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Farmer's Advocate "PERSEVERE AND SUCCEED." and Kome Magazine. ESTABLISHED 1866.

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VOL. XXXVI.

LONDON, ONT., AND WINNIPEG, MAN., AUGUST 15, 1901.

No. 532

EDITORIAL.

Our Exhibitions.

The value of the influence of agricultural and industrial exhibitions in promoting improvement in Canadian live stock, farm products and machinery, and in advertising the country's capabilities for the production of food supplies in great variety and of superior quality, can hardly be overestimated. The improvement of our stock of horses, cattle, sheep, swine and poultry by the importation of the best procurable in each has been largely the result of the stimulation of competition at the fairs, and at no time in the history of the country has that competition been keener than at present, prominent breeders vying with each other in procuring the best that money can buy in Britain, while the many in rank and file of our stockmen are fitting for the fray selections from their herds and flocks, with confident hope of holding their own creditably against the newer importations, as they have often done before. In no country can a larger or better showing of live stock of so many breeds and classes be seen than at the leading Uanadian shows, where all classes are shown on the same dates, so that they can be covered by one visit, and not in sections at different dates, at intervals of two or more weeks, as at the Columbian, the Pan-American, and some other big American shows. And, after all, the live stock is the backbone, the principal attraction of all these great shows. Take away that department and the chief element of interest is gone ; and no wonder, for it is by long odds the most important of the country's assets, representing more money value and entering more largely into the thrift and happiness and comfort of the people than any other. The principal Canadian fairs, however, in ddition to the live-stock feature, show a grand combination of industrial and manufacturing exhibits, and these, we have reason to believe, will receive greater prominence this year than heretofore, as it has been found that actual demonstrations of the manufacture of various articles on the ground are among the most attractive features of a show of this kind, and there are also grounds for believing that the element of entertainment, in response to the appeal of the people and the press so strongly made after the fair season last year, will be of a higher character this year. The Province of Ontario may well be proud of the three great exhibitions maintained at Toronto, London, and Ottawa. The Maritime Provinces have a magnificent equipment for an exhibition in the splendid fair grounds and buildings at Halifax. Manitoba and the Northwest Territories have reason to congratulate themselves on the success of their shows recently held at Winnipeg. Brandon, Calgary, and Edmonton, while the prospect for those slated for British Columbin, at New Westminster, Kamloops, and Victoria, are said to be of the most encouraging character.

promise of a successful fair season in Canada this year. For the first time in its history, we are informed, entries of live stock from Manitoba and the Maritime Provinces have been received for the Toronto Industrial Exhibition, and from many sources comes the assurance that the number of visitors from the United States this year will be vastly greater than in any former year. The Toronto show is by common consent the greatest annual event of its kind on the American continent, combining more strong, practical and substantial features than any other, as well as sufficient attractions and entertainments to satisfy any reasonable demand. The London show is a model exhibition in most particulars and always draws a large attendance of admiring patrons from all of Western Ontario and many of the adjoining States ; while the Central, at Ottawa, the "hub" of the Dominion, draws from east and west large crowds of visitors, who are never disappointed. Times are good, crops on the whole are good, feed for stock is plentiful, and farmers and their families can afford to take a few holidays after the busy season of harvest is over. With the low excursion rates always arranged for, pleasure and education, combined with entertainment, can in no other way be so cheaply obtained.

Evergreens on the Farm.

To make an agricultural country of Ontario, Quebec, and the Maritime Provinces, it was necessary to destroy the primeval forests. The destruction was not complete, but it is still in progress. By way of restoration, comparatively little has been attempted. The effect upon the climate has been injurious, but even for purposes of shelter and ornament, hosts of farmers have as yet done little or no tree-planting. Too often this is the last improvement the farmer sets

reason why so little planting is done is simply procrastination. Men know they should do so, and desire to do so, but some other duty no more important, or some trifling pleasure crops up, and the work is postponed from year to year. The moral is : " Prepare now to plant spruce this fall."

It is a mistake to select large trees for this purpose. From two to three feet is a good height. Trees that have been root-pruned are best. They should be carefully taken up from the nursery row with a good root, and must not be exposed to sun or wind. Two hours of such exposure of roots is enough to kill a spruce. Make a hole large and deep enough to take in the roots without crowding or twisting, and what is most important of all, see that the moist, mellow earth is closely and firmly packed beneath and around every rootlet, so that they can at once begin sucking in moisture and plant food from the earth. It is a fatal mistake to leave cavities about the roots of a newly-planted tree. A small tree properly planted will soon outgrow and surpass the larger one. Once well established, it will make a growth of some eighteen inches to three feet every year. If a drought should succeed planting, water the trees occasionally. The writer recalls the setting-out of some 75 spruce trees, a few years ago, on a Middlesex, Ont., farm, about the last of June, succeeded by a severe and prolonged drought, but by care in planting and a few waterings not a tree was lost.

