); and Charles at once went up and spoke to them. Dr. Polperro turned round and glared at

false imprisonment.

mad—and his secretary equally so. I demand a summons for false imprisonment."

Suddenly it began to dawn upon us that the tables were turned. By degrees it came out that we had made a mistake. Dr. Polperro was really the person he represented himself to be, and had been always. His picture, we found out, was the real Maria Vanrenen, and a genuine Rembrandt, which he had merely deposited for cleaning and restoring at the suspicious dealer's. Sir J. H. Tomlinson had been imposed upon and cheated by a cunning Dutchman; his picture, though also an undoubted Rembrandt, was not the Maria, and was an inferior specimen in bad preservation. The authority we had consulted turned out to be an ignorant, self-sufficient quack. The Maria, moreover, was valued by other experts at no more than five or six thousand guineas. Charles wanted to cry off his bargain, but Dr. Polperro naturally wouldn't hear of it. The agreement was a legally binding instrument, and what passed in Charles' mind at the moment had nothing to do with the written contract. Our adversary only consented to forego the action for false imprisonment on condition that Charles inserted a printed apology in the Times and paid him five hundred pounds compensation for damage to character.

Dr. Polperro, who was a familiar person in literary and artistic society, as it turned out, brought an action against the so-called expert who had declared against the genuineness of his alleged Rembrandt, and convicted him of the grossest ignorance and misstatement. Then paragraphs got about. The World showed us up in a sarcastic article, and a week or two later my brother-in-law received a cheerful little note on scented paper from our persistent sharper. It was couched in these terms:

"Oh, you innocent infant!"

Oh, you innocent infant! "Bless your ingentous little heart! And did it believe, then, it had positively caught the redoubtable colonel? And had it ready a nice little pinch of salt to put upon his tail? And is it true its respected name is Sir Simple Simon? How heartily we have laughed, White Heather and I, at your neat little ruses! It would pay you, by the way, to take White Heather into your house for six months to instruct you in the agreeable sport of amateur detectives. Your charming naivete quite moves our envy. When again shall such infantile transparency be mine? When, ah, when? But never mind, dear friend. Though you didn't catch me, we shall meet before long at some delightful Philippi.

"Yours, with the profoundest respect and gratitude,
"ANTONIO HERRERA,
"Otherwise RICHARD PEPLOE BRABAZON."
Charles laid down the letter with a deemdawn sich.

Charles laid down the letter with a deep-drawn sigh. "Sey, my boy," he mused aloud, "no fortune on earth—not even mine—can go on standing it. These perpetual drains begin really to terrify me. I foresee the end. I shall die in a workhouse. What with the money he robs me of when he is Colonel Clay, and the money I waste upon him when he isn't Colonel Clay, the man is beginning to tell upon my nervous system."

system."
"You must need rest and change," I said, "when you talk like that. Let us try the Tyrol."

IV. THE EPISODE OF THE TYROLEAN CASTLE.

We went to Meran. The place was practically decided for us by Amelia's French maid, who really acts on such occasions

us by Amelia's French maid, who really acts on such occasions as our guide and courier.

She is such a clever girl, is Amelia's French maid. Whenever we are going anywhere, Amelia generally asks (and accepts) her advice asto choice of hotels and furnished villas. Cesarine has been all over the Continent in her time; and, being Alsatian by birth, she of course speaks German as well as she speaks French, while her long residence with Amelia has made her at last almost equally at home in our native English. She is a treasure, that girl—so neat and dexterous, and not above dabbling in anything on earth she may be asked and not above dabbling in anything on earth she may be asked

So when Amelia said, in her imperious way, "Cesarine, So when Amelia said, in her imperious way, "Cesarine, we want to go to the Tyrol—now—at once—in mid-October; where do you advise us to put up?" Cesarine answered, like a shot, "The Krzherzog Johann, of course, at Meran, for the autumn, madame."

So to Meran we went; and a prettier or more picturesque place, I confess, I have seldom set eyes on. A rushing torrent; high hills and mountain peaks; a Rhine town plumped down among green Alpine heights, and threaded by the cool colonnades of Italy.

I approved Cesarine's choice; and I was particularly selections.

high hills and mountain peaks; a Rhine town plumped down among green Alpine heights, and threaded by the cool colonnades of Italy.

I approved Cesarine's choice; and I was particularly glad she had pronounced for an hotel, where all is plain sailing, instead of advsing a furnished villa, the arrangements for which would naturally have fallen in large part upon the shoulders of the wretched secretary.

The great peculiarity of Meran is the number of schlosses (I believe my plural is strictly irregular, but very convenient to English ears) which you can see in every direction from its outskirts. One would be square, with funny little turrets stuck out at each angle, while another would rejoice in a big round keep, and spread on either side long, ivy-clad walls and delightful bastions. Charles was immensely taken with them. From the moment he came he felt at once he would love to possess a castle of his own among those romantic mountains. "Seldon!" he exclaimed, contemptuously. "They call Seldon a castle! But you and I know very well, Sey, it was built in 1860, with sham antique stones, for Macpherson of Seldon, at market rates, by Cubitt and Co., worshipful contractors of London. Now, these castles are real. They are hoary with antiquity. Schloss Tyrol is Romanesque—tenth or eleventh century." (He had been reading it up in Baedeker.) "That's the sort of place for me! t-tenth or eleventh century."

As for Amelia, strange to say, she was equally taken with this new fad of Charles. As a rule she hates everywhere on earth save London, except during the time when no respectable person can be seen in town, and when modest blinds shade the scandalized face of Mayfair and Belgravia. She et Cesarine to inquire of the people at the hotel about the market price of tumbledown ruins, and the number of such eligible family mausoleums just then for sale in the immediate neighborhood. Cesarine returned with a full, true and particular list. Several of them had witnessed the gorgeous marriages of Holy Roman Emperors, and every on

eration.

The two we liked best of all these tempting piles were Schloss Planta and Schloss Lebenstein. Schloss Planta was the most striking externally, I should say, with its Rhine-like towers and its great gnarled ivy stems, that looked as if they antedated the House of Hapsburg; but Lebenstein was said to be better preserved within, and more fitted in every way for modern occupation. Its staircase has been photographed by 7000 area tenses.

7,000 amateurs.
We got tickets to view. The invaluable Cesarine procured them for us. Armed with these we drove off one fine afternoon, meaning to go to Planta, by Cesarine's recommendation. Half way there, however, we changed our minds, as it was such a lovely day, and went up the long, slow hill to Lebenstein. I must say the drive through the grounds was

simply charming.
We knocked at the door—for there was really no bell, but a

Lebenstein. I must say the drive through the grounds was simply charming.

We knocked at the door—for there was really no bell, but a ponderous, old-fashioned, wrought-iron knocker.

The door was opened for us by a high well-born menial, attired in a very ancient and honorable livery. Nice antique hall; suits of ancestral armor, trophies of Tyrolese huntred, couts of arms of ancient counts—the very thing to take Amelia's aristocratic and romantic fancy. The whole to be sold exactly as it stood: ancestors to be included at a valuation. We went through the reception-rooms. They were lofty, charming, and with glorious views, all the more glorious for being framed by those graceful Romanesque windows, with their slender pillars and quaint, round-topped arches. Sir Charles had made his mind up. "I must and will have it!" he cried. "This is the place for me. Seldon! Pah, Seldon is a modern abomination!"

Could we-see the high well-born Count? The liveried servant (somewhat haughtily) would inquire of his Serenity. Sir Charles sent up his card, and also Lady Vandrift's. These foreigners know title spells money in England.

He was right in his surmise. Two minutes later the Count entered, with our cards in his hands. A good-looking young man, with the characteristic Tyrolese long black moustache, dressed in a gentlemanly variant on the costume of the country. He waved us to seats. We sat down. He spoke to us in French; his English, he remarked, with a pleasant smile, being a negligeable quantity. We might speak it, he went on—he could understand pretty well—but he preferred to answer, if we would allow him, in French or German.

"French," Charles replied, and the negotiation continued henceforth in that language. It is the only one, save English and his ancestral Dutch, with which my brother-in-law possesses even a nodding acquaintance.

We praised the beautiful scene. The Count's face lighted up with patriotic pride. Yes, it was beautiful, beautiful, his own green Tyrol. He was proud of it and attached to it.

Then th

held the needful documents, and would arrange the negotiations in detail with us. It was a stiff sum, I must say—an extremely stiff sum, but no doubt he was charging us a fancy price for a fancy castle.

I may add that people always imagine it must be easier to squeeze money out of millionaires than out of other people, which is the reverse of the truth, or how could they ever have amassed their millions? Instead of oozing out gold as a tree cozes gum, they mop it up like blotting paper, and seldom give it out again.

oozes gum, they mop it up like blotting paper, and seigon give it out again.

We drove back from this first interview none the less very well satisfied. The price was too high, but preliminaries were arranged, and for the rest the Count desired us to discuss all details with his lawyers in the chief street. Unter den Lauben. We inquired about these lawyers, and found they were most respectable and respected men. They had done the family business on either side for seven generations.

They showed us plans and title deeds. Everything quite en regle. Till we came to the price there was no hitch of any sort.

As to price, however, the lawyers were obdurate. They stuck out for the Count's first sum to the uttermost florin. It was a very big estimate. We talked and shilly-shallied till Sir Charles grew angry. He lost his temper at last.

"They know I'm a millionaire, Sey," he said, "and they're playing the old game of trying to diddle me. But I won't be diddled. Except Colonel Clay, no man has ever yet succeeded in bleeding me. And shall I let myself be bled as if I were a chamois among these innocent mountains? Perish the thought!"

a chamois among these innocent mountains? Ferish the thought!"

Things dragged on in this way, inconclusively, for a week or two. We bid down; the lawyers stuck to it. Sir Charles grew half sick of the whole silly business. For my own part, I felt sure if the high well-born Count didn't quicken his pace my respected relative would shortly have had enough of the Tyrol altogether, and be proof against the most lovely of crag-crowning castles. But the Count didn't see it. He came to call on us at our hotel (a rare honor for a stranger with these haughty and exclusive Tyrolese nobles), and even entered unannounced, in the most friendly manner. But when it came to £ s. d. he was absolute adamant. Not one kreutzer would he abate from his original proposal.

"You misunderstand," he said, with pride. "We Tyrolese gentlemen are not shopkeepers or merchants. Were you an Austrian I should feel insulted by your ill-advised attempt to beat down my price. But as you belong to a great commercial nation—"he broke off with a snort, and shrugged his shoulders compassionately.

nation—" he broke off with a snort, and shrugged his shoulders compassionately.

We saw him several times driving in and out of the schloss, and every time he waved his hand at us gracefully. But when we tried to bargain it was always the same thing—he retired behind the shelter of his Tyrolese nobility.

At last Charles gave up the attempt in disgust. He was tiring, as I expected. "It's the prettiest place I ever saw in my life," he said, "but, hang it all, Sey, I won't be imposed upon."

my fire, he said, "but, hang it all, sey, I wont be imposed upon."

So he made up his mind, it being now December, to return to London. We met the Count next day, and stopped his carriage, and told him so Charles thought this would have the immediate effect of bringing the man to reason. But he only lifted his hat, with the blackcock's feather, and smiled a bland smile. "The Archduke Karl is inquiring about it," he answered, and drove on without parley.

Charles used some strong words, which I will not transcribe (I am a family man), and returned to England.

