

**PAGES
MISSING**

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

VOL. XXXII.

LONDON, ONT., AND WINNIPEG, MAN., NOVEMBER 1, 1897.

No. 441.

EDITORIAL.

The Pig in the Political Sanctum.

The Hamilton (Ont.) *Spectator* undertakes to tell its readers that the FARMER'S ADVOCATE "pooh-poohed" pea feeding and maintained that the Canadian Government "did the proper thing in admitting cheap American corn free to feed Canadian pigs"; but that now the ADVOCATE is "down on corn." The editor of the *Spectator* may be an eminent authority on the subject of liver and bacon, but his agricultural education has been sadly neglected, and it is a matter for regret that the editor of a good newspaper like the *Spectator* has had so little time to devote to a careful study of the FARMER'S ADVOCATE, by which he would have been saved from such misrepresentation as the foregoing, and from misleading those of his readers who do not happen to be subscribers to the FARMER'S ADVOCATE, which stands for the interests of the farmer and stockman first, last, and all the time. Before Grit and Tory editors began to talk buncombe about the use of peas and corn the FARMER'S ADVOCATE had frequently taken occasion to sound a note of warning against the dangers of Western States methods of hog raising, which include very much more than exclusive corn feeding, bad as that may be. Fortunately, Canadian breeders and farmers (whose attention, by the way, does not happen to be exclusively devoted to swine raising) reached the front rank in producing the modern bacon type of animal long before the hog got into politics, and their good judgment will still enable them to take wise advantage of a good supply of raw material in the production of animals and their products, the basis of permanently successful farming.

The Fat Stock Show at Brantford, Ont.

The herds and flocks, large and small, of Ontario are now being sorted up and placed under fitting for the battle royal at Brantford on December 7, 8 and 9, where we shall witness the grand finale of the Provincial showing events of 1897. There is every indication that the coming Fat Stock Show will be a distinct advance upon its long line of successful predecessors. The City of Brantford is to be congratulated upon securing the presence of this great event of the stockmen, and will doubtless give it a worthy welcome. The point has sometimes been raised, in the nature of a complaint, that some of the large autumn exhibitions are so largely under the direction of city men. Whatever ground there may be for that feeling, it certainly does not exist regarding the Fat Stock Show, the directorate of which is composed almost without exception of prominent breeders and farmers, who are thoroughly versed as to the needs of the times. The prize list is a handsome one, amounting to some \$1,000 all told, apportioned among cattle (beef and dairy, the trials in the latter being actual performance at the pail), sheep, swine, and dressed poultry. The secretary of the show, Mr. F. W. Hodson, Parliament Buildings, Toronto, will cheerfully furnish any information desired in regard to entries, etc. We know of no exhibition where the young farmer or stockman can study to such advantage the various types of meat-producing animals that bring the highest returns in the world's best markets to-day. Not only this, but a series of popular meetings are held during the evenings of the show, where questions of vital interest to stock raisers are discussed. We doubt not but that, in addition to the large attendance of breeders from various parts of the country, the good farmers of Brant and adjacent counties will be out in strong force, so that the gathering will in every way be commensurate with the important interests represented. The entries are reported to be 300 per cent. greater than they were at this season last year.

WM. RENMUTH, Colchester County, N. S.:—"We all like your paper very much, and would not be without it."

The Canadian Butter Trade.

During the past summer an exporter purchased one month's make of butter from an Ontario creamery-man as a sample lot for the British market. Having every confidence in the output of his establishment, the latter, before closing up a lot of the packages, placed on top of the butter a slip of parchment paper used for his pound prints, on which the name and address of his creamery was neatly printed. The butter crossed the Atlantic in due course and went into consumption, giving the best of satisfaction. Ere long the creamery-man received enquiries from several parties of whom he had no previous knowledge, asking if he could undertake to supply them regularly with butter similar to the package from which they had evidently picked up one of his parchment paper wrappers. The main lesson—though there are several others—is apparent. There need be no question about Canadian butter taking a high stand in the home market against the product of Denmark or any other country, but as Mr. Sleightholm, principal of the Western Ontario Dairy School, pointed out in our last issue, and Mr. Harrison, bacteriologist at the O. A. C., emphasizes in the present number, citing the experience of Australia, supplies must not only be uniformly choice, but be regular the year round. Butter will not improve with age; the chances are in favor of deterioration. It is idle to try and build up a satisfactory trade on spasmodic supplies on the "feast one day and a famine the next" principle. The British consumer, if pleased, will be a steady customer, because constancy is a national characteristic. The increasing consumption per capita of butter as compared with cheese is a tendency which should encourage the butter producer, especially in the face of the fact that British imports of butter increased from \$65,489,268 in 1894 to \$74,674,537 in 1896, or a gain of over \$9,000,000 in two years, while the imports of cheese were increasing at a very much slower rate, from \$22,752,290 in 1895 to \$23,848,749 in 1896, or an increase of only \$1,000,000 worth. There would seem good reason, then, for confidence in the butter trade. In the immense areas of Canada suitable for dairying there is, however, ample room for the continuance of the great cheese industry which has given the Dominion world-wide fame, together with an immense increase in buttermaking. Districts and dairymen now devoted to cheesemaking with satisfactory results would probably do well to continue giving it their main attention; but in view of the growth of winter dairying at cheese factories, makers who are wise will at once qualify themselves by a course at one of the dairy schools or otherwise for buttermaking.

Pasteurizing and the use of special cultures as starters are means of attaining uniform flavor and better keeping qualities, with which practically nothing has yet been attempted in Canada, but presenting an important field for investigation and advance. With regard to the use of preservatives, to which Mr. Harrison refers, we might say that, at the request of the FARMER'S ADVOCATE, Mr. J. S. Larke, the representative of the Canadian Government in Australia, investigated the subject carefully and reported adversely in our issue of Nov. 2, 1896, and June 15, 1897. Australians have used a good deal of "Preservitas," the basis of which is said to be boracic acid, but considering the relatively cool climate of Canada and its nearness to England, where there has been an agitation against these expedients, Canada need not meddle with them; in fact, Mr. Larke expressed the opinion that our goods might with advantage be advertised as absolutely free from all such questionable ingredients. Absolute cleanliness, with the best of modern methods in manufacture and transportation, and the use of salt to suit the consumer's taste, along with regular shipments, will

enable Canada "to have and to hold" a splendid position in the British market.

The FARMER'S ADVOCATE predicts an increased home consumption of butter also. At a late date in October the creameries in the Northwest had not closed, and the butter was being disposed of—chiefly in British Columbia—as rapidly as customers could be found for it. We are pleased to state that out of a total make of over 10,000 boxes there were on October 25th less than 300 boxes not yet disposed of, in cold storage at Montreal, and that would have been shipped before but for the great engineers' strike and other causes which have depressed the British market.

The Manitoba Elevator Monopoly.

The above question was brought up before the Winnipeg Grain Exchange recently in the shape of the following motion, and, as would be expected, was defeated by a majority of 28 to 9. It was moved by J. K. McLennan, seconded by W. T. Gibbons:

"That, whereas, an impression obtains in certain quarters that an elevator monopoly and grain combine exist in Northwestern Canada to the prejudice of the best interests of the people at large, the same having recently been the subject of considerable newspaper controversy here and in Eastern Canada: we, the members of the Winnipeg Grain Exchange, having the well-being of our city and Province at heart, and feeling the importance of taking prompt action in connection with this vital question, in order to indicate to the farmers, upon whose efforts largely depends the general prosperity of our country, the fact that our organization as a body is opposed to monopoly and combines in every form; therefore, we hereby request as a simple and effective solution of the whole difficulty that the C. P. R. Company abrogate forthwith their present regulation which prohibits farmers and others from loading direct on cars at elevator points."

As has been previously stated in these columns, there exists a very general belief among farmers that a combine obtains between four large elevator companies, and to our minds there has been ample evidence adduced to prove the existence of a combine or pooling arrangement between these concerns. Referring to this matter previously, we gave our reasons for believing that if the C. P. R. abolished the so-called elevator monopoly clause in their regulations, that the keystone which permit pooling arrangements and the regulation of prices by the big wheat companies would be knocked out, and the chief cause of the very general complaints among the farmers would then be removed. Of course the C. P. R. argues that they could not possibly supply sufficient cars to handle the traffic if farmers were permitted to load off wagons. But there is no difficulty experienced in this regard on the Northern Pacific nor on the Manitoba Northwestern, where there is no obnoxious elevator clause prohibiting farmers from loading on cars direct from wagons. As a matter of fact, the freedom to ship without putting wheat through the elevators practically does away with the necessity for it.

Tuberculosis at Ottawa Experimental Farm.

For the second time the Central Experimental Farm, Ottawa, has had an unfortunate experience with tuberculosis among its cattle stock. The first case officially reported there was in July, 1891; others were discovered before the close of the year, and again in 1892, when in November the tuberculin test was first used. From then until February, 1894, when Bulletin Number 20th, giving a history of the trouble, was issued, fifty-four head were tested and twenty-six gave the reaction indicating disease. The other twenty-eight were regarded as sound and healthy. Besides the older animals slaughtered, twelve young calves were killed out of consideration. From the Central Farm breeding stock went to the four branch farms, where the disease also appeared. In the present instance twenty-six out of fifty-two animals are reported diseased. A full report is promised, which may indicate the relation, if any, of this to the former outbreak. A rigid investigation into all the circumstances is needed. Evidently there is much yet to learn regarding tuberculosis, the test, and the subject generally.

Another opportunity is thus afforded to demonstrate the efficiency of the methods of dealing with the ailment that have been recommended to others; and at the same time there is no occasion for a newspaper "scare" on the subject.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

PUBLISHED BY
THE WILLIAM WELD COMPANY (LIMITED),
LONDON, ONTARIO, AND WINNIPEG, MANITOBA.

JOHN WELD, MANAGER.

1. THE FARMER'S ADVOCATE is published on the first and fifteenth of each month.
- It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.
2. TERMS OF SUBSCRIPTION—\$1.00 per year in advance; \$1.25 if in arrears; sample copy free. European subscription, 6s., or \$1.50. New subscriptions can commence with any month.
3. ADVERTISING RATES—Single insertion, 30 cents per line. Contract rates furnished on application.
4. DISCONTINUANCES—Remember that the publisher must be notified by letter or post-card when a subscriber wishes his paper stopped. All arrearsages must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.
5. THE ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearsages must be made as required by law.
6. THE LAW is, that all subscribers to newspapers are held responsible until all arrearsages are paid and their paper ordered to be discontinued.
7. REMITTANCES should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.
8. ALWAYS GIVE THE NAME of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done.
9. THE DATE ON YOUR LABEL shows to what time your subscription is paid.
10. SUBSCRIBERS failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.
11. NO ANONYMOUS communications or enquiries will receive attention.
12. LETTERS intended for publication should be written on one side of the paper only.
13. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.
14. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.
15. REPLIES to circulars and letters of enquiry sent from this office will be paid for as provided above.

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

The Exhibition Circuit.

To the Editor FARMER'S ADVOCATE:

On behalf of the directors of the Central Canada Exhibition Association, I wish to express their appreciation of the able assistance rendered our exhibition from time to time through the columns of your valuable journal, and also for publishing in your last issue the names and addresses of all live stock winners at our recent exhibition.

Following up the suggestion made by Mr. Stevenson, Manager of the Montreal Exposition Company, with reference to forming a circuit for next season, permit me to say that this is a good suggestion and worthy of careful consideration. In this connection, how would it do for Montreal to go back to their former dates, viz., come in after Toronto, and Ottawa after Montreal as usual? An arrangement of this kind would be offering some inducement to western exhibitors, as they do not care to come so far east as either Ottawa or Montreal for one exhibition only, but they would for two. They can get half rates to Montreal and Ottawa, and return free from the latter exhibition.

Sherbrooke, Three Rivers, and Quebec no doubt will arrange their dates in September, and previous to Montreal should the latter adopt their former dates. Therefore the exhibitors at the latter three exhibitions would, in all probability, wind up the circuit by taking in Montreal and Ottawa, returning from the latter free, according to the various railway arrangements for exhibition freight.

E. MCMAHON,

Secretary Central Canada Exh'n Ass'n.
Ottawa, 22nd Oct., 1897.

Is it Profitable to Fatten Worn-out Dairy Cows?

At a Farmers' Institute meeting in a Wisconsin town a discussion arose as to what was the best means of disposing of old cows that don't pay for their feed and care? The question was finally answered, says *Hoard's Dairyman*, by a practical man as follows:

"Sell her now for a canner, or for whatever they want to do with her, for what you can get, if it is not more than \$10, and not waste any food on her trying to fatten her up. You may put a little meat on her, if you feed her long enough, but it will be cheap meat, and at the same time the dearest meat a man ever made. Every dollar you add to her selling price by feeding will cost you more than two dollars in feed. Don't worry about being obliged to sell her so cheap. You have milked her for six years, and made enough clean profit from her to buy two good cows, and more too. She has been a profitable cow for you anyway, no matter how little you get for her. But you don't want to fool away any of the money you have made in keeping her by trying to make beef of her, something it is not in her nature to do."

Good Agents.

We want a good agent in every township to secure new subscribers to the FARMER'S ADVOCATE. Send for sample copies.

Mr. Robert Robertson, Superintendent of the Maritime Provinces Experimental Farm.

We present to our readers herewith a portrait of Mr. Robt. Robertson, formerly of Howick, Que., latterly of Compton, Que., the recently-appointed successor to Geo. W. Forest as Superintendent of the Maritime Provinces Experimental Farm at Nappan, Nova Scotia. Until moving to Compton, in 1893, Mr. Robertson has since his childhood lived on the farm at Howick, Que. His education has been largely obtained from observation, experience, and home reading, as he left school quite young, so that truly it may be said he is a "self-made man." He showed an ambitious tendency, good judgment, and an inborn love for good stock when a boy, by preparing and showing horses, cattle, and sheep at exhibitions, and invariably getting to the top in the various classes competed in. The beautiful Ayrshire cow seems to have been one of the objects of Mr. Robertson's first love, as his was one of the first and continued to be one of the foremost herds of that breed for which the Province of Quebec has become so famous. In 1893 he was appointed by the World's Fair Commissioner to superintend the selection of Ayrshires for the "Columbian," which appointment was heartily endorsed by breeders, who have ever since appreciated the wisdom of the choice by reason of the unqualified success, now historic, of the Canadian exhibit.

As a farmer, Mr. Robertson demonstrated his practical ability by winning the first prize in county



MR. ROBERT ROBERTSON.

competition, and the silver medal—the highest possible award—on his farm in Provincial competition in 1891, beating the farm that in 1896 won the gold medal, after Mr. Robertson had left Howick for Compton. He also conducted the Provincial Model Farm very successfully for a number of years; indeed, as a practical farmer and stockman he has had marked success, due more to perseverance and persistence of purpose than to scholastic training. His well-known skill as a plowman bears out the general impression that a successful and painstaking farmer is often indicated by his ability to "put up a good land." At fifteen years old we learn he began plowing at matches, and when twenty-six he could very seldom get a match open to him. His winnings are as follows: Twenty-six firsts, five seconds, and one third prize; and on one occasion was ruled out on time limit. During the last ten years he has trained many young plowmen, who are now the best plowmen in the Province of Quebec.

We cannot but feel that a very wise choice has been made by the Hon. Minister of Agriculture (Mr. Fisher) in appointing so practical and successful a man in general agriculture and stock raising as Mr. Robertson to this position, to whom it must be a satisfaction to realize that in the various preferments that have fallen to his lot, irrespective of political proclivities, the position has invariably sought the man.

Putting Away the Binder.

Speaking about laying aside self-binders for the season, we would advise our friends who use them to take off all the canvas webs, and have them carefully cleaned, dried, and repaired, if necessary, before storing. All dirt and grease should also be wiped from about the bearings when soft. This is also a good time for those using binders the first year to see the troublesome places, as, owing to the broken weather when cutting, grass and straw find their way round the rollers and roller ends. This, if it has not already shown itself by preventing the canvas from moving at all, is now laid bare by the removal of the canvas. The only place where this troubles to any extent is the front roller on platform next the divider. Grass round the roller ends, especially those driven by the canvas, should be carefully watched and cleaned out, as it makes a binder more difficult to draw, and wears out the canvas much earlier.—S.

STOCK.

The Provincial Exhibition of British Columbia.

(EDITORIAL CORRESPONDENCE.)

The annual exhibition of the Royal Agricultural Society of British Columbia, held at New Westminster, Oct. 5th to 8th, was favored with queen's weather, and was the most successful meeting of the kind the Society has ever had. The exhibition grounds are large and beautifully situated, overlooking the noble Fraser river, and commanding a fine view of the mountains beyond. The main exhibition building is large and of handsome design, and the stock buildings, though not up to the standard of those of the leading Eastern fairs, are yet comfortable and well-arranged. The cattle, sheep and swine were judged by Mr. J. C. Snell, Snelgrove, Ontario, and the exhibitors were well satisfied with his rulings. The show of stock, while not equal in extent to what we are used to seeing at the principal exhibitions in the East, and not of as high an average of merit or brought out in as fine condition, was quite in excess of our anticipations of so young a Province, and included many high-class animals, fairly well prepared for exhibition. The classes of dairy breeds of cattle were particularly good, and comprised a large proportion of first-class animals. This is especially true of the Jerseys and Holsteins, which were largely and well represented, dairying being the leading industry in the portions of the Province more nearly tributary to the point at which the exhibition is held.

CATTLE.

The beef breeds were not well represented, there being but few Shorthorns shown, and the bulls in this class not up to a high standard of quality, though the class of cows was very creditable, Mr. W. H. Ladner, of Ladner, winning first prize with a lowset, blocky, thick-fleshed cow, and J. A. Evans, Chilliwack, second premium with a lengthy, level cow of good type. Mr. Ladner carried off the bulk of the prizes in this class, including the sweepstakes for best bull and the herd prize.

An excellent herd of *Herefords* was shown by Mr. Frank Kirkland, Ladner, for the Kirkland estate, including a bull from the herd of Senator Cochrane, which would have stood high in the competition at the best of the Eastern shows, having much of the quality and appearance of his paternal ancestor Cassio, the sweepstakes winner for years at the Provincial fairs. The cows bred from the herd of the late Mr. Stone, of Guelph, were also of first-class quality, while the heifers bred from these and the bull referred to showed much sweetness of quality and strong breed type.

A trio of *Polled Angus*, shown by Mr. Alex. Ewen, New Westminster, bred by Mr. McGregor, Brandon, were well up to the standard, and constitute an excellent foundation for a herd.

The three groups of *Jerseys* in competition for the herd prize would have compared very favorably with any three herds shown at the Toronto Exhibition. And we are not sure but that the first prize herd here, shown by A. J. Street, Chilliwack, would have stood second at Toronto, where the crack show herd of the United States was also in competition. Mr. Street's herd was headed by the 12 year-old bull, Belle's Rioter, bred by Mrs. E. M. Jones, Brockville, and sired by Rioter's Pride, son of imported Pride of Windsor and the Great Stoke Pogis 3rd. He is a grand old bull, with strong constitution and excellent dairy points, but has seen his best days, and but for this would probably have topped his class. The first prize in the class for bulls over 3 years went to Liverpool Boy, shown by T. Shannon & Sons, Cloverdale, a typical Jersey bull in dairy conformation, the second prize going to a very richly colored bull of fine quality, shown by A. C. Wells & Son, Chilliwack. The first prize 2 year-old bull, Ella's Dick St. Helier, owned by J. S. Smith, Chilliwack, was also awarded the sweepstakes prize as best bull in the class. He is very rich in his skin secretions, and is a fine representative of the combination of the blood of the two great families, Rioter and St. Helier. Mr. J. A. Evans had the first prize yearling bull, a deep-ribbed son of Belle's Rioter (bred by Mr. Street), with fine dairy points; and Mr. Street won second with Premier Laurier (another son of the same sire and of the first prize cow), a rich-skinned bull, with much quality. He has been sold to T. Shannon & Sons, Cloverdale, in whose hands we predict he will make his mark high in the future. The first prize cow, Essie Gay, shown by Mr. Street, is one of the good, big sort, showing indications of strong constitution, with great capacity for work, combined with good quality and fine dairy conformation. J. S. Smith, Chilliwack, showed a good herd, and won a number of prizes on his young stock, as well as the first and second premiums in the milking test, showing the largest percentage of butter-fat by the Babcock test. J. A. Evans, Chilliwack, and E. Goudy, Ladner, were also successful exhibitors in this class, and showed good stock.

Holsteins were well represented by selections from the herds of H. F. Page, Mission City; J. Resce, Chilliwack; Wm. Newlands, Eburne; R.

McLeod, Eburne; Jas. Wells, Eburne, among whom the prizes were pretty well distributed, Mr. Page winning first honors for bull over three years, and sweepstakes for best bull any age; also first for yearling heifer. Mr. Newlands won the herd prize, second prize for cow, first for bull calf, and first and second for 2-year-old heifers. Mr. McLeod scored first for cow with a high-class dairy cow of fine form and quality; also first for heifer calf.

Ayrshires were shown by A. C. Wells & Son, Chilliwack; Mackie Bros., Eburne, and M. A. Wolfenden, New Westminster. The first prize bull over three years old, also winner of sweepstakes, was Sir Laughlin (shown by Mackie Bros.), a well-known figure and a winner for several years at the Toronto Exhibition in the hands of his breeders, Jas. McCormack & Sons, who were also the breeders of the first and second prize cows, the former, Phyllis of Rocton 2nd, by Sir Laughlin, shown by M. A. Wolfenden, and the latter, Jessie of Rockton, by Mackie Bros; both were typical dairy cows and shown in fine condition. M. A. Wolfenden had also the first prize heifer calf and second prize yearling heifer, and the herd prize went to Mackie Bros., who also won first and second for 2-year-old heifers, the former being Winsome, by Jock Morton.

Guernseys were represented by a bull and two cows shown by F. A. Kipp, Chilliwack. The bull was one of the best we have ever handled, and, in our opinion, would have been a clear first at the leading shows in the East. He shows strong constitution, good dairy form, rich secretions, and has a skin that is soft as a glove and can be rolled over the hand, so loose and pliable is it. He was bred by Wm. Davies, Markham, Ont. The cows were good specimens of the breed, one showing fine dairy characteristics.

There was a fine show of graded dairy cows, the first prize going to a Holstein grade shown by Wm. Newlands, who also won the first prize for the cow giving the most milk in the test. She was a grand type of a dairy cow. The second prize cow, shown by Miss May McDougall, New Westminster, was a beautiful grade Jersey of excellent dairy form and quality.

SHEEP.

The competition was not large in any of the classes of sheep, but there were good representatives of all the breeds shown, and a number of extra good ones.

Southdowns made the strongest show, and the principal exhibitor was Mr. J. T. Wilkinson, of Chilliwack, who was very successful in winning prizes in a number of classes of horses and pigs as well, having won more money than any other exhibitor at the show, his prizes totalling nearly \$250, including the special prize of \$10 for the finest ram of any breed, and the special for best boar of any breed, which went to his Berkshire Pride. He also won the flock prize in Southdowns and the herd prize in Berkshires. Mr. W. B. Austin, Sapperton, won second prize for ram lamb and for two ewe lambs with a handsome trio, of good quality, bred by Telfer & Sons, Paris, Ont.

Shropshires were shown by John Richardson, Plumper's Pass, and E. A. Kipp, Chilliwack; the latter had a fine shearing ram, bred by John Campbell, Woodville, Ont., which won first prize, also a lot of useful ewes and lambs, winning most of the prizes in the class, Mr. Richardson winning second for shearing ram and for ram lamb.

Oxfords were shown by John Richardson, and T. Shannon & Sons, Cloverdale, who had forward a capital ram lamb, recently imported from the flock of Smith Evans, Gourcock, Ont., which won first prize. The same exhibitors had the first prize aged ewes, shearing ewes, ewe lambs, and the first prize flock. Mr. Richardson had a strong, useful lot, and won first for two-year-old ram, second for ewes, shearing ewes, and ewe lambs.