If intended for a hedge, set them about four feet apart, and if for other purposes, such as in clumps or as a general wind-break row, plant about 15 or 16 feet apart. The lower limbs will in a few years reach out and touch each other. Some place them eight feet apart, and then in a couple of years remove alternate trees to put in

Our people should loyally stand by their own shows, for we should all miss them very much if for any reason they should be withdrawn, and any one who has had experience in running a fair knows that the work involves many difficulties and discouragements, and that the promoters have by no means a sinecure in striving to keep up the interest and to make them pay expenses.

All indications, we are glad to know, give

about making, whereas it should be one of the first, for it takes time for trees to grow and their full benefits to accrue.

Trees and hedges not only add to the comfort of the homestead, both in hot and cold weather, but improve the appearance and enhance the value of the farm many times the little outlay involved. Plain, modest buildings surrounded by evergreen and other trees will impress the passerby or stranger as a home occupied by a family of taste and comfort far more than the large, pretentious farmhouse, bare-looking for want of trees. We question if any investment made will give as certain, as satisfactory or as large returns. For hedge purposes or wind-breaks all the year 'round, nothing equals evergreens. Cedar lends itself admirably for hedge purposes, being in some respects unsurpassed; but, all points considered, the spruce is probably our most hardy, useful and handsome evergreen tree. It is really astonishing what a trifling \$10 investment for labor and young spruce trees will accomplish for the appearance of a farm in five or ten years' time. The transformation is a paying one in every respect, and, once established, the tree practically takes care of itself, barring a little occasional trimming.

June has been considered the one popular month for planting, but ideas on this point are changing, excellent results being attained by doing the work late in October or November. Large numbers of trees are now successfully planted in the fall. Hence, the reader need not put this work off till another season. The chief

other places. While the trees are young, keep the ground about them free from weeds and grass by cultivation, or by mulching with strawy manure or some similar material.

By way of preparation for planting this fall, clear away the old fence or rubbish and turn down the sod, running half a dozen furrows with the plow, and by November 1st, the ground, if harrowed once or twice, should be in good condition to receive the young trees. Selected and planted as we have briefly indicated, there need be no such thing as failure. In the case of hedges, the top and sides must be severely pruned, and in other cases, a foot or so of the main top shoot should be cut off when the tree is three or four years old. This will cause the side branches to grow out stronger, and make a more compact tree. If allowed to run up naturally, the tree will soon become sprawling and open in appearance.

There probably have not been for twenty years past as many improvements to farmhouses and barns made as in the present season, which is an evidence of growing intelligence and thrift, and improved financial condition, occasioned by better prices for Canadian farm products and better methods in farming, and also more leisure to devote to enhancing the appearance of the surroundings of the farm home. Amid all this progress, let not the planting of evergreens and other trees be neglected; and, if you have not already done so, give the spruce a trial. The results will so please you that you will soon want to plant more.

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THE FARMER'S ADVOCATE.

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THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

Two DISTINCT PUBLICATIONS-EASTERN AND WESTERN.

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The Highest Authority on Cheesemaking.

The making of good cheese and the success of

geous. To discover a gold mine may place an individual in comfortable or even luxurious circumstances, but it will not, as a rule, go far towards developing his thrift or manhood. It is often charged against dairying in any of its forms that it is excessively slavish and engaging in its demands, but it is only by results that the true estimate of any calling can be formed, and where can we find a more substantially comfortable class of citizens in mind and body than the prosperous factory-patron or cheesemaker, whose prosperity depends upon and has grown out of his personal effort? Nor is the necessary personal effort confined to hard work, but close study, observation and experiment also play an important part in the success of dairying, the development of the dairyman and the prosperity of agriculture. Had it not been for these qualities of intelligent thrift and studiousness on the part of those of our cheesemakers who exhibited cheese at the Pan-American we could not have published the proud record of Canadian cheese as we did in last issue of the "Farmer's Advocate."

It was no insignificant accomplishment that our cheesemakers achieved in that Pan-American test, and it is of great value to cheesemakers generally to learn some of the chief points and practices observed in making the cheese. Makers and others in touch with the cheese industry will count it a privilege to read in the dairy department this issue how the cheese was made and cured. These successful makers are to be congratulated, as they proved themselves able to do fine work, and in some cases with defective raw material, in very unfavorable weather conditions and with curing-rooms that would spoil completely anything but well-made, clean-flavored cheese.

STOCK.

The Canadian Quarantine.