For the next two months we heard little from Amelia save her regret that the Count wouldn't sell the Schloss Lebenstein. Strange to say, she was absolutely infatuated about the castle. Moreover, Cesarine further inflamed her desire by gently hinting a fact which she had picked up at the courier's table d'hote at the hotel, that the Count had been far from anxious to sell his ancestral and historical estate to a South African diamond king. diamond king.

to sell his ancestral and historical estate to a south Airican diamond king.

One morning in February, however, Amelia returned from the Row all smiles and tremors. (She had been ordered horse exercise to correct the increasing excessiveness of her figure.)

"Who do you think I saw riding in the Park?" she inquired. "Why, the Count of Lebenstein."

"No!" Charles exclaimed, incredulous.

"Yes," Amelia answered.

"Must be mistaken," Charles cried.

But Amelia stuck to it. More than that, she sent out emissaries to inquire diligently from the London lawyers whose name had been mentioned to us by the ancestral firm in Unter den Lauben as their English agents as to the whereabouts of our friend, and her emissaries learned in effect that the Count was in town and stopping at Morley's.

I was all for waiting prudently till the Count made the first move, but Amelia's ardor could not now be restrained. She insisted that Charles should call on the Graf as a mere return of his politeness in the Tyrol.

She insisted that Charles should call on the Graf as a mere return of his politeness in the Tyrol.

He was as charming as ever. He would be ravished to dine next evening with Sir Charles.

He dined with us, almost en famille. In the billiard-room, about midnight, Charles reopened the subject. The Count was really touched. It pleased him that still, amid the distractions of the City of Five Million Souls, we should remember with affection his beloved Lebenstein.

"Come to my lawyers," he said, "to-morrow, and I will talk it all over with you."

We went—a most respectable firm in Southampton Row;

talk it all over with you."

We went—a most respectable firm in Southampton Row; old family solicitors. They had done business for years for the late Count, who had inherited from his grandmother estates in Ireland, and they were glad to be honored with the confidence of his successor.

Sir Charles named a price, and referred them to his solicitors. The Count named a higher, but still a little comedown, and left the matter to be settled between the lawyers. He was a soldier and a gentleman, he said, with a Tyrolese toss of his high-born head. He would abandon details to men of business.

of business.

I met the Count accidentally next day on the steps of Morley's. (Accidentally, that is to say, so far as he was concerned.) I explained, in guarded terms, that I had a great deal of influence in my way with Sir Charles, and that a word from me— I broke off. He stared at me blankly.

"Commission?" he inquired at last, with a queer little

smile.
"Well, not exactly commission," I answered, wincing.
"Still, a friendly word, you know. One good turn deserves

another."

He looked at me from head to foot with a curious kind of scrutiny. For one moment I feared the Tyrolese nobleman in him was going to raise its foot and take active measures.

"M. Ventvorth," he said, "I am a Tyrolese seigneur; I do not dabble, myself, in commissions and percentages. But if your influence with Sir Charles—we understand each other; do we not?—as between gentlemen—a little friendly present—no money, of course—but the equivalent of say five per cent. in jewelry on whatever sum above his bid to-day you induce him to offer—th?—c'est convenu?

"Ten per cent is more usual." I murmured. oner—en i—c est convenu i
"Ten per cent is more usual," I murmured.
He was the Austrian hussar again. "Five, monsieur, or

It was the Austrain hussaf again. The history of nothing!"

I bowed and withdrew. "Well, five, then," I answered, "just to oblige your Serenity."

When it came to the scratch, I had but little difficulty in persuading Sir Charles, with Amelia's aid, to accede to the Count's more reasonable proposal. In a week or two all was settled. Charles and I met the Count by appointment in Southampton Row, and saw him sign, seal and deliver the title deeds of Schloss Lebenstein. My brother-in-law paid the purchase money into the Count's own hands, by cheque, crossed on a first-class London firm where the Count kept an account to his high well-born order. And, what to me was more important still, I received next morning by post a cheque for the five per cent, unfortunately drawn, by some misapprehension, to my order on the selfsame bankers, and with the Count's signature.

[TO BE.CONTINUED.]

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Somebody Else.

Who's Somebody Else? I should like to know Does he live at the North or South? Or is it a lady fair to see, Whose name is on everyone's mouth? For Meg says, "Somebody Else will sing." Or, "Somebody Else can play;" And Jack says, "Please let Somebody Else Do some of the errands to-day."

If there's any hard or unpleasant task
Or difficult thing to do,
'Tis always offered to Somebody Else—
Now, isn't this very true?
But if some fruit or a pleasant trip
Is offered to Dick or Jess,
We hear not a word about Somebody Else;
Why, I will leave you to guess.

The words of cheer for a stranger lad
This Somebody Else will speak,
And the poor and helpless who need a friend
Good Somebody Else must seek.
The cup of cold water in Jesus' name,
Oh, Somebody Else will offer,
And words of love for a broken heart
Brave Somebody Else will proffer.

There are battles in life we only can fight,
And victories, too, to win,
And Somebody Else can take our place
When we shall have "entered in;"
But if Somebody Else has done his work
While we for our ease have striven,
"Twill be only fair if the blessed reward
To Somebody Else is given.

Why She was Popular.

A queer old man once made a tea party for all the little girls in our town, and when they were all gathered in his front yard, in white dresses and carefully-tied sashes, he offered a doll for the

most popular little girl in the crowd. But half the children did not know what "most popular" meant, so he told them it was the best-liked little girl. All the children voted, and Mary Blain got the doll. Mary was not the prettiest nor the cleverest of the children but she got the doll.

dren, but she got the doll.

"Now," said the queer old man,
"I will give another doll to the one that first tells me why you all like Mary the best."

Nobody answered at first, but presently Fanny Wilson said, "It's because Mary always finds out what the rest of us want to play, and then says, 'Let's play that.'"

The old gentleman said that was

the best reason he had ever heard, and he was going to try for the rest of his life to find out what other people wanted to play, and then say, "Let's play that!"

"Secrets."

d Jack, always called by the rest of the family "the kids," are the youngest of seven—all boys! Can you imagine the wear and tear on trousers and boots in that family? To let you into a secret (not the one Jack is whispering to little Jim), the eldest boy, Ted, is almost as good as a girl. Mind you don't tell, he doesn't want it to be talked about. He can wash dishes,

sweep, peel potatoes, and has even tried his hand at mending stockings.
I am sorry to say, though, that mother ripped out his long, straggling stitches, on the sly, and did the work all over again. But let us see what the "kids" work all over again. But let us see what the "kids" are so eagerly discussing. To-morrow will be the dear mother's birthday, and everybody has a present for her,—"everybody but us," as Jack said sadly half an hour ago. Ted has made her a splendid slat hammock. Frank brought from the woods a beautiful maiden-hair fern, and planted it in a rustic basket which he made himself. Tom and Fred, who are fond of amateur carpentering, have contrived to put together a rather shaky clotheshorse. Dick, who has a hen of his "very own," has saved six eggs for the great occasion. What can these little fellows make? Mother doesn't care much for "boughten" presents; besides, they haven't a copper between them.

This is Jack's brilliant idea, which Jimmy is absorbing with intense interest. absorbing with intense interest. "Let's get up, ever so early in the morning, and go fishing. Then we'll clean the fish and get Ted to cook them for mother's breakfast. Oh, won't she be s'prised?"

So Jack talks on, trying to silence his conscience which whispers that they are never allowed to go which whispers that they are never allowed to go fishing alone. Jim is rather doubtful, and a little frightened at the daring scheme; but then he never contradicts Jack. The little conspirators have not yet learned that it never pays to do evil that good may come. Mother would certainly rather go without a birthday present than have two disobedient children. Let us home that they may get pathing. children. Let us hope that they may get nothing worse than a ducking, and a sermon on disobedience, which is certainly well-deserved.

THE QUIET HOUR.

The Ministry of Well-Wishing.

Learn that each duty makes its claim Upon one soul, not each on all. Now, if God speak thy brother's name, Dare thou make answer to the call?

The greater peril in the strife, The less this evil should be done, For as in battle so in life, Danger and honor still are one.

Arouse him, then! this is thy part; Show him the claim, point out the need! And nerve his arm, and cheer his heart, Then stand aside, and say, "God speed!"

" Smooth thou his path ere it is trod, Burnish the arms that he must wield, And pray with all thy strength that God May crown him victor in the field.

And then, I think, thy soul shall feel
A nobler thrill of true content
Than if presumptuous eager zeal
Had seized a crown for others meant."

One of the saddest things about life is that, with such boundless power to give cheer to others by our speech, most of us pass through the world in silence, locking up in our own hearts the thought-



"SECRETS."

ful and helpful words which we might speak, and which, if spoken, would minister so much strength and inspiration. Hearts are breaking with sorrow, men are bowing under burdens too heavy for them, duty is too large, battles are too sore. On every hand, in every life, there is need for love's ministry, that men and women may not fail. Nor is it large and costly service that usually is needed. The kindly utterance of a kindly feeling will often give all the impulse and inspiration required. Yet many of us let the good-will lie in our heart unuttered, and stand by in silence while our brother beside us goes down in defeat, which a few words of ours might have changed into victory. It is not the want of love that is our fault, but the penuriousness which locks up the love and will not give it out to bless others. Is any miserliness so mean? We let hearts starve to death close beside us, when in our hands is the food to keep them living and make them strong, then when they lie in the dust, we come with our love to make funeral wreaths for them and speak eloquent eulogiums to their

ory.

What silences we keep, year after year,
With those who are most near to us and dear!
We live beside each other day by day,
And speak of myriad things, but seldom say.
The full, sweet word that lies just in our reach,
Beneath the commonplace of common speech;
Then out of sight and out of reach they go—
These close, familiar friends who loved us so.
And, sitting in the shadow they have left,
Alone with loneliness, and sore bereft.
We think with vain regret of some kind word
That once we might have said, and they have heard.

How much better it would be if at all times we gave freer rein to our lips in speaking kindly and cheering words. It is truly very sad when nothing less than the death of our friends can draw from our slow and selfish hearts the debt of love and of our slow and seinsh nearts the debt of love and of helpfulness that we owe them. There is a time for the angel ministry—it is when the conflict is waging. When death has come, or failure, or waging. When death has come, or failure, or defeat, the opportunity is past forever. The good wishes of friends do not by their mere utterance become realities in our lives. If they did, how rich most of us would be, and how happy! Good wishes, however, may be made to come true. They may be turned into prayers by those who make them, and, passing through the hands of Christ, may be changed from mere empty breath into blessings that shall enrich our lives or feed on blessings that shall enrich our lives or feed our souls or shine like sparkling gems upon our brows. The best way for our friends to get good things to us is to pass them through Christ's hands,

The friends who think only of this world's honors and possessions and attainments when they wish us well do not understand the table of values by which heaven estimates everything. The good wishes that are of most worth are those that are for qualities of character which we can carry with us through the pearl gate.