Cotswolds.—John Maynard, Chilliwack, showed a good string in this class, and won all the prizes he entered for, including the flock prize. His sheep are from the flocks of J. G. Snell, Snelgrove, and D. McCrae, Guelph, and are well up to the standard of the breed in size, quality, and covering.

Lincolns were represented by a select lot from the flock of A. C. Wells & Son, Chilliwack, who won all the prizes in the class. Their sheep are strong and vigorous and full of quality, having well-fleshed backs and heavy fleeces of long, lustrous wool, of strong staple and fine quality.

SWINE.

Berkshires were shown by J. T. Wilkinson, Chilliwack; T. Shannon & Son, Cloverdale; A. C. Wells & Son, and H. Kipp, all of whom had good things forward, the first named winning first for two-year-old boar, two-year-old sow, and best boar and two sows; Messrs. Shannon winning first for yearling sow, second for yearling boar and for boar under a year, and first for pigs under six months. Messrs. Wells had the first prize yearling boar, and first prize boar under a year.

Yorkshires were shown by J. T. Wilkinson, who won the herd prize and first for yearling sow and sow under a year, and for pigs under six months. Mr. Page scored second for yearling boar, for two-year-old sow, for sow under one year, and for pigs under six months. E. A. Kipp had the first prize two-year-old sow.

Chester Whites were represented by the herd of W. R. Austin, Sapperton, who showed a useful lot and won all the prizes.

Poland-Chinas.—Geo. Banford, Chilliwack, made the show in this class, and had forward some very

good individuals. He won all the prizes he entered for.

Duroc-Jerseys.—A very good selection was shown in this class by E. A. Kipp, Chilliwack, who secured all the prizes.

Suffolks.—A. M. Sturdy, of the Seaside Poultry Farm, won all the prizes in this class. A class was given for English dish-faced Berkshires, and the prizes were mostly won by T. Shannon & Sons, Cloverdale, H. Kipp winning two, and J. T. Wilkinson one.

HORSES.

The show in the horse classes was fairly good, the roadsters and other light classes predominating. There were a number of very useful mares and fillies in the heavy draft classes, shown by D. Woodward, Alex. Mitchell, H. F. Page, and J. M. Steves, Steveston. The last named exhibitor showed a very fine string of Suffolk Punches, including a capital imported stallion and mare. These were a very useful lot, and attracted much attention. Mr. Steves won the champion prize for the best exhibition of horses by one exhibitor. Percherons were shown by H. F. Page, Mission, and J. T. Wilkinson was a successful exhibitor of roadsters and Standard-bred trotters.

FRUIT.

The display of fruit at this show afforded indisputable evidence of the suitability of the climate and the capability of the soil to produce the finest varieties of apples, pears, plums, grapes, and peaches. It was quite equal in all but the last two to what we have seen at Toronto, while the apples struck us as being larger and finer than any we have seen in the East, and there was a large show of a great many varieties, not only by the Experimental Farm at Agassiz, but by many amateur fruit growers and farmers from many sections of the Province.

The samples of grain in competition were large, plump, and heavy, and comprised wheat, oats, barley, peas, rye, and buckwheat, all of which were first-class.

Watering the Cows in the Stable.

The question of a proper system for watering stock in the winter season is worthy of more consideration than most farmers are inclined to give it. Especially is this true with dairy cows, as so large a proportion of their milk is water. Where roots—mangels or sugar beets—are liberally fed, a drink once or twice daily of pure water will suffice; but when a less succulent ration is given, even though corn ensilage be liberally fed, the herd will undoubtedly return a greater profit for the same liberal food and care provided if the water supply is more abundant. If one would watch a herd of cows in a pasture of green grass he would see marked differences in the frequency and quantity of their drinking. At the last Ontario dairy convention, attended by John Gould, of Ohio, in referring to the watering of cows in the stable, he gave the results of his observation watching a herd of cows drink. The experiment was made with six cows, and it was found that the average quantity consumed daily varied with the individual cows from 70 to 140 pounds. The test was made in the stable during several days, and the water was weighed and supplied as they needed it in their respective basins. One cow drank 140 pounds daily right along, and some the smaller quantity, with an average of 90 pounds each. Another discovery made was that some of the cows would drink very often, while others drank at longer intervals. One cow would take most of her twenty-four hours' supply at once in the morning and only a little in the evening. These cows were getting fifty pounds of ensilage per day, which shows that even though a moderately succulent ration is given, the consumption of water is little reduced. It was found that the greatest desire to drink was about an hour after the morning meal. While some of the cows drank varying quantities from day to day, others were very steady in amount taken daily. The animals were continuously stabled during the test. It was evident that the cows that drank several times a day did the best. There is no doubt whatever but that an indoor watering system, where the cows can drink wholesome water at their pleasure, is by far the most profitable with dairy or even beef cattle. An important feature in stable watering is that the water is always at the same temperature, which must of necessity maintain the body at a normal temperature in a much greater degree than can possibly be the case where the cows are driven to a creek once a day and allowed to take into their systems 70 to 100 pounds of icy water.

As to the advantages of a good system of watering there can be no doubt, and in order to assist those who have not introduced the indoor mode, we will, with pleasure, publish letters from readers who are using satisfactory systems, explaining the plan and their impressions of its advantages over outdoor watering during the season that cattle are stabled; also from those who have a convenient plan of yard watering which they may prefer.

Hopes He will Always Have a Dollar for the Advocate.

Enclosed find one dollar, being my subscription for this year, which should have been paid on the first of March, but was neglected. I hope I am not too late yet, for I feel I would not like to do without your valuable paper. When but a lad I chanced to get one of your papers, in the year 1869. I liked it, and sent my dollar for it, and have sent one every year since then, and I hope as long as I live I shall always have a dollar to send for it. Peel Co., Ont. JOSEPH WIGGINS.

Care of Lambs.

In a late report of the Buffalo market a statement is made that too many poor lambs were forced upon the market during the dry period this season. This has at all times a tendency to reduce the price, and in a year of large supplies of food products it is difficult to ascertain the reason why any person should turn off their lambs in an unfinished condition. Though the markets are not at present calling for very heavy lambs, small, ill-fed stock are not desirable, and seldom realize satisfactory prices. On account of the abundance of grass the past summer there was very little complaint of lambs reducing in flesh after weaning, until the severe drouth during the month of September scorched the grass so badly as to render extra feeding a necessity if the lambs were to gain in flesh. Ewe and wether lambs that are to be held for late autumn or winter markets will require careful attention now as the colder weather approaches and the grass becomes less nutritious.

The best results are nearly always obtained by giving the lambs the run of a pasture field in daytime, unless the weather is wet. They never thrive in a close, warm pen at any time. All they require is shelter from wet and stormy weather. They may be fed grain in a trough in the pasture while the weather is mild and dry. Close attention should be given to the amount of grain fed. This part of their food costs most, gives quickest returns, and is the most likely to produce some disorder in the digestion of the lambs. For the first two weeks it is much better to give them only one-half what they need than to feed too much. This is especially necessary if many are being fed together, as the stronger lambs will sometimes crowd the others out of their place and gorge themselves to their own, their flockmates' and their owner's loss. There are some foods that are safer than others to feed at the beginning, and among these oats and bran have a general preference. The quantity may be gradually increased, as the capacity of the lambs to consume it becomes greater. It is a good plan, where it is possible to do so, to feed the grain in two or three feeds. By feeding only one-third of the full feed intended, it is easy to gauge the appetite of the lambs, which is a very important matter. The smallest degree of overfeeding is certain to react on the gain of the lambs, for in some instances it will probably cause scouring, in others constipation, and it may even result in the loss of some lambs.

If they should be kept until midwinter—though it may not be wise to keep ewe lambs so long when weight is not so much required; wethers, on the other hand, being likely to sell well any time—clover hay, corn ensilage or corn fodder will be relished, and may be fed to advantage in addition to the grain.

A Complete Change of Feeding After Shows.

The treatment of our show sheep after the return to the farm from the shows is very simple. We believe in a complete change of manner of feeding, as well as the food, and rapidly take them from food largely composed of grain to rape or clover for the lambs and poorer pasture for the older sheep, generally completing the change in about ten days. The only exception we make is with ram lambs, which we continue to feed liberally with grain while running on as good rape or clover pasture as we can provide. And then we find that our best shearlings, both rams and ewes, come not from the lambs fed for showing, but from those of the flock which have had only ordinary care through the summer. We seldom begin feeding grain to the ewe lambs we intend to fit for shearlings to show the following year until about Dec. 1st.

We believe very strongly in the good results of complete change of food for sheep at intervals, for any purpose, and with show sheep the change from full grain ration to the cooler green food, together with plenty of exercise, strengthens the sheep. They become more active and acquire a fresh relish for stronger foods when the time comes that it is necessary to push them. They seldom lose much in weight, because, though they may not be quite so fat at the end of a couple of months' run, they have grown a good deal, in the case of lambs or shearlings. A. W. SMITH.

Middlesex Co., Ont.

Liverpool's Cattle Trade.

Liverpool carries on the most extensive trade in cattle of any port in the world. Situation may account for this distinction, seeing that the supplies are chiefly drawn from the West, and the facilities for distribution are abundant. Irish dealers in stock consign to this port more than half the sheep they export, one-third of the swine, and about 40 per cent. of the cattle, and they are right in holding that this trade is well worth the benevolent consideration of the Dock Board. The actual round figures for last year are 290,000 cattle, 443,000 sheep, and 201,000 pigs. But to this enormous influx of beasts must be added the foreign importations, which concurrently numbered 254,000 cattle and 353,000 sheep. Swine do not appear to arrive from any greater distance than Ireland, which has consequently a monopoly of the market for those toothsome animals. In addition to the live stock, our steamers bring hither an enormous amount of dead meat in refrigerating chambers; and, on the whole, we may assume that a considerable area of the country is thus dependent upon Liverpool for an adequate supply of beef, mutton, and bacon.—*Liverpool E.*

Our Scottish Letter.

A GREAT WEEK OF SHORTHORN SALES.

The outstanding event in the agricultural world during the past few weeks has been the series of sales of Shorthorn cattle in Aberdeenshire. Five consecutive days were occupied in this way, and 335 head of Cruickshank cattle were disposed of. The sales were very largely attended, buyers being present from South America, Canada, Ireland, many parts of England, and all parts of Scotland. The auctioneers were Mr. J. M. Fraser, of Macdonald, Fraser & Co. (Limited), and one of his assistants, and the general result has been highly satisfactory to exposers.

The first sale took place at Auchingathle, in the Vale of Alford, when 35 head from the herd of Mr. W. A. Mitchell were disposed of. When we mention that the highest price was £42, and the average £23 15s. 6d., it will at once be recognized that a very steady selling trade was experienced all through. This is all the more clearly seen when it is further mentioned that ten of the thirty-five were calves.

The greatest sale of the series took place on the second day at the celebrated farm of Uppermill, Tarves, tenanted by Mr. W. S. Marr, when 27 bull calves from the herd of Mr. Wm. Duthie, Collynie, and 24 bull calves from Mr. Marr's own herd were disposed of. The attendance reached its highest on this day, and, in spite of very inclement weather, trade was brisk and prices splendid. Mr. Duthie's highest price was £210, and his average for 27 calves £60 4s., a drop of about £10 from the figure reached last year, but still high enough to please everybody. Mr. Marr's calves were younger, and hence made somewhat lower prices, but they sold with remarkable uniformity, the highest figure being £89 5s., at which two were sold, and the average £44 15s. 1d. The average price of the 51 bull calves sold on this one day was £52 18s. 7d. The sires which most distinguished themselves during this sale are worth noting. The place of honor, curiously enough, belongs to a young bull named Golden Count 68711, which Mr. Duthie used for but one season and sold for exportation to South America. Golden Count was bred by Mr. J. Deane Willis, Bapton Manor, Cadford, St. Mary, Wilts., and was got by the celebrated bull Count Lavender, out of Gwendoline. Four of his bull calves were sold last week, and made an average of £100 3d. apiece. There is a considerable gap between him and the next sire—Mr. Duthie's noted champion bull, Pride of Morning 64546. Three of his calves made £82 5s. apiece, and then came the bull Scottish Archer 59893, which more than once in the past has made the best record at these sales. This year four of his calves drew £80 17s. apiece. These three sires are in Mr. Duthie's herd. The next is Mr. Marr's stud bull, Spicy Robin 69639, like Golden Count, bred by Mr. Deane Willis and bought when a calf for 250 gs. In view of his own youth, and the youth of his calves, he made a notable record, namely, £62 14s. for seven calves. There is a considerable gap between this figure and the next—£49 7s., at which four calves by the Inverghomery sire, High Steward 67188, were sold. This bull is now in Mr. Philo L. Mills' herd, at Ruddington Hall, in Nottingham, and he gives excellent promise as a sire. One of the most numerous represented sires in the sale was a young bull named Prince Frolic 63126, bred at Uppermill, and used for one season at Collynie. He has a record of £47 13s. 4d. for six calves. Two Collynie-bred bulls—own brothers—the property of Mr. Marr, show excellent results. These are Golden Ray 67132 and Sittyton Pride 67939, the former having an average of £41 1s. 7d. for eight, and the latter an average of £30 15s. for seven bull calves. These figures show conclusively how completely the breeding of the best and most valuable class of modern Shorthorns is dominated by the blood of Sittyton, and with Bapton Manor sale holding the record for all breeds in 1897, and Bapton Manor bulls leading the averages in both Collynie and Uppermill, the wisdom of Mr. Deane Willis' purchase of the whole of Amos Cruickshank's yearling and two-year-old heifers is fully vindicated.

The third day's sale took place at the farm of Tillygreig, in Udry parish, not far from Uppermill. The weather was of the worst possible description, but yet Mr. Geo. Walker's 54 Shorthorns made an average of £26 11s., and Mr. Crombie's 44, removed from Woodend for convenience of sale, made £26 4s. This was a very hearty sale, and the younger stock were brought out in excellent bloom. The pedigrees were again dominated by the Cruickshank influence, and the prices were wonderfully uniform and steady. The nine heifer calves from both herds made exactly the same average—£21 16s. 4d., and the five bull calves from Tillygreig made £27 18s. 7d., and the eight, from Woodend, £26 5s. It may be worthy of remark that not only is Woodend dominated by Cruickshank blood, but lying contiguous to Sittyton, during the minority of the present occupant, Mr. Crombie, the herd was under the immediate control and management of Amos Cruickshank. The Sittyton traditions are being admirably sustained. The stock bull Granite City 70570, a typical red Cruickshank bull, was secured by Mr. W. Parkin-Moore, an eminent breeder in Cumberland, for £43 1s. This bull's calves were of great promise.

On the fourth day the company followed Mr. Fraser to Strathbogie, a little further north, and at Pirriessmill, the farm of Mr. John Wilson, factor for His Grace the Duke of Richmond and Gordon, K. G., in that locality, assisted at a joint sale of his stock and a draft from Mr. A. M. Gordon, of Newton, the convener of the county of Aberdeen. This was a draft sale from both herds. Mr. Wilson sold 58 head at an average of £23 9s. 5d., and Mr. Gordon sold 10 head at an average of £34 6s. 8d. The highest price of the day was £74 11s., at which figure Mr. Mills secured Star Princeus, a yearling heifer bred by Mr. Gordon. Another from the same herd, the bull Star of Magic 71685, a roan yearling, was secured by Lord Carlingford's representative at 56 gs., or £58 16s. It should be mentioned that the Newton stock bull is Star of Morning, a magnificent animal, and sire of Mr. Duthie's champion bull Pride of Morning. It would be hard to find a better bull for his years than Star of Morning.

The last sale of the series was held at Kinellar, when a herd well known in Canada was dispersed. The name of the late Mr. Sylvester Campbell was widely known in the Dominion, and his stock were possibly quite as much favored

as the Cruickshank stock. Mr. Campbell was an original thinker. While admiring the Sittyton tribe, he did not slavishly follow Cruickshank, but struck out on a line of his own. The herd was founded 50 years ago, and was based on merit with blood. Scottish bulls were first used, and then, for a time, came a series of Booth bulls; latterly the Scottish type of blood was alone followed, and the results were apparent to all at the sale. The cattle have never been highly fed and have always proved good "doers" for their purchasers. The sale went well, the averages, in spite of an incessant downpour, coming out to the satisfaction of all parties. Nineteen cows made £33 18s. 7d. each; 10 two-year-old heifers drew £41 7s. 5d.; 11 yearling heifers made £24 18s. 3d.; 7 heifer calves, £24 6s.; 3 bulls, £26 19s., and 12 bull calves, £18 7s. 6d. At the same time Mr. Watson, Auchronie, sold 17 head from his herd, the average price of which was £23 14s. 10d.

Altogether the Aberdeen Shorthorn week of 1897 has been an inspiring experience, and fully sustained the prices reached during the preceding twelve months. Possibly the trade in bull calves was rather overdone last year and there is a lull in the demand from South America. Exporters seem to find it impossible to make a market there for all they have purchased, and hence the absence of any great demand for bulls for that quarter during the past week. Canadian buyers insist on the tuberculin test, and as Scottish breeders do not help them much in this they have to purchase cautiously, leaving a margin for possible loss. We are now in the middle of the great dairy show week, about which we will have something more general to say in our next.

"SCOTLAND YET."

FARM.

Ontario Farmers' Institute Meetings.

From the Superintendent of Farmers' Institutes for the Province of Ontario, Mr. F. W. Hodson, Parliament Buildings, Toronto, we have received the programme of meetings for the season of 1897-8, beginning on November 30th and continuing till March 8th. In all there are some 206 regular and 306 supplementary meetings, or a grand total of 512, requiring the services of about 50 regular speakers or delegates, besides which there is a reserve list of about a dozen. The majority we recognize as having been engaged in the work before, so that they have the benefit of experience, and many of them are regular or occasional contributors on practical subjects to the FARMER'S ADVOCATE. The regular list is as follows: Duncan C. Anderson, Rugby; Dr. Wm. Brodie, Toronto; G. A. Brodie, B. S. A., Bethesda; Alf. Brown, Picton; Martin Burrell, St. Catharines; Prof. G. E. Day, B. S. A., Guelph; Prof. H. H. Dean, B. S. A., Guelph; T. A. Duff, Toronto; Andrew Elliot, Galt; J. B. Ewing, Dartford; J. J. Ferguson, B. S. A., Smith's Falls; W. S. Fraser, Bradford; D. Z. Gibson, B. S. A., Willow Grove; H. Glendinning, Manilla; Joseph E. Gould, Uxbridge; A. C. Hallman, New Dundee; D. G. Hamner, Burford; W. W. Hilborn, Leamington; R. F. Holtermann, Brantford; R. Honey, Brickley; Prof. H. L. Hutt, B. S. A., Guelph; Arthur Johnston, Greenwood; A. P. Ketchen, Brucefield; Wm. Linton, Aurora; Nelson Monteith, B. S. A.; Lieut.-Col. McCrae, Guelph; Jas. McEwing, Drayton; Alex. McLean, Carleton Place; Thos. McMillan, Seaford; John McMillan, M. P., Seaford; A. McNeil, Walkerville; J. E. Orr, Fruitland; W. J. Palmer, B. S. A., Toronto; L. Patton, Oxford Mills; A. W. Peart, B. A., Burlington; T. G. Raynor, B. S. A., Rosehall; J. H. Reed, V. S., Guelph; Simpson Rennie, Milliken; Wm. Rennie, Farm Superintendent, Guelph; John Robertson, Ingersoll; Miss Laura Rose, Assistant Instructor Dairy Department, O. A. C., Guelph; W. C. Shearer, Bright; Major James Sheppard, Queenston; D. G. Smith, Hamilton; Wm. Smith, ex-M. P., Columbus; R. S. Stevenson, Ancaster; R. Thompson, St. Catharines; Jas. Tolton, Walkerton; T. C. Wheatley, Blackwell; C. A. Zavitz, B. S. A., Guelph. Reserve list—G. C. Caston, V. Ficht, Prof. F. C. Harrison, B. S. A.; Elmer Lick, Miss Bessie Livingston, J. E. Meyer, A. J. Reynolds, Mrs. M. J. Rogers, Mrs. J. L. Smith, Joseph Yuill, and M. McNabb. Mr. Harrison was removed from the regular list so that he might deliver special lectures on tuberculosis or test herds that cannot be attended to by Lieut.-Col. McCrae. Where special addresses on the use of cement concrete are desired, the services of Messrs. Isaac Usher or Hudson Usher may be obtained.

The list of subjects covers practically everything in the whole range of Canadian farming.

Where to Place the Tank.

To the Editor FARMER'S ADVOCATE:

SIR,—In answer to "Subscriber's" query in your October 1st issue on the above subject, I will give my experience of one winter. The tank is placed in the corner of the mow next to the threshing floor, to give sufficient fall for all purposes, and about eighteen inches from either side, and filled with chaff. The space it occupies is my only objection. The pipe leading to tank enters from the basement (which freezes in severe weather), and is protected by a wooden box lined with cloth. I was not troubled with frost at all last winter. In my case an advantage in having tank in the mow is to put in another pipe to convey water to threshing engine, thus avoiding the inconvenience of pumping and hauling for that purpose. WM. FERGUSON, York Co., Ont.

Notes from the Wabigoon Pioneer Farm.

To the Editor FARMER'S ADVOCATE:

The estimate of the yield of grain on the Pioneer Farm given in your issue of August 2nd will probably be correct; but owing to the fact that we have not threshed as yet, the yield cannot be verified. The potatoes yielded at the rate of 400 bushels per acre; specimens weighed two pounds seven ounces each. The turnip crop was not large, owing chiefly to the extreme dry weather during the growing season—September and the first two weeks in October. This season we have sown two varieties of fall wheat. The Genesee Giant on new land summer-fallow is looking well; the same can be said of the Dawson Velvet Chaff, sown on grass land plowed down, on which the sheep pastured during the early part of the season; but the wheat on the land in which a crop of clover was plowed under has not made satisfactory growth.

On the Pioneer Farm is now cleared about 135 acres. Every stump and snag is taken out while clearing, and the first crop on any of the fields can be cut with a binder. On the farming land there are no rolling stones to hinder working. A large number of the settlers who purchased land in 1896 moved in last spring, and have cleared some land for next year's crop. Some have as much as forty to fifty acres cleared in one season. The markets for the farmers' produce have been good throughout the season. The lowest point reached for butter was 20 cents; eggs, 18 cents; potatoes, 75 cents; etc. The farmers have been able to sell all their produce in Dryden this year, and have not had to ship anything to Rat Portage, the largest town of the district, ninety miles west.

The progress of this section has been extraordinary. Eighteen months ago there was nothing here but the Pioneer House and barn; now the place has the appearance of a thriving settlement; houses are springing up all over the country, some of them being as far away as thirteen miles from the town, which, by the way, contains about 400 people, having six stores, besides flour and feed and lumber merchants. The prices of goods are low, being much the same as in eastern towns. A first-class school, containing the latest improved automatic seats, has been built. The school is also used to hold Presbyterian, Methodist, and English Church services in at present. There are no taxes except a small tax to support the school, levied by the trustees.

To the industrious man having a small capital there are opportunities to be found here to make a home for himself that would be difficult to find elsewhere, with our cheap, easily-cleared land, on the main line of the C. P. R. We have good home market for meats, butter, eggs, etc. During the two years I have been on the Pioneer Farm nothing has been hurt by frosts in summer. The man who is not prepared to work and stand the hardships incident to pioneer life I would advise to stay where he is. A. E. ANNIS.

Wabigoon District, Oct. 19th.

A Doctor Taking His Own Treatment.