" The importance of this demand to our livestock breeders does not need to be emphasized. The stoppage for the time being of the demand from South America, coupled with the fact that there has not existed for many years past so large a demand for pedigree cattle in the States and Canada, as shown by the eminently satisfactory results of the sales that have been held in those countries during the present year, afford proof of its value. It is, therefore, of the utmost importance that so far as is consistent with the safety of the health of the Canadian herds and flocks, all barriers that prevent or in any degree interfere with the free transference of pedigree cattle and sheep from hence to those other markets wherein there exists so large a demand is much to be deprecated. It is satisfactory that the 'Farmer's Advocate' should have thought proper to call attention to the needless length of the quarantine imposed upon imported cattle, which, under the present arrangements, extends to a period of ninety days. Our contemporary argues that whatever justification might have existed for this lengthened period of quarantine at its inception has long ago passed away, from the fact that there does not exist in the English herds any disease that renders this lengthened period of quarantine essential. But a still stronger argument is put forward in pointing out that under the scheme for carrying out the tuberculin test, the Canadian Government has now one of its own officials resident in this country, whose duty it is to test all animals purchased for Canada previously to their shipment. Assuming that all the cattle that passed the test for tuberculosis under Dr. J. G. Rutherford's direction are free from this disease, it says that the cattle selected in the first place at heavy expense by enterprising breeders having to run the gauntlet of rigid inspection, and then, after taking an ocean voyage of some ten days, ' in the name of common sense why should our breeders be put to the further cost and delay of three months' de-tention in quarantine ?' Tuberculosis they cannot have. Dr. Rutherford's test surely settles that. Pleuro is not here to catch, and, at the very outside, the period of incubation for foot-and-mouth disease does not run over twenty days, some authorities contending that ~ only in exceptional cases does it extend over six days. Our contemporary concludes its remarks upon this matter by asking what else there is that will not show itself in less than half ninety days, presuming any germ could elude Dr. Rutherford's viligance? Has not the Department faith in its official representative ?"- (Farmer and Stockbreeder (EngFOUNDED 1866

The Winnipeg Industrial Exhibition.

Perfect fair weather throughout the week, the practically assured prospect of bumper crops, the fine condition of the exhibition grounds and speeding track, all contributed to render the Winnipeg Industrial, held July 29th to Aug. 2nd. a gratifying success. The attendance was large. the management exceedingly creditable to the officers and directors, and the grand-stand attractions the cleanest ever yet presented there. The live-stock show, especially in horses and the beef breeds of cattle, was strong in numbers and of high-class quality, the judge of the latter, Prof. Thos. Shaw, of the Minnesota Agricultural College, stating his opinion that no single State in the Union could make a better exhibit of these. A detailed report of the work of the judges, by members of our own staff, is given below.

HORSES

CLYDESDALES.-The judging of the drafters at the Industrial always has an interested crowd of onlookers to agree with or criticise the action of the judges, and this year was no exception. The exhibit in the Clydesdale classes showed the renewed interest in the breeding of drafters, although the classes showed a wide divergence of ideas as to what constitutes the draft type or the ideal Clydesdale. In the four-year-old stallions competition was keen. Imported horses, stud veterans, and home-bred stuff all vied for the honors indicated by the possession of a red, blue or white ticket. The bloom and fitting of the horses varied a great deal. Some were just off the route, with large breeding records, others were there whose stud duties were exceeding light, and who consequently carried more flesh, not having had to bear the heat and burthen of the day. For show purposes, any animal should be fitted, yet not so much so as to unfit for breeding purposes if shown in a breeding class. Jno. Gardhouse, Highfield, Ont., and R. B. Ogilvie, Chicago, judged the horses and awarded the prizes. J. A. S. Macmillan's (Brandon) entry, Sir Christopher, the Clydesdale cup winner there, went to the front. He was certainly fitted, and carried himself well. He is by Sir Harry, out of Chrystabelle, and has a record as a show-ring performer; here he was considered as outstanding. The blue ticket went to the Carman horse, Shunk's General, a well-muscled, active horse. that if fitted would make a hard fight for first place. Third prize went to Prince Charles, a good, useful horse, dark brown in color, the property of Donald Ross, of Cypress River. Several good ones were unplaced, notably Aberdeen. Colquhoun and Beattie's entry, slightly off bloom, but fresh from the stud, and Brooklin Boy, who, while not a winner here, is a getter of draft horses. Three-year-olds caused some thinking. Prince Stanley, the Mutch Bros., Lumsden. Assa., entry, being well thought of. While he moves well, with the promise of making a massive horse, he is hardly as wide in front as desired, and had to be content to play second fiddle to Dr. Swenerton's entry, a grandson of the noted old Macqueen. Rosemount was fitted to the top notch, and although a little short in the quarter, and might be straighter in his hind limbs, and in some eyes he is a shade light below the knee and hocks, yet had sufficient merit to carry him to the top, and later on to win the Clydesdale cup, the winner in the aged class being barred, having already won the cup at Brandon. Prince Bonnybridge was only able to get up to third place. He lacked draftiness when compared with the other horses, although he possesses quality and action equal to the first and second prize winners. Anent action in a draft horse, the gait at which they should excel is the walk, which should be fast, true and level, with no wobbling. A serious fault, to our minds, in one of the horses showing was that in the walk he carried his hind legs too far forward, considering the setting on of those members, and as a result, would lose power at draft work ; not only so, but his length of stride gave him a tendency to wobble, which also means loss of power, either in the shafts or traces. In the two-year-old class, the judges found the winner in Baron Hendry, a son of Baron's Pride, a well-developed, strongmuscled colt, with plenty of bone of good quality A worthy rival to the Macmillan horse was Lord Grandeur, from the stud of J. A. Turner, Millarville, Alta., a good sort that will stand more fitting, which would make him a strong candidate for first honors; he was hardly as good in his hind quarters as the Brandon horse. The thirdprize colt was not finished, lacks middle, and looked raw; he needs developing. In the $y \cdot a^{y-1}$ lings, the contest was very keen. Several of the colts had come together before, and winners in previous contests were not looked at. and vice versa. J. E. Smith's "Little Bobs" was picked as the winner, although one of the judges thought him a little strong in his hind legs. He is a blocky drafty colt, with bone and feather enough for any Scotchman, R. B. Ogilvie putting it as follows He possessed more Clydesdale character that all the others together." Frasers, of Emerson put a strong candidate for honors into second place, a horse that would have been higher but