How to get these great things into our lives is the question. Our best and truest friends cannot put them into our lives by any power of love, They may utter the wishes, and may translate them into prayers, but only we ourselves can take the benedictions and the answered prayers into our life.
This we cannot do by mere resolving and purposing. New Year or birth-day resolutions are good enough as such, but unless they are gotten into the heart and life, as well as down in neat lines on paper, they will amount to little. Intentions may be very fine, but they must be lived out to become of practical worth. We must take the good wishes of our friends and turn them into life; we must let them into our spirits, as the bare briery rod in the garden lets the sunshine and the rain into itself, and transmutes them into blooming, fra-

Just how to do this is an impor-tant question. The Bible emphasizes the fact that all growth of character must begin within. We are to be transformed by the renewing of our minds. Our hearts make our lives. What we are in heart, in spirit, in the inner life, we are really before God; and that, too, we shall ultimately become in actual character, in outward feature. The disposition makes the face. Every creature builds its own house to live in, and builds it just like itself. Coarseness builds coarsely; taste builds tastefully. A corrupt heart works through in the end, and changes all without into moral decay like itself. Jealousy, envy, bitterness, selfishness, all write heir own image and signature on the features if you give them time enough. A pure, beautiful soul builds a holy and divine dwelling for itself. In one of Goethe's tales he tells of a wonderful lamp which was placed in a fisherman's hut and changed it all to silver. The lamp of Christ's love set in a human heart transforms the life from sinfulness and earthliness into the likeness of Christ's own spirit. To make good wishes come true we must first get them into our heart and then

they will soon become real in our life. No wish is more commonly expressed than that we may be happy, but true happiness depends altogether on the heart. A heart at peace fills our world with peace. Light shining in our bosom gives us light wherever we may be. The miners carry little lamps on their caps, and wherever they move in the dark wines there is light. So it is move in the dark mines there is light. So it is with us if in us the lamp of joy shines. The world may grow very dark sometimes, but round about us there is always light. We shall surely be happy in the truest sense if we have Christ's joy in our hearts. This is a lamp that slines through the longest night. No storm blows it out—indeed, its beams grow brighter the denser the gloom about us and the fiercer the storm. Christ's joy was, in His own life, a lamp which was not quenched, even by the awful darkness of the cross.

If we would realize the wishes of our friends for joy, we must be sure to get the love of Christ into our hearts, and then we shall always have our own lamp, and shall find gladness wherever we go. We need not, then, in any case greatly worry about our circumstances. If we are right within, all will be well. If the lamp is kept burning within the chamber it will be light there, however deep the gloom outside.—J. R. Miller.

If we could read the secret history of our enemies we should find in each man's life sorrow and suffering enough to disarm all hostility.-Longfellow.

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UNCLE TOM'S DEPARTMENT:

MY DEAR NEPHEWS AND NIECES,

Hip, hip, hurrah! Don't you hear the merry shout? The hot, dusty school-rooms are all closed, and for six long weeks the well-thumbed books will be allowed to lie in silent state, while their owners revel in the freedom of holiday-time. The rosy June hours dragged on but slowly to those eager hearts whose anticipations not even the dread of approaching examinations could mar. Now that the much-desired time has really come, I hope all will find their fairest flights of fancy fully realized. Oh, that the joyous hopefulness of youth might never leave those merry hearts—that care might never leave its traces on those fair young brows! And yet I pause ere giving free utterance to such a wish, for a cloudless sky sates the sight, and one must have gale enough to ruffle the sails, would he ever reach his desti-nation; for it is truly said that "No one ever worked his way in a dead calm.'

Many things we are wont to call "misfortunes" prove stepping-stones to success, the gale that fills our sails and bears us on our long life voyage. We must, however, look to our rigging and keep the sails trimmed and in proper shape, not only that we may catch the breeze, but that we may make it serve our purpose instead of being buffeted by it or driven

upon the rocks. We are often inclined to envy those fortunate beings whose wealth or social position appears to give them greater advantages than we can hope to enjoy, and yet if we take the trouble to look into the matter, we find that very many of the world's cleverest men have climbed from obscurity and comparative poverty to eminence and wealth. Homer was once a beggar; Cardinal Wolsey a butcher's son; the father of the great poet Virgil a potter; Robert Burns a simple plowman; while Shake-speare, Daniel Webster and Abraham Lincoln were farmers' sons. Coming to our own day, we find that Garfield worked his way "from log cabin to White House." Again, Mr. Schurman, who receives a large

salary as secretary to the present President, was thirty years ago working in Prince Edward Island for a salary of thirty dollars a year. By dint of hard studying he won a scholarship worth sixty dollars a year; then he went to college and paid the remaining fees by acting as accountant for different merchants every moment of his spare time

The accident that deprived Prof. Mills of his hand was instrumental in advancing him in his after career, for by incapacitating him for farm work it caused him to turn his attention to study. I might quote many similiar instances to show that so-called adversity is often a blessing in disguise, but I know you are anxious to be off to play, so I will say good-bye for this time.

Your loving-UNCLE TOM.

As we walk through the

The Meadow Lark

fields we often hear the sweet, plaintive

(Sturnella magna). This pretty, plump little bird is familiar

to many of us.

call, to which some song-bird lovers have fitted these words: "Betsy-de-ah — Betsy-de-ah" "Spring o' ye-ah." The plumage is brown and yellow, speckled with black. It has a curious habit of seldom perching upon trees, but generally preferring fences or telegraph poles. This propensity, however, and the properties of the properties of the plumage of the p ever, is of the greatest service to farmers, for when the cutworm begins its dreaded work our little meadow lark comes nobly to the rescue, as the tree loving birds do not see these horrid ground caterpillars; but our friend does see them-and a fine meal is made! It walks with a dainty step (as the picture would indicate), and, every now and then, stops to give its tail a little nervous twitch, which is very funny. It eats various weeds, but the chief food is insects;—favorite of all, the grasshopper, which, we suppose, is a very dainty dish to set before the king—if the king happens to be a grasshopper epicure! It has been proved that the meadow lark's food consisted of a large parcentage of insects even when the ground was covered with snow, which speaks much for the bird's skill in finding what it preferred. As a rule, meadow larks are not looked upon as enemies to agriculture, and are usually left in peace. Sometimes, however, they fall victims to the cruel gun. for they are considered to be a great table delicacy. The writer—alas!—has eaten roast lark—about a hundred years ago—but now feels quite ashamed

Kitty Knew About Sheep.

of it. This plump little lark looks so innocent-

"Seven sheep were standing
By the pasture wall.
Tell me," said the teacher
To her scholars small—
One poor sheep was frightened,
Jumped and ran away,
One from seven—how many
Woolly sheep would stay?"

but, still, what horrid things he eats!

Up went Kitty's fingers—
A farmer's daughter she,
Not so bright at figures
As she ought to be,
Please, ma'am!" "Well, then, Kitty.
Tell us if you know."
Please, if one jumped over,
All the rest would go."

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 Address all work to Miss Ada Armand, Pakenham,

> 1. What tree is called the dancing tree?
> 2. " housemaid's tree?
> 3. " is the tree that is nearest the sea?
> 4. " " forbids you to die?
> 5. " " where ships may be?
> 6. " tree is warmly clad?
> 7. " the schoolboy's restraint? BUTTERCUP.

We are five little creatures, all of different voice and features. One of us in *glass* is set, one of us you may find in *jet*, another you may see in *tin*, and if the others you wish to find, we never fly from *you*. What are our names?

2-RIDDLE.

BUTTERCUP. 3-DOUBLE ACROSTIC.

In "friends" we like, In "soldiers" with pikes, In "rambler" who bikes, In "painters" on strike Led by the renowned Mike.

In "printers" fond of pie, In "sailors" drinking rye, In "buffoons" who dye, In "juveniles" that cry And really don't know why.

In "Cupids" with arrows, In "animals" that burrow, In "farm boys" that will harrow The wheat field to-morrow



THE MEADOW LARK.

Twice you have to read me down
Ere the answer correct is found;
Days of celebrations then you'll get,
That loyal Canadians never forget.
"'ARRY 'AWKINS."

4-NUMERICAL ENIGMA.

4—NUMERICAL ENIGMA.
My 2, 10, 3, 6 is to avoid.
My 12, 2, 1, 7 is labor.
My 4, 11, 3, 1, 8 is bold.
My 9, 11, 6 is a vessel.
Whole, one of the most enjoyable parts of our "Dom."
"ARRY 'AWKINS."

5—SUBTRACTION.

Take thousand from a sum of money and leave to expire.
Take one from to hasten and leave a pronoun.
Take 500 from grub and leave charge.
Take 500 from beverage and leave a place of enjoyment.
Take 50 from a support and leave reposed.
Take § of one from a vein of metal and leave a boy's name.
Take 1000 from a vessel and leave to plunder.
Take one from to stop and leave a pen.
Take part of three from flow and leave to mind.
Take 100 from a play and leave charge.
Take 1-5 of eight from to acknowledge and leave a large sin. 5-Subtraction.

sin.
Subtractions added will give the name of a popular novel.
"'ARRY 'AWKINS."

We belong to a school of twenty-six;
Our captain, who leads us, is called No. 8.
We're a part of the body that sometimes doth ache.
The next in command is called No. 5.
After five comes another, and he's No. 1.
I'll make this a vowel that him you can't shun.
Now we have three, but there's one to come yet.
That man, on the list, is named No. 4.
Those make the whole, and you want no more.
You can't work without it or leave it at home.
With your wits about you you can see it, I'm sure.
There's only four needed, and you want no more.

(1) Work around the field, and practice with the swords.
(2) The small boy's and the stone cutter's favorite.
(3) To drop from a high place, and just before winter.
(4) What the coppers carry, and a person's name.
(5) What belongs to a window and to a girl's dress.
(6) He plays in the Band, and to sell his goods he must received. 8-CHARADE.

My first takes an almost princely rank (Pronunciation not the best);
My second is found in "of"—how frank!
My third soon make one sigh for rest.
My whole now find in our fair, free land,
A refuge from a despot's hand.

9-ACROSTIC.

(Words of the same number of letters.) 1, Fencing material; 2, a bay; 3, a Mohammedan pilgrim to Mecca; 4, a harbor; 5, remains of burnt bodies; 6, proportion; 7, a ditch.

Primals and finals spell one of our "Cousins" who has made a very satisfactory standing during the past year.

"DICKENS."

10-Anagram. When difficulties block our way, And pause we must in dire dismay, Shall we retreat and shun the fight, Deny the truth, betray the right? NO EVER DARE.

F. L. S.

11--CHARADE-RIDDLE. Every married SECOND is a FIRST, but not every FIRST is a WHOLE. Every WHOLE, though, is a SECOND and a farmer.

Answers to June 1st Puzzles.

1-Sinai, Anna, nothing, two—Santiago. 2-Shark-hark; table-able; maid-aid; gate-ate.

3- Pestilent estover nacre extra

neglect

transfuse 4 Simple Simon, Una, Buttercup, Toledo, Jessie Hyde, A. E. T., Barney, Ogma, Dickens, 5-Elephant, gorilla, weasel, giraffe, antelope, bearer,

> SOLVERS TO JUNE 1ST PUZZLES. Emma H. Humble, M. R. G.

ADDITIONAL SOLVERS TO MAY 15TH PUZZLES.

M. N.

COUSINLY CHAT.

Rupert Neptune.—We are very glad to have you for our cousin, and hope you will long be one of our number.
K. K.—You are very welcome also. We have several cousins from your country.
F. L. S.—I thought you had deserted us altogether, and am pleased to find myself mistaken.

I notice a considerable falling off in our list of solvers, while contributors of original puzzles continue to come in. Why do not all send answers as well, and kill both birds with the one stone! We commence a new quarter with this issue, so all begin anew, and let us have a larger circle than ever.

Recipes.

JELLIED CHICKEN.