In July 15th, 1896, issue of the FARMER'S ADVOCATE, Mr. Thos. Conant makes a strong plea for tree planting, referring to his own work in that direction. Since that time Mr. Conant has made a tour around the world, which has more than ever convinced him of the value, especially of black walnut. The following is from the Oshawa Vindicator, published at Mr. Conant's door:

"In the spring of 1895, Thos. Conant set out on his lands about Oshawa some 10,000 black walnut trees. The intervening summer of 1895 was the driest ever experienced, and yet, owing to the fact that the walnut trees were planted very deep, not more than five per cent. were lost. This fall Mr. Conant is planting 25,000 black walnut nuts and 25,000 shell-bark hickory nuts. The object is to get them in the ground before it is frozen solid in order to let the frost crack open the nuts that they may grow vigorously in the spring, as they do in this manner in a natural state. As to the far-seeing judgment leading to this extensive tree planting there can be no two opinions. It simply means wealth for his family from this source alone, and a benefit to the general public as well. Both of these woods are now extremely valuable, and no one in Canada has yet approached Mr. Conant in tree planting. The walnut nuts were obtained in Western Ontario, and the shell-bark hickory nuts in Michigan. The extensive travelling in all lands has given Mr. Conant valuable ideas, and he is not slow in profiting by them for his own benefit as well as his neighbors."

Whitewash for the Poultry House.

An exchange gives an excellent recipe for whitewash that will not rub off or blister:

"Slake half a bushel of quicklime with boiling water, keeping it covered during the process. Strain it, and add a peck of salt, dissolved in warm water; three pounds of ground rice, put into boiling water and boiled to a thin paste; half a pound of powdered Spanish whiting and a pound of clean glue, dissolved in warm water; mix these well together, and let the mixture stand for several days. Keep the wash thus prepared in a kettle or portable furnace, and put it on as hot as possible. For poultry houses a little carbolic may be added to advantage."

Lambton's Indian Agricultural Exhibition.

(CONTRIBUTED.)
It may be explained that there are four Indian Reservations in the County of Lambton, Ont. Two of these are in the Township of Bosanquet, on the southern shore of Lake Huron. A third is on Walpole Island, on the River St. Clair; and the fourth, in some respects the most important, lies along the River St. Clair just below Sarnia, the county town of Lambton. This Reservation originally extended to 10,000 acres, but has been curtailed by sales made during the past years. Prior to 1827 the Indians, in what is now the County of Lambton, roamed over the forest without any settled abode: the Indian in his feathers and buckskin, when in full dress, and the squaw in her everyday blanket and moccasins. In the above year, however, they were settled on the above four Reserves, and although there is room for improvement in the various lines of agriculture, the progress made during the past twenty years is very creditable, and shows that the red man is capable of coping with sterner realities than fishing and hunting. A three days' exhibition was held on the 3rd, 4th and 5th of the month of Oct., on the Sarnia Reserve, and was attended by Indians from the other Lambton Reserves and also Muncney. A pleasant drive of about three miles down the River Road brings you to the Indian show grounds; and as you enter the gate you pass the Indian Council Chamber, a brick building on a substantial stone foundation. This building is also used for concerts and any indoor gathering the tribe may require, while a roomy dining hall occupies the basement. At the distance of a stone's throw stands the agricultural hall, a lofty two-storied frame building. On entering I noticed a good bit of bench space unoccupied, but no more in proportion than I have seen this fall at more pretentious shows. In potatoes the display of the different varieties was really excellent, while in pumpkins, squashes, beets, and other products belonging to the truck class the exhibits were very creditable. There was a great display of beans—white, black, brown, and speckled; but the show of fall wheat was far beyond the highest expectation, and all of a superior quality. One pretty fair sample of spring wheat showed that this generally discarded cereal is not wholly banished from our locality. Samples of oats and barley of a fair quality were also shown. The ladies' work (up-stairs) was much admired. Specimens of bread baking, pies, tarts, and whatever would tempt the appetite, showed that the Indian matron can be either inventive or can closely imitate. A large exhibit of fruit preserves was pronounced by the lady judges (whites) as being superior to what is usually seen even at shows. In ladies' fancy work—in embroidery, Berlin wool, needlework, crochet lace, counterpanes, etc.—the designs and execution were really good.

The cattle were not numerous. There were a few good-looking milk cows, two or three promising heifers, and one very fair Shorthorn bull. Horses were away behind. The Indian idea of a well-matched team is very crude. Several good specimens of penmanship, drawing and composition showed the education of the young is not neglected.

As this is only the third agricultural exhibition held by the Lambton Indians, we anticipate a future for them in agriculture, and would like to see them encouraged in their efforts by a good attendance of their pale-faced brothers and sisters.

JOS. OSBORNE.

GARDEN AND ORCHARD.

Protecting Trees from Rabbits.

BY ELLIS F. AUGUSTINE, LAMBTON CO., ONT.

Every season there are many valuable young trees lost through being girdled by rabbits and mice. These pests are most destructive when there is a covering of snow upon the ground, although several instances came under my observation where young trees have been girdled by rabbits during summer months.

Where mice alone need to be guarded against, a safe protection is to remove all grass and rubbish near the base of the tree, and then form an earth mound about the trunk not less than eight inches in height.

Last winter a neighbor had a number of valuable apple trees nearly a foot in diameter completely girdled by mice. The orchard had been under clover and a heavy second growth remained upon the ground during winter. Had this been removed from around the base of the trees no damage would have been done. Rabbits are much more difficult to guard against than mice, for when there is a crust upon the snow they will reach up and girdle the trees at a considerable distance above the ground. Smearing the trees with blood or grease of any kind serves as a preventive, but as this will wash off through time, we prefer something more durable.

Old newspapers wrapped about the trunks and fastened with binder twine serve as a protection. Tar paper is much preferable, as it is more lasting, and its strong odor is very disagreeable to both rabbits and mice. Bark from bedding after it has become warped partly round by the sun is quite serviceable, as also are cornstalks, but for a large orchard it requires too much time to properly adjust the last named material. We have some 250 trees protected by means of pieces of sheet-iron rolled into the form of a tube four inches in diameter and twelve inches long. These afford

excellent protection, but are somewhat objectionable on account of excluding the sunlight, thereby causing the bark to become rather tender. The most satisfactory material of any is wire netting having a very fine mesh. This can be rolled tightly around the tree when young, allowing it to wrap twice around the trunk. As the tree expands the netting will unroll so that no injury to the bark will be sustained. If the meshes are very fine this will also serve as a protection against the destructive wood-borer. As this protection freely admits sunlight, it is preferable to the sheet-iron tubes we have in use. They should be not less than eighteen inches high, as rabbits will sometimes reach to that height when there is considerable snow upon the ground.

Whatever material is used the work of protecting the trees should not be delayed, as both rabbits and mice will often destroy a whole row of valuable trees before their owner is aware of any damage being done. If the orchards that have been destroyed through being girdled by rabbits and mice which have come under the writer's personal observation are any criterion of the damage done throughout the whole country, the loss from this source is a very heavy one; but as such ready means of prevention are within the reach of all, it is a loss for which the farmer has only himself to blame.

When trees have been girdled close to the ground they may be frequently saved by banking the earth in a heavy mound considerably above the wound.

If the part girdled is too far above the ground to admit of this, they may sometimes be saved by taking scions long enough to reach well across the girdled part and carefully grafting one end into the bark above and the other end into the bark below the wound. It should then be smeared completely over with grafting wax and securely wound with a cloth. But as such treatment is never entirely satisfactory, and prevention is the best remedy, the wise farmer will take precautions to carefully protect his trees before damage has been sustained.

Lessons on the Season's Work at the Ontario Fruit Experiment Stations.

TENDER FRUITS IN THE NIAGARA DISTRICT.

I suppose if one asked a dozen representative fruit growers what the financial results of the past season were, the answers would be pretty much alike. If, however, the additional question were put: "How do you account for the unsatisfactory returns?" there would probably be a dozen different replies. A would curse the rascally commission men; B would blame the transportation companies; C might growl at the "bugs," "blights," mildew and bad weather; D vow that there was a sight too many men in this fruit business; and so on. If a thirteenth man, say a consumer, had a chance to answer, he would probably declare that the whole trouble lay in the fact that there was too much poor fruit on the market and not enough good. Truth is many-sided. Doubtless every man's solution is partially true, but the real answer would be compounded of them all. It will be impossible to discuss now the real evils that exist in connection with the transporting and selling of our fruits. Nor need we rail at that ancient institution—the weather. As for the complaint that fruit growing is being overdone, we may make up our minds that there will be gradual extension of the industry for many years to come. There will, however, be always some room "at the top." But apart from all these things, each successive season brings home the lesson that much money is lost to the horticultural community from the neglecting of vigorous warfare against fungi and injurious insects, and by the cultivation of unprofitable varieties. Unhappily, it takes a good many years to find out what varieties are unprofitable. It is pretty safe, however, to say that it is unwise to plant extensively of any quite new variety, and equally unwise, now that the fruit area is so wide, to plant heavily of mid-season varieties. Growers whose stock of peach trees consisted chiefly of Early Crawford had an object lesson this season in this respect. There are always congested markets during the season of the Early Crawford, and the Lombard plum, and most of us would have been better off if we had not had a tree of those varieties. It is wisdom every time to cover the whole season by a number of good varieties, but taking care to plant few of any kind that comes in during this period of "glut." Of course if everybody followed this practice the glutted periods would shift. But not one man in a hundred will follow it.

If I were to suggest a list of peach trees for intending planters, I do not think I should be far wrong in naming Hynes' Surprise, Yellow St. John, Jacques' Rareripec, Elberta, Late Crawford, Smock, and Stevens' Rareripec as profitable varieties. The last one is white fleshed, but a good peach and prolific. These varieties ripen in the order named, and the Crawford season would be missed, just coming in between Yellow St. John and Jacques' Rareripec.

Cherries were amongst the few paying crops this year, but how many thousands of dollars' worth were lost by "rot" and from the "cherry aphid." In carrying out some spraying experiments for rot on a row of May Duke cherries this year, conclusive proof was had of the value of the work. The spraying was done systematically and up to as late a date as possible, "check trees" being left. Everyone who carries on work of this

kind should satisfy himself of the use or uselessness of the work by leaving test trees unsprayed, and carefully note down all resultant details at the time of fruiting. With regard to the cherry aphid, and all plant lice, it should be emphatically pointed out that aggressive methods must be adopted in time. The ordinary kerosene emulsion—one part to twelve of water for the green species, and one part to six of water for the black aphids—will always be effectual, but if the early colonies are allowed to breed the increase is so rapid that your name will undoubtedly be "mud." Mildew, blights, insects, all these "trials and tribulations" must be fought early and vigorously. No chances must be taken if the grower wants to come out on the top of the heap.

M. BURRELL,
Experimenter Niagara Station.

Lincoln Co., Ont.

THE PEACH.

As this fruit is a native of a southern clime, and therefore somewhat tender, we must give it all the advantage we can in the way of location and culture if we wish to succeed with it in this country. An elevation near a large body of water is preferable, with a light sandy loam, and natural drainage to the depth of ten or fifteen feet. When these conditions cannot be secured we cannot look for any great measure of success.

By planting a tree or two on the north side of a building we can often grow a crop of this fruit in sections where they would fail without the protection thus afforded. Hardy varieties should always be selected when planting outside the "peach belt." Early Barnard, Tyhurst, Longhurst, Golden Drop, Hill's Chili, and Lemon Free are among the hardiest sorts thus far tested, and all of them good kinds. In peach sections the following is a good list, named in their order of ripening: Early St. John, Early Crawford, Fitzgerald, Yellow Rareripec, New Prolific, Tyhurst, Elberta, Golden Drop, Longhurst, Hill's Chili, Late Crawford, Jacques' Rareripec, Lemon Free, and Smock.

Cultivation should begin in early spring, and discontinued the first of August. This method of culture will induce early growth of wood, also early ripening of the same, which is very essential to success. At the latter date crimson clover should be sown among young trees to give a covering for the soil through the cold weather, which protects the roots of the trees. Plow under in early spring and cultivate again as directed above.

The black aphid is the worst insect enemy we had to contend with thus far. They do most injury to young trees newly planted. Perhaps the best remedy we have is to treat the young trees before planting by soaking a few minutes in strong tobacco water. We take any refuse tobacco, leaf or stems, for this purpose. When this is done and good culture given there is little trouble after from this cause.

W. W. HILBORN,
Experimenter at South-western Station.
Essex Co., Ont.

COMMERCIAL APPLES AND PEARS.

In giving an outline of fruit growing there are several things to consider. Amongst others, the first and most important is the soil; next, the location; third, the person who takes charge of the work; and fourth, the varieties. In this paper I shall confine my remarks solely to apples and pears, the two most important for commercial purposes. The soil should not be wet, spongy, or have a cold, hard bottom, but all land for orchards should be well drained. Poor soil and wet, cold land has ruined hundreds of acres of orchards, giving poor crops of inferior fruit. A sharp clay loam is generally the best for an apple orchard if well kept up with manures, although clay land will produce fine orchards if well drained and the ground worked annually. The best orchards I have observed are on land sloping to the west or south-west.

The person who starts fruit growing as a business should be patient, thoughtful and observant, and make pets of his trees as he would his horses or sheep. He should be keen to notice when anything is wrong, or have sense enough to effect a cure promptly. A safe rule to guide planters is to select those varieties that succeed best in the vicinity where the orchard is to be located, as we have such a variety of climatic influences in Canada, and even in this Province, that varieties that succeed well in one location are not a success in another. But we are glad to know that there are varieties that succeed in almost all sections of Ontario. I have at present about forty varieties in full bearing, some of which are not profitable, partly because they are early fruit or partly shy bearers. It is a great mistake, as many people have found out, to have too many varieties in an orchard—four varieties in a hundred trees is quite enough, and if I were planting a thousand I would not increase the varieties to any extent. We have found the following to give us good results: R. I. Greening, Canada Red, Minkler, and Baldwin, but I believe the Ontario will be equal, if not superior, to those named, when we are better acquainted with it.

In pears the same attention should be given as to apples. The pear, however, delights in heavy clay land, well drained, and I do not recommend manuring as heavily as for apples, but keep the soil well pulverized and good results will follow. I prune always in the spring, as I consider fall or winter pruning injurious, but any time while the tree is in growing state will answer. Apples should be pruned by sections, and a large branch should never be cut out, if possible to avoid it. Pears require very little pruning after they get to full

bearing, but it is wise to shorten back the growths on rampant growers. We have found the Bartlett, Louie Bon, and Jersey Kuffers Hybrid most profitable so far, but as we have about a hundred other varieties under test we may have some that will excel those noted varieties.

The codling moth, pear slug, bark louse, and several other insect plagues have annoyed us, but we find by the diligent use of Bordeaux mixture and Paris green we can raise clean, smooth fruit and reasonably free from worms. For bark-lice I have always found strong soap-suds or lye from wood ashes, an effectual remedy. I have applied both in spring and summer with satisfactory results.

Hoping I have not trespassed too much on the space in your valuable paper, which should be in every farmer's home in the Province, I remain,

R. L. HUGGARD.

Ontario Co., Ont. East Central Fruit Station.

Fall Preparation of the Soil.

To the Editor FARMER'S ADVOCATE:

SIR,—Land that has been well gang-plowed, then harrowed and plowed again should, this dry fall, be in good condition for the frosts of winter to pulverize. But the gang-plow, especially where the "small boy" uses it, very often runs over a good deal of the ground, doing little good. Plowing to a medium depth with single plow, followed by a good spring-tooth with "thistle points," or a first-class disk, several times in dry weather would be better than the former method. A sod field that has been lightly plowed, say three inches deep, thoroughly rotted, worked, and single plowed again, will be in the very best condition for oats, or, if rich soil, be fit for barley.

For corn next year we would always try and spread our fall and winter manure on clover sod; always have a plant to assist in taking up the liquid manure.

Turnip land for next year, if out of sod, should be prepared as for oats or barley, with the addition of manure in fall and winter.

A word in regard to this suggestion in the article by Mr. Thos. McMillan, of Huron, in your October 15th issue: If turnip land is thoroughly clean it does not matter so much about plowing it in the fall; but the average cornfield this year should surely be plowed to put thistles and other weeds out of sight, and where manure has been plowed under last spring it will be just brought to the top again by a medium depth of plowing, where you can see it lying in layers, a splendid mulch for next spring seeding down, not to mention how much better the frost will do its work.

J. D. T.

Middlesex Co., Ont.

DAIRY.

Developing the Canadian Butter Trade.

To the Editor FARMER'S ADVOCATE:

SIR,—Messrs. W. Weddel & Co. in their "Australasian Dairy Review, season '96 and '97," give a number of interesting facts which are well worthy of study by Canadian farmers and others interested in the dairy produce trade. A few of these facts and a table or two are here given from their excellent review, which, although written for the benefit and guidance of the Australian Colonies, might well be taken to heart by ourselves. There are certainly some causes of self-gratification in it, as instanced in the increase of our export of butter to England, as the following table shows:

IMPORTS OF BUTTER INTO THE UNITED KINGDOM FOR THE LAST TWO SEASONS.

Country.	Season		1896-97 compared with 1895-96	
	1895-96.	1896-97.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
Denmark.....	40,896	39,761	1,135	.....
France.....	14,344	15,138	.....	794
Australasia.....	11,872	10,142	1,730	.....
Sweden.....	10,456	11,026	.....	570
Holland.....	7,608	5,709	1,899	.....
United States.....	5,914	3,894	2,020	.....
Russia.....	4,680	3,917	763	.....
Canada.....	3,466	1,577	1,889	.....
Germany.....	2,663	4,666	.....	2,003
Belgium.....	1,274	1,514	.....	240
Norway.....	889	486	403	.....
Argentina.....	579	580	.....	1
Other countries	683	87	596	.....

From the data given above, it is easy to see that Canada has more than doubled her export, and that the United States also seems to be aware of the importance of the English market, as its export has increased over two thousand tons. Careful study of the "increase column" will show who the principal competitors are likely to be in the future, and a perusal of the column indicating the amounts of butter exported by the different countries during the season 1896-97 will show that we are yet far down on the list; being, in fact, in the eighth place, and only exporting one-eighth of Denmark's output—a country of about the same population as Ontario, but one-fifteenth the size!—(Denmark, 14,789; Canada, 22,000 square miles). Messrs. Weddel & Co. are very emphatic in bringing to notice four points, which are as important to Canadians as to Australians. Briefly, they are as follows:

Regular supplies.—To secure the success of Canadian butter in the English markets, regularity of supply is an important factor. This supply should arrive at least every seven days, and the quantity

arriving should gradually increase as the season advances, and decrease as the season declines. The advent of the new steamship line to England, with cold storage facilities and the erection of properly constructed depots at the principal shipping ports, together with rigid and painstaking inspection of all export butter, should greatly help Canadians to obtain a good hold on the British market.

Condition.—The officers of the vessels bringing Australian butter to England are authorized to reject all butter if it exceed 45° Fahr. This is a very necessary regulation in Australia, as there is great danger of the butter heating on its way from the cold stores to the ship, a proceeding that would of course destroy the condition of the butter. On account of the greater use of refrigerator cars this danger might not be met with here, but it is well to be warned of all these points.

Preservatives other than salt.—The use of a patent preservative called "Preservitas" has been adjudged by the English courts as harmless, and the Australians use a great deal of it in their export butter. Whilst not defending the putting in of any preservative in butter, it might be well to look into the question, if it would assist in the placing of our butter on the market in a better condition, and, of course, taking it for granted that our customers had no objections to offer to its use.

Pasteurization.—Denmark and Sweden pasteurize over 90 per cent. of the cream of their export butter; the Australian colonies are adopting its many advantages (uniformity, better flavor, and better keeping qualities); whilst we, in Ontario, have as yet done nothing in this important line, and it is time that the merits of the system should be exhaustively tried.

Butter vs. Cheese.—The statistics of the last few years conclusively prove that the cheese market is somewhat on the decrease, the consumption per head of population in the United Kingdom being:

15.29 lbs. in 1894
13.33 lbs. in 1895
13.71 lbs. in 1896

The butter market, on the other hand, is on the increase, as the following figures prove. Consumption per head of population in the United Kingdom:

12.49 lbs. in 1894
12.62 lbs. in 1895
13.12 lbs. in 1896

This proof of the coming change should be carefully considered by our dairymen, and they should as far as possible move with or be ahead of the times. It is true that during the present season the prices of Canadian Cheddar cheese averaged nine shillings per cwt. more than they did in the preceding season; but it is to be remembered that this was entirely owing to the short make of European and English cheese in the summer of 1896. The growth of the Colonial cheese trade was made by displacing the competition of the United States, who lost the British market by removing the cream and substituting other fats in the manufacture of cheese—the so-called "filled" cheese. By stringent laws, which prohibit the export of "filled" cheese, unless branded "filled," the United States is endeavoring to recover its position in the British market, and it therefore behooves us to closely watch our southern neighbors.

F. C. HARRISON.

Ontario Agricultural College.

Developing Dairy Heifers in the West.

To the Editor FARMER'S ADVOCATE:

1. I do not want my heifers to calve much, if any, before three years old. Whatever heifers may do calving at two years old under more artificial conditions, in this western country I find they make better, stronger cows, and I consider give as much milk with their first two calves, when they calve at three years old, as they will with their first three when they calve at two years. This has been my experience, and I now never let my heifers come in before three years of age if I can help it.

2. I prefer to have my cows calve from November to March.

3. I feed whole milk from one to two weeks, then change gradually to skim. I am guided by the strength and condition of calf as to how long I feed whole milk, but if the calf is all right I generally get it on skim by the time it is two weeks old. Feed oat chop as soon as it will take it, as much as it will eat until it takes one and a half pounds per day. As there is abundance of natural shelter (timber) here, I let my calves run at will as soon as grass is good. Calves dropped after June I usually keep in stable till following spring.

4. One of my best cows calved December 3rd last (1896), and is now giving one pound per day. She started at one and a half, and was giving one and a quarter a month ago, so it is safe to put her yield for ten months at 350 pounds of butter. I use the weigh-scales, but not the Babcock tester.

5. Our method of making and marketing the butter is so exactly similar to that described by Messrs. Munroe & Champion in the ADVOCATE some time ago that it would be a waste of space to repeat it. The only difference is that we supply cream to the creamery all summer, and make a specialty of winter dairying. We use a separator.

ALFRED HUTCHINSON.

Yorkton District, Assa.

Each Copy Better than the Last.

JAS. GARTLEY, Wentworth Co., Ont.:—"I do not wish to lose any copies of the FARMER'S ADVOCATE. We like the paper very much and think each copy better than the last."

How Prize-winning Butter of the Toronto Industrial was Made.

To the Editor FARMER'S ADVOCATE:

SIR,—I will endeavor to tell you how my prize-winning butter was made. I may say that I did not take any more pains in the making of my exhibition butter than I do in my ordinary practice. There are three points that are essential in good buttermaking: cleanliness, ventilation, and careful attention. I strain the milk, as soon after milking as the froth settles, into earthen crocks that hold about a gallon each. My milk room in the cellar under the house is well ventilated by a window at the north and one at the east side. When the cream is all risen I skim it into an earthen crock. I churn twice a week, and in cold weather the cream crock is allowed to stand by the stove over night, which ripens it nicely. I use a "rocker" churn, which is washed before using in hot weather with cold water and in cold weather with hot water, modified as judgment directs. The butter usually comes in about thirty minutes. When the butter begins to come, the formed granules and cream are washed down with a quart of water; the churning is then proceeded with until it gathers. The buttermilk is then allowed to drain off, and the butter is washed by adding a quantity of cold water, and the churn is given a few rocks. The butter is then lifted into a wooden bowl with a ladle, and after a small quantity of water is added it is stirred and gently worked, being careful not to break the grain. It is then salted, one ounce to the pound, with fine dairy salt and allowed to stand from morning until the afternoon, when it is again washed and worked a little and made up into old-fashioned pound rolls, which are left on a large-sized dish with a paper laid over till going to market. Each roll is then wrapped in butter-paper and put into the basket. A point I consider of great importance in the keeping of butter is to preserve the grain as whole as possible.

I do not conduct a large dairy business, but what butter I have to spare I sell for 25 cents per pound the year round, and could find a market for much more at the same price. We have fresh cows coming in at all seasons of the year, and among them are three Jerseys, which I highly prize as private property. The cows received no extra feed while giving the milk from which the exhibition butter was made, as we consider it wise to feed plenty of good, wholesome food at all times. I may say in closing that I have been an appreciative reader of the FARMER'S ADVOCATE for twenty-five years, and always find a great deal of valuable information in it.

MRS. GEO. WOOD.

York Co., Ont.