Canadian agriculture bear a somewhat close relationship. This is true in a larger measure than at first consideration might be supposed. Were it not for the fact that our cheese is good, we could not have shipped, at a paying price, some \$20,000,000 worth to Britain last year, because it would not have been wanted. It is the quality that counts, and the more of it our cheesemakers get into their goods, the more can they sell and the better will be the price. Probably the chief reason why Canadians do not eat more cheese is that they do not have the best grades set before them. Good cheese is not only a substantial and economical article of food, but a luxury as well, whereas a poor quality of cheese is more likely to be thrown aside than eaten, and hinders the demand for more. It is, therefore, of great importance that the general average quality of our cheese be raised, and that this go hand-in-hand with an increased production. That the cheesemaking industry is good for a people we have much evidence. Where can be found more universal evidences of thrift than in a district where cheesemaking has been the chief industry? Probably in no other counties of Ontario can better barns, houses, fences, and dairy herds be found than in Oxford and Perth, where Canadian cheesemaking had its origin and continues to the present day. The same may be said in portions of Eastern Ontario that are too rough to succeed well without the cow, and in Prince Edward Island the cheese industry since it became established has promoted the agricultural interests as never before. We are compelled to recognize the fact that financial prosperity

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for a slackness in his ribs, and being slightly down in the back. He is a good mover, well muscled, and possesses legs and feet of the wearing kind, and was much fancied by the Ontario judge. Premier Prince, while not entitled to the rank in this company his name would suggest, got third place. This colt is owned by A. E. Thompson, M. P. P., Melita, and was bred by Purves Thomson. The brood mares were headed by the Calgary winner, Princess Patricia, by Prince Patrick, owned by J. A. Turner, an old show-yard winner, with a foal at foot, a typica' Clydesdale, well muscled, with good feet and limbs, action of the best, and plenty of character.



BROOKLIN BOY. Clydesdale stallion ; sire of first-prize draft t(am, Calgary, 1901. BRED AND OWNED BY WM. MOODIE, MILLARVILLE, ALTA.

Second place went to Lady Almondale, by International, a good one, with lots of substance and quality, but lacking the quantity of bone and hair possessed by her successful rival; it was no disgrace to be beaten here. J. E. Smith had the third prize mare, matronly and a little plain, but of a useful type, that will both work and produce the right sort. Lady Almondale, with a daughter (Princess Royal) like herself and Lord Roseburn, by Burnbrae, got the progeny prize, beating the Smithfield entry. Three-year-old fillies brought out two. The Mutch Bros.' Lady Charming, being the more typical and drafty in form, secured the red ticket. Thompson's Princess Royal getting the blue. The two-year fillies were a good lot, Charming Lassie, a slashing big one, a little short in her rib, being placed first, the McKenzie entry, a very tidy mare, a little low at withers, and without the bone and size of her competitor, being second, the other entry of Mutch Bros. having to be content with the third In the yearlings, a filly low in flesh, but prize. drafty in type, of Mutch Bros.', went to the top; Princess Natalie, a very nice filly, but lacking weight, from the Roxey Farm, being second ; third to I E Smith In the foals, Princess Patricia's filly foal was first, with two good ones of plainer type, belonging to J. E. Smith, second Princess and third. In the mare any age, Patricia was an outstanding winner. She is by Prince Patrick, out of Dora McGregor. One breeder, J. A. Turner, imported or bred all the first-prize winning females, a record to be proud of. In the stallion and three of his get, competition was not as strong as we should like to see. Prince Charles deservedly won with his progeny. For premium for stallion bred in Manitoba or the N.-W. T., that useful draft horse, Aberdeen, owned by Colquhoun and Beattie, got the pride of place. While probably not as fashionable as some, he is doing good work in the stud, and is doubtless a money-maker. J. B. Thomson had a youngster out which secured the blue ticket, a colt of good parentage, being out of Lady Almondale, and by J. A. S. Macmillan's prizewinner, Burnbrae.

THE FARMER'S ADVOCATE.

won with a well-put-together foal. The dray team fell to that good horseman, Jno. Stott. with the get of Lord Haddo. Mare and progeny went to D. T. Wilson. In the teams for farm purposes, D. Little, the Portage man, had a hefty team of Clydes, both fair movers. Boyle, Thornhill, had a chunky team, the off one probably not quite as good as the near one, for second place. Bonar's team had to be content with third place, being a little lacking in bloom.