Boil a chicken in as little water as possible until the meat falls from the bones, chop all fine and season with pepper and salt. Now put in a mold a layer of hard-boiled eggs cut in slices, and then the meat in yers with the eggs until the mold is full. Boil down the liquor left in the pot and add a tablespoonful of gelatine, and when dis-solved pour into the mold with the meat. Set in a cool place over night and then turn out when wanted.

RASPBERRY VINEGAR.

To four quarts of red raspberries put enough vinegar to cover, and let them stand twenty-four hours. Scald and strain it, and add a pound of sugar to every pint of juice. Boil for twenty minutes, and bottle.

RASPBERRY ICE.

One quart berries. Extract the juice, and strain. Add one pint of sugar, let dissolve in the juice, half a pint of water and the juice of one lemon. Freeze like ice cream.

DELICATE PUDDING,

One cup sugar, 1 cup milk, 1 egg, 1 cup of raisins, and butter the size of an egg; 2 teaspoonfuls of baking powder, and flour to make a stiff batter. Steam one hour. As this makes a large pudding, allow plenty of room for rising.

A Reader's Lament.

I cannot read the old books
I read long years ago—
Eliot, Dickens, Thackeray,
Bulwer, and Scott, and Poe;
Marryatt's yarns of sailor life,
And Hugo's tales of crime—
I cannot read the old books,
Because I haven't time.

Nove the dear old stories,
My thoughts to them will stray;
But still one must keep posted on
The writers of to-day.
My desk is piled with latest books
I'm striving to dispatch;
But ere I've finished all of them
There'll be another batch.

Hope's new one isn't opened yet,
I've not read James' last,
And Howell's is so prolific now,
And Crawford writes so fast;
"Evelyn Innes" I must skim,
Oer "Helbeck" I must pore,
"The Day's Work" I'll enjoy, although
I've read the tales before.

And then there is "The King's Jackal,"
"The Gadfly," "Caleb West,"
"Silence," "The Forest Lovers," and
I can't name all the rest.
I'll try to keep up with the times,
But oh! I hope that I
May read my "David Copperfield"
Once more before I die.

Canadam Wells in the "Ro Cayolyn Wells, in the " Bookman.

JUL

We and heifer = 218 Heir = 2720 Jubile herd.

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CENTRAL CANADA....



TWELFTH ANNUAL EXHIBITION AT OTTAWA, ONT.,

SEPTEMBER 11th TO 23rd, 1899 TWO WEEKS.

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

Excellence of Attractions. Grounds extended and several new buildings erected since last exhibition.

\$1,500.00 added to Prize List this year, principally in the Live Stock Department. Offered in purses \$3,000.00

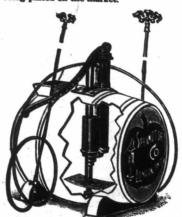
SPECTACULAR :

Bombardment of Pekin"

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

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

ALL SPRAYING, DISINFECTING AND WHITEWASHING CAN BE DONE WITH THE



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



The Farmers' Binder Twine Co., Ltd.,

BRANTFORD, ONTARIO,

Take this medium of impressing upon the users of twine the importance of not buying a single pound outside of their agents, for the harvest of 1899, if this co-operative movement of three thousand farmers is to be held in existence for future competition. ers is to be held in existence for future competition. There is no necessity to say anything further. Every intelligent man in the country understands the importance of this advice, and if they have not already found it out, the sooner they get there the better for

THIS is the Company that sold you, as farmers, their entire output of last year (1,500 tons of twine) at HALF what others were charging.

JAMES COOPER & SON, KIPPEN. IMPORTERS AND BREEDERS OF

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

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

CLYDESDALES, AYRSHIRES and POULTRY.

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

GOSSIP.

Mr. W. D. Flatt, Hamilton, Ont., indding a growing demand for Shorthorns from his well-known Trout Creek herd, recently made a visit to England and Scotland, accompanied by Mr. James Smith, of Brantford, formerly manager of the Bow Park farm and herd, one of the most reliable judges of cattle in Canada, and made selections of 25 head of choice animals (5 bulls and 18 females) from several of the best herds in the Old Country, which are now in quarantine at Quebec, and which, judging from the character of the distribution of Mr. Fish from which they come, the ambition of Mr. Fish from which they come, the ambition of Mr. Fish from which they come, the ambition of Mr. Fish to win the best, and the united judgment of himself and Mr. Smith, will no doubt prive valuable acquisition to the Trout Creek herd and to the sum total of high-class cattle in Canada. Mr. Flatt's herd now numbers very close to 100 head, and in breeding and quality ranks high among the best and rill compare favorably with any herd in America. Mr. Flatt writes: "I found good things very scarce and prices extremely high. They were those of Messrs. Duthie, Marr, Phile Mr. Mills, and R. & W. T. Garne. These herds can miking dams of the natural-fleshed sort. And if we wish to attain that point we mus use sires of strictly first-class sires from good miking dams of the natural-fleshed sort. And if we wish to attain that point we mus use sires that will improve our herds."

Master of the Clan, a strong, sappy buil, bred by Mr. Duthie, Collynie; sired by Thou for the Uppermill Missie family, whose dam Madeonoisele Sth, is grandam of Mr. Feterson's buill, in this importation is the row parting, Master of the Clan, a strong, sappy buil, bred by Mr. Duthie, Collynie; sired by Thou Stone, bred by Mr. Duthie, Collynie; sired by Thou Stone, be down the beauty of the Clan, as strong, sappy buill, bred by Mr. Duthie, Collynie; sired by Thou Stone, bred by Mr. Duthie, There of Mr. Harrison's show buil Cornelius. His dam, Harrison's how will come to the favorite

The New Brunswick International Exhibition will be held at St. John, September 11th to 20th. Chas. A. Everett, St. John, N. B., is the manager and secretary. The Nova Scotia Provincial is fixed for Sept. 23rd to 30th, at Halifax. Secretary, J. E. Wood.

Land, and a daughter of Star of Morning, who is a grandson of Field Marshal and sire of numerous winners.

Lady Douglas, bred by Mr. James Durno, Rothie, is a roan 4-year-old that has won six first prizes, including 1st at the Royal Northern at Aberdeen. Her sire, Lord Douglas, a winner of six first prizes, is a son of Lavender 46th, who was the dam of the great American bulls, Duke of Lavender and Lavender Lad. Lady Douglas is of the same family as Challenge Cup, the Royal winner; also of Mr. Harrison's Bright Archer.

A cow of remarkable scale and quality is Bella 3rd, a roan 4-year-old, from the herd of Sir A. H. Grant, Monymusk, N.B., sired by Martin, by Star of Morning, her breeding being a happy combination of Booth and Cruick-shank. Butterine is a substantial roan 3-year-old, bred by Mr. J. B. Manson, Kilblean, Old Meldrum, by Merrymason, bred at Uppermill, and a son of William of Orange, Mr. Marr's noted stock bull. Her dam's sire, Touchstone, bred by Mr. Cruickshank, Sittyton, is the sire of Mr. Harrison's show bull, Cornelius. Gladys, a red 2-year-old of grand presence and promise, is from the herd of Mr. Bruce, Fochabers, and was got by Sigmund 2nd, and her dam by Dashwood, bred by Mr. Duthie. Ruby Lass, Roschush and Isabel are a trio of 2-year-olds, of fine form and quality, from the herd of Mr. Jamieson, Mains of Waterton, sired by Topsman, by Gravesend, bred by Mr. Cruickshank, and used many years by Mr. Duthie, who considers the breeding of these heifers choice. Five large, heavily-fleshed and deep-milking cows, from the herd of Messrs. Garne, of Gloucestershire, of standard English tribes, topped by Scotch-bred bulls of superior merit, complete the consignment now in quarantine, and which is, all things considered, one of the most important importations made to Canada in years.

AN IMPORTANT SALE OF JERSEYS.

AN IMPORTANT SALE OF JERSEYS. AN IMPORTANT SALE OF JERSEYS.

Messrs, W. A. Reburn & Co., Massawippi, Stanstead, Quebec, announces in our advertising columns that they will dispose of their entire herd of choicely bred Jerseys, about lifty head, on or about July 26th. These consist of the best selected from the original herd of Mr. Reburn, Sr., and their produce, and are principally pure St. Lamberts, of the best lines of breeding. Fuller particulars may be given in our next issue. In the meantime those interested will do well to write for a catalogue. Are You Building?

Rock-Faced Stone?

 $\begin{array}{c} \textbf{STEEL} \hspace{0.1cm} \textbf{SIDING} - \textbf{GALVANIZED} \hspace{0.1cm} \textbf{OR} \\ \hspace{0.1cm} \textbf{PAINTED.} \end{array}$

It makes a wonderfully durable and eco-nomical covering for new buildings, or for improving old ones.

Gives a most handsome effect—is very easy to apply—offers fireproof protection, and can't be penetrated by dampness. By deciding in its favor you will get the best results at least expense. WRITE US if you're interested - we'll send full information

THE METALLIC ROOFING CO'Y

1185 King St. W., TORONTO.

AUCTION SALE

PURE ST. JOISONS

ON OR ABOUT JULY 26th, 1899.

WE will sell our entire herd, composed of 20 cows (in milk, or soon due), 23 heifers (in calf) and heifer calves. One aged bull, one yearling and five bull calves. All first-class. Particulars and terms, see next ADVOCATE. For catalogues, address—

W. A. REBURN & CO., MASSAWIPPI, QUEBEC.

FOR SALE...

IMPORTED AND **CANADIAN-BRED**

ClydesdaleStallions

From One to Four Years Old. Also



SEVERAL THREE FILLIES,

All registered and warranted sound. Inspection invited.

ROBT. DAVIES, -om Thorncliffe Stock Farm, TORONTO.

FOR SALE:

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

JOHN ISAAC,

KINELLAR LODGE, MARKHAM, ONT. River Bow Stock Farm. B. SNARY & SONS, CROTON, ONT.,

Breeders of Shorthorn Cattle, Poland-China and Chester White Swine.

We offer for sale seven good We offer for sale seven good young bulls, from seven to twelve months old; eight theifers of choice quality and breeding. Sired by Chief Captain. Pigs of both sexes and all ages at moderate prices, quality moderate prices, quality considered.



Shorthorns and Shropshires

I have a few promising young bulls on hand, and am booking orders for Shrop, ram lambs for fall delivery; well covered, GEORGE RAIKES, - BARRIE, ONT. ARTHUR JOHNSTON Greenwood P. O. and Telegraph Office



OFFERS FOR SALE 15 SHORTHORN BULLS

FIT FOR SERVICE; 3 IMPORTED. 25 COWS AND HEIFERS Including 9 recently imported heifers. Prices right.

Catalogues on application.

Claremont Station, C. P. R. Pickering Station, G. T. R. "NO BUSINESS, NO HARM."

W. D. FLATT. HAMILTON P. O. and TELEGRAPH OFFICE,



OFFERS FOR SALE

Twenty-two Shorthorn Bulls

from three to fifteen months old.

Persons requiring show bulls can be supplied from this bunch. TWENTY COWS AND HEIFERS

served by imported bull, Golden Fame =26056=. Farm 6 miles from Hamilton. Catalogue sent on application. Visitors met at G. T. R. or C. P. R. if notified. Prices consistent with quality. Inspection invited.

JOHN DRYDEN, BROOKLIN, ONTARIO,

Scotch Shorthorns,

Choice Shropshire Sheep.