[NOTE.—We are pleased to publish Mrs. Wood's letter for several reasons. It not only shows how good butter is actually made twice a week at her home, but it indicates the value of good judgment and thoroughness. From the dairy literature of the last few years the conclusion might easily be drawn that good butter cannot be made without a strictly modern equipment, including creamers or a separator, a thermometer, butter-worker, etc. While these are of prime importance, especially with the novice, or those making on a large scale, too much dependence may be put in them and too little in common sense and the lessons of experience. Perhaps, after all, the chief points claimed by the newly-fledged dairy school graduate, which are not observed by Mrs. Wood, have their especial value in securing from the milk and from the cream the maximum quantity of butter-fat. We see here that without them butter can be made of a quality to win at the best exhibition in America and make its own market at 25 cents per pound the year round; but with them it might be made more expeditiously and perhaps at greater profit.—EDITOR F. A.]

Brantford Fair Milk Test.

Last year, in order to promote the keeping of a better class of dairy cows, the managers of the Brantford, Ont., fall exhibition inaugurated milking trials, and were apparently well satisfied with the results, as the plan was continued this season. The following tables show the result of the twenty-four hours' trial:

Open to patrons of cheese factories.

Owner.	Breed.	Lbs. milk.	Lbs. fat.	Solids.	Total score.
1. A&G. Rice	Holstein	59 lbs.	1.833	5.169	136.74
2. R. Alexander	Grade	45 "	1.692	4.069	108.72
3. Smith Bros.	Ayrshire	26	.917	2.663	70.70

Open to all not in former class.

1. Bull & Son	Jersey	29	1.591	2.663	95.82
2. Wm. Britany	Holstein	33	1.431	2.819	91.72
3. Smith Bros.	Ayrshire	32	1.189	2.829	84.50

Valuable Suggestions.

J. W. STEVENS, Ontario Co., Ont.:—"I am more than pleased with the FARMER'S ADVOCATE, as it treats of so many departments in the farmer's line of work and gives so many valuable suggestions for improvement in general. I hope it may cover a still wider field in the near future and have the support its merits warrant."

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.]

Legal.

Agreement Not Lived Up To.

READER, Waterloo Co.:—"I bought a Poland-China pig last spring. The man agreed to have pig registered in my name. I hold his letter stating that I have written four times wanting pedigree and no answer. What steps had I better take to get it?"

[You should demand personally or demand by registered letter that he carry out his contract by delivery of the necessary papers agreed upon, and notify him if he fails to do so you will sue for damages, and if he still neglects or refuses, you should sue for the damages which you have sustained, and in such damages you should include the price paid and the expenses incurred by you on the animal, as well as any other damage sustained, less the value of the animal without a pedigree and unregistered.]

Purchase of Middlings from a Mill.

WATERLOO:—"I bought seven tons of middlings from a mill. After taking them home and commenced feeding them my cattle would not eat them unless mixed with something else. I examined them and found that the smut and dirt of the wheat was all blown in. Has a miller a right to do this; if he has, I think a law ought to be passed to prohibit it, as I think it is about as bad as stealing—selling something that is not only no use, but is harmful for the cattle?"

[You have not supplied sufficient information to enable a lawyer to answer fully. It may be said, however, that what you had a right to expect and get as middlings would be what is ordinarily known as such in the custom and course of trade in that business, and whether you got this or not is for you to ascertain yourself.]

Sale of Hay in Field.

SUBSCRIBER:—"I sold some hay as it lay in the windrows in the field to B for \$21. Nothing was said as to when the money was to be paid. After a few days B, with my permission, came and stacked the hay in my field, and shortly afterwards B came to draw some of the hay away, and I then forbid him to take it till he paid for it. B then forbid me selling the hay to anyone else until I paid him for stacking it up. B is a minor under twenty-one years of age. What are my legal rights and liabilities?"

[You have a right to insist on payment to you of the price before the hay is taken away, and you could not get a judgment against B (an infant) for the price after he took away the hay. You should not sell the hay to another without first notifying B that you intend to do so, unless he pays for it forthwith, and then if B does not pay within a reasonable time, you would be at liberty to sell to another, and B would have no legal claims for his work in stacking the hay.]

Veterinary.

Injury to Cow's Teat, or Polypus.

J. T. CRAIG, Lanark Co., Ont.:—"I have a cow that has about lost one of her teats by some cause unknown; supposed to be bitten by a milk snake or injured by jumping over a fence. Her bag is swollen in front quite hard. I can hardly get any milk out of it. Can you suggest how to reduce the swelling and get a free flow of milk?"

[The inflammation is due to an injury, as suggested, or polypus in the milk duct. Reduce the inflammation with the following liniment: Potash nitrate, acetate of lead, oil terebin, liq. ammonia fort, of each 6 drams; spts. camphor, 4 oz.; fl. ex. belladonna, 1 oz.; water to make 1½ pts. Shake and bathe on the udder twice daily, and give teaspoonful of saltpetre twice daily for six doses. Milk carefully. Report if polypus (a small tumor in the duct) is present when swelling is reduced.]

Ringworm on Cattle.

MR. JOE N. FARBER, Ohio, U. S. A.:—"Some cattle that I bought, which came from Canada, have spots (white) all over them, more or less. It started on one first, on his nose, and extended half way to his eyes. Then it came on others on their sides. They are as large as a dime to half a dollar. Please state the cause and what to do in the next number of ADVOCATE?"

[The white spots are evidently ringworms, which are frequently seen on calves. Although once believed to be the work of minute worms, it is now understood to result from a fungus propagated by spores. It is really a sort of skin disease, which will sooner or later exhaust itself, usually from six weeks to three months. To wait for this is unnecessary, as it can be readily cured by three or four applications of carbolic acid mixed with four times its bulk of sweet, linseed or castor oil. It is well to wash off the scaly surface with warm water and a little soap before applying the carbolic acid. Other remedies are bichloride of mercury, ammonia, chloride of

mercury, chloride of zinc, and tincture of iodine. The first three mentioned are poisonous, and should be sparingly and carefully applied.]

Pigs with Worms.

WM. HILL, Elgin Co., Ont.:—"A number of young pigs, five weeks old, which are still on the sows, get very stiff all over; their jaws become set and they froth badly at the mouth. The sows have been fed on bran, shorts, and corn. They have plenty of room in a dry, clean shed. Some of the young pigs die soon, others live for days. On opening some of the pigs I found in the stomach worms about three inches long. They seem to thrive well until they are taken sick all at once. What is the trouble and remedy?"

[Even without the knowledge that worms were found in the stomach, all the other symptoms point in the direction of intestinal and stomach worms, which are not at all uncommon in young pigs and lambs, due to certain secretions existing in those organs favorable for their existence. Good treatment would be to wean the pigs and add to milk given them for each pig ten drops of creoline twice a day for three days.]

Cow Pox.

SUBSCRIBER, Middlesex Co., Ont.:—"Our milk cows all took sore teats. It began by small mattery lumps, which broke, and a hard scab formed. It was hard to get the cows to stand to be milked. One cow would not give the milk; her udder got hard and one quarter dried up, and in a few days later the other one, so she only gives milk from the two back teats now. 1. Will she come all right when she calves again; or will these two teats remain dry? 2. A heifer one year old has one quarter swelled and matter coming from the teat. Will that injure her udder if kept for a cow? The cattle all took swelled eyes, which ran water for several days, and mattery lumps formed in the corners. They all had good pasture and clover fields to go to, and the creek runs through their pasture. Salt always within reach. Please state cause and treatment?"

[Your cows are evidently having a run of cow pox, and the bad results mentioned will in all probability come all right. The proper treatment will be to keep them in a clean place, and bathe the teats and udders where effected with warm water daily, in which is added a teaspoonful carbolic acid to the pint, and dress with oxide of zinc ointment. Give each cow a tablespoonful of hyposulphite of soda once daily in sloppy food, previously dissolved in the hot water. Bathe the eyes with warm water, previously boiled, adding a teaspoonful carbolic acid to two quarts. 1. The affected teats will likely come all right at next calving. 2. The result will depend on the extent of the disorder, but the chances are in favor of a full recovery.]

Mammitis.

P. T. BARRY, Renfrew Co., Ont.:—"I have an Ayrshire cow, a very fine milker. Last fall milk became thick in the udder. I could scarcely milk her, so dried her up as soon as possible. The same thing has occurred this fall. She will not come in until 1st May, '08. Please give cause and remedy?"

[The condition described is one of subacute inflammation of the mucus membrane of the udder, due, no doubt, to the fact of her being a heavy milker, the glands being called upon daily to carry out an enormous amount of labor and become exhausted at a time when the circulation is becoming more feeble. I would put her on a modified diet through her next milking period, and give her a laxative dose of salts (1 lb. occasionally). A few teaspoonful doses of saltpetre (say one every other night in a light mash) will also assist the absorbents in removing much of the material.]

Miscellaneous.

Cement Floor in Stable.

OLD SUBSCRIBER, Victoria Co., Ont.:—"Would you kindly give in your next issue of the FARMER'S ADVOCATE directions for putting in a cement floor for cattle and horses in a cellar stable?"

[We have on several occasions described fully the use of cement in floor construction in the columns of the FARMER'S ADVOCATE. We would refer "Old Subscriber" and others wanting the information to turn up the following back numbers of the ADVOCATE: March 2nd, 1896, page 95; Aug. 1st, 1896, page 313; and June 15th, 1897, page 272. A useful pamphlet on the subject may be obtained by dropping a post card to Isaac Usher & Son, Queenston, Ont. Just here we would emphasize the importance of filing and preserving all numbers of the ADVOCATE, as the information contained in last year's numbers are as applicable now as then, and often of more value to many who now desire to apply the information. We might add a caution to the instructions contained in the articles referred to, which is not to attempt concrete work in frosty weather, unless it can be covered so as to protect it thoroughly from frost for a month or six weeks.]

Rape Feeding for Milk, and Pasteurizing.

J. W. F., Huron Co., Ont.:—"I have a considerable acreage of rape which was sown amongst oats that is producing an abundance of feed this autumn. I have twenty cows and only fourteen young cattle, and no sheep. The young stock cannot possibly eat all the rape this fall. I make butter from my milk, and therefore do not like to turn the cows into the rape for fear of injuring the flavor. I

noticed in the FARMER'S ADVOCATE last winter that the Guelph Dairy School, to get rid of turnippy flavor, pasteurized the milk or cream from which butter was made. Would it be advisable for me to adopt that system; and if so, what sort of pasteurizer would you recommend, and how much would one cost? I would like to save as much as possible of my winter feed?"

[In reply to J. W. F., who, I presume, is a farmer without steam appliances, I would say that the best way to pasteurize your cream (and that is the only way to treat it if you wish to make good butter from cow's milk tainted with rape) would be to put a large dish pan or boiler on the stove, filling it about half full of water. Get this water very nearly boiling (say 130 degrees), then set your cream pail into the hot water. Keep the cream well stirred by means of a dipper until it reaches 160 degrees; then remove it from the hot water and allow to stand for twenty minutes. After doing this, cool the cream, by setting the can in cold water, down to about 90 degrees, and then put in some nice, clean-flavored buttermilk or sour skim milk to act as a starter. Allow it to cool down to 70 degrees, and then leave it at that temperature until the cream thickens, when it should be cooled to churning temperature—say 60 to 65 degrees if it is deep-setting cream, 50 to 60 degrees if separator cream. O. A. C. Dairy School. H. H. DEAN.]

What Shall We Feed the Calves?

MR. R. S. W., York Co., Ont.:—"I have a number of September and October calves which I wish to raise well on skim milk. I notice an article in your issue of Oct. 15th dealing with raising calves on separator milk, based on an experiment conducted by Prof. Curtiss, Iowa Experiment Station, in which a preference is given to crushed grains rather than oil cake to be fed with separator milk. I would like to hear more on this question, as I have always had good results from using oil cake in connection with skim milk. Kindly indicate in your next issue what grain you would recommend me to use, also the best method of feeding them. Is there any advantage from feeding young calves their milk in single stalls, keeping them there for some time after a meal, over the ordinary method of allowing all of the same age to run together as soon as they have finished a feed? By answering these questions you will greatly oblige an appreciative reader of your valuable paper."

[With regard to the inquiry of R. S. W., York Co., re calf feeding, I may say that your comments upon the experiment conducted by Prof. Curtiss are so full that little more remains to be said. It is well to remember that skim milk is nature's food, less the fat, and in supplementing a skim milk ration, we must look for something that will supply the place of the fat. Though oats supply comparatively little fat, still they supply a large amount of carbohydrates, which perform functions in the animal body similar to those performed by fat. Skim milk contains too much nitrogenous matter, and is apt to cause indigestion, and while oil meal contains more fat than is contained by oats, corn, etc., still it is very rich in nitrogenous matter, and consequently when we add it to skim milk we are adding a highly nitrogenous food to one already too rich in nitrogen, so that the benefits derived from the fat of the oil meal are largely counterbalanced by the extra nitrogenous matter which it contains. I confess that I am rather disappointed in the results of the flax-seed mixture, but the method of feeding it may have affected its value. I am also surprised at the results obtained from corn, but as there was only one test with corn, too much importance must not be attached to it. It seems to me that flax seed and oats should constitute an excellent supplementary food, since oats are good bone-formers, and, in addition, would serve to dilute the nitrogenous matter of the ration; while the flax seed would supply the deficiency in fat. I have seen good results obtained from feeding oats and shorts made into a porridge and mixed with the milk, also from flax-seed jelly, made by steeping flax seed in about six times its bulk of water. I certainly think it would be a good plan to feed calves in single stalls as described, where such an arrangement is practicable. G. E. DAY, Agriculturist. Ontario Agricultural College.]

Ration for Young Pigs.

CHAS. S. CHAPPELL, York Co., Ont.:—"I have eight pigs seven weeks old, from a Tamworth sow and Berkshire hog, and would like to know through your paper how to mix two or more of the following foods: Peas, barley, rye, oats, and shorts, to make the pigs up to one hundred and fifty pounds in the shortest time? Have sweet milk and mangels also?"

[I should prefer shorts and middlings with skim milk until the pigs were about ten weeks old. At this time, a few ground oats may be added to the ration, say one-quarter oats and remainder shorts or middlings, with skim milk. I would not feed much of other grain until pigs reached 100 lbs. live weight, and would reserve the peas until the last three or four weeks of feeding, when they may constitute half the ration, or more, if required. I like to feed a mixture of grains, and would feel inclined to feed all the list given, if they were available, continuing the skim milk as long as possible. A very few boiled mangels, mixed with the grain ration will help keep the pigs in thrifty condition, though I do not care for roots for small pigs. Ontario Agricultural College. G. E. DAY.]

Building a Henhouse.

PETER M. McLEAN, King's Co., Nova Scotia:—"Please answer through the columns of your paper the following questions: 1. Is plaster as good or better than matched lumber on inside of henhouse? 2. Is a board floor as good as the ground? 3. Can I keep fifty hens in a house 32x10? 4. Are Pekin ducks a hardy breed?"

[We have never seen plaster used for the walls of a henhouse, but see no objection to it, provided the fowls do not commence to peck it off in their desire for lime. Most poultrymen now prefer to use matched lumber, lined with tar paper, fastened on with battens or laths, or, if paper be not used, the cracks may be filled with whitelead to keep out drafts. It is also well to put on paper outside before the battens are applied. 2. Provided the walls are made draft proof down to the ground, a board floor will answer well, but will soon rot, except treated with some sort of wood preservative, such as is advertised in our columns. If the house is built on well-drained, gravelly soil, the earth or sand floor will answer well, when a proper system of ventilation will be necessary to keep it sufficiently dry. 3. A house 32x10 feet is just about the correct size for fifty hens, which allows each hen about six square feet. Better results will be secured if the pen is divided in the center and the flock into two of twenty-five each. 4. Pekin ducks are of the hardest and most prolific of breeds.]

Moving and Pruning Old Grapevines.

MILTON PEARSON, York Co., Ont.:—"I would like some information regarding the best time to move old grapevines. If moved this fall should the vines be pruned? If so, how are they to be pruned? A reply in your next issue would oblige."

[Without more definite information as to size and age of vines, it is a little difficult to answer this question satisfactorily. Speaking on general principles, however, I would advise removal in the fall, the sooner the better. If carefully transplanted the vines will recover from shock of removal by winter, and be ready to send out roots directly growth commences in spring. If there are only a few vines to be done, I would secure as much earth on the roots as possible; the long, thick roots may be cut severely back. Yes, I would prune when I transplanted, but not too severely; finish at the end of the winter. I would cut all superfluous wood and short unripened wood, but the canes that are left for fruiting next year had better be left somewhat long for fear of freezing back, and prune them back to the right length just before spring. Tramp the earth very firmly round the root after transplanting, and hill up well with earth or manure.

MARTIN BURRELL.

Niagara (Ont.) Fruit Experimental Station.]

POULTRY.**Fall Care of Poultry.**

In *Farm Poultry* of Oct. 1st I think I ran across what I have looked for for a long time—a cure for roup; and as it appears to be a season when the disease is in many yards, it may be of value to many of your readers. I may state I have tried it in only a few cases, but it has been entirely satisfactory in those few. I have no hens that have the disease, but have no doubt it would be as efficacious as it proved to be the turkeys treated. To A. V. Meersch belongs the credit of discovery:

"If a chicken is troubled with roup, clean out the pus, if in the mouth, with a wooden spatula; if you make it bleed a little don't be alarmed. When this operation is done, wash the mouth with cotton wadding attached to a little stick of wood, saturated in peroxide of hydrogen. If a little is swallowed it will not matter, as it is a non-poisonous liquid. This done, use a little aristol, which is an odorless brown powder; drop a little on each sore place; repeat this operation morning and night for three days, and all will be done. I have seen it cured in two days. Should the chicken's face be swollen, which is also roup, take a very sharp knife and cut a little incision in the swollen part of the face, squeeze the open cut slightly to try to extract the root; if it cannot be done, wash well with peroxide of hydrogen and leave the wound open. Next morning or night you will find that the core has come out. Wash well with peroxide, and put the aristol powder to close it up. Should all matter not be out, even by a gentle squeeze, omit the aristol till next day. This will also prove an entire cure in three days."

The cases which I tried were cured in two days. Although cure appears complete, I would not for a moment think of retaining any of the affected birds for breeders, because I believe their constitution is irretrievably ruined.

Some breeders keep a lump of brimstone (sulphur) in the drinking vessels at this time of the year; I put a little tincture of iron in every morning. If there be a time for use of condition powders, foods, etc., now is the time. The time of the year has nearly arrived when nearly all farmers are killing beef and pork; let everyone save the blood and mix it with bran, shorts, and ground feed and give it to fowl. I know of no way in which equal results can be attained with so little expense. Boil the heads and lights, cut up and feed, using water in which they were boiled to make mashies. Take an axe, if you have no bone cutter, and smash all bones; fowls will soon learn to run to you if they hear you strike a stone with an axe. If it is too much work to crush bones, at least burn them and throw the ashes where the fowls can get them.

Anyone having a large quantity of beef blood could probably make better use of it by allowing it to coagulate, then put in a bag, boil it for some time and it becomes a crumbly mass, and could be fed better in this shape, using about 10 per cent. of blood in the mash.

Be sure and lay by a good supply of small gravel and sand; supplement this with all broken dishes, crushed up, and don't forget a barrel of oyster shells. They will cost you fifty cents in this market (Winnipeg), but will nearly double your egg yield. Poultry houses cannot be in repair too soon now; the cold, damp winds do more real harm than the keen frosts of winter. Remember, the first requisite is dryness. I should like to have my henhouse so dry that dust would rise up in it if a blast of wind came in at the door. The next requisite is warmth. For a dust bath provide a good-sized box, not deep, but broad and long; fill it with sand or dry earth, add a pail or two of ashes (coal preferable), some air-slaked lime, and your hens will fight their greatest enemy—lice—without further aid from you. But you must not expect them to clear the building as well as themselves. Whitewash, using carbolic acid in whitewash; spray corners, crevices, nest boxes and roosts with coal oil, and you will receive your reward when thermometer registers 25° below zero in nice new-laid eggs.

I would like your regular correspondent, "Invicta," to tell us where he finds high prices for fowl or chickens at Christmas time. With a very fair acquaintance with Winnipeg markets, I must say if I could not get better prices than those in vogue at Christmas time, I should soon go out of the business; perhaps it would be truer to say I would be forced out. No, now is the time to market young cockerels; price is higher than it will be later, and August and September was the time to market old hens; there was no trouble at all in getting 12¢ cents a pound for hens then. I marketed the bulk of mine during exhibition week.

To sum up the situation briefly, the outlook for all the eggs you can get this winter is bright. The enhanced value of wheat, the poultryman's staple food, will cause fewer hens to be kept, and those that are retained will get less wheat, consequently lay fewer eggs. The purchasing power of those who can afford them at fancy prices will be greater than for some years past. Already they are worth 25 cents a dozen—of course I speak only of strictly fresh eggs—and make no doubt that Christmas will see them at 50 cents. This price will pay for those little attentions without which it is useless to expect eggs. Do your part, and if your fowl are of the right sort they will do theirs.

W. Millbrook, Man.

Eggs on Tap.

We understand that Italian dealers are sending eggs to London, Eng., quite ready for the use of pastry cooks, restaurants, cafes and hotels. Instead of having to break each egg separately, and with care lest the shell become mixed with it, the cook has simply to turn a tap and let as much egg flow into a basin as may be required for culinary purposes.

About one thousand at a time are sent in the tins, hermetically sealed, the greatest care being taken in selecting them, as the loss to the exporter, if a single musty or bad egg should get into a tin, would be serious. This new departure is said to be meeting with great favor among the leading chefs, and opens a new future for surplus hen fruit.

APIARY.**No. 10.—"Outside and Inside Wintering."**

BY A. E. HOSHAL, LINCOLN CO., ONT.

Bees do not usually die in winter quarters, as is so often supposed, from cold, moisture, starvation, etc. (these can all be overcome), but of bee-diarrhoea, or, more properly, the want of cleansing flight when their intestines become loaded with fecal matter. So long as a colony of bees through favorable weather is permitted frequent cleansing flights, all is well, but when this is denied, that the food be such a character as not to load their intestines is very important; and temperature, moisture, disturbance, etc., should also be considered, so far as through these we can place the bees under favorable and comfortable conditions, and thereby cause them to consume less food, so lessening the accumulation of fecal matter in their intestines, and lengthening the time they can endure without a flight.

From the above it will readily be seen that whether bees will do better wintered inside or outside depends much upon the character of the winter. If a person is situated where usually there are occasional fine, warm days throughout the winter on which bees can have a cleansing flight, they will, if properly protected (see Sept. 1, '97, *ADVOCATE*), do better outside; but where throughout this season steady cold weather prevails and such cleansing flights are thereby denied them, I am of the opinion that they will do better if wintered inside.

That bees can be wintered either way, when all conditions are right, the experience of many proves. Beginners, I believe, will generally have better success wintering outside, as an error in this method is not nearly so apt to prove fatal as with the other, especially should the weather permit frequent flights of the bees.

Where bees are to be wintered inside, everything about the repository must be just right, or

they are better out of it. Those who are thinking of trying inside wintering had best go slowly until they learn how to winter in this way. A repository for this purpose must be held at an unvarying temperature of from 43 to 47 degrees during the entire time the bees are in it, be absolutely dark, free from vermin or other disturbing causes, and have sufficient (which is but little) ventilation to keep it sweet and fresh. A dry underground cellar usually makes the best winter repository, and is the most practical for farmers and others generally. Into this the bees should be placed at the beginning of settled cold weather and immediately after they have had their last fly, usually from the middle to the last of November. The hives may be piled one on top of the other, the bottom one being raised ten or twelve inches from the floor. After being carried in, remove all entrance blocks, leaving the entrances of the hives wide open, close the repository, and leave severely alone, only so far as is necessary to sweep up the accumulation of dead bees and to see that the temperature and other conditions remain right. If all is right there will be a low murmuring (not buzzing) sound where many colonies are being wintered, but if there are but a few colonies being wintered, this will not be noticeable. If by the middle of February they show no signs of spotting their hives from diarrhoea, the chances are that they will winter all right. If, however, their hives are becoming spotted and soiled at this date or after, they should then be placed on their summer stands on the first fine, warm day following for a cleansing flight, and afterward returned again to their winter quarters. In such a case care should be taken, when they are again put upon their summer stands in the spring, that they occupy the same position that they did when previously put out.