GENERAL-PURPOSE class had a number of entries, which are often the mislits from other classes. This class is of doubtful educational benefit. An occasional good one is found there, which is not, however, sufficient excuse for continuance of prizes for general-purpose horses. It is a class which does not reflect any special lustre on a breeder, nor does it require any great knowledge of breeding to couple equine stock so as to get specimens which usually fill this class. Horse breeding is a science, and needs devotion to a special purpose if one wishes to make a success of it. This seems to be a class, a'so, that may be brought into the ring in any old way, one animal being brought in with both fore shoes loose. Winners in this class were D. T. Wilson, H. Boyle, Thornhill, W. A. Stewart, Jno. Stott, Jas. Bray, R. Glennie. In the G. P. teams, Stott won with a well-matched, good-moving pair, Boyle being second with a pair of darkcolored ones, not, however, as good in the feet as the first-prize team. The Wilson team that fell into third place were not as well matched, one being in breeding condition. The get of Disturbance, out of a Fraser mare, won the progeny prize.

LIGHT HORSES .- The call for Standardbreds brought out quite a number of entries to pass under the critical eye of the judge, D. Hughes Charles, Galt, Ont. Some were old campaigners, and what not, the classes as a whole being fair. Jno. Henry, Harry Stanton, Sharper, Bryson, Edgar Moody, and Alaclave made a strong ring, old Sharper going to the top, Alaclava, a son of Wildmont, second, with Bob Kirk into third place, he being a little lame that day. Several good horses were left unplaced, and of a type more profitable, if used at all by the farmer, for the getting of big, upstanding horses. Nelles' two-year Judge Geers, had an easy thing in his department. In road mares, a pair of good ones came out, Thos. Scott's Stonewall Maid being an especially good one, FiFa being second. One entry came out in the two-year-olds, and was given a second, which was a very lenient proceeding on the judge's part. A daughter of FiFa wore in the yearling class. The foels were good ones, and were placed in the reverse position to their dams. Taken as a class, they were not a lot, with a few exceptions, notably those of Thos. Scott, Atwell, that will tend to make the breed favorites with discerning horsemen or the wiser portion of the farming community.

exceptionally good one being by a Hackney sire, Claimant. In pairs to harness, Moffat had an easy thing with a team of good movers, well, put up and with considerable action. The singles brought out a large class, with a lot of good ones, having size, speed, style and some shape to them. At the head of the class of fifteen stood H. A. Galbraith's entry from Hartney, a stylish, free moving, speedy mare, and of type far too seldom seen in this class. She is by Stanton Chief. Moffat, of Souris, got second; and the Macmillan entry, a toppy, good-going one, third.

CARRIAGE HORSES .- If those shown at all represent the prevalent ideas of Manitobans as to what constitutes a carriage beast, those ideas need a good shaking up. Some of the entries, were small, weedy things, and as a Scotchman puts it, " could trot like a soo." In the stallions (aged), Pasha, the Brandon horse, was an easy first, a horse of great substance and great action, both fore and hind; rather much overweight for the class. He should, with selected mares, get a strong, useful lot of horses. Ingmanthorpe Victor came second, a well put up horse of the carriage type, but lacking action altogether. In year-olds, Jno. Stott won with a Ryshawk colt, a gay mover of the carriage type; second went to Frasers with a Disturbance colt. In two-yearolds, Ryshawk again claimed the parentage of the red-ticket winner, a Claimant colt being put into second place, the latter a little undersized. In pairs there were several out, the first-prize team, owned by T. D. Stickle, Carberry, being the only strictly carriage pair, being well mated, good movers, and upstanding ; they were easy winners. The second-prize team, a green pair, were found to be under the height, so had to give place to the Shannon entry. Brood mare with foal at foot was an object lesson, showing how not to do it, a mare of fair carriage type, with evidence of breeding, having a foal at foot sired by a Clydesdale stallion, for which no prize was awarded. In the singles to harness, the Stickle entries got first and second, Lee third with a gray, some good ones being unplaced.

HACKNEYS were not numerous, but were good. In the aged class, Power's False Heir, a Lord Derby, out of a Denmark dam, up in years and showing the marks of usage, went to the top. He has plenty of quality and trappy action, and has been a getter of highclass stock. His competitor, Jonas, by Cambridgeshire Shales, is a big, smooth, upstanding horse, with plenty of bone, but lacking the knee and hock movement desired. They were placed in the order named. In three-year-old stallions, Confident Squire, from Neepawa, Stewart Bros. and McLean's entry, got the red ticket, and also the sweepstakes for stallion any age. The young horse is strong, well put up, and promises to be a phenomenal actor when developed. He has good feet, plenty of bone, and size enough. More

SHIRES.—Entries were few, a fact to be regretted, as good draft horses are none too plentiful. Rising Sun, the property of J. McLaughlin, High River, a big strong horse, got first place. W. H. Belson had the two-year stallion winner, a useful sort. The mare and two of her progeny brought out the exhibit of F. J. Scott, in which was a good three-year-old. In the Clydesdale and Shire stallion sweepstake, Rosemount won; had evidently frightened all possible rivals, as he was able to eyen dim the Rising Sun. Mutch Bros, winning the brood mare prize in the interbreed sweepstakes.