SHORTHORN CATTLE AND LINCOLN SHEEP.

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

J. T. GIBSON,

DENFIELD, ONT Maple Lodge Stock Farm

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

MAPLE LODGE P. O., ONT.

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CAMPBELLFORD P. O., ONT.,

BREEDERS OF Shorthorns, Cotswolds, and BERKSHIRES,

Have 9 bull calves for sale, from 1 to 8 months old, price from \$45 to \$60 each (registered). Also heifers and heifer calves; 30 Berkshire pigs, from 5 weeks to 5 months old, from \$5 to \$10 each (registered).

ORTHORNS FOR SALE

HERD ESTABLISHED 1855. A number of Young Bulls, Cows and Helfers for sale. Herd headed by Imported Christopher = — =, and Duncan Stanley = 16364 =. Grand milking cows in herd.

JAMES DOUGLAS, om CALEDONIA, ONT

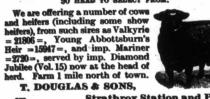
SHORTHORNS 9 BULLS, 4 HEIFERS,

Mostly Scotch-bred, and got by such bulls as Kinellar Sort(imp.), Northern Light (imp.), Prince and Prince Bismarck. Prices right. Correspondence Solic-lted, and Visitors Welcome. G. A. BRODIE,

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

Scotch Shorthorns For Sale:

90 HEAD TO SELECT FROM.



Strathroy Station and P. O.

W. G. PETTIT & SON, FREEMAN P. O., Burlington Junction Telegraph Office.

10 SHORTHORN BULLS 10 By Indian Statesman = 23004 =, from 10 to 20 months. Twelve young cows or heifers with calves by side or in call. Twelve ram and 20 Shropshire ewe lambs, sired by (Imp.) Flashlight. Also, Berkshire boars and sows, all of which will be sold at moderate prices. Farm half mile from Burlington Junction, G. T. R.

MOUNT ROSE

J. W. Hartman & SONS,



SPRINGHURST SHORTHORNS

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

Exeter Station, G. T. R., H. SMITH, half mile from farm. HAY, ONT. -om

WE OFFER

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

A. J. C. SHAW & SONS,

THAMESVILLE, ONT.

SPRINGFIELD FARM

Shorthorns, Oxfords, AND Berkshires. Young bulls and Heifers on hand. Also a few choice Berkshires.

CHAS. RANKIN, Wyebridge, Ont.



HERD ESTABLISHED IN 1872. Such sires as imported Royal George and imported Warfare have put us where we are. A. & D. BROWN,

ELGIN COUNTY. -om IONA, ONTARIO. SPRINGBANK FARM.

Shorthorn Cattle, Oxford Sheep, and Bronze Tur-keys. Young bulls for sale. oe JAS. TOLTON, WALKERTON, ONT.

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

R. MITCHELL & SON, Burlington Station. -0 Nelson P.O., Ont. F. W. TAYLOR, Wellman's Corners, Ont

HAWTHORN HERD

OF DEEP-MILKING SHORTHORNS. 3 heifers bred to Beau Ideal = 22554 =, of first-class quality and A 1 breeding.

Wm. Grainger & Son, - Londesboro, Ont.

F. BONNYCASTLE & SONS | SPRING GROVE STOCK FARM

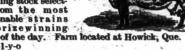
Shorthorn Cattle and Lincoln Sheep. Herd prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by Imported Blue Ribbon = 17095 and the famous Moneyfuffel Lad = 20521 =. High-class Shorthorns of all ages for sale. Also prizewinning Lincolns.



T. E. ROBSON, Ilderton, Ont.

WM. WYLIE, 228 BLEURY ST., MON-

Breeder of high-class Ayrshires. Young stock always for sale bred from the choice strains procurable. Breeding stock select Breeding stock selected from the most fashionable strains and prizewinning stock of the day. Far 5-1-y-o



TROUT RUN STOCK FARM

Snap I One Ayrshire bull calf, 3 mos., \$25. Grand lot of females, all ages. Five cows to calve in August, fit to show in any company.

The calves will be from Royal Star, 1:t at Toronto and 1st and sweepstakes at London, 1898. Write for prices and full particulars.

WM. THORN, Norfolk County. om LYNEDOCH, ONT

W. F. STEPHEN.

Breeder and importer of choice and fashionable

AYRSHIRES

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

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

CHOICE AYRSHIRE BULLS

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

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

Six - Young Ayrshire Bulls - Six

FOR SALE! From eight to ten months old ; all importad in dam and all from good herds. Will sell them right. Address

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

AYRSHIRES FOR SALE.

The kind that can speak for themselves. Size, constitution, dairy and show combined. Six young bulls for sale, by Glencairn 3rd (imp.), dam Primros nbrain (imp. Their dams are all Glencairn heifers. Five of the dams were shown last fall at Toronto, London, an Ottawa. Also a few good cows. No culls sold.

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

MARKE Dairy and Stock Farm.

AYRSHIRES Three young bulls fit for service, and bull calves. BERKSHIRES, TAMWORTHS,
Booking orders for spring litters.

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

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

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

Ayrshire Cattle and Berkshire Pigs.

The bull Tom Brown and the heifer White Floss, winners of sweepstakes at World's Fair, were bred from this herd. Young stock for sale. Also Leicester sheep & Berkshire swine.

D. BENNING & SON, Glenhurst Farm, Williamstown, Ont

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

DONALD CUMMING, LANCASTER 4 Yearling Ayrshire Bulls for Sale. Also a of spring calves, sired by Douglas of Loudoun.

2 - Choice Young Ayrshire Bulls - 2 Descended from the noted heavy-milking Orange Blossom family, so successful with my late father.

F. T. GUY, BOWMANVILLE, ONT.

NOTICE

NOTICE.

The prize list just issued by the retiring Secretary (Mr. Thos. A. Browne) of the Western Fair, to be held at London, Ont., Sept. 7th to 16th, is a model of sytematic arrangement and conciseness, and reflects credit on the compiler. It gives all the necessary information under distinct headings, and is void of "vain repetitions." It is a departure from the old-fashioned rut in the preparation of such literature, but if the intending exhibitor will look over it thoughtfully for a few moments he will find that all he needs to know has been provided for in such a manner a wayfaring man, though a farmer, need not err if he follows its well-considered plan. The prize list is a liberal one, the amount of money offered being considerably more than in former years, and the prospect is that 1899 will be a record year for the Western Fair. The following special requests of the Secretary are worthy of careful consideration:

Send for a prize list.

Read all of the rules carefully.

consideration:
Send for a prize list.
Read all of the rules carefully.
Ask for special entry paper. One has been prepared for each department.
Make out entry papers in accordance therewith.

Be particular to send entries as early as

Do not be later than September 1st, but rather before, as there may be corrections required which will necessitate our writing you.

Give registry numbers where required in Live Stock classes. Be particular to give P.O. address as com-

Be particular to give P.O. address as complete as possible.

Be sure and enclose entry fees.

If your neighbors express a desire for a copy of the Prize List send their address at once on a post card, and a copy will be mailed.

If you have no use for this Prize List pass it around among your friends.

Remember the Fair dates, Sept. 7th to 16th.

Remember late entries and those without fees will not be accepted.

The address of the new Secretary is J. A. Nelles, London, Ont.

GOSSIP.

Mr. Wm. J. Duck, Springridge Farm, Morpeth, Ont., breeder of Poland-China hogs and Shorthorn cattle, has recently added to his stock the imported bull, Aberdeen Hero. He was bred by Alexander Watson, Kinellar, Scotland, and imported by Mr. Arthur Johnston, Greenwood, Ont. Mr. Duck says he paid a lot of money for him, but his size, quality and breeding warranted him in doing so.

W. F. Stephen, Trout River, Quebec, writes:

"W. F. Stephen, Trout River, Quebec, writes:
"My stock has done very well this season.
Great demand for Ayrshires; have made large
number of sales. My bull, Klondike, is turning
out a remarkably fine animal. Uncle Sam's
heifers are making grand milkers. From
twenty-four cows and heifers I am now getting
twelve gallons cream per day, which I ship to
city of Montreal. I expect to have a number
for sale this fall."

MAPLE HILL HOLSTEINS.

MAPLE HILL HOLSTEINS.

One of the staff of the FARMER'S ADVOCATE recently called on Mr. George W. Clemons, St. George, Ont., and found his noted herd of Holsteins in their usual good shape, making butter cheaply while the grass grows, as they do profitably the year 'round. A prominent figure in the herd is the matronly Madge Merton, who boasts a shining record as a prizewinner, having stood third at the World's Fair and first as a three-year-old, and sweepstakes for the silver medal as best female any age at Toronto in 1895. She will be due to calve in this month, and will be in fine shape for the shows, her wonderful constitution, great udder development and rich colored skin making her a choice specimen of her sort. Mondamin's Daisy Barrington, whose record of 62 lbs. milk daily at two years old, and an average of 50 lbs. for six months in her two-year-old form, and a record of eleven first and an average of 50 lbs. for six months in her two-year-old form, and a record of eleven first prizes and three sweepstakes at thirteenshows, is also "coming in" this month, and is in fine bloom. Queen DeKol 2nd is now in her four-year-old form, and is fulfilling in her maturity her great promise when as a two-year-old she won first prize at the Provincial Dairy Show at Brantford, and the Prince of Wales sweepstakes as best in the test under thirty-six months old. Empress Josephine DeKol, the sweepstakes two-year-old wherever shown last year, is now in full flow of milk, and shows splendid, indications of great capacity for dairy work, having extraordinary milk veins and a shapely and well-balanced udder, which measured 48 inches as a two-year-old. She will be due in August, and should make a grand show. Inka 5th is holding her own admirably. The young things sired by Colanthus Abbekirk 2nd, and the champion Count Mink's Mercedes, are very promising, and the young imported bulls now in service, DeKol 2nd's DeKol Duke and Sir Pledge DeKol, strong in the blood of that great family, are going on splendidly. A new addition to the list of stock bulls is Young Daisy Teake's King, a brother of Daisy Teak's Queen, winner of the championship in the milking test at the Winnipeg Industrial in 1895, and sweepstakes as best dairy cow any breed at the same show last year, her phenomenal record of 72.25 lbs. milk and 2.62 lbs. butter (80 per cent. butterfat) in one day on the fair grounds stamping her as one of the very best of any breed. fat) in one day on the fair grounds stamping her as one of the very best of any breed.

OAK LODGE SHROPSHIRES.

Shropshire sheep have found substantial admiration and support at the hands of Messrs. James Cooper & Son, whose splendid breeding establishment is at Kippin, Ontario, which we had the pleasure of visiting in the early part of May. The flock was founded upon selections made from such English breeders as Bradburn, Minton, Tanner, Batch, Williams and Thomas, all of which are located near Shrewsbury, Shropshire, England. The present flock of fifty breeding ewes and lambs, a dozey shearling ewes and twenty shearling rams, are a uniformly good bunch. Both covering and size are among the points that receive attention. The sires have been selected with much care; the present four-shear ram, Montford Beauty, being a get of Mr. Alfred Mansell's noted Fair Star. He is a sheep possessing grand quality in conformation and covering. The bunch of homebred shearling rams are highly worthy of the attention of breeders requiring young, fresh, well-bred sires, where quantity and quality of wool are regarded as of due importance. The young stuff were showing the effect of the luxuriant pastures at Oak Lodge.' OAK LODGE SHROPSHIRES.