Mr. Hoshal's Suggestions Considered.

To the Editor *FARMER'S ADVOCATE*.

SIR,—Will I be allowed to differ from your able correspondent on bee culture, Mr. Hoshal? In the issue of Sept. 1st, 1897, in giving directions how to prepare bees for winter, he advises filling the outer cases a little full, so that when the cover is put on it will rest on the packing and have to be pressed down to place. Well, I once thought the same, and practiced that way for years; but every spring upon removing the covers I would find the under sides of them and the packing material wet; and, in fact, most of the material above the bees would be damp or wet. Then I tried a deeper box, so that there could be four to six inches of packing above the bees and a clear space of about two inches above the packing, so that the air could circulate and keep all dry. I found this a very great improvement.

Then every hive should have a rim just the size of the hive—two and a half inches deep—placed under it. Then, in addition to the horizontal entrance, there should be two vertical entrances about four inches apart—3x2 in.; these should reach up to and connect with the horizontal entrance. Now, these vestibules under the hives should have about an inch of sawdust spread over the bottoms and two or three bits of wood near the center, reaching nearly up to the combs, to help the bees reach the combs.

Another point: If the combs are more than seven inches deep it is absolutely necessary to perfect wintering that the combs be pierced in a couple of places near the center. Without these winter passages the bees cannot contract and expand to suit the temperature—without these in severe weather the cluster cannot be perfectly preserved—the cluster will be parted and the bees will perish. There is but little trouble about these necessary winter preparations if you only have the courage to set about the work. It will pay, for I believe more bees die from improper ventilation, want of winter passages through the combs, and dampness, than all other causes put together. Boards should be leaned up over the entrances to keep out the snow and wind. When the weather is suitable for the bees to fly, the boards should be removed. These points are for beginners.

Elgin (East) Co., Ont.

S. T. PETTIT.

Where Should Comb Honey be Kept?

A common mistake made by beekeepers or those purchasing honey is to store comb honey in the coolest room in the house. Some believe that honey becomes watery because the bees do not thoroughly ripen it before capping it over, while the real cause of honey becoming thin and watery is that it absorbs water from the dampness of the cool, unventilated room in which it is stored. Honey swells only as it becomes damp, filling the cells heaping full and running down the face of the comb. G. M. Doolittle says in the *American Bee Journal* that when he commenced to keep bees he stored his honey in a tight room on the north side of the house, where it usually remained from four to six weeks before crating for market. When crating the honey, it was found that the center and rear side of the pile was watery and transparent. The conclusion was that the early stored honey was worse because it was not fully ripened, until one year the early honey was placed by itself in a warm, dry, airy room, where it kept perfectly, and was better and nicer than when first taken from the hive; while the later, or more perfect honey, as it came from the hive, stored in the old room, was as watery as ever. Mr. Doolittle claims to have seen the point at once, and soon located his honey-

room in the south-west corner of a building and painted the whole of a dark color to absorb the heat of the midday and afternoon sun. On two sides of the room platforms were fixed for the honey, on which the sections were piled so that the air could circulate all through the whole pile. During the afternoons of August and September the temperature of the room would be quite 100 degrees, which would warm the pile of honey to nearly that degree of heat, which was largely retained for some length of time. By this means the honey was being ripened each day, the unsealed cells becoming thicker and thicker, until if a section were tipped over the honey would not run out. When the honey was held till cold weather a fire was occasionally put on, which raised the temperature up to 90 or 100 degrees. A free circulation of air was always maintained, which, together with the heat which was attempted to be kept much like that in the hive, ripened the green honey and maintained the mature honey in perfect condition.

ENTOMOLOGY.

Serious Danger from the San Jose Scale.

To the Editor FARMER'S ADVOCATE:
DEAR SIR,—On page 457 of your last issue, in an account of the annual meeting of the Entomological Society of Ontario, mention is made of a report of some very valuable observations made upon the occurrence of the San José scale in Ontario. This account, of course, is very much condensed, but I am afraid that a wrong impression may be given by the sentence, "A noticeable feature was that it did not spread from tree to tree so much as last year," and it might be inferred that the danger from the serious pest was less than is actually the case. Mr. Burrell's observations showed that while it is true the spread of the scale from tree to tree was not so marked as might have been expected, there was an extraordinary increase in the infestation on trees that were only moderately attacked in the spring. In most cases the scale had spread over the whole tree, including leaves and fruit. In conclusion, Mr. Burrell expresses the belief that the scale is liable to be a serious menace to Canadian horticulture unless the most stringent measures are adopted to stamp it out of the few orchards where it exists, and the strongest precautions taken to prevent the sale and planting of infested nursery stock. In addition to the above, I may say that I know of no one in the Niagara district who is so well able to offer an authoritative opinion on this subject than Mr. Burrell, who has paid close attention to the San José scale and its spread in the Niagara Peninsula since its first discovery. Quite recently he has succeeded in detecting at St. Catharines the useful little parasite which has done so much excellent service in the United States by preying upon the San José scale. This is a minute ladybird beetle belonging to the genus Pentilia.

By the insertion of the above, sir, you will, I feel sure, prevent possibly an erroneous opinion that the San José scale is not much to be feared becoming prevalent among fruit growers. It is certainly very much to be feared, and all must be on their guard against it. Yours obediently,
Ottawa, Oct. 22, 1897. JAMES FLETCHER.

BOOK TABLE.

Testing Milk and its Products.

There has recently been issued a very exhaustive and clearly-stated treatise on the subject of Testing Milk and its Products by Professors E. H. Farrington and F. W. Woll, of the University of Wisconsin. It is intended for the use of dairy students, creamery and cheese factory operators, practical dairymen and others interested in the testing or analysis of milk and its products. The subject is largely treated in a popular manner, making it intelligible to students with no further training than a common school education. Complete directions for making tests of milk are given, with illustrations of the necessary apparatus for the work. For the benefit of advanced students familiar with chemistry a chapter has been added giving detailed instructions for the complete analysis of milk and other dairy products. A chapter is also contained discussing the various systems of factory bookkeeping and tables, greatly facilitating the work of the factory secretary in connection with the payment of milk delivered at butter and cheese factories. In regard to the latter, this work recommends dividing the proceeds among cheese factory patrons according to the actual fat content of the milk. As an example of its dealing with practical subjects the book has the following to say on the method of improving the quality of milk:

"The quality of milk produced by a herd can generally be improved by selection and breeding; that is, by disposing of the cows giving poor milk, say three per cent. of fat, and by breeding to pure-bred bulls of a strain that is known to produce rich milk. This method cannot work wonders in a day, or even in a year, but it is the only certain way which we have to improve the quality of milk produced by our cows. It may be well in this connection to call attention to the fact that the quality of the milk which a cow produces is only one side of the question; the quantity is no her and equally important one. Dairymen should remember that a high production of butter-fat in the course of the whole period of lactation is of more importance than a very high test."

The work contains 236 pages, well compiled, printed and illustrated on good paper, and substantially bound in boards. The matter is divided into fourteen chapters and an appendix. It is published by Mendota Book Co., Madison, Wis., or can be secured through this (FARMER'S ADVOCATE) office for one dollar.

THE HELPING HAND.

How to Construct "Hoard's Model" Cow Stall.

BY J. GREEN, LEEDS CO.

After three winters' thorough trial, I know of no style of cow fastening that can excel the "Hoard's Model Stall" for comfort, cleanliness and cheapness of construction. We built our stalls almost entirely out of lumber taken from an old barn. In constructing the stalls, first the floor is laid for the cow to stand on. This is made—for cows of ordinary size—8 ft. long, with a slant of about 1 inch toward the drop. On the high end of this floor erect 4-inch scantlings, to which is nailed the solid board partition, 4 ft. high, on the side next the cow. Then, if a water trough is required, build one out of 1 1/2 or 2 inch plank. These will have to be sawed, one-third of the number 10 inches wide, and two-thirds of them 8 inches wide. Turn the 8-inch plank on their edge, two side by side and 10 inches apart, outside measure, the length of your partition; cover the top edges with hot coal tar; lay on the 10-inch pieces, breaking joints with the others; spike them together solid; turn the whole over against the partition, and you have a trough ten inches wide and ten deep, outside measure, running the length of your row of cows. Should this fail to hold water, or leak at the joints, take strips of lath and tack along the bottom on the inside, about 1/2 inch from the sides, and fill in the groove with hot coal tar. At joints, where ends of side plank come together, tack strips of leather up and down loosely over the joint and fill in with the hot tar.

This watering trough we consider a valuable addition to the "Hoard" stall. We have two of these troughs in use, over sixty feet long, through which the water runs from fall till spring, giving good satisfaction.

Having put the trough in position, next raise to place the plank which is to serve as the bottom of the feed-rack. It is better to have this plank 10 inches wide so as to extend over the watering trough. This plank is nailed, in a horizontal position, to the partition 30 inches from the floor. The outer edge is supported by scantlings placed 3 1/2 feet apart, with ends cut slanting so as to fit underneath the plank and on the floor just back of the trough. Next are wanted the boards for the feed rack. These are cut 6 inches wide and 3 feet long, and are nailed through one end to the outer edge of the plank, leaving a space of 3 1/2 inches between them. The rack is given such a slant as will produce a measurement of 18 inches from top of partition level across to rack boards. The upper ends of rack boards are nailed to a scantling running horizontally, and this is supported by more scantlings cut 7 1/2 ft. long, which rest on the floor at the edge of the gutter. On this support, and the one sustaining the plank at bottom of rack, are nailed the boards which form the partitions between the stalls.

Next comes the feed box, which is built 12 inches deep, 19 inches wide, and 18 inches back from trough (outside measure). This is reached from the feed-alley through a hole cut in the partition close under the feed rack and 12 inches deep, in which is built a chute reaching out a few inches beyond the partition and extending over the trough into the box. This leaves about 20 inches of the trough not covered in each stall, giving each cow access to pure running water as often as she is inclined to drink.

Hoard makes provision for 2 inches of a drop behind the cows. We built our first stalls on this plan, but our experience is that unless one man can be left in the stable nearly all the time to keep the floor clean, it were better to have a level floor with gutter 4 inches deep and 14 inches wide.

In tying we use a rope with snap and ring adjusted around the neck, as we find it cheaper than halters, and it also gives more freedom to the cow's head.

MARKETS.

Toronto Markets.

The export trade for the season does not promise any great returns to shippers, consequently there is slow demand for either cattle or sheep. The markets are very "ragged," as they are termed, meaning that there is little money in the trade. There were ninety-five loads of cattle on the boards, besides 2,327 sheep, and 4,000 hogs. About 1,000 missed connections and arrived on Saturday morning. To-day there were only two loads of export cattle.

Export Cattle—Very little export trade has been transacted at this market for the last month; the Old Country markets have been flooded with Argentine cattle that compete heavily with Canadian stock. Only a few export cattle came in, and these did not seem to be wanted; none of the chief buyers were on the market. A few changed hands at from 3 1/2 to 4 1/2 per lb. One load taken for best feeders at \$3.65 per cwt.

Butchers' Cattle—Although a better demand, the prices continue to fall to the lower scale; some good cattle sold down to 3c on Friday last. The market was overstocked; the quality not very good; nothing went over 3 1/2c per lb. The Montreal buyers were in full force and took over 20 carloads of stock for that market; 3 1/2c for good to choice, and a few fancy head brought 3 1/2c per lb.; nearly everything sold, but quite a few were held over by the dealers for profit. All round the cattle trade is in a very bad state, and the less stock farmers send in at present the better it will be for the future trade. Common cattle sold down to 2 1/2c per lb.

Bulls—This trade still holds good, the quantity not too great and readily absorbed, which maintains the price in a good condition. Stock bulls sell for 3c top prices and 3 1/2c per lb for best export. The distillery-men are seeking a few good bulls for feeding.

Stockers—There was quite lively buying for Buffalo; Mr. T. McCarty, representing a Buffalo firm, bought five carloads. Messrs Rowntree & Crealock purchased five carloads, taking the different grades of stockers; quotations unchanged. One firm bought 180 stockers, for which they paid from \$2.50 to \$3.25 per cwt. It is not too much to say that Ontario has profited to the extent of several hundred thousand dollars by this trade

during the season, and has got rid of a class of cattle that would otherwise have been unprofitable to the farmers.

During the quarter ending September the value of animals exported totals \$15,441,837.

Sheep and Lambs—Market fairly active and strong on Buffalo demand, and sell at \$3 to 3.20 per 100 lbs. Bucks are worth 2 1/2c per lb. A few good sheep wanted. Lambs firm on short supply, at from \$3.80 to \$4 per 100 lbs.

Calves—Never in the history of this market have calves been so scarce and in demand. Prices have advanced and calves that fetched only \$2 to \$3 per head a short time ago are now fetching \$5 and \$8. Good veal calves are in good demand, but there are too many big, rough calves coming forward; the large quantity of stockers exported this year has caused calves to be more generally reared.

Milk Cows—Market in good shape for choice dairy cows and early springers; choice cows scarce at about steady values. Prices held firm for choice, \$25 to \$30 per head.

Hog Market—Receipts again heavy, over 5,000 on sale to-day. The returns for the month exceed any on record. The supply absorbed by outside points. Prices have a tendency to lower on the over-supply. A further drop of 10c per cwt. next week. It is thought that after the present glut is over that they will recover some of the lost ground and do better in November, when the present rush will be over and cold weather sets in.

Messrs. Davis & Co. are enlarging their premises and will put on a night gang as soon as the necessary alterations are completed; this will enable them to take all the hogs offered on this market.

The market dropped over 1c per lb since our last quotation, with a further decline promised next week. Top price for singers, 4 1/2c per lb to-day; thick-fat and light hogs, 4 1/2c; other grades unchanged.

Dressed Hogs—Car lots of choice lightweights are quoted at \$8 to \$10. On the street to-day farmers' loads sold at from \$6 to 6.25. Receipts light.

Hides—Values in this market keep very firm, and owing to the new trade with Great Britain for sole leather there is a better demand for hides.

Eggs—Receipts liberal; market steady. Strictly new-laid are quoted at 16c to 17c per dozen.

Grain Markets—The receipts on the street market to day were liberal—1,000 bushels of wheat selling at 84c for white, 85c for red, and 78c for goose.

Oats about steady—1,000 bushels selling at 25c to 25 1/2c per bushel.

Barley rather easier—2,000 bushels at 27c to 35c.

Hay firm—twelve loads of hay selling at \$8 to \$9 per ton. Only a few loads of straw, at \$3 to 8.50 per ton.

Butter—Good butter very scarce; prices unchanged. No. 1 small dairy pound prints, 16c to 17c; for choice creamery pounds, 18c to 20c.

Cheese—No accumulation in the market, but dealers are selling freely at 9 1/2 to 10c for early and late make; choice brands are scarce.

Toronto, Oct. 26th.

Montreal Markets.

Export Cattle—There has been no export demand of late worthy the name, only very few being picked up at this market to fill odd spaces, and these have not been of any too good quality. Four cents has been paid for a few of the very best, but rarely the bulk of what has been purchased being around 3 1/2c per pound. The quality of our export cattle going forward could be a great deal better than it is; in fact, our cattle in the British markets are on the same basis now as Argentina (South American) cattle, or a cent and a quarter to a half below United States cattle. The quality of the Northwest cattle is fairly good, but not up to the average of two years ago, but much better than last season's, and when placed side by side with the well-finished American steer the difference is only too apparent.

Butchers' Cattle—On a weekly market of about 1,400 or 1,500 head of cattle, with very little demand for export account, it is really surprising how the price of stock is being maintained, although yesterday's (Monday, Oct. 25th) trade was of a much more dragging nature than has of late been the case, but even at this price were fairly well maintained for the better class of butchers' cattle, the poorer grades and cuts being very little enquired for, and slow of sale at very low prices, as low as one cent per pound having been taken for some of the poorest, and 1 1/2 to 1 3/4 for not a bad beast. Best butchers' steers ranged from 3 1/2 to 3 3/4 per lb; fair to medium or good, from 3c to 3 1/2c; inferior down according to quality. Very little realized the outside figure.

Sheep and Lambs—The poor nature of sheep sales in Britain has caused a slow, dragging trade on this market, and not a great many are taken for export, and these only as a fraction over the 3c per pound for the best selections. Butchers' sheep have been dull accordingly, and have ranged from \$3 to \$3.50 each, or 2 1/2 to 2 3/4 per lb. This shows a decline of a full 1c on export stock since our last report. Lambs have been the best trade so far, good, choice lambs being a good market. This trade has undoubtedly been kept up by the active demand in the West for choice lambs for their small meat accordingly. Prices ranged from 3 1/2 to 4c and 4 1/2 per lb for fair to choice selections of lambs. Weekly offerings are about 2,000 head of sheep and lambs.

Calves—Very few are being offered on this market. These are of fair quality, and bring good prices, ranging from \$5 to \$10 each.

Hides and Skins—There is nothing of importance to note in this line from our last report, the condition of the market being healthy, with a good average yield per week and a good demand from tanners. Prices are unchanged from our last.

LIVE STOCK SHIPMENTS.

Shipments, as compared this week with last, show quite a falling off, as follows:

	CATTLE.	SHEEP.	HORSES.
This week.....	2,776	1,750	270
Last week.....	5,158	4,095	196
Total to date.....	107,000	52,500	8,500

The Horse Market.

Unfortunately there has been very little improvement if any of note in our local trade, as cables for everything but the best continue to show very poor returns of sales made; still losing shippers money. Notwithstanding the heavy list of steamers sailing last week, shipments this week show an increase of about 80 head. Choice blocks or drafts from 1,500 lbs. up make \$120 to \$140 each, if very good; drivers all the way from \$80 to \$125 each, and chunks and cobs from \$75 to \$90 each.

Buffalo Markets.

Hogs—There is no great change in values since last report. Really prime hogs are scarce. Choice loads will bring 10c to 15c a hundred more than the common ones. Shippers took the bulk of to-day's offerings of 25 cars at an average of \$1 per cwt, and \$3.95 for medium and heavies.

Cattle receipts have been large, both natives and Canadas. Good cattle were quite plenty, but there were no strictly fancy lots in the yards. The best load brought 5c, though a few smaller bunches sold at \$5.10 and 5.15. Plain fat steers, 1,100 to 1,300, \$4.25 to 4.50. Feeders in fair flesh, good quality, \$3.90 to 4.25; stockers, \$3.25 to 3.90; extra fancy veal calves, \$6.25; common to fair, \$5.00 to 5.25.

Sheep and Lambs—Receipts of Canadian lambs have been fairly liberal. Prime ewe and wether lambs are selling on the basis of \$5.60. Heavy weights, 90 lbs. and upwards, sell for \$5.50; culls and throwouts, \$5.00; good yearlings, 80 to 100 lbs., bring \$4.75 to 5.00.

October 28th.

ERICK BROS.

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.) Following are the current and comparative prices for the various grades of live stock:-

Table with columns for CATTLE, HOGS, and LAMBS, showing present and top prices for various grades and weights.

Supplies of live stock are being marketed in fairly large volumes all around. The quality in all branches is generally poor. Speaking of the probable supplies of cattle, Mr. John Clay, jr., says: "It is true our stocks of native cattle became reduced, and if one reckoned with those alone he could easily figure out a shortage."

The quality of the hogs continues very poor. Little pigs and coarse heavy sows form a large share of the offerings. The bulk of the pigs are coming from Minnesota, where the swine plague seems to be most severe. A Chicago concern makes the number of hogs this October 92 per cent. of last year's.

Canadian Live Stock Exports.

Table showing live stock exports for the week ending October 27th, listing destinations like London, Liverpool, and Glasgow with corresponding cattle and sheep counts.

Russia's Wool Industry.

Russia, the first nation in Europe in the production of wool, has 45,000,000 common sheep and 15,000,000 Merino sheep pasturing on the vast prairies of Southern Russia. Russia's wool production amounts to 10,000,000 pounds (361,120,000 pounds) annually, nearly six pounds per sheep.



THE DUSANTES.

A SEQUEL TO "THE CASTING AWAY OF MRS. LECKS AND MRS. ALESHINE." (Continued from page 460.)

We took leave of the kind-hearted ranch people, who looked upon us as a godsend into their lonely life, and disposed ourselves as comfortably as we could in the large wagon. When we arrived at the railroad station we were met by Mr. Dusante, who showed a moderate degree of pleasure at seeing us and an immoderate amount of annoyance, exhibited principally to me, in being obliged to give up to the women of our party the large room he had occupied in the only lodging-house in the little settlement.

When I informed him that the strangers with us were the Dusantes, on whose island we had been staying, he at first listened vaguely. He had always looked upon the Dusante family as a sort of fable used by Mrs. Lecks to countenance her exactions of money from the unfortunate sojourners on the island. But when I told him what Mr. Dusante had done, and related how he had brought the board-money with him, and had offered to pay it back to us, an eager interest was aroused in him.

"I do not wonder," he exclaimed, "that the conscience-stricken man wishes to give the money back, but that any one should refuse what actually belongs to him or her is beyond my comprehension! One thing is certain—I shall receive my portion. Fifteen dollars a week for my daughter and myself that woman charged me, and I will have it back." "My dear sir," I said, "your board was reduced to the same sum as that paid by the rest of us,—four dollars a week each."

"I call to mind no reduction," said Mr. Dusante. "I remember distinctly the exorbitant sum charged me on board on a desert island. It made a deep impression upon me." "I do not care to talk any further on this subject," I said. "You must settle it with Mrs. Lecks." On the morning after our arrival at Ogden City, Mr. Dusante took me aside. "Sir," he said, "I wish to confide to you my intentions regarding the jar containing the money left by your party in my house, and I trust you will do nothing to thwart them. When your baggage arrives, you, with your party, will doubtless continue your eastern way, and we shall return to San Francisco. But the jar, with its contents, shall be left behind to be delivered to Mrs. Lecks. If you will take charge of the jar and hand it to her, sir, I shall be obliged greatly."

"I promised Mr. Dusante that I would not interfere with his intentions, but asserted that I could, on no account, take charge of the jar. The possession of that piece of pottery with its contents, was now a matter of dispute between him and Mrs. Lecks, and must be settled by them. "Very well, then, sir," he said, "I shall arrange to depart before you and your company, and I shall leave the jar, suitably packed, in the care of the clerk of this hotel, with directions to hand it to Mrs. Lecks after I am gone. Thus there will be nothing for her to do but to receive it." We spent three days in Ogden City, and then, the weather being moderated very much, and the snow on the mountains having melted sufficiently to allow the vehicles to be brought down, our effects were forwarded to us, and my party and that of Mr. Dusante prepared to proceed on our different ways. An eastward-bound train left that evening an hour after we received our baggage, but we did not care to depart upon such short notice, and so determined to remain until the next day. In the evening Mr. Dusante came to me to say that he was glad to find that the westward train would leave Ogden City early in the morning, so that he and his family would start on their journey some hours before we should leave. "This suits my plans exactly," he said. "I have left the ginger-jar, suitably wrapped and addressed to Mrs. Lecks, with the clerk of the hotel, who will deliver it to-morrow immediately after my departure. All our preparations are made, and we purpose this evening to bid farewell to you and our other kind friends, from whom, I assure you, we are most deeply grieved to part."

ture surprised her but little, for she told me that he always liked to get to places before the rest of the party with whom he might be journeying. "Even when we go to church," she said, "he always walks ahead of the rest of us. I don't understand why he likes to do so, but this is one of his habits."

"When I informed Mrs. Lecks and Mrs. Aleshine of what had happened, they fairly laughed. "I don't know what Mr. Dusante calls it," exclaimed Mrs. Lecks, "but I know what I call it." "Yes, indeed!" cried Mrs. Aleshine, her round eyes sparkling with excitement; "if that isn't ex-honesty, then he ain't no ex-missionary! I pity the heathen he converted!" "I'll convert him," said Mrs. Lecks, "if ever I lay eyes on him! Walkin' away with a package with my name on it! He might as well take my gold spectacles or my tortoise-shell comb! I suppose there's no such thing as ketohin' up with him, but I'll telegraph after him; and I'll let him know that if he dares to open a package of mine, I'll put the law on him!"