DRAFT HORSES was a light class. Brood mare with foal by side brought out two, the wellbalanced entry of D. S. Wilson, Asessippi, being placed first, Bonar's (Forest) big bay mare getting second, a mare considered a little light in her timber for the weight above. The other single class prizes were captured by D. T. Wilson, who had his stock in good fit, although Bonar



RANCH-BRED DRAFTERS. First-prize draft team, Calgary Fair, 1901. BRED AND OWNED BY WM. MOODIE, MILLARVILLE, ALTA.

In Roadsters the standard was some higher, the brood mares with foals being useful and breedy looking stuff, the tickets going to Yuill Bros., Portage la Prairie : Jno. Wishart, J. H. Tait, Winnipeg, in the order given. Three-yearolds were a poor lot, having neither style, size, action nor fitting. The two-year-olds contained some very good specimens, a Keewayden filly being first. The yearling filly call brought out a good one of R. I. M. Power, the get of a Thoroughbred. The foals were very promising, an

good Hackneys are needed in the West, especially if carriage horses are to be bred here.

THOROUGHBREDS.—Several aged stallions came out, some of them winners in the ring before. Dermod got the place. although beginning to show his age. Hard Lines, a very serviceable horse, second; with Alfieri, a breedy-looking fellow, third; Kilburn and others being unplaced. In the stallions three years old, two horses were out, both racers: Riviera, an extra good one, with plenty of breed character and substance;

thick, deep, level-fleshed roan, with great heart

his unsuccessful competitor being the leggy Port Jarvis, lacking in depth of forerib and other appearances of stamina. Brood mares brought out Nora Howard, a beautiful mare, with size, substance and quality, and breeding of the best, her opponent being a pony in size. Nora Howard's foal by Davidson was an easy winner, and is a very promising youngster. The progeny prize went to Hard Lines, the sweepstakes to Dermod.

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SADDLE HORSES AND PONIES were a fair lot, W. L. Puxley, W. Hole, J. Bennette and Vernhortt contributing the winners. The horse exhibit, as a whole, hardly represents improvement commensurate with the improvement in prices.

In the matter of carriage-horse breeding, a lot of educational work has yet to be done "if one may judge from the specimens now shown as carriage stock at Winnipeg fair. The mares bred to the so-called carriage stallions, Yorkshire, German and French Coach and Cleveland Bays, are usually deficient in quality and hot blood, which is to be got from the Thoroughbred almost en-If fortunate enough to possess the tirely. desiderata mentioned, the use of the best types of Hackney or Standard-bred stallions will give the most lucrative and therefore satisfactory results. The horse ring could be much improved by the laying down of a piece of solid track, say fifty yards straight away, on which to send the horses in hand, to show their paces, and incidentally their weaknesses. The prize list needs some amending in the horse classes. The brood mare and progeny prizes in the general-purpose class is wasted money, for reasons already mentioned. We see no good reason, either, why discrimination is shown against three-year-old Hackney stallions and under classes in the matter of money offered, while Standard-breds, not as a general rule anything like as safe stock to breed from, get far more money; in future, the division should be made on a more equitable basis. In place of the everlasting diplomas, the Horse Breeders' Association might offer silver medals, suitably inscribed. Have them good, even if only a few can be offered, and the honor of winning will be all the greater. The rule of not awarding prizes to unworthy stuff needs to be more rigorously enforced. The Industrial, by its strength, need have no fear of results if it undertakes to infuse a little backbone in this matter into the judge and his director.

CATTLE.

In spite of the lack of feed during the past season, and the scarcity of ready money, which militated against the free importation of new blood, the cattle barns were well filled with stock, in most cases of a high order of excellence. The remodeling of the old cattle barns was greatly appreciated by the exhibitors who occupied them, as well as by the visitors who desired to get an intelligent view of the stock.