Horse Owners! Use



Every bottle sold is warrel Price \$1.50 per bottle, sent by express, charges p for its use. Send for de

Jersey Cattle

MONEY IN YOUR POCKET. Mrs. E. M. Jones,

Box 324. BROCKVILLE, ONT., CAN.



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

B. H. Bull & Son.

BRAMPTON. S. WICKS & SONS MOUNT DENNIS, ONT.,

Offer two Registered A. J. C. C. Jersey Yearling Bulls. These are grand youngsters; cheap if sold at once. We have also some fine Registered C. K. C. Collie Pups; also some fine young Registered Bitches. Manufacturers of the Skee Hot Water Incubator. Hatches 100 per cent. The best and most scientific Incubator in the market.

FOR SALE!

JERSEY BULL, THREE YEARS OLD, A GRANDSON OF THEOLINE, THE SECOND RICHEST COW IN THE WORLD, ALSO TWO YEARLING SHORTHORN BULLS AND A FEW CHOICE YOUNG BERKSHIRES. . .

S. DYMENT, -om BARRIE, ONTARIO.

Deschenes Jersey Herd.

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

> R. & W. CONROY, DESCHENES MILLS, QUEBEC.

MEADOWBROOK JERSEYS, TAM-WORTHS, W. WYANDOTTES. worth Sows, fit to breed; a splendid Boar, 7 months old, for sale. Eggs for balance of season, two settings for \$1. o EDGAR SILCOX, Shedden, 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.

.. MAPLE HILL..

HOLSTEIN-FRIESIANS

I offer for sale MADGE MERTON 5th, sire Colanthus Abbekerk 2nd, dam Madge Merton (nine months old); INKA 5th's MERCEDES, sire my champion show bull Count Mink Mercedes, dam the Advanced Registry cow Inka 5th, record 184 lbs. butter in a week (one month old). Remember my herd won championship gold medals in 1897 and 1898. G. W. CLEMONS, ST. GEORGE, ONT.

HOLSTEIN BULLS

that we think you will want when you know their breeding, and the large OFFICIAL milk and butter records of their nearest ancestors. Six of them are sired by a son of our great cow, Korndyke Queen, others by sons of De Kol 2nd, and some by Manor De Kol. Heifers and young cows of equal breeding. It's better to buy the best. We furnish papers to pass them through without duty or detention. There is no quarantine. Write for just what you want. Henry Stevens & Sons, Lacona, N. Y.

Lynnfield Holstein Herd.

Do you want to buy young cows that are great milkers, also two-year-old heifers, bred to our stock and show bull, Homestead DeKol Belle Boy. We have also some fine heifers nine months old. For choice Holstein-Friesians write or visit me.

C. M. KEELER. GREENBUSH P. O., ONT.

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

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

ESTABLISHED 1889 BELLEVILLE BOGLE & **BUSINESS** JEFFERS, PROPRIETORS. COLLEGE

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

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

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

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

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AND SHORTHAND SCHOOL. A business education will help you. Students assisted to situations. None but specialist teachers employed. Write for particulars. OH. M. KENNEY, PRINCIPAL, WOODSTOCK.



The Leading Commercial School of Western Ontario. W. J. Elliott, Principal.

CURED WITHOUT ENIFE OR PLASTER. FULL PARTICU-

LARS FREE. F. STOTT & JURY, Bowmanville, Ont.

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

Address- SYDNEY FISHER, 17-y-0 ALVA FARM, KNOWLTON, P. Q.

▲UERNSEYS

Two Choice Bull Calves AND Five Heifers for Sale.

Tamworth and Berkshire Pigs. W. H. & C. H. McNISH,

INGLESIDE HEREFORDS.

UP-TO-DATE HERD OF CANADA!

TAMWORTHS CHOICE PIGS SIX TO SEVEN

WEEKS OLD.

Send for Illustrated Catalogue. Address,

H. D. SMITH, COMPTON, QUE. F. W. STONE ESTATE, GUELPH, ONTARIO.

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

GOSSIP.

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

W. R. BOWMAN'S SHORTHORN CATTLE, SHROP-SHURE AND SUFFOLK SHEEP, YORKSHIRE SWINE, AND B. P. ROCK FOWLS.

SWINE, AND B. P. ROCK FOWLS.

Mr. W. R. Bowman, whose stock farm is near the town of Mount Forest, Ont., is one of those men who possesses the requisite amount of judgment and energy to succeed in what he undertakes. We have always found him alive and progressive in stock matters and up to the demands of the times. In Shorthorn cattle he has been a strong admirer of the high milking strains, and made a selection for his foundation from the Mayflower family, of which his herd is largely composed. A daughter of Clara 40th (imp.), by Eclipse, has also made her home with Mr. Bowman's herd. Some half dozen heifers approaching their second year are now among

from the MayHower family, of which his largely composed. A daughter of Clara 40th (imp.), by Eclipse, has also made her home with Mr. Bowman's herd. Some half dozen heifers approaching their second year are now among the number of the even, thick, early-maturing kind. The sire now in service is Monarch of Mapleton, by Monarch of Bowfront, and out of a pure Bates cow, and although not in high flesh, is a strong, evenly-made bull, and proving highly satisfactory.

In Shropshire and Suffolk sheep we found the stock in excellent shape. Of the former about fifteen breeding ewes were on hand, while double that number of the latter are in the breeding pens. The Shropshires were selected from the pens of Phin, Hunter and Campbell, to which was mated a very choice young ram selected from Mr. W. E. Wright's flock at Glanworth, Ontario, resulting in some splendid, strong, well-covered lambs, thirteen of which are rams. A dozen or more shearling rams were held over, which should attract attention early this fall. The Suffolk ewes were imported from the Earl of Elsmere's estate, at Stetchwood, Eng., and mated to a ram bred by the Iowa Suffolk Sheep Company, Iowa, resulting in fifteen each of ewe and ram lambs. Very little has been known of this breed in Canada, but from their lamb producing and rearing qualities we would suggest that they are worthy of a closer investigation than has heretofore been given them. They are a big, strong sheep, with black heads and legs, less bone than the Hampshire and equal as mothers, being copious milkers. We wish Mr. Bowman success in his new enterprise, and think the sheep are in the right place to find out their relative value with other similar breeds.

In Yorkshire swine we found a splendid stock of matrons on hand. Among them were three very choice sows of Hollywell ancestry, by a Hume sire of Marion & Haskett breeding. Also a couple of litters of April pigs by the Brethour-bred Silver King, out of a Rose dam. We also saw three full sisters by Lord Grey that are good ones, as well as

OFFICIAL TESTS OF HOLSTEIN COWS.

Mr. S. Hoxie, Supt. of the Advanced Registry of America, has issued a statement of tests of 34 cows and heifers made from Oct. 1st, 1899.

of 34 cows and heifers made from Oct. 1st, 1898, to Jan. 1st, 1899.

These, tests are for seven consecutive days, and are supervised by officers of agricultural colleges and State experiment stations or by persons vouched for by such officers. The amounts of butter-fat are determined by the Babcock test, and the amounts of butter are calculated on the basis of 80 per cent. fat to a pound of butter—the rule established at the World's Columbian Exposition.

Amongst the number in this report we find the following, which are the highest in the list: Calamity Jane 26292; age 7 years, 10 months, 11 days: owned by A. & G. Rice, Currie's, Ont.; amount of milk, 485.8 lb.; amount of butter per pound, 7.04 cents.

Calamity Jane 26292; age 7 years, 10 months, 11 days; amount of milk, 572.5 lb.; amount of butter, 25 lb. 0.9 oz.

Inka Hartog's Pietertje Kate 23484; age 8 years, 1 month; amount of milk, 456.8 lb.; amount of butter, 20 lb. 3.2 oz.

Daisy Texal 2nd 44831; age 3 years, 1 month, 21 days; property of A. & G. Rice, Currie's; amount of milk, 444.8 lb.; amount of butter, 18 lb. 2.1 oz., in a food test; cost per pound, 9.32 cents.

Daisy Texal 2nd 44832; age 1 year, 11 months.

18 lb. 2.1 oz., in a food test; cost per pound, 9.32 cents.
Daisy Texal 3rd 44832; age 1 year, 11 months, 28 days; owned by A. & G. Rice; amount of butter, 10 lb. 1 oz.
Lilith Pauline DeKol 43134; age 2 years, 1 month, 18 days; amount of milk, 333.9 lb.; amount of butter, 15 lb. 2.2 oz.

JAS. TOLTON & SONS SHORTHORNS, OXFORDS, AND BRONZE TURKEYS.

JAS. TOLTON & SONS' SHORTHORNS, OXFORDS, AND BRONZE TURKEYS.

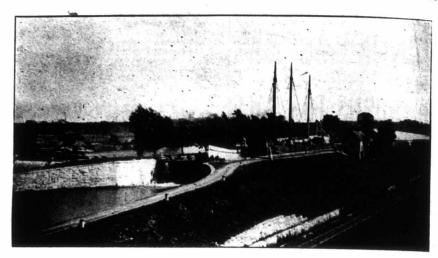
A recent inspection by one of the FARMER'S ADVOCATE staff of the herds and flocks at Mr. Jas. Tolton's splendid farm near Walkerton, in Bruce County, Ont., found the herds and flocks in their usual up-to-date form. Among the 30 odd head of Shorthorns are an exceptionally promising bunch of young females, one, two and three years old, and as they are descended from excellent milking dams, their future usefulness is assured. The imported cow, Cleopatra, purchased at Mr. Simmons' dispersion sale, is rearing a splendid bull calf to imported Blue Ribbon, which we would be inclined to suspect Mr. Tolton would reserve to head his herd. He is a straight, deep, good calf, with a wealth of natural flesh not found in every family, and of the early-maturing kind. The present stock bull, Earl of Warwick, by Earl of Moray, and out of Mr. Gaunt's Melody, has not only proven himself a worthy sire, but has made rapid growth. He has a broad, level back, well-sprung ribs, smooth, deep body, and long, level quarters, standing well on his legs, is active and useful, and has a mild, quiet disposition; in fact, he is an all-round good bull. Seven red and roan bull calves were in view at the time of our visit.

and roan bull calves were in view at the time of our visit.

Oxfords.—Thirty-two breeding and eleven yearling ewes are on hand this season, and among the young lambs we saw some fine, growthy, promising fellows; the sire employed last season being Bath & West, a sheep bred in Mr. Brassey's noted English flock.

Bronze turkeys receive attention here, and much care has been exercised in the selection of suitable foundation stock.

Work Done THOROLD CEMENT



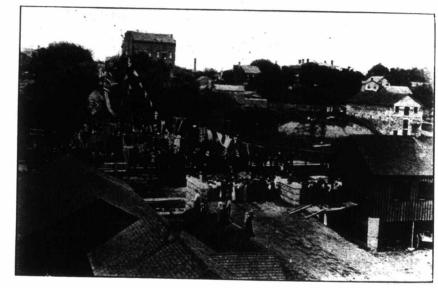
NEW WELLAND CANAL, LOCK 24

with Wasteweir and Swing Bridge, and Niagara Central Bridge in the distance.

From W. G. Thompson, Esq., Engineer in Charge New Welland Canal and Sault Ste. Marie Canal.