"That's so," said Mrs. Aleshine. "You kin send telegraphs all along the line to one station an' another for conductors to give to him in the cars, an' directed to Mr. Dusante, a tall man with gray-mixed hair an' a stolen bundle. That's the way they did in our place when Abram Marley's wife fell into the cistern, an' he'd just took the cars to the city, an' they telegraphed to him at five different stations to know where he'd left the ladder." "Which ain't a bad idea," said Mrs. Lecks, "though his name will be enough on it without no description; an' I'll do that this minute, and find out about the stations from the clerk."

"You must be very careful," I said, "about anything of that kind, for the telegrams will be read at the stations, and Mr. Dusante might be brought into trouble in a way which we all should regret; but a dispatch may be worded so that he, and no one else, would understand it." "Very well," said Mrs. Lecks, "an' let's get at it; but I must say that he don't deserve bein' saved no trouble for 'im as sure as that 'im a livin' woman that he never saved nobody else no trouble since the first minute he was born."

The following dispatch was concocted and sent on to Bridger, to be delivered to Mr. Dusante on the train: "The package you know of has been stolen. You will recognize the thief. If he leaves it at Chicago hotel, let him go. If he opens it, clap him in jail." "Mrs. Lecks." "I think that will make him keep his fingers off it," said Mrs. Lecks; "an' if Mr. Dusante chooses to send somethin' of the same kind to some other station, it won't do no harm. An' if that Dusante gets so skeered that he keeps out of sight and hearin' of all of us, it'll be the best thing that's happened yet."

Mr. Dusante was fully determined to go on with us until he had recovered possession of the ginger-jar. His courteous feelings towards Mrs. Craig and myself prevented his saying much about Mr. Dusante, but I had good reason to believe that his opinions in regard to my father-in-law were not very different from those of Mrs. Lecks and Mrs. Aleshine. Ever since Mr. Dusante had shown his petulant selfishness, when obliged to give up his room at the railroad station for the use of the women of his party, Mr. Dusante had looked upon him coldly, and the two had had but little to say to each other. We were all very glad that our pleasant party was not to be broken up; and although there was no resignation at the absence of the ginger-jar, we started on our journey the next day in a pleasant mood for the absence of Mr. Dusante. Before we left, Mr. Dusante sent a telegram to Kearney Junction, to be delivered to Mr. Dusante when he arrived there. What this message was I do not know, but I imagine its tone was decided. At Chicago we went at once to Brandiger's Hotel, and there we found, instead of Mr. Dusante, a letter from him to Ruth. It read as follows: "MY DEAR DAUGHTER,—I have determined not to wait here as originally intended, but to go on by myself. I am sorry not to meet you here, but it will not be long before we are together again, and you know I do not like to travel with a party. Its various members always incommode me in one way or another. I had proposed to go to Philadelphia and wait for you there, but have since concluded to stop at Meadowville, a village in the interior of Pennsylvania, where, as they have informed me, the two women, Mrs. Lecks and Mrs. Aleshine, reside. I wish to see the party all together before I take final leave of them, and I suppose the two women will not consent to go any farther than the country town in which they live. Inclosed is a note to your husband asking to business matters. I hope that he will take the best of care of you during the rest of the journey, and thus very much oblige— YOUR AFFECTIONATE FATHER."

"This was my note: "MR. CRAIG: SIR,—I should have supposed that you would have been able to prevent the insolent messages which have been telegraphed to me from some members of your party, but it is my lot to be disappointed in those in whom I trust. I shall make no answer to these messages, but will say to you that I am not to be browbeaten in my intention to divide among its rightful claimants the money now in my possession. It is not that I care for the comparatively paltry sum that will fall to myself and my daughter, but it is the principle of the matter for which I am contending. It was due to me that the amount should have been returned to me, and to no other, for me to make the proper division. I therefore rest upon my principles and my rights; and, desiring to avoid needless altercations, shall proceed to Meadowville, where, when the rest of my party arrive, I shall justly apportion the money. I suppose the man Dusante will not be foolish enough to prolong his useless journey farther than Chicago. It is your duty to make him see the impropriety of so doing." "Yours, etc." "D. J. ENDERTON." Ruth's letter was shown to all the party, and mine in private to Mr. Dusante, Mrs. Lecks, and Mrs. Aleshine. When the first moments of astonishment were over, Mrs. Lecks exclaimed: "Well, after all, I don't know that I'm so very sorry that the old sneak has done this, for now we're rid of him for the rest of the trip; an' I'm pretty certain, from the way he writes, that he hasn't dipped into that jar yet. We've skeered him from doin' that." "But the impudence of him!" said Mrs. Aleshine. "Think of his goin' to the very town where we live an' gettin' 'them fust! He'll be settin' on that tavern porch with every loafer in the place about him, an' tellin' 'em the whole story of what happened to us from beginning to end, till by the time we git there it'll be all over the place an' as stale as last week's bread."

As the Dusantes and Ruth expressed a desire to see something of Chicago, where they had never been before, we remained in the city for two days, feeling that as Mr. Enderton would wait our coming, there was no necessity for haste.

On our journey from Chicago to the little country town in the interior of Pennsylvania we made a few stops at points of interest for the sake of Ruth and the Dusante ladies, Mrs. Leeks and Mrs. Aleshine generously consenting to these delays, although I knew they felt impatient to reach their homes. They were now on most social terms with Mrs. Dusante, and the three chatted together like old friends.

We arrived at Meadowville early in the afternoon, and when our party alighted from the train we were surprised not to see Mr. Enderton on the platform of the little station. Instead of him, there stood three persons whose appearance amazed and delighted us. They were the red-bearded coxswain and the two sailor men, all in neat new clothes and with their hands raised in maritime salute.

There was a cry of joy. Mrs. Aleshine dropped her bag and umbrella, and rushed towards them with outstretched hands. In a moment Mrs. Leeks, Ruth, and myself joined the group, and greeted warmly our nautical companions of the island.

The Dusante party, when they were made acquainted with the mariners, were almost as much delighted as we were, and Mr. Dusante expressed in cordial words his pleasure in meeting the other members of the party to whom his island had given refuge.

"I am so glad to see you," said Mrs. Aleshine, "that I don't know my bonnet from my shoes! But how, in the name of all that's wonderful, did you get here?"

"I ain't much of a story," said the coxswain, "an' this is just the whole of it. When you left us at Frisco we felt pretty downsome, an' the more that way because we couldn't find no vessel that we cared to ship on; an' then there come to town the agent of the house that owned our brig, and we was paid off for our last voyage. Then, when we had fitted ourselves out with new togs, we began to think different about this shippin' on board a merchant vessel, an' gettin' cussed at an' livin' on hard-tack an' salt prog, an' jus' as like as not the ship springin' a leak an' all hands pumpin' night an' day, an' goin' to Davy Jones after all. An' after talkin' this over, we was struck hard on the weather bow with a feelin' that it was a blamed sight better—beggin' your pardon, ma'am—to dig garden-beds in nice soft dirt, an' plant peas, an' ketch fish, an' all kinds of shore work, an' eatin' them good things you used to cook for us, Mrs. Aleshine, and dancin' hornpipes fur ye, an' tamin' birds when our watch was off. Wasn't that so, Jim an' Bill?"

"Aye, aye, sir!" said the black-bearded sailor men. "Then says I, 'Now look here, mates, don't let's go and lark away all this money, but take it an' make a land trip to where Mrs. Aleshine lives,' which port I had the name of on a piece of paper which you give me, ma'am."

And here Mrs. Aleshine nodded vigorously, not being willing to interrupt this entrancing story.

"An' if she's got another garden, an' wants it dug in, an' things planted, an' fish caught, an' any other kind of shore work done, why, we're the men for her; an' we'll sign the papers for as long a voyage as she likes, an' stick by her in fair weather or foul, bein' good for day work an' night work, an' allus ready to fall in when she passes the word. Ain't that so, Jim and Bill?"

"Aye, aye, sir!" returned the sailor men with sonorous earnestness.

"Upon my word!" cried Mrs. Aleshine, tears of joy running down her cheeks, "them papers shall be signed if I have to work night an' day to find somethin' for you to do. I've got a man takin' keer of my place now; but many a time have I said to myself that, if I had anybody I could trust to do the work right, I'd buy them two fields of Squire Ramsey's an' go into the onion business. An' now you sailor men has come like three sea angels, an' if it suits you we'll go into the onion business on sheers."

"That suits us tip-top, ma'am," said the coxswain; "an' we'll plant inyas for ye on the shears, on the stocks, or in the dry-dock. It don't make no difference to us where you have 'em; jess pass the word."

"Well, well," said Mrs. Leeks, "I don't know how that's goin' to work, but we won't talk about it now. An' so you come straight on to this place."

"That did we, ma'am," said the coxswain. "An' when we got here we found the parson, but none of your folks. That took us aback a little at first, but he said he didn't live here, and you was comin' pretty soon. An' so we took lodgin's at the tavern, an' for three days we've been down here to meet every train, expectin' you might be on it!"

There was but one small vehicle to hire at the station. This would hold but two persons, and in it I placed Mrs. Dusante and Ruth, the first not being accustomed to walking, and the latter very anxious to meet her father. I ordered the man to drive them to the inn, which was about a mile from the station, where we would stay until Mrs. Leeks and Mrs. Aleshine should get their houses properly aired and ready for our reception.

"Mrs. Craig will be glad to get to the tavern and see her father," said Mrs. Aleshine. "I expect he forgot all about its bein' time for the train to come."

"Bless you, ma'am!" exclaimed the coxswain, "is she gone to the tavern? The parson's not there!"

"Where is he, then?" asked Mrs. Aleshine.

"He's at you house, ma'am," replied the coxswain.

"An' what in the name of common sense is he doin' at my house?" exclaimed Mrs. Aleshine, her eyes sparkling with amazement and indignation.

"Well, ma'am, for one thing," said the coxswain, "he's had the front door painted."

"What!" cried Mrs. Leeks and Mrs. Aleshine in one breath.

"Yes, continued the coxswain; "the parson said he hated to see, ma'am, his hand doin' nothin'. An' then he looked about an' said the paint was all wore off the front door, an' we might as well go to work an' paint that, an' he sent Jim to a shop to git the paint an' brushes—"

"An' have 'em charged to me?" cried Mrs. Aleshine.

"Yes, ma'am," continued the coxswain. "An' Jim an' Bill holy-stoned all the old paint off the door an' I painted it, havin' done lots of that sort of thing on shipboard; an' I think it's a pretty good job, ma'am—red at top and bottom an' white in the middle, like a steamer's smoke-stack."

Mrs. Leeks and Mrs. Aleshine looked at each other. "An' he told you to do that?" said Mrs. Leeks.

"Yes, ma'am," answered the coxswain. "The parson said he never liked to be nowhere without doin' what good he could. An' there was some other paintin' he talked of havin' done, but we ain't got at it yet. I s'posed he was actin' under your orders, an' I hope I haven't done no wrong, ma'am."

"You're not a bit to blame," said Mrs. Aleshine; "but I'll look into this thing. No fear about that! An' how did he come to go to my house? An' how did he get in, I'd like to know!"

"All I know about that," said the coxswain, "is what the gal that's livin' there told me, which she did along of askin' us if we was comin' to live there too, and if she should rig up beds for us somewhere in the top-loft, but we told her no, not havin' no orders, an' payin' our own way at the tavern. She said, said she, that the parson come there an' loved he was a friend of Mrs. Aleshine's and travellin' with her, an' that if she was at home she wouldn't let him stay at no tavern; an' that knowin' her wishes he'd come right there, an' s'pected he'd be took care of till she come. She said she felt over-certain about it, but she tuck him in till she could think it over, an' then we come an' certified that he was the parson who'd been along with Mrs. Aleshine an' the rest of us. Arter that she thought it was all right, an' beggin' your pardon if we was wrong, so did Jim an' Bill an' me, ma'am."

[TO BE CONTINUED.]

THE QUIET HOUR.

Let the Good Prevail.

Op, fellow-men, through storm and shower, Through mist and snowdrift, sleet and hail, Brace up the strong right arm of power, And—Let the good prevail.

Let never selfish thought intrude, Nor selfish fear your heart assail; Work bravely for the common good, And—Let the good prevail.

True brothers in the race of life, Rejoice not if a brother fall; We all may conquer in the strife, And—Let the good prevail.

Men are not units, one and one; One body all, we stand or fall; The common good must aye be won, So—Let the good prevail.

Go, take your Bible from its shelf, And read the ancient hallowed tale; "Love thou thy neighbor as thyself," So shall the good prevail.

"Make the Best of One Another."

We may, if we choose, make the worst of one another. Every one has his weak points; every one his faults. We may fix our attention constantly upon these. It is a very easy task, and by so doing we shall make the burden of life much heavier, turn friends into enemies, and provoke strife and heartburnings wherever we go.

But we may also make the best of one another, and by so doing we bring out the best that is in our friends.

"She never found fault with you, never implied Your wrong by her right; and yet men at her side Grew nobler, girls purer, while through the whole town The children were gladder that plucked at her gown."



JOAN OF ARC, LISTENING TO THE HEAVENLY VOICES.

By loving whatever is lovable in those about us love will flow back from them in return, and life will become a pleasure instead of a pain, and earth will be a shadow of heaven.

Self-sacrifice is the law of life. You can only truly bless when you have done with the pursuit of personal happiness. "He saved others, Himself He cannot save."

"Thy Saviour's pattern wouldst thou mark? Then hear the witness of His foes; The bitter scoff O Christian, hark, Which 'mid that cruel throng arose, Blaspheaming Him Who loved them so 'That e'en for them His life He gave;— 'He 'scapes not Who saved others; lo! This Christ—Himself He cannot save': He could not, for He loved them still; He could not, all He held in mind; Could not: He will His Father's will; Wouldst thou, though in thy small degree, Bless so others, since He doth thee bless? Thy law the good of others be: Cease quest of thine own happiness. Give up thyself, and freely give Self sympathy, and all thou mayst: Thy store shall grow while thou dost live. 'This is Christ's 'thrif,' the worldling's 'waste.'"

"Do You."

It is strange the persistency with which one will touch upon the weak point of one's companion. To the thoughtful person it is often a matter of surprise how often we hurt each other's feelings in our daily intercourse.

To make a person conscious at every turn of some personal fault or deficiency, is to bring unnecessary pain to this person.

Riches and splendor, wisdom and honor, cannot bring perfect harmony into a family circle. There

must be that peculiar adjustment of natures contributed by each member so as to form a connected harmoniousness that cannot be obtained where brother and sister, father and mother, are constantly "nagging," and casting hurtful slurs upon one another.

As the kindergarten is a preliminary step to the primary department of our education, so is the home a fitting school for the larger fields of action which are to follow in the outer world.

If the home be a fountain-head for the best thoughts and the best words of a family, there will be little fear that one of its members will turn from its teachings of love and sympathy, and cast sorrow and regret upon a friend by unkind or thoughtless words.

"The ill-timed truth we might have kept— Who knows how sharp it pierced and stung? The word we had not sense to say— Who knows how grandly it had rung!"

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES,—

The festival of Thanksgiving is almost here again, when the scattered members of every family rally around the old home fireside for their annual reunion. On this occasion the thrifty housewife proudly produces the choicest fruits of her culinary skill, to all of which full justice is done amid many a sally of mirth and wit. The curtains are closely drawn, the fire burns brightly, and song and story circle around the joyous group, who care little for the fast-approaching reign of the frost king.

It is good for the old and young thus to mingle together—good especially for the time-worn travelers on life's journey to forget their cares in the innocent mirth of the children. Hawthorne says: "When our infancy is almost forgotten and our boyhood long departed, though it seems but yesterday; when life settles darkly down upon us and we doubt whether to call ourselves young any more, then it is good to steal away from the society of bearded men and of even gentler woman, and spend an hour or two with the children. After drinking from those fountains of still fresh existence, we shall return into the crowd . . . with a kinder and purer heart and a spirit more lightly wise."

Master Jack has been busy during the last month, and a clever old fellow he is, even if he did spoil our gardens. Was it not his touch that dropped the crisp, sweet nuts within our reach and painted the woodlands in all their glorious hues? Not long, however, have we been allowed to enjoy the charming scene, for, too often held in his chilling embrace, one by one the bright leaves faded, and fell an easy prey to every passing breeze.

Before my window stands a pair of maples; when last I wrote to you they were in their full emerald glory. Day by day they changed to yellow and crimson, and now even their wealth of golden beauty has passed away and only the bare branches stand out against the sky. "What a pity!" my friends exclaimed. "Nonsense," I replied, "can I not see more of Heaven's own blue?" And do I not also know that spring will again clothe them in all their pristine loveliness? What though other eyes than mine may gaze upon them, some heart they will surely gladden, and doing so will fulfill their mission, which is all even we—God's masterpieces—can ever hope to do.

Yes, to fulfill our earthly mission is the acme of real success. But we are prone to think that success means the doing of great deeds, and while waiting to achieve such, many of our best opportunities pass by unheeded. "The golden moments in the stream of Time slip past us and we see nothing but sand; the angels come to visit us and we only know them when they are gone." Let us guard against such delusions, and remember that the lowliest office faithfully filled is as honorable as the governing of a kingdom, and that we may "elevate our meanest task by the manner in which we perform it." Ever your loving—

UNCLE TOM.

A Word of Warning.

What would you think of a farmer who deliberately tore down his fences and allowed his fields to be left exposed to certain destruction? You would think he was crazy, would you not? And yet are not you doing much the same thing, you women, who—whether you are farmer's wives or not—would certainly starve if the crops were to fail. The only fences which can protect them from destructive insects are birds. If you will read the following clipping from "Progressive Age," you will see how you are keeping these fences in repair:

FASHION'S SLAUGHTER OF BIRDS.

The women's demand for the plumage of birds with which to decorate their hats is a sure sign that they are mentally inconsiderate or cruel in disposition. It would be unjust to charge that all who follow this fashion are organically or habitually cruel. I believe that if a majority of these women could witness the killing of these birds, while singing their melodies, or mating, or vigilantly caring for their unfledged offspring, and could hear the cries of the bereft ones, shivering and starving in their nests, they would weep with the little mourners, sternly rebuke the slayers of the innocent, and, morally shocked at the fact that by their example they have aided

Commence
Canvassing
To-day

Premiums!

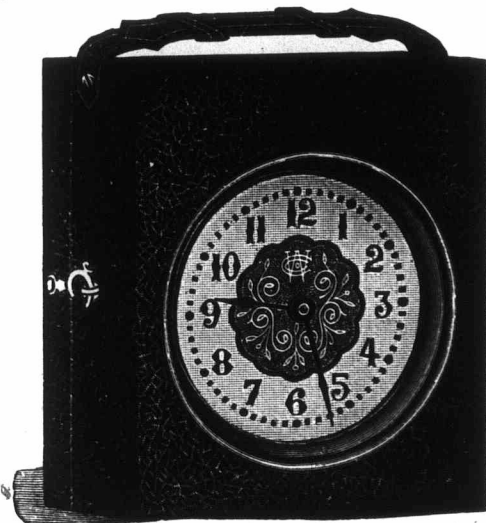
Premiums!

To any of our subscribers furnishing the required number of new subscribers we will send per mail, charges prepaid, any of the valuable premiums shown on this page.

Subscriptions must all be NEW, and cash accompany orders.

BALANCE OF 1897 AND ALL OF 1898 FOR

\$1.00



Fine Gold-finished Clock, handsomely decorated dial; fitted in Maroon Seal Leather Case. 4 New Subscribers.



Rich Roman Gold Plate Clock, handsomely polished Case. 4 New Subscribers.



Lady's Bracelet, best Rolled Plate, 4 New Subscribers. Same pattern in Sterling Silver, 3 New Subscribers.

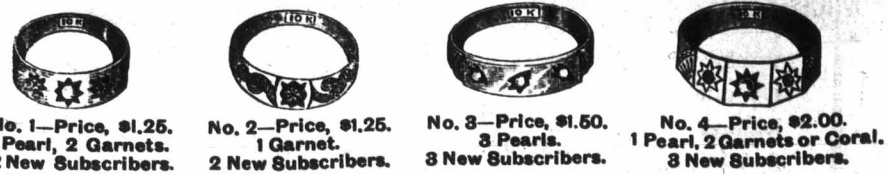
FOR CANVASSING OUTFIT ADDRESS:
Additional premiums will be announced in next issue.

Handsome Rings

WARRANTED TEN KARAT GOLD.

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

CHILDREN'S OR MISSES' REAL STONE SETTING.



No. 1—Price, \$1.25. 1 Pearl, 2 Garnets. 2 New Subscribers.

No. 2—Price, \$1.25. 1 Garnet. 2 New Subscribers.

No. 3—Price, \$1.50. 3 Pearls. 3 New Subscribers.

No. 4—Price, \$2.00. 1 Pearl, 2 Garnets or Coral. 3 New Subscribers.

LADIES' REAL STONE SETTING.



No. 5—Price, \$3.50. 2 Pearls, 3 Garnets. 5 New Subscribers.

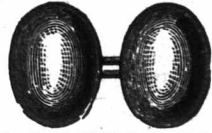
No. 6—Price, \$3.50. 2 Garnets, 5 Pearls. 5 New Subscribers.

No. 7—Price, \$3.50. 1 Garnet, 2 Pearls. 5 New Subscribers.

No. 8—Price, \$2.00. 3 New Subscribers.



Sterling Silver Baby Pin, 1 New Subscriber.



Gent's Gold Filled Cuff Links, warranted for 20 years, for 3 new names. In Sterling Silver for 1 New Subscriber.



Gent's Gold Filled Cuff Buttons, as above, or Masonic, Odd-fellow or I. O. F. emblem, 2 New Subscribers.

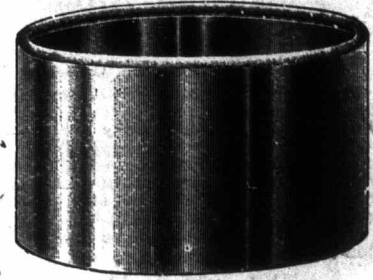


Solid Gold Locket, either Guinea Gold color or bright, 10 New Subscribers. Can have same locket gold filled for 3 New Subscribers.

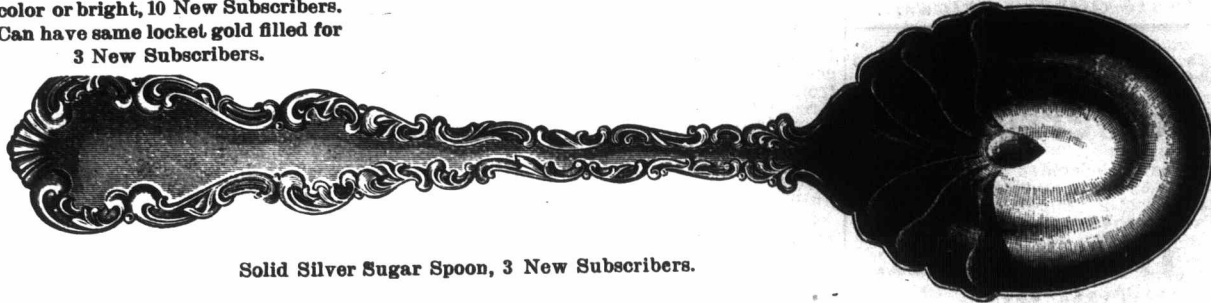
Sterling Silver Cane Scarf Pin, can also be used as lady's stick pin, 1 New Subscriber.