SHORTHORNS .- As usual, the Shorthorns exceeded all other breeds, both numerically and in general excellence and finish, some 120 entries of this cosmopolitan breed being forward. Among the exhibitors of the red, white and roans were Home Stock Farm , Prairie Hon. Thos. Greenway Crystal City, and Manager Yule deserves credit for the strength and quality of the exhibit brought out; J. G. Barron, Carberry, whose entries were presented in fine form in spite of their trip to the Brandon Fair; Andrew Graham, Forest Home Farm, Pomeroy, with a creditable showing, of mostly home-bred things; W. S. Lister, Marchmont Farm, Middlechurch, with an exhibit of valuable imported stock; R. Mc-Lennan, Moropano : Bennie Bros., Castleavery Thos. Speers, Oak Lake; C. C. Castle, Toulon; H. O. Ayearst, Middlechurch ; Jas. Bray, Longburn; John Graham, Carberry, and W. G. Styles, Rosser; Wm. Ryan, Ninga; Yuill Bros. and J. T. Thomas, of Portage la Prairie, and K. McIvor, with one entry each. Five bulls lined up before the judge, Prof. Thos. Shaw, of the Minnesota Agricultural College, in response to the call for bulls four years and over. Manitoba Chief, a son of Topsman, shown by Benallack and Lafrance, Winnipeg, was, after consideration, sent to the top. He is a great, massive, fore-ended red, with a fairly good top, but light in flank and thighs, and from lack of exercise cramped in his going. For second place, the judge selected the roan. George Bruce, from the Prairie Home stalls, a bull carrying more meat in the valuable cuts than any bull in the ring : a wonderfully good handler, smooth and level back to the hooks, from which point. however, he fails. Robbie O'Day, the big red roan at the head of Forrest Home herd, was sent into third place. He is not as smooth as might be and lacks depth behind, but from a utility standpoint might well have headed the class, with Bennie Bros.' Knight of Lancaster following him : he is a dark red, with good top, well-sprung rib and great depth forward. Castle's What-for-No was in too low condition for the company he was in. In the three-year-old class, the four imported balls had to give place to a home-bred one in Barron's Topsman's Duke a

and full crops, and well-packed loins, flanks and twist, but a trifle plain about head and neck. The second was found in Imp. Jubilee, from the Prairie Home herd, a good quality bull, with gay head and carriage, good depth of body and straight underlines, but not so level on top. Barron's Imp. Nobleman got third, with Imp. Sir Colin Campbell, shown by R. McLennan, following, a smooth, handsome, showy red, a trifle slack behind the hooks, and yet by many a favorite for higher place. Lister's Prince Alpine, a good, straight bull, but lacking in flesh and finish, was also unplaced. But three bulls answered the call for two-year-olds. The 1900 sweepstaker, Sittyton Hero 7th, recently sold by J. G. Washington, of Ninga, for \$1,000, was the strong card from the Crystal City herd, and in this class an outstanding winner. He is a Duchess of Gloster, by Sittyton Hero, bred by the Davidsons, of Ontario, and comes out in even better form than as a yearling. Deep, thick, smooth. evenly-fleshed and of superb quality, he was not only outstanding in the class, but, we think, by general consent, an outstanding winner of the male championship, also awarded him For the blue ticket, the judge halted, but finally sent it to the deep, red, showy youngster. Cumberland, also from Greenway's string. He is a deep, full-jointed bull, with smooth, level quarters. Into third place dropped Barron's entry Judge 2nd, shown in rather thin form, but with good loin and fair quarters. In the yearling class were some surprises, two new exhibitors coming out right at the top of the seven entries forward, and both of these with pure white bulls. Wm. Ryan brought out in excellent form the Missie bull, Lord Missie of Ninga, bred by W. S. Lister ; good on head, neck and bosom, full crops, straight-lined, well-ribbed, and particularly smooth over the quarters, and full in twist. His was no easy victory, however, as John Graham pushed him hard with the Watt-bred Captain Jack, by Hillsburg Tom, out of Mildred 6th, a deep, sappy youngster, of choice handling, splendid loin and quarters, and that looks like growing into a topper. The judge stated that the roundness of forerib and smoothness of finish of the Ninga bull won him the place. But when one considers that such a good bull as Ribbon's Choice, of Capt. Robson's breeding, a secondprize winner at Toronto last year, and brought out in that pink of condition for which Manager Yule is famous, only got a third place in this ring, one realizes something of the excellence of the show. In the calf class, Yule had out Buffalo Bill, recently brought up from Ontario, a big, wide and deep bodied calf of the thick-fleshed kind that are always good doers ; but the judge found his preference in the more breedy-looking Red Knight, by Caithness, also from the Greenway stalls, a neat, tidy little bull, with a smoothlyturned hind quarter. For second place, Masterpiece 2nd, shown by Jas. Bray, was selected, a growthy, well-ribbed youngster, with smooth shoulders and good neck veins, but inclined to droop behind the hooks. In the calendar year calf class, Greenway's stalls again furnished the winner, with a white son of Judge, Jack Frost, 2'00d. straight with another good Masterpiece calf : Greenway 3rd, with a Sittyton Hero calf, and Thos. Speers 4th, with a good quality, calf of Cargill's breeding. For the male sweepstakes, all the first-prize bulls but the aged one came out, and made a most interesting ring. The fight lay between Topsman's Duke and Sittyton Hero 7th, the former a butcher's block, the latter with more style and breed character, and Prof. Shaw went for quality, and sent the coveted honor to Sittyton Hero 7th, thus making him male champion two years in succession. Later on, in deciding the male sweep-special by the Dominion Shorthorn Breeders' Association, Mr. R. B. Ogilvie, of Chicago, in the capacity of associate judge, when asked to tie the ribbons, reversed Prof. Shaw's decision, giving his preference for juicy stakes and deep loin cuts. It was a case where doctors differ, and the ringside seemed to be as far apart as the two judges on which of the types should stand first. In the aged female class there were but thirteen out, as against sixteen in 1900. They represented a variety of types, from the dairy to the pure Scotch. Lister and Greenway had each five entries out, Barron two, and Graham one. For first honors, Prof. Shaw selected Barron's imp. roan. Jenny Lind 4th, the thirdprize cow in 1900, and a cow of wonderful length and levelness, full of character and usefulness, and with a little more fitting a world-beater. Barron also scored a 3rd on the Topsman cow, Louisa, a decision not so easily concurred in as the first The Abbotsford cow, Frieda, from the Greenway string, dropped into second place; she is a smooth, sweet little cow, brought out in excellent form. Lister's crstwhile sweepstakes winner. the ten-year-old Rosabella, was rated for 4th place She still carries a wealth of flesh, and is a typical example of much-in-little, but is beginning to lack freshness and bloom, to our mind however, she should either have gone higher up or else been thrown out altogether. Space for-