My tests of the Thorold Hydraulic Cement have extended over a period of twenty eight years, and have been on a large scale, as exemplified in the locks, bridges, culverts, and other masonry on the Welland Canal and Welland Railway, and the record, which has been invariably satisfactory, is to be found in examination of the structures. The necessary tearing down of masonry and concrete during the Welland Canal enlargement has afforded abundant evidence of the reliability of the Thorold Hydraulic Cement, both in masonry and concrete, and above and under water. I desire no better cement for the class of work referred to.

April 17, 1884.



ABERDEEN BRIDGE, OAKVILLE, ONTARIO.

Masonry Work built with Thorold Cement. William Gibson, Esq., M. P., Contractor.

Oakville, January 16th, 1897.

Estate of John Battle, Manufacturers of Thorold Cement, Thorold, Ont.: Dear Sirs,—Thorold Cement was used in the construction of Aberdeen Swing Bridge, at town of Oakville, and it has given perfect satisfaction.

C. J. MARLATT, Reeve,
Chairman of Bridge Committee, 1894.

(From the Toronto Globe, September 19th, 1894.)

OAKVILLE'S ENTERPRISE.

An \$11,000 Steel Swing Bridge Formally Opened Yesterday—A Large and Enthusiastic Audience.

CARVILLE, SEPT. 18.—(Special)—The erection of a fine new steel swing bridge over the river here justified the enthusiasm displayed by the people of Oakville at its opening to-day.

The new bridge is a splendid structure, and is undoubtedly a credit to the Town of Oakville and the Council of the County of Halton, who have aided them in erecting it. The bridge has a clear span of 115 feet between the abutments, and is 118 feet over all. It has a 16-foot roadway and two 4-foot sidewalks. It is a deck swing steel bridge with riveted Warren truss girders. It swings in either direction upon a central pier, 17 feet in diameter at the top and 19 feet at the bottom. The central pier and abutments are of solid masonry laid in Thorold Cement. The laying of the central pier was a difficult feat, owing to the depth of the mud. It rests on 66 piles, sunk to a depth of 40 to 50 feet. The masonry cost \$7,300 and the superstructure \$2,400. The approaches, etc., will bring the total cost up to about \$11,000. The masonry work was done by Mr. William Gibson, M. P., Grimsby, and the superstructure put up by the Central Bridge and Engineering Company, of Peterboro'.

FOR FREE PAMPHLET WITH FULL PARTICULARS, ADDRESS

ESTATE OF JOHN BATTLE, THOROLD. ONTARIO.

Imported Shorthorn Bulls 2

2 - YEAR - OLD



1 - YEAR - OLD

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HEIFERS.

HEIFERS ALL IN CALF TO IMPORTED BULLS.

Correspondence or a personal visit solicited. Catalogues on application.

H. CARGILL & SON, CARGILL, ONT.

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

1868

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AT SUMMER HILL IS THE Imported Yorkshires LARGEST HERD OF....

IN THE DOMINION.



Large, Lengthy, English Type. Among them being the first choice of the most important prize-winning English herds. My Canadian-bred herd comprises the choicest individuals, selected from the best herds in the country, and is headed by the undefeated prize-winning boar, Look-Me-Over 2612. I am offering young stock directly imported, imported in dam, or Canadian bred. We ship to order, prepay express charges, and guarantee stock as represented, Trains met at Hamilton by appointment. D. C. FLATT, MILLGROVE, ONT.

AYRSHIRES and YORKSHIRES



One Yearling Bull, February, March and April calves, and other young stock, all of choicest breed-ing and individual excellence. February, March and April pigs, some extra good ones, at moderate prices. Can furnish pairs of either calves or pigs not akin. For prices, or anything in Ayrshires of

ALEX. HUME & CO., Menie P. O., Ont., IMPORTERS AND BREEDERS. Hoard's Station, G.T.R.



PURE-BRED GUERNSEY CATTLE

Chester White Swine.



Duroc - Jersey Swine.

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

SHORTHORNS! SHORTHORNS!!

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

D. ALEXANDER, BRIGDEN, ONTARIO.

Large Yorkshires.

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

E. DOOL.

- HARTINGTON, ONT.

Yorkshires, Holsteins, 🚂 Cotswolds

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

R. HONEY, WARKWORTH, ONT.

PINE GROVE FARM HERD OF LARGE YORKSHIRES.

Imported and Canadian berd, from the Hasker fairs in Canada and the World's Fair at Chicago any other family of Yorkshires in America. Young boars and sows fit for breeding for sale. Correspond-ence solicited, which will receive prompt attention.

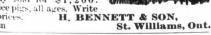
JOSEPH FEATHERSTON, Streetsville, Ont.

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

Offers York, and Berk, Boars and Sows, weigh Offers York. and Berk. Boars and Sows, weighing from 30 to 40 pounds, at \$6 each, registered; a few boars weighing from 200 to 300 pounds, at \$12 to \$14 each. All stock shipped C. O. D. We will have a limited number of Shrop, and Suffolk Ram and Ewe Lambs to offer, also a few shearlings. A choice Jersey Bull for \$35. Five settings of Barred Rock Eggs for \$2; single setting, 75c. -o

Large English Berkshires.

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



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

JAS. A. RUSSELL, Precious Corners, Ont.

BERKSHIRES FARE.

Boars and sows of all ages. Choice young pigs at \$6 each, registered. JOHN RACEY, JR., Lennoxville, Que.

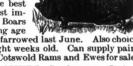


(LIMITED) TEMPERANCE ST., TORONTO, CANADA

Affiliated with the University of Toronto. Patrons: Governor-General of Canada, and Lieut. Governor of Ontario. Fee, \$65.00 per session. Apply to Andrew Smith, F.R.C.V.S., Principal. 18-2-y-om

- SNELGROVE -BERKSHIRES AND COTSWOLDS

High-class Berkshires of the large English bacon type, bred from the best specimens of the best im-



portations. Young Boars and Sows of breeding age for sale. Two boars farrowed last June. Also choice spring pigs six to eight weeks old. Can supply pairs not akin. Yearling Cotswold Rams and Ewes for sale. R. P. SNELL, Snelgrove, Ont. -om

Berkshires

SPRING OFFERING

Yorkshires



eight weeks old. Pairs and trios supplied, not akin, of the best breeding and individual merit. A number of Yorkshire boars fit for ser-

vice, and fine lengthy sows in pig to an imported boar. Berkshires, all ages, quality of the best. Write H.J. DAVIS, BOX 290, WOODSTOCK, ONT. om Breeder of Yorkshires, Berkshires, Shorthorns.

LARGE ENGLISH BERKSHIRES.

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



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

BORNHOLM HERD IMP. CHESTER WHITES.

Stock for sale at all times, all ages. Nothing but first-class stock shipped. Inspection invited. Correspondence answered. -o Daniel DeCourcey, Bornholm P. O., Ont.



Yorkshires and Berkshires REGISTERED CHESTER WHITE PIGS. Eight weeks old, at \$5.00 each.

REGISTERED JERSEY BULL CALVES \$20.00 each.

F. BIRDSALL & SON, BIRDSALL, ONT.

OHIO IMP. CHESTER WHITE PIGS.

Young stock, both sexes, for sale. Bred from imported and home-bred stock. BERLIN, ONT. T. E. BOWMAN, o-

DUROC-JERSEY SWINE

We have an excellent we have an excelent lot of long, strong, hardy young Duroc-Jersey pigs now on hand. Also a few choice young boars ready for service. We have also a choice flock of White Minorca Chickens. Eggs, \$1 per dozen. Address,



-om TAPE BROS., Ridgetown, Ont.

GOSSIP.

Colwill Bros., Newcastle, Ont., write: "We are making quite a few sales, especially of Tamworths, and are well satisfied with the result of our advertising in the ADVOCATE. It reaches the best class of farmers and brings husinese"

business."

FITZGERALD BROS.' SHORTHORNS.

In a splendid grazing section of Simcoe County, Ont., some fifteen miles north-west of the town of Barrie, Messrs. Fitzgerald Bros.' extensive farming and breeding operations are conducted. Their 400 or more fertile acres are peculiarly adapted for the purposes to which they are devoting them, and here and there are to be seen evidence of active breeding operations in the extensive herds and flocks of pure-bred and high-grade animals. Some 25 matured Shorthorn females are at present enjoying their liberty in the luxuriant and well-watered pasters, and showing evidences of the richness of its product. A few heifers of last year's produce were also retained, making a very attractive herd. In running over their pedigrees we noticed that many of the more matured matrons trace their origin to Roan Lilly and Village Rose parentage; while the employment of such sires as Ingram's Victor and Marquis of Lansdowne have produced the younger stock worthy of their retention in the herd. Since our visit a year ago there have been added to the herd a representative of the noted Nonpareil family—a straight roan cow tracing to Scarlet Velvet, and the imported sire, British Statesman, purchased at Messrs. S. J. Pearson & Son's dispersion sale last spring; and in their purchase, the Messrs. Fitzgerald Bros. have wisely consulted their own interests and acted upon their best judgment. Although we have seen British Statesman from time to time, we never saw him in better stock form than at our recent visit, enjoying his freedom in a shaded grass plot adjoining the barn. Coming as he has from one of the best herds in Scotland, and being got by a sire of noted bulls, he cannot fail to make an impression upon this herd such as few have the privilege of in this country. His owners report him as proving very sure, and he retains his activity equal to many of much younger age. A few (some half dozen) young bulls were on hand at the time of our visit, most of which are at a serviceable age; chiefly FITZGERALD BROS.' SHORTHORNS.

such stock.

The grade Cotswolds are up to their former mark, and a splendid, well-covered lot of lambs are to be found at Mount St. Louis.

ANNUAL MEETING AMERICAN HOLSTEIN

ANNUAL MEETING AMERICAN HOLSTEIN
ASSOCIATION.

At the 14th annual meeting of this Association, held at Buffalo, N. Y., June 7th, the attendance embraced members from 14 States and from Canada. Mr. W. A. Matteson, Utica, N. Y., was re-elected President; F. L. Houghton, Brattleboro, Vt., Secretary and Editor; and S. Hoxie, Yorkville, N. Y., Supt. of Advanced Registry. The Treasurer reported a balance on hand of \$17,361.82. The schedule of Officially Authenticated Butter Records and Report of Economic Tests attached hereto, forming a part of the report, show very valuable and instructive results from the work carried on during the year.

In class 1, for cows five years old or over, 55 cows of an average age of 6 years, 9 months and 6 days, yielded 18 lbs. 13.2 ozs. of butter, 30 per cent. fat, in 7 days. In this class first prize went to Belle Korndyke; milk, 509.8 lbs.; average per. cent. fat, 4.04; butter (80 per cent. butter-fat), 25 lbs. 12.3 ozs.; owner, Henry Stevens & Sons, Lacona, N. Y. Second prize to Calamity Jane; milk, 572 15-32 lbs.; average per cent. fat, 3.5; butter, 25 lbs. 9 ozs.; owners, A. & G. Rice, Currie's, Ontario.

In class 2, nine cows of an average age of 4 years, 8 months and 6 days, yielded an average product of 17 lbs. 2.1 ozs. of butter in 7 days.

In class 3, thirteen cows of an average age of 4 years, 3 months and 10 days, yielded an average product of 16 lbs. 15.8 ozs. of butter in 7 days. ASSOCIATION.

of 4 years, 3 months and 10 days, yielded an average product of 16 lbs. 15.8 ozs. of butter in 7 days.

7 days, 9 months and 16 days, yielded an average product of 16 lbs. 15.8 ozs. of butter in

7 days.