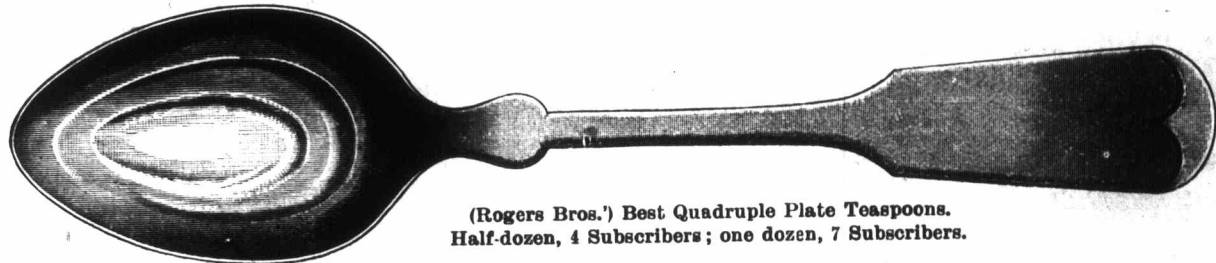
Sterling Silver Thimble, handsomely engraved (give size required), 2 New Subscribers.



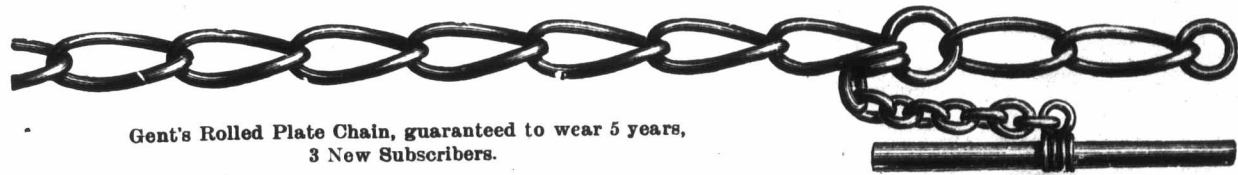
Solid Silver Napkin Ring, 4 New Subscribers



Solid Silver Sugar Spoon, 3 New Subscribers.



(Rogers Bros.) Best Quadruple Plate Teaspoons. Half-dozen, 4 Subscribers; one dozen, 7 Subscribers.



Gent's Rolled Plate Chain, guaranteed to wear 5 years, 3 New Subscribers.

NY-AS-SAN
CURE FOR
ERYSIPELAS



SEND POSTAL CARD FOR BOOKLET

Mrs. Thos. Trahey, of Parrsboro, N. S., says:—"In the year 1892 I was in bed five weeks with Erysipelas, swollen out of all human shape, Doctors gave me fast sinking her up, and given up to die. At this crisis Nyassan was used and in a most wonderful way I was cured in a few days."

The Nyassan Medicine Co., Truro, N.S.
Mention this paper when you write.

Guelph Xmas Fat Stock Jubilee Show
"SMITHFIELD OF CANADA."

The annual Christmas Fat Stock Show, under the auspices of the Guelph Fat Stock Club and the Guelph Poultry Association, will be held in the City of Guelph, Victoria Rink, on Thursday and Friday, December 9 and 10, when prizes to the amount of \$1,200, including the Queen's Jubilee Prize of twelve sovereigns (gold), for the best animal in the show, will be awarded. Prize lists can be had on application to the Secretary.

John McCorkindale,

GUELPH P. O., ONT.

Leading buyers from different parts of the Dominion have signified their intention to be present. REDUCED RATES ON ALL RAILWAYS.

Sale of Ayrshires and Jerseys.

The undersigned has decided to dispose of his entire herd of Ayrshire and Jersey Cattle by private sale, as other appointments will not allow the attention they require.

R. Jamieson,
Perth, Ont.

FOR SALE!

25 CLYDESDALE STALLIONS and MARES.



QUEEN.

Nearly all prize-winners at Toronto, Montreal, Ottawa, and Chicago World's Fair. Most of our young stock are sired by the Columbian champion, Prince Patrick, and Grandeur (sweepstakes four times at Toronto). Two of our fillies are daughters of Lillie Macgregor, the champion World's Fair mare. Also a number of Hackneys. Also Ayrshire bull and heifer calves, and Shropshire sheep. 62-y-om

D. & O. SORBY, Guelph, Ontario.

FOR SALE! Good Young Cows

two years old, yearlings and heifer calves out of imported and home-bred cows, and the imported bulls, Royal Member and Rantlin Robin. Come and see them, or write, if you want something special.

H. CARGILL & SON,
Station on the farm. Cargill Stn. & P.O., Ont.

Hawthorn Herd of Deep-Milking Shorthorns

For Sale! FOUR young bulls and several heifers of the choicest breeding and good quality. Prices right. om
WM. GRAINGER & SON, Londesboro, Ont.

F. BIRDSALL & SON, Birdsall, Ontario,

Breeders of Shorthorns, Jerseys, Oxforas and Chester Whites, are at present offering a bunch of grade Oxford lambs, and some pure-bred ram lambs and shearlings of good quality. o

Geo. Raikes, Barrie, Ont.,
Breeder of Shorthorn Cattle & Shropshire Sheep.

At present offering some choice Shropshires, all ages.

ADVERTISE IN THE ADVOCATE

GOSSIP.

William Fraser, Campbellville, Ont., breeder of Berkshire pigs, writes under date of Oct. 25th, 1897:—"I am greatly pleased with the ADVOCATE, and wonder how any farmer gets along without it."

The big Chicago packing house of Swift & Co. have leased the South St. Paul packing house, St. Paul, Minnesota, where it is expected they will do a \$10,000,000 business next year, and greatly benefit the Minnesota and Dakota stock raisers by supplying a home market for their stock.

Prof. H. H. Dean, B.S.A., Professor of Dairy Husbandry at the O. A. C., writes under date of October 21st:—"The prospects are good for the attendance at the coming dairy school session. Over one-quarter of the number which can be accommodated have already applied. Those who are late in applying will find the school crowded. Our accommodation is flexible, however, and provision can be made for more than one hundred if necessary."

Michigan has what is called the State Association of Farmers' Clubs, composed of delegates from local clubs. The aim of these clubs is educational, social, and political, but strictly non-partisan, consequently they have been able to exert a very marked influence on legislation and in promoting the two other objects mentioned. The fifth annual meeting will be held at Lansing, on Dec. 14, 15 and 16. Mr. Frank D. Wells, of Rochester, Mich., is the Secretary.

R. J. & A. Laurie, Wolverton, Ont., write under date of Oct. 20th:—"Find enclosed a change of advertisement. Our Tamworths have done well this season, also our poultry, of which we have a grand lot to dispose of at reasonable prices. We have purchased a bear to head our herd, which we think will keep up the high standard of the bacon hog. We have made the following recent sales: 1 boar to W. McCormack, Northfield; 1 sow to N. Blain, St. George; 1 sow to R. Smith, Hickson; 1 boar to A. Scott, Ayr; 1 sow to Mr. Newshead, Preston; 1 sow to C. Scott, Branchton. We have on hand a grand lot of young pigs from prize-winners for sale, also one aged boar.

Mr. H. K. Fairburn, Rose Cottage Stock Farm, Theford, Ont., writes:—"Now the fall fairs are all over and things have resumed their usual quietude, our cattle are doing well, especially those shown at Toronto and London. The dams of our show bull and heifer calves have dropped us a nice pair of bull calves from India Brava and Nicholson's stock bull, and our cow, Maid of the Mist, has dropped an excellent heifer calf, by Dainty Davie. We have a heifer and a few cows to come in, from which we expect fine offspring, from our stock bull Dainty Davie, sired by Great Chief, by Indian Chief. Dainty Davie is out of Miss Laverne, a 10073—a beautiful cow. We have five heifers for sale, including one we find we have taken 16 first, 14 second, and 6 third prizes at the fairs this autumn."

Mr. Andrew Montgomery, Castle Douglas, Scotland, arrived safely in Glasgow on Oct. 5th with his importation of Clydesdales from the studs of Mr. Robt. Davies, Toronto, and Col. Halloway, Alexis, Ill. From the former he took the noted substantial Prince of Quality, that has been let to one of the best districts in Scotland—the Stranraer district, where Macgregor has been travelling for the past three years. This is considered the highest honor a horse can get in Scotland. From Col. Halloway was taken the eight-year-old Prince Regnant, the three-year-old Prince Macgregor, and two yearling stallions, all including Prince of Quality, sired by Cedric. In this Clydesdale transaction was included the purchase from Mr. Montgomery by Col. Halloway the Darnley stallion "Sirdar," now in his fourteenth year, who has arrived at Alexis, via Montreal, before this date.

J. Yuill & Sons, Carleton, Ont., write:—"Our Ayrshires are doing well, and are leaving us a fine crop of calves. We have seven—three bulls and four heifers—and a number of cows due. There is more demand for young calves this year than for some time; in fact, the demand has been good for all classes of Ayrshires. We sold five head to the New Brunswick Government, two bulls and three heifers; one bull and one heifer to Robert Burgess, Harwood; one year-old bull to G. W. Webster, Valen; one yearling bull to A. Boyd, Kars; one bull calf to John Doran, Prescott; one bull calf to John Brockenridge, Westwood; one bull and one heifer to George E. Cooper, Sault Ste. Marie. Of Shropshires we sold one shearing ram to R. W. Gibson, Lammernoor; one shearing ram to Robert Irving, Innisville; one ram lamb to Jas. Sheeley, Powassan; one ram lamb to A. Sprague, Utterson; and one ram lamb to L. Price, Mountain Grove. We have done an extra good business in Berkshires. Since we got the large Berkshires we find they suit the trade much better than the small ones did. We have still a few fine young boars to dispose of."

NOTICES.

The Ontario Wind Engine and Pump Co., Toronto, have just received an order for three windmills from Australia from a party to whom was sold one of their mills in 1894. These orders are the result of the great satisfaction he has had from the mill purchased at that time.

We have to thank Mr. George Johnston, F. S. S., Dominion Statistician, for a copy of the 1896 Statistical Year Book of Canada. The present issue consists of two parts—first the "Record," and second the "Abstract." The work has 477 pages of such information compiled in easily accessible form that every Canadian who feels interested in the development of the nation will want to have access to it. It is issued by the Department of Agriculture, Ottawa, Ont.

The stone lifting machine of Mr. A. Lemire, Wotton, Que., is worthy of the attention of farmers having stony land, as it has many desirable features. It is so arranged that one man can lift without any assistance a stone of 18,000 pounds weight. Being constructed on a heavy set of wheels, the stone is deposited at the will of the operator; the whole operation being simple, and requires no special skill in its manipulation.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all throat and lung affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper. W. A. NOYES, 820 Powers' Block, Rochester, N. Y.

Spring Grove Stock Farm

Shorthorn Cattle and Lincoln Sheep. The noted sire, Golden Robe = 20396 = and Nominee = 19628 =, at the head of the herd. Representatives of this herd won two silver medals and the herd prize at Industrial Fair, Toronto, 1897. Prize-winning Lincoln Sheep are also bred at Spring Grove. Stock of all ages and both sexes for sale. Apply **T. E. ROBSON, Ilderton, Ont.**

SIMMONS & QUIRE.

Shorthorn Cattle, Berkshire Swine—Money-making Sorts.
The imported bull, BLUE RIBBON = 17095 = (63736), by ROYAL JAMES (54972); dam ROSE-LINTY, by GRAVESKEND (46461), heads the herd. Female representatives of the celebrated Mina, Strathallan, Golden Drop and Mysie families. The Berkshires are choice prize-winning stock. Easy to feed, quick to sell.
Stock for Sale. **C. M. SIMMONS, Ivan P.O., Ont.**
1-1-y-om **JAMES QUIRE, Delaware, Ont.**

Shorthorns and Leicesters

Nominee, sweepstakes bull at Toronto, 1897, bred by us. We also won first prize on pen Leicesters bred and owned by exhibitor. We continue to breed the best.

E. Gaunt & Sons, St. HELEN'S,
Lucknow Station, G. T. R. 3 miles. om

JOHN SRICLEY, Allandale, Ont.,

Breeder of Shorthorns and Herefords, Shropshire sheep, Berkshire and Yorkshire pigs. A choice bunch of Shropshires, also a few Shorthorn and Hereford females now for sale. -om

Ingleside Herefords.

UP-TO-DATE HERD OF CANADA!
Bull Calves
OF THE RIGHT SORT
For Sale.

Address—
H. D. SMITH,
17-y-om Compton, Que.

Guernsey Cattle

CHESTER WHITE AND DUROC-JERSEY PIGS.

At present we are offering
4 Richly-bred Bull Calves

two of which are from imported cows, and pigs of all ages.
WM. BUTLER & SON,
om- DEREHAM CENTRE, ONT.

GUERNSEYS

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

Address: **SYDNEY FISHER,**
17-y-o Alva Farm, Knowlton, P.Q.

Guernsey Bulls for Sale.

We are now prepared to dispose of half a dozen young bulls of gilt-edge breeding.
MENISH BROS., LYN, ONT. o

Brookbank Holsteins.

Champion milk and butter herd. Can sell a limited number of bulls and heifers one month old and up; some nice ones from our show herd. First come first served. Quality unsurpassed. Prices right. Write or come and see.
A. & R. RICE,
Oxford Co., Ont. -om **CURRIE'S CROSSING.**

D. J. GIBSON, Bowmanville, Ont.,
Breeder of
HOLSTEINS AND TAMWORTHS

Now offering a yearling bull fit for service and a number of young Tamworths of both sexes.

GOSSIP.

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

The dairy barns of Mr. P. J. Cogswell (home of the great family of Jerseys descended from Exile of St. Lambert), located at Brighton, N. Y., just outside the city line of Rochester, were recently destroyed by fire. They were filling the silos at the time. It is probable that the fire started by a spark from the engine, although it is not positively known. The loss was between seven and eight thousand dollars, partially covered by insurance. They were fortunate in getting the cows out of the barn, so that all the stock was saved except three calves. About 70 animals were about the place at the time. Mr. Cogswell is rebuilding; in fact, having a large force of men at work at this time, expects to have a new plant in time to properly protect the animals before cold weather comes on.

JAMES CHRISTIE'S CHESTER WHITES.

In our travels in the eastern counties of Ontario we came across a very worthy herd of 50 Chester White pigs, the property of James Christie, Winchester. One notable sow, George's Queen 950, by U. S. King 619, and out of Canada's Pride 369, by Lord Nelson 102, was purchased from her breeders, Messrs. H. George & Son, Crampton, Ont., and is now suckling her second litter, and the size and style in which she raises her progeny stamps her as a breeder of high merit. Lady Farnin, by Sam Jr. 389, was purchased under six months, and was retained on the farm until she had raised her fourth litter, all of which turned out extra good. "In fact," says Mr. Christie, "she never produced a bad one," which is certainly saying a good deal. Her two daughters, Rosy Christie and Lily Christie, are now on the farm and both breeding, one having had fifteen at the last litter; in fact, the family have distinguished themselves on account of their prolificacy. Fourteen brood sows are owned in the herd, most of which are either in pig or suckling a litter, so that the firm are in a good position to meet future demand. The stock boar, King George 9th 846, was purchased from H. George & Sons, and has been on the farm a little over a year. His second litters are now arriving, and it has been noticed both on this farm and elsewhere that his litters are large and strong. His sire, Victor 305 (imp.), has been and is today a showing winner, and much of his superior conformation is carried by King George in his depth of sides, length of body, and substance of bone, being a grand feeder and of quiet disposition. At present, Mr. Christie offers for sale some 20 head of both sex from a month old upwards, and barring accidents he will be in a position to meet the active demand that has arisen in favor of this worthy breed.

CAMPBELL & MARTINSON'S BERKSHIRES, CHESTERS, SHORTHORNS, LEICESTERS, AND POULTRY.

The Chester White herd of Messrs. Campbell & Martinson, Northwood, Ont., now number some 25 head. The original stock was obtained from Mr. George Bennett, when the brood sow, Nell 600, by King Cross 996, and out of Daisy 362, was purchased; her pedigree running back to George-bred stock. She is now raising her fourth litter, although but four years old, the stock finding ready buyers; in fact, all being sold except one young boar and one sow under six months, by Agent 779, Daisy Bell 913, by Prince Chester; was also purchased from Mr. Bennett; her pedigree running to Butler-bred stock. She also has proven herself a prolific breeder, raising 19 out of 22 pigs in two litters, by Agent 779, the stock boar, by Better Times 527, and out of Belle of Crampton 224. He has been on the farm about a year, and of him his owners speak in the highest terms. In conformation he possesses an abundance of size and evenness. At present the firm offer for sale a boar and sow six months old, as well as a young litter.

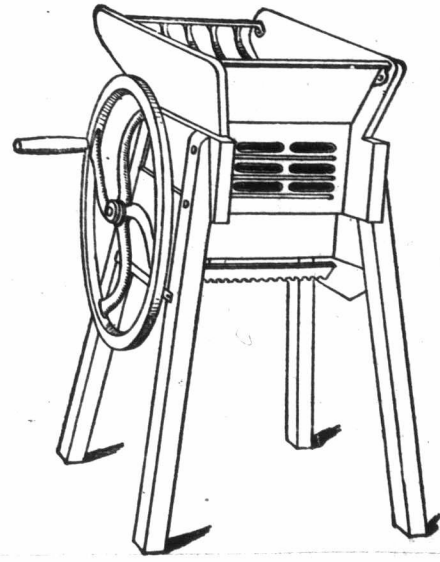
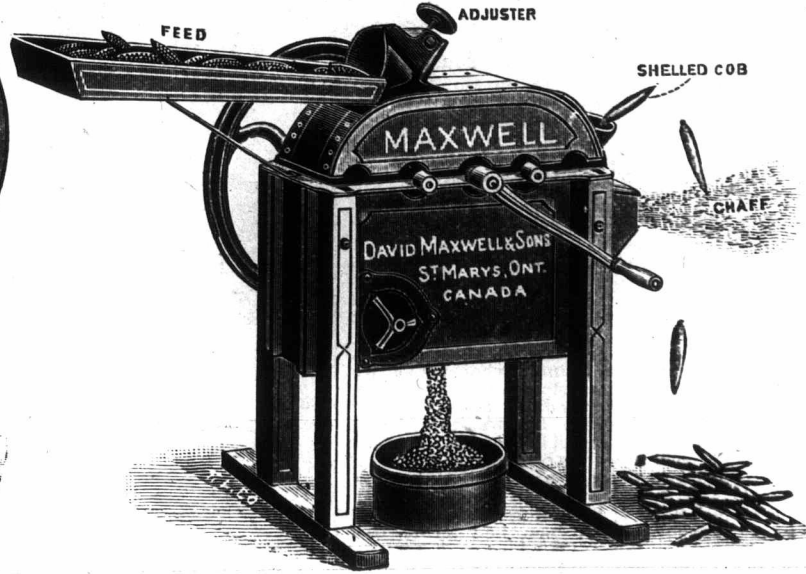
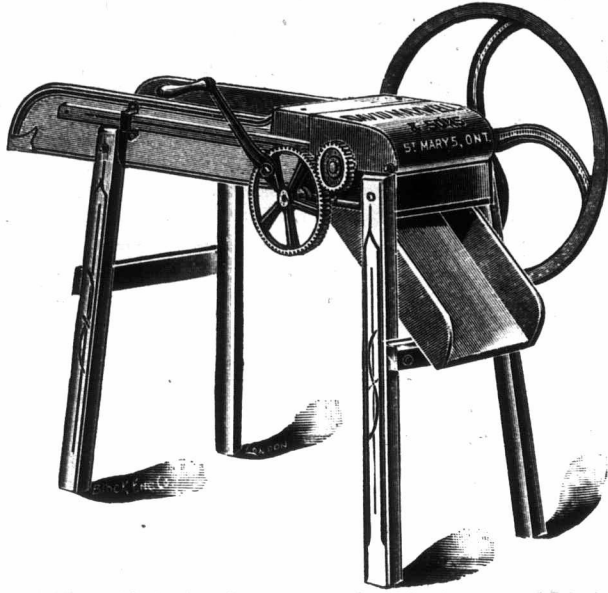
In Berkshires, the progeny of Duchess of Kent 3691 hold sway; the mother was purchased from Mr. H. J. Davis, Woodstock, and raising her fourth litter. Her daughter, Duchess of Kent 2nd, by Robust Jim 3500, is suckling a litter of eight, by Crown Lad 3705, which promise well being well-marked and even in quality. Nine head of very choice four months pigs are now on the farm, three of which are straight, good, well-marked, growthy boars. The offerings are half a dozen sows and three boars under six months, and fourteen head under two months, five boars and nine sows, all well-marked pigs.

Ten pure-bred Shorthorn cattle are also owned on the farm, three of which are young, salable bulls. Lou Northwood, by Daisy Chief 13674, is suckling a pair of twin bull calves of roan color, and Betsy Bobbets, by Daisy Chief, has a red fellow, all by Invincible 3rd 20282, a Davis-bred animal having a good pedigree. The Shorthorn stock, though thin in flesh, the pasture having failed, are a useful lot. Nothing but good bulls have been employed in the herd.

In poultry the firm have a dozen Dorkings, built on a Shore-bred foundation. Wyandottes were selected from J. J. Lenton, Oshawa, and are well up in quality. Black Minorcas, Red Caps, Games, Bremen geese, and white turkeys are also represented. In the showing this season the firm have been very successful. At Thamesville, on Chesters they won: 1st on aged boar; boar under six months, 1st and 2nd; aged sow, 2nd; sow under six months, 1st and 2nd. Berkshires were not shown. In poultry, 1st on aged Dorking, 1st and 2nd on young Dorking, 2nd on Black Minorcas, on Wyandottes, 1st on aged and 1st on young pen; on Bremen geese winning 1st and 2nd, and 1st on white turkeys. Twenty-five head of Wyandottes are here owned, as well as half a dozen Games, and a trio of Red Caps.

A few choice Leicester sheep were also shown us. These, too, were selected with great care from Mr. McNabb, Cowal, Ont. The stock ram, Cheswick 5th 923, by Cheswick 852 (imp.) and out of Blind Eye, is of Wm. Whitelaw's breeding, and is a strong, serviceable follow. Three registered ram lambs are held for sale.

ADVERTISE IN ADVOCATE



David Maxwell & Sons

St. Mary's, Ontario, Canada,

Manufacturers

High-Grade Farm Implements:
 Binders, Reapers, Mowers, Hay Rakes, Hay Loaders, Hay Tedders, Disk Harrows, Scufflers, Turnip Sowers, Turnip Slicers and Pulpers, Cider Mills, Hand Straw and Corn Cutters, Lawn Mowers, Churns, Wheelbarrows, and Corn Shellers, Iron Jacks, Riding Plows, etc. Agents wanted in all unoccupied territory.

SEND FOR CATALOGUE.

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

Maple Hill Holstein-Friesians
SPECIAL OFFERING.
 Three bull calves, sired by Sir Pieterje Josephine Mechtildie, whose five nearest female ancestors average over 28 pounds butter per week, and out of the great cows, Cornelia Tensen, Lady Akkrum 2nd, and Inka Rose Pieterje DeKol. If you want a bull to head your herd why not get the best?
 11-y-om G. W. CLEMONS, St. George, Ont.

SPRING BROOK STOCK FARM.
 Choice Tamworth pigs ready to wean, sired by the prize-winning imported boar, Nimrod. Write at once for prices.
 A. C. HALLMAN,
 New Dundee, Waterloo Co., Ont.

Exile of St. Lambert 13657
 Sire of 56 DAUGHTERS with seven-day tests of from 14 lbs to 32 lbs. 7 oz. of butter—a greater record than can be shown of any other bull 'living or dead.' We will sell a few grandsons and granddaughters, by tested dams, and sired by EXILE'S SUCCESSOR 42716—a pure St. Lambert with a royal pedigree.
 P. J. COGSWELL,
 ROCHESTER, N. Y.

WILLOW GROVE HERD OF JERSEYS.
 Sweepstakes herd of 1893, 1894, 1895 and 1896.
J. H. Smith & Son, Highfield, Ont., are offering 12 females, to calve shortly: one first prize bull, dam Elena of Oakdale (19 lbs. 4 oz. of butter in seven days), granddam Menies 3, A. J. C. C., test 20 lbs. 1 oz. in seven days. Dam of bull won 1st prize in dairy test, Guelph, 1896, and he is half-brother to King of Highfield.