In class 5, twenty-seven cows of an average age of 3 years, 2 months and 5 days, yielded an average product 15 lbs. 9.3 ozs. butter in 7 days.

In class 6, thirteen cows of an average age of 2 years, 9 months and 18 days, yielded an average product of 13 lbs. 2.7 ozs. of butter in 7 days.

In class 7, sixty-nine cows of an average age of 2 years, 1 month and 14 days, yielded an average product of 11 lbs. 6.8 ozs. of butter in

The results of the Economic Test to determine

The results of the Economic 1 est to determine the cost of a pound of butter and per 100 lbs. of milk were most gratifying.

In class 1, cows five years old and over, the average yield per cow was 18 lbs. 8.2 ozs. of butter in 7 days, at an average cost per pound of 6.43 cents. Cost of milk per 100 lbs., 28.19

In class 2, cows four years old and under five.

cents.

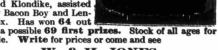
In class 2, cows four years old and under five, the average yield per cow was 17 lbs. 2.7 ozs. of butter at an average cost of 6.19 cents per pound. Cost of milk per 100 pounds, 28.57 cents. In class 3, cows three years old and under four, the average yield per cow was 16 lbs. 6.9 ozs., at an average cost of 6.65 cents per pound. Cost of milk, 30.97 cents per 100 lbs.

In class 4, cows under 3 years old, the average yield per cow was 13 lbs. 3 ozs., at an average cost of 7.34 cents per pound. Cost of milk per 100 lbs., 32.64 cents.

In his very felicitous address President Matteson said: "As I look over this large gathering of intelligent, successful breeders, I recognize men who have so successfully developed their cows that in a seven-day official test they have produced—in two-year-old form, 16.84 pounds of butter; in three-year-old form, 21.94 pounds; in four-year-old form, 24.14 pounds; in mature form, 26.66 pounds—while another mature cow, in making an official butter record of 24.27 pounds, showed the remarkable average in 7 days of 5.44 per cent. butter-fat. I see also men who have so skillfully handled their herds that in a public fair ground test, amid all the excitement incident to public exhibitions, a cow has produced 85 pounds milk and over three pounds butter in twenty-four hours, while other cows have undergone thousands of miles of jolting railroad travel to enter the Omaha Exposition dairy test, and there won miles of jolting railroad travel to enter the Omaha Exposition dairy test, and there won magnificent victories over all other breeds."

OXFORD HERD OF POLAND-CHINAS

The home winners of the Winners Headed by the imported boars, Conrad's Model and Klondike, assisted by Bacon Boy and Len-



W. & H. JONES,

OXFORD CO. -om MT. ELGIN, ONT. Springridge Poland-Chinas

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



. WM. J. DUCK, MORPETH, ONT.

POLAND-CHINA SWINE.

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

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



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

H. GEORGE & SONS, Crampton P.O., Ont. SPRING BROOK HERDS OF



One boar, 7 mos. old; one imported boar, 8 mos. old. A choice lot of boars and sows ready to ship. Pairs not akin. All stock sired by imported prizewinning boars. A few according pars. A few sows to

spare, in farrow. Prices right. A. C. HALLMAN, NEW DUNDEE, ONT.

Unatham HEFP

Tamworths 1 yearling boar, 4 sows 7 mos. old, 5 sows 5 mos. old, 6 boars 4 mos. old, 8 sows 4 mos. old, 10 sows and 10 boars 3 mos. old, 10 sows and 10 boars 3 mos. old, 8 sows and 10 boars 2 months old, 3 litters 6 weeks. Write for

o J. H. SIMONTON, Box 304, Chatham.

TAMWORTHS.

Upwards of 100 head to select from, bred up from Middleton Mimulus and other noted females, to which have been mated such sires as King George, Amber Smith and other prizewinning boars. Pairs other prizewinning boars. I not akin. St. George, Ont.

TAMWORTHS, YORKSHIRES, BERKSHIRES.



For Sale - Two Tamworth Boars, three months old, \$8 Boars, three months old, \$8 each; Tamworth Pigs seven weeks old, weighing from 30 to 40 pounds, \$5.00 each. Choice Yorkshires, from six to eight weeks old, \$5.00 each. Two Berkshire Boars and four Sows, five months old, \$8.00 each. All Pigs registered, crated and shipped to any address.

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TAMWORTHS Of the Most Approved Type.

WE have a dozen vigorous sows to farrow this spring to O. A. C. 419, and can book orders for right good stock. Our stock was not only represented at the Illinois State Fair, but won the best prizes offered in '98. We also have a choice imported Berkshire sow three years old, and a twenty-months boar for sale.

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In pairs, not akin; also young sows bred and ready to breed. Prices right and freight paid.

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Brownsville,

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

CHRIS. FAHNER, Crediton, Ontario.

CHESTER WHITE SWINE. Young stock, both sexes. Booking spring orders.

W. E. WRIGHT, - GLANWORTH, ONT.

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

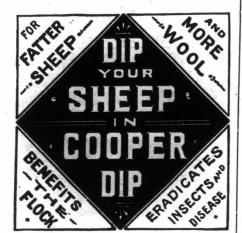
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Tamworth BOARS and SOWS, from Elliott, Bell and Nourse foundation. A choice bunch of Shropshire ram lambs for fall delivery, extra well covered, imported foundation. CHAS. LAWRENCE, COLLINGWOOD

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

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GEORGE HOTEL, Shrewsbury, Eng. Orders for Sheep AND Gattle will receive careful attention. Sheep imported by me have won more premiums in eight years than all other importations combined.

ROBERT MILLER, Stouffville, Ontario. HEN/RY ARKELL, ARKELL, ONTARIO., IMPORTER AND BREEDER OF

OXFORD-DOWN SHEEP.

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

GOSSIP.

W. & H. Jones, breeders of Poland-China hogs, Mt. Eigin, Ont., in remitting for their advertising account, write:—"Our stock is doing well. We have received many enquiries from our advertisement and have made good sales, in number quite beyond our expectations."

At a sale of Clydodeles and China below.

sales, in number quite beyond our expectations.

At a sale of Clydesdales and Shires belonging to the Earl of Durham, May 31st, sixty lots were sold for 2,840 guineas, an average of about \$250 for young and old. A Shire mare and filly foal brought 100 guineas and a Clyde mare 91 guineas. A 4-year-old Shire gelding sold for 150 guineas, and a 3-year-old gelding for 79 guineas.

guineas, A 4-year-old Shire genains some and a 3-year-old gelding for 79 guineas.

Mr. F. S. Peer, Mt. Morris, N. Y., writes: "I have lately returned to New York with my twelfith importation of cattle from England and the Channel Islands, consisting of 66 head of Jerseys and Guernseys and 16 head of sheep. The sheep are mostly Lincolns, and a very grand lot they are. The last few years in England, at the Bath and West and Royal Counties Shows, has convinced me that there is no breed of sheep in England that show as much improvement as has the Lincoln in the last 15 years. They have not only the grandest fleeces, but the quality and fineness of the staple is something to be proud of. They are getting them with well-covered heads, and I must say, taking them all in all, they are about my ideal wool and mutton sheep. I enclose you a photo of a ram lamb 13 months old. His wool measures 15 inches, and the quality and luster is the best I ever saw, not only on the shoulders and sides, but down the flanks as well. This ram and 10 ewes were imported for Mr. Percival Roberts, of Philadelphia, and are, I believe, the first Lincolns to be imported to the U. S. directly from England, though there has been a few brought over from Canada. I had the pleasure of selecting these sheep from the celebrated flock of Messrs. Kirkham Bros., Biscathrope House, Lincoln. The ram is a fair sample of the 10 ewes of the same age. The ewes were the pick of 155 hoggs (my pick), and I must say I never saw 11 such sheep together. I hope later to send you a photo of the ewes. Some of the ewes were sired by Royal, for which ram Messrs. Kirkham Bros. paid 350 guineas (\$1,785)."

Messrs. Henry Stevens & Sons, Lacona, N.Y., in reporting the sale of a fine herd of twenty-

which ram Messrs. Kirkham Bros. paid 350 guineas (\$1,785)."

Messrs. Henry Stevens & Sons, Lacona, N.Y., in reporting the sale of a fine herd of twenty-five Holsteins to Messrs. Averill & Gregory, proprietors of the Yates Hotel, Syracuse, N.Y., write: "One of the finest and best bred herds that ever left Brookside are now grazing on the pastures of the Geddies Farm, and supplying butter, cream and milk to the guests of the Yates. The proprietors of this magnificent hotel also run in connection with it the large and beautiful farm known as the Geddies Farm, comprising 500 acres and situated near the city of Syracuse. For some years they have been running a mixed herd of various breeds, and deciding they would keep nothing but thorough-breds, some months ago they hoisted the 'red flag' and sold all the cattle upon the farm. They were then undecided which breed to purchase, but after making a thorough investigation of the different breeds they decided Holsteins were best suited for their purpose. After careful examination of our herd, which numbered at the time about eighty milch cows, they made their selections, discarding everything except those that tested high in butterfat. And we think we can safely say a finer, more uniform or better bred herd never left the home of any breeder. Had we the time and you the space we would gladly mention each individual animal, but will only say that this herd is strong in the blood of DeKol 2nd, Netherland Hengerveld, and Pauline Paul. Several of them had made large official butter records. The bull selected to head this herd was a son of Pietertje Hengerveld's Lady DeKol 2nd, sired by Mutual Friend 3rd's Paul, thus giving him a combination of the blood of the largest producing families ever known. His dam, Pietertje Hengerveld's Lady DeKol 2nd, won third prize in her class in the late official butter prize contest, and his sire's dam won first prize in the official butter prize contest and his sire's dam won first prize in the official butter prize contest and his sire's dam official butter prize contest, and his sire's dam ometal butter prize contest, and his sire's dam won first prize in the official butter prize contest two years in succession. This bull is not only backed up on both sire and dam's side by the largest official butter records ever yet made, but he is also an exceptionally fine individual."



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100 head to select from, among which are some specially good shearling ewes and rams. We employed two rams last fall, bred direct from imported stock. O C. & E. WOOD, FREEMAN, ONT.

Shall have a fine lot of choice early lambs for

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GREAT WEIGHT.

This highly valuable English breed of sheep is unrivalled in its

Rapid and Wonderfully Early Maturity,

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

MUTTON AND LARGE PROPORTION OF LEAN MEAT IT IS UNSURPASSED.

Full information of

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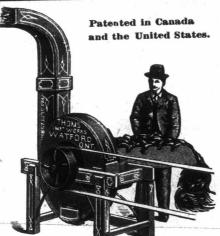
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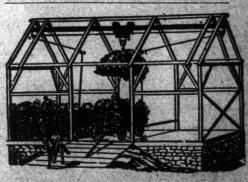
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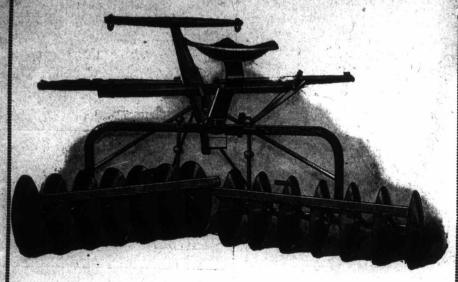
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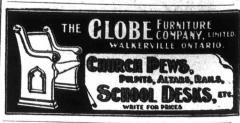
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