JERSEYS
 Two heifers, twenty months old; good colors, and from rich stock. Also six heifer calves, two weeks old; good colors, and from cows giving from 7,000 to 10,000 pounds of milk in ten months. All bred from the grand stock bull, Canada's Hero, whose dam tested 19 lbs. 5 ozs. in 7 days. For prices write
W. C. SHEARER,
 BRIGHT, ONT.

MASSENA'S SON
 and two choice young Jersey Bulls for sale; also eggs from choice pens of Blk. Minorcas (Rev. W. E. Scott's breeding), Plymouth Rocks and Black Langshans at \$1 for 15 eggs. Orders booked for Berkshire pigs. All of the best strains.
W. W. EVERITT,
 Box 552, CHATHAM, ONT.

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

GLEN ROUGE JERSEYS.
WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 22-y-om

GOSSIP.
 Among the additions to the stock of the Maritime Provinces Experimental Farm at Nappan, N. S., are a number of fine Guerneys, personally selected in the United States by Mr. Robert Robertson, the newly-appointed superintendent.

A correspondent writes:—"The 29th annual exhibition of the East Peterboro Agricultural Society was held at Norwood on the 12th and 13th of October, and was a record breaker. East Peterboro Show ranks next to Markham Fair as an agricultural exhibition. Nearly all the breeds of cattle were represented. Shorthorns were exhibited by Jno. Knox, F. Birdsall & Son, Gilbert Biezard, and Boland Bros. Jerseys were not as strong in numbers as in former years, but what they lacked in numbers they made up in quality. Principal exhibitors, Messrs. Brethour, Birdsall, Phillips. Ayrshires were a good class and also a large one. Stewart & Son, of Menie, with their famous herd which won so many honors at the World's Fair capturing most of the prizes. Holoiteins were exhibited by Messrs. Cameron, Honey, and Campbell. Never was such a class of grade and fat cattle shown in Norwood. Messrs. Welsh, Boland, and Brethour were amply repaid for their trouble by securing the bulk of the prizes. Sheep always good in numbers, lacked nothing in quality. In the long-wool class, Bonnycastle, Stillman, and Honey divided the prizes in Cotswolds; while Honey, Cameron, and Forsythieyid with each other for the reds in Leicesters. The Southdown class was filled by Bate and Holdsworth, while Miller, Curtis, Ewing, Ketcheson showed fine specimens of Shropshires. Oxfords were shown by Messrs. Birdsall & Son, Tyrrell and Roxborough. All the breeds of pigs, from the long-eared Tamworth to the little short Suffolk, were brought out in splendid form. Horses always make a strong class in East Peterboro Show, and this year was not an exception. Ladies' work was good, while the domestic manufactures were ahead of former years. Grains, vegetables and fruits were shown by numerous people, and were of extra good quality.

D. J. GIBSON'S HOLSTEINS AND TAMWORTHS.
 Cocella's Princess stock predominates in the Holstein herd of Mr. D. J. Gibson, Bowmanville P. O., Ont. She was purchased four years ago from W. L. Webber, East Saginaw, Mich., as a two-year-old, and her four females are still in the herd. The family history has been extremely brilliant, as is evident by her own and daughter's udders, as well as their uniformity in conformation, color, etc., as well as being producers of females. The herd is a comparatively young one, but from the careful and businesslike manner of the proprietor in his selection of foundation stock we feel safe in forecasting for Mr. Gibson a successful future as a pure-bred breeder, possessing not only an accurate knowledge of qualification required, but also an untiring energy in his undertakings, which is bound to push any man to the front rank. While on the farm our attention was attracted by the yearling bull out of Pickaninny, and by Lady Wedo's Mink Mercedes, the result of a carefully selected stock, for he is a true, useful specimen of the breed, correct as to his dairy conformation, with sufficient size and quality, and the amount of activity peculiar to his breed. Being closely related to the balance of the herd, Mr. Gibson offers him for sale, and owners of dairy stock who desire the improvement within the power of Holstein blood can hardly make a mistake in securing the services of a bull whose ancestry has such a clear sheet. The younger stock, and in fact the entire herd, possess greater uniformity than is frequently found in the hands of so young a breeder.

In the Tamworth pens we found the descendants of a very worthy sow, Red-skin, by Shortnose 88, and out of Countless 2nd, a sow which has been a very regular breeder, being but three years old and now suckling her fourth litter. As a matron she possesses the called-for qualifications, producing and raising her litters in good shape, and which possess much of the good quality of their dam. The present litter of eight—four boars and four sows—being no exception, as are a boar and sow, six months, still on the farm, that are smooth, growthy, good animals. The stock boar was lately purchased from W. C. Quickfall, Glenallen, Ont., and promises well, possessing the qualified amount of bone and activity, and is kept in good serviceable condition.

BOWEN CABLE STAY FENCE CO.
 \$10 For a machine to build the cheapest, strongest and best fence made of wire. No royalties, no farm rights, machine easily and quickly operated by any farmer. Send for large circular.
NORWALK, OHIO, U.S.

FOR SALE CHEAP!
Jersey Bull two years old, Queen Ida's Prince 3957, A. J. C. C. D. Count Oxford's Ida 3076, A. J. C. C., sire 100 Per Cent. 16590, A. J. C. C., dam of Stoke Pogis 3rd, sire of Mary Ann of St. Lambert, 36 lbs. 12 ozs. Won first prize at Toronto, 1897, second at London, first at Brantford, first at Brampton, and second at Woodbridge (where he was shown in the class of any age). For further particulars apply—**JOHN ELLIS,** Stanley Mills, Ont.

LEE FARM REGISTERED JERSEYS.
 Bulls fit for service, - - \$50 each
 Heifers in calf, - - - 50 "
 Young cows in calf, - - 75 "
 Heifer calves, - - - 30 "
 Solid colors. None better bred in Canada for dairy purposes. Come and personally select, or write for description and pedigrees.
E. PHELPS BALL,
 17-y-0 Lee Farm, Rock Island, P. Q.

Registered Jerseys For Sale
 Four spring cows in calf, - \$40 00 each.
 Two yearling heifers in calf, 25 00 "
 Two heifer calves, - - - 15 00 "
 One bull calf, - - - 12 50 "
W. H. BUCKERFIELD, -om Bracebridge, Ont.

WM. WYLIE, 225 Beury St., MONTREAL, or Howick, P. Q.
 Breeder of high-class AYRSHIRES. Young stock always for sale; bred from the choicest strains procurable. Breeding stock selected from the most fashionable strains and prize-winning stock of the day. Farm located at Howick, Que. 5-1-y-0

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

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

WM. STEWART & SON, MENIE, ONT.
 Breeders of high-class Ayrshire cattle; choice young stock of either sex and any age always on hand. Our herd contains a number of Columbian winners. 21-1-y-0

KAINS BROS. BYRON, ONTARIO, LONDON STATION.
 Breeders of AYRSHIRE CATTLE.
 Several fine young bulls, including the first prize yearling at London, second prize bull calf, and other good ones; also choice heifers of various ages. Prices right. 1-1-y-0

GOSSIP.
F. A. GARDINER'S SHORTHORNS AND BERKSHIRES.

The herds of F. A. Gardiner, Britannia, Ont. were looked over recently, and we learned from their enterprising owner that they are the result of foundation stock obtained from the Hon. Thos. Ballantyne & Son, Stratford, in 1885, when Missie of Neidpath 6th 18491, by Prince Royal 618 (imp.), dam Missie 81st 5180 (imp.), was purchased immediately following Mr. Gardiner's dispersion sale. Being from imported stock on both sides, and of the proper conformation, Mr. Gardiner made in her a very wise choice. In condition she tipped the scales at right close to 1,800 pounds, her stock turning out sufficiently good to find very ready sales, as only two of her half dozen calves remain on the farm, one being Missie of Neidpath 22nd, by Scotsman 18557, a heifer pronounced to be the best female on the Brampton fair ground. She is a right one all over, as is the younger sister, possessing much sweetness of quality. Marchioness, by Prince Royal, was also purchased at the same time. Her pedigree runs all through the Marchioness family, originally from imported stock, her two calves also being still retained in the herd. The stock bull, Bold Britain 20397, by the imported Golden Crown 17038, and out of Miss Lenton 25455, was bred by John Isaac, and purchased as a yearling. He has never suffered defeat in the showing, although meeting strong competition. He is of beautiful roan color, weighs 2,200 pounds, and carries his weight well under control. Marchioness 8th, a ten months bull, promises exceedingly well, possessing much of the characteristic conformation of his sire, Bold Britain. He is of the choicest red color with a little white, and possesses a grand constitution. Rose Saxon, five years old, is also a strong feature in the herd, carrying an abundance of evenly-distributed beef, while her daughter is her exact counterpart. Missie 23rd also deserves a passing notice, for she is growing up right, possessing as good a back as one will see; in fact, she has not a slack spot any place in her make-up, and is of sweet quality all through. Mr. Gardiner's stock bears the distinction of winning the herd prize at Brampton for two succeeding years, the herd consisting of bull and three females of any age, which is a guarantee of the quality. They have won many of the individual premiums offered in the respective classes.

In the Berkshire pens there are two brood sows, one of which is suckling a fine litter. The stock was founded on Snell-bred animals. The stock boar, Prince Charles 4533, by Baron Lee 4th, and out of Missie of Neidpath, possesses much of the Baron Lee quality, as well as being set on a strong set of limbs. He has perfect markings. A young Enterprise boar is also on the farm, and is held for sale. The matrons, Mayflower and Mayflower 2nd, are directly descended from imported Queen's Own, and out of Sallie May. Mayflower 2nd being by Baron Lee, so that due regard has been given their selection as to breeding. The young litter of half a dozen are equally divided, males and females.

THE LAST OF SYDENHAM HERD AS A HERD.
 The dispersion sale of the late Thomas Guy's Ayrshire cattle, at Sydenham Farm, Oshawa, Ont., was held, as announced, on Wednesday, October 13th inst. It seems almost similar to penning an obituary to refer to the last of this once grand herd of Ayrshires, from which the Canadian stock of so many now prominent herds have been bred. It has been laid or supplemented. For nine years in succession Mr. Guy won the herd prize at the Provincial exhibition, and many other such feats, including milk tests, World's Fair awards, etc. The picked animals of the herd were sold last year, but while a number of those recently sold were unfitted they will doubtless do their new owners much good. The purchasers and number of animals bought were as follows: James Muir, Myrtle, Ont., four; David Montgomery, Hampton, one; John Davidson, Ashburn, five; Wm. Thorn, Lyndoch, one; W. J. Haycraft, Agincourt, three; J. C. Lyall, Sutton West, one; Fred Trill, Bowmanville, two; E. H. Lick, Oshawa, one; William Jack, Hampton, two; Crawford Bros., Brown's Corners, one; Thos. Stanton, Taunton, one. The highest prices were paid by Mr. John Davidson: \$86 and \$70 for Gurta of Sydenham—2842—and Nelly of Oshawa—3377—.

SS. SAILINGS.
ALLAN LINES

THREE DISTINCT SERVICES FROM MONTREAL WEEKLY.

Royal Mail Service of Passenger Steamers, Montreal to Liverpool, every Saturday, calling at Quebec and Londonderry.

DIRECT SERVICE MONTREAL TO GLASGOW
Direct Service Montreal to London.

These steamers are of most recent construction; are of the highest class, and their record for the safe carriage of cattle is unexcelled. Special attention paid to the best methods of stowing and caring of hogs, apples and other farm produce. Steamers fitted with refrigerators for perishable freight. For schedule of sailings, rates of passage or other information, apply to— J. D. HUNTER, Western Freight Agent, Corner King and Yonge Streets, Toronto, or H. & A. ALLAN, Montreal.

Dominion Line Royal Mail Steamships.

Steamer. From Montreal. From Quebec.
Sootsman, Nov. 6, daylight, Nov. 6, 2 p.m.
Labrador, Nov. 13, " Nov. 13, 9 a.m.
Ottoman, Nov. 17, " Nov. 17, 2 p.m.
Rates of Passage—Cabin, \$52.50 to \$70; second cabin, \$34 to \$36.25, to Liverpool or London. Storage, \$2.50 to \$3.50, to Londonderry, Liverpool, London, Glasgow, Queenston or Belfast. Outfits furnished free to steerage passengers. First and second cabins are midship, and steamers are lighted throughout with electric lights.
S.S. Canada will sail from Boston Nov. 11th, and Dec. 9th.
DAVID TORRANCE & CO.,
General Agents, MONTREAL.
17 St. Sacramento St.

DOMINION LINE

ELDER, DEMPSTER & COMPANY'S

Regular Line of First-class Steamships.

.. MONTREAL ..

TO

BRISTOL (Avonmouth) and LONDON

CONSISTING OF THE FOLLOWING FIRST-CLASS STEAMERS:

S.S. MILWAUKEE	12,000 tons
S.S. MONARCH (bldg.)	12,000 "
S.S. MONTCALM (bldg.)	8,000 "
S.S. MONTROSE (bldg.)	8,000 "
S.S. "MONTEREY" (bldg.)	8,000 "
S.S. MONTEZUMA	7,500 "
S.S. MERRIMAC	6,500 "
S.S. ALBERTA	6,500 "
S.S. QUEENSMORE	6,000 "
S.S. MARINO	5,000 "
S.S. ASHANTI	5,000 "
S.S. BELGIAN KING	4,500 "
S.S. PARKMORE	4,500 "
S.S. LYCIA	4,500 "
S.S. ETOLIA	4,500 "
S.S. MEMNON	4,250 "

Steamers of the above line are fitted up with all the modern improvements for carrying Live Stock, Butter, Cheese, Grain, and every description of general cargo, and are intended to be despatched from Montreal as follows:

TO BRISTOL (Avonmouth).
S.S. LYCIA, Nov. 4th
S.S. MONTROSE, " 11th
S.S. MONTCALM, " 16th
And Weekly thereafter.

*Steamers marked thus are fitted with cold storage.
TO LONDON.
S.S. NIAGARA, Nov. 6th

For rates of freight and other particulars apply to
Elder, Dempster & Co.,
219 Commissioners St., Montreal.
Toronto Agency:—
R. DAWSON HARLING, 23 Scott St.
Chicago Agency:—
EARLE & MASSEY, 6 Sherman St.

AYRSHIRE CATTLE

The bull TOM BROWN and the heifer White Floss, winners of sweepstakes at World's Fair, were bred from this herd. Young stock for sale. Also Leicester Sheep and Berkshire Swine. 51-y-o
DAVID BENNING,
Glenhurst Farm, WILLIAMSTOWN, ONT.



AYRSHIRE BULLS.

Four fit for service, and a Feb'y calf from 2nd prize cow at Toronto (illustrated in Sept. 15th issue), from imp. stock on both sides; also four August calves by our 1st prize bull, Craigleola (imp); dams from imported cows and by imp. bull.

THOS. BALLANTYNE & SON,
Neidpath Stock Farm, STRATFORD, ONT.
Farm adjoins city, main line G. T. R. -om

Cotswold Sheep

AND BRONZE TURKEYS

Rams and ewes of all ages, all registered, and from prize-winning stock. Turkeys from 42-lb tom and Munger hens.

T. HARDY SHORE, Glanworth, Ont.

GOSSIP.

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

M'NISH BROS.' GUERNSEYS.

The Guernsey herd of Messrs. McNish Bros., of Lynn, Ont., are the result of foundation stock purchased from Hon. Sir J. C. Abbott in 1883, and subsequently an importation made from Prince Edward Island. Half of the 30 head are cows, either in calf or with calves at their feet by the stock bull Albert of Sunny Springs, winner of first honors wherever shown this fall, and of him it was said by competent judges that "he was the best bull of his breed on the Toronto show ground this fall," which speaks in loud terms for his quality, for there certainly never was a stronger competitor on the ground before in this breed. The animals offered for sale by the firm are the progeny of such cows as Adelta of East View, winner wherever shown. This year she won first and sweepstakes at Montreal, first in Toronto, and first and sweepstakes in London. She was pronounced the best cow of the breed in Canada. Nephotos 5th is a grand three-year-old, by Florist, and won second at Toronto and first at London. She is a cow of true dairy conformation, carrying a grand, well-balanced udder. A grand yearling also has just dropped a straight, good fawn and white bull calf that should grow into usefulness in the herd, his dam possessing many of the superior qualities of the herd, apart from her indications of usefulness in conformation, possessing much good substance and constitution, and carrying a beautiful, well-balanced udder. One is impressed by the evenness of the herd all through, and the youngsters offered should not fail to attract the attention of admirers of this useful breed.

F. BIRDBALL & SON'S SHORTHORNS, JERSEYS, OXFORDS AND CHESTERS.

The Shorthorns now number a score, half a dozen of which are cows, milk and in calf. The herd was originated some ten or more years ago, when Daisy Dean 5763, by Tifford Chief, was purchased from Wm. Collins, Peterboro. The family pedigree traces through Lady Eden to American Belted Will 12394 (imp.). Her females have been regular breeders, and the stock has sold readily. About the same time Blanche 631 was secured, with pedigree tracing back much the same as Daisy Dean's. Mollie of Peterboro 12625 was also purchased about the same time from James Campbell. In 1891 Fair Queen's Ury was introduced into the herd with a pedigree tracing back for fifteen generations. She is a useful animal, possessing a combination of beefing and dairying qualities, the latter being especially evident in her offspring. Her pedigree is traced back to the stock bull Warden 12724. Arkell's Daisy 18572, by The Governor 12289, was purchased from Henry Arkell when a calf. She is a lowset, thick cow of beefing type, and has been a regular producer, her last calf a heifer, winning second at Peterboro this fall in strong competition. Manilla 3rd, the daughter of May Manilla 21331, was purchased from James Graham, Seungog Island. Having a strong dash of Zora blood, she bears out the characteristic dairy qualities of the Zora family, her bull calf taking on from February 6th to September 11th 862 pounds, gaining 100 pounds the last month. The young females on the farm are descendants of such matrons as above described, and bear out in the main the characteristics in points of conformation, and at present are in strong, vigorous form. The stock bull, Warden 19724, by Prince Royal 14836 dam Isabella 19th 16055, was purchased from Messrs. W. & J. Russell, Richmond Hill, Ont., when a calf. In a letter from Mr. Russell regarding Warden, he says: "His sire was first for two years at Toronto, and headed the first prize herd at that show in 1892." His dam was a good milker. Isabella 25th was winner of sweepstakes medal in 1892 for the best female of any age, both at Toronto and Montreal, and second in Chicago in her class. Therefore, Warden may justly be regarded as an animal of superior value, his stock coming strong and vigorous, and possessing extremely lengthy bodies, and are good feeders. We were also shown a couple of superior bull calves, one of which is by Warden and out of Manilla May, that promise exceptionally well, possessing much style, the other being younger and of recent purchase.

Half a dozen Jerseys make their home here, at the head of which is the pure St. Lambert bull, Regal St. Lambert 41456, of Mrs. Jones' breeding. He was placed at the head of the herd by Mr. Birdball as one of the best animals procurable, and was regarded by his breeder as having few equals. Exciter of Tyre 47107 is a nine months old bull, by Hyram of Tyre 45254, and out of Pine Belle. He is a strong, growthy calf of solid fawn color, black points, black tongue and switch, and descended from a family of rich producers. He is now held for sale. The two matrons and their heifers are the pride of the farm. Brier's Salinbird 69569, by Brier Pogis 14163, has a record of seven per cent. butter-fat, and is a sweet type of a cow. Although few in numbers, the herd has always been able to account well for themselves in the showing. Ton Britannia 39633, now being in her sixth year and due to calve in a few days, is a show cow in every sense of the word.

The Oxford flock was founded in 1889 from the pens of Henry Arkell, and now numbers some forty head. Recent importations have been added, which have done much to sustain the standard of excellence and breeding originally procured. The present stock ram is an importation from the flock of Henry Adams, England, and is a big, strong, useful animal. His present crop of lambs is a well-covered, good lot; in fact, we saw much material for show animals.

Chester Whites have also been receiving attention here. The stock boar, U. S. King, was imported from his breeder, F. J. Martin, Alexandria, Ohio, by H. George & Son, and too well known to require comment. His superior quality and substance of bone, with his depth of body, make him worthy of the reputation he has established for himself and the breed. From such sows as Nancy Hanks 4th 391, by Banker 3rd, and out of Nancy Hanks 2nd, have the present herd been produced, making them worthy of all the attention they have attracted in the showing and elsewhere.

Champion Hackney Royal Standard Stallion . . .

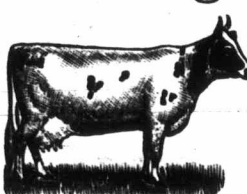


We have a number of first-class mares and fillies of this breed in foal to the above stallion. We also have for sale a number of other choice Clydesdale stallions, Standard-bred and Thoroughbreds.

GRAHAM BROS.,

Claremont, Ontario.
25 miles east of Toronto, on C. P. R. 4-tf-om

Isaleigh Grange Stock Farm.



Special Sale!
Consisting of five choice young AYRSHIRE BULLS fit for service, TWO GUERNSEY BULL CALVES, and the best lot of young IMP. LARGE YORKSHIRE Pigs ever offered.



PRICES LOW IF TAKEN AT ONCE.
J. N. GREENSHIELDS, Prop., T. D. M'CALLUM, Mgr.,
DANVILLE, QUEBEC. 9-y-on

USE Queenston Cement

FOR BUILDING STABLE, SILO, AND OTHER WALLS, CISTERNS, STABLE FLOORS, HOG TROUGH, CULTVERTS, Etc

QUEENSTON CEMENT CONCRETE MAKES THE BEST AND CHEAPEST STABLE FLOORS. If use of cement is not understood we will send competent man FREE, to lay out work and give complete instructions. We warrant all structures when our instructions are carried out, and guarantee our cement quite equal to any domestic or imported Portland cement for above structures.
SEND FOR OUR NEW PAMPHLET OF 1897, CONTAINING FULL INSTRUCTIONS, FREE.

For prices of Cement and other particulars, apply,
ISAAC USHER & SON, Queenston, Ont.
15-y-o

On the Threshold of a New Year!

Central Business College.

Stratford, Ont.,
CANADA'S MOST SUCCESSFUL COMMERCIAL SCHOOL.

Students from all parts of the Dominion attend this popular college. FIRST in thoroughness, equipment and genuine merit. All who wish to get the best training for business should attend this institution. Cost moderate; board cheap. Write for beautiful catalogue.
-om
W. J. ELLIOTT, Principal.

LEICESTER SHEEP ONLY SNELGROVE BERKSHIRES



Yearling and ram lambs for sale at moderate prices. We have only a few, but they are all first-class animals, with good pedigrees.
Address—C. & E. WOOD,
Freeman P.O., Burlington Station, Ont.



Large, lengthy English type. Bred straight from first-class importations. Young boars fit for service, and spring pigs at eight weeks old, single or in pairs not akin. We ship to order, register, prepay express charges, and guarantee satisfaction. Write for prices.
-om
J. C. SNELL, Snelgrove, Ont.

Geo. Hindmarsh, ONT....

Breeder of high-class
SHROPSHIRE SHEEP

the blood of which was obtained from the noted flocks of both England and Canada. Ram lambs of the choicest breeding for sale.

ROWAT BROS., HILLSDALE, ONT.,
Breed Shropshire Sheep. The flock established from noted English breeders, and nothing but the best rams have been used. -o

Oxford Down Sheep.

A fine lot of Young Stock for sale. A few nice Yearling Rams and Ewes. Prices reasonable. Inspection invited.

Herbert Wright,
52-y-om Box 47, GUELPH, ONTARIO.

"FARNHAM FARM" OXFORD DOWNS.

I HAVE for sale a choice lot of yearling and ram lambs, yearling ewes, and ewe lambs for 1897. Prices reasonable.
7-y-om H. ARKELL, Arkell P.O., Ont.

Southdown Sheep

40 ewes and ewe lambs for sale. Address—
JOHN JACKSON, Abingdon, Ont.

English Berkshires.

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

SHEEP BREEDERS' ASSOCIATIONS.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto, Canada. Address correspondence to MORTIMER LEV-ERING, Sec., Lafayette, Indiana. 8-1-y-om