bids mention of the many excellent cows left unplaced. Greenway's grand old Roan Mary was lined up 5th, with such good ones standing by as Imp. Clara, Imp. Lady Bell 4th, Imp. Red Rose. a beautiful model of a milking Shorthorn. Graham's useful Canadian Duchess of Gloster, and Lister's grand old Rose of Montrath, and his imported cows, Elsie 2nd, Jilt 21st, and Lady Dorothy 31st. But four three-year-olds were forward. Greenway's entries, Ninga Jubilee Queen and Crimson Cloud, both thick, low-set, smoothly-turned heifers, were placed in the order named. with the stylish, breedy cow, Imp. Claret Jug, from the Marchmont herd of Mr. Lister, following, and a useful-looking entry, Fanny Ury, shown by Thos. Speers, next. The most attractive ring of the class was that of two-year-old heifers, with seven choice things forward, to be headed by one of the best females of the year. Village Princess, from the Prairie Home stalls. She is by Abbotsford, was bred by Harry Smith of Hay, Tnt., and is low-set, deep and level from end to end, with evenly-balanced quarters and wonderfully developed forward, full crops and fore flank, and most beautiful bosom and neck veins. Her stable mate, Matchless 25th, of Watts' breeding, and by Royal Sailor, with sprightly carriage, strong back, and rare quality, had to play second fiddle to the Carberry entry, Barron's Myrtle, a smooth, beautifully-fitted roan, while 4th went to her companion. Kinaldie Rosebud, leaving Graham's entries, Eveline and Princess, and Greenway's Minnie Bud, unplaced in a septette of beautiful, fresh young things, full of promise of the continued supremacy of the red. white and roans. Of the six yearling heifers, Greenway furnished the 1st, 2nd and 3rd winners, with three roans. The imported Brightlight, a very sweet, level little thing, to the surprise of many, was placed over the growthy, well-developed Lavina's Blossom, bred by Capt. Robson and sired by Imp. Blue Ribbon. This heifer has a great heart-girth and good front; her being forward in calf may have made her appear a trifle down in back, but she is a good sort; 3rd went to the Abbotsford heifer, Regalia, great over the crops and fore ends. Barron followed, with a daughter of Imp. Nobleman, with the Golden Measure heifer, Violet, from J. E. Smith's string, following. With four entries in the heifer calf class, Greenway scored 1st, 2nd and 3rd, with Graham 4th. The 1st and 3rd were Jubilee calves, and the 2nd a daughter of Judge, that we think might well have been graced with the red ticket, being a compact, level calf of great sweetness and in wonderful form, whereas her successful stall mate, Lavender, was rather slack in the back, although a larger calf. Graham's entry, Lily Grey, a smooth, well-fitted calf, might, without dispute, have been ranked higher up. R. McLennan and Bennie Bros. each had good, straight calves, that with more fitting would have demanded more attention. A daughter of the sweepstakes bull from Greenway's stalls scored in the calendar year calves, a very breedylooking, smooth heifer, but lacking the substance of some of her rivals. A Jubilee heifer out of Matchless 11th was second, with Graham's Red Rose, by Robbie O'Day, following. The female sweenstakes for the D cided by Prof. Shaw and R. B. Ogilvie, and lay between Barron's 1st-prize aged cow, Jennie Lind, and Greenway's 1st-prize two-year-old, Village Princess, with the same exhibitor's 1stprize three-year-old, Ninga Jubilee Queen, also in the ring. They were a superb trio, the wonderful sweetness of the two-year-old making her a favorite with some, but the ringside generally concurred with the decision of the indges in favor of the aged cow. The same judges placed the awards on the D. S. B. A. special for young herds under two years of age, the rating being as follows: Greenway 1st, with a herd headed by Ribbon's Choice, and 2nd on a herd headed by Red Knight: Smith, with a quartette by Golden Measure, and Barron's Nobleman youngsters following in the order named. The balance of the class was judged by Prof. Shaw alone. In the open herds, bull and four females, no less than six herds lined up, with the following result: Greenway 1st, on Sittyton Hero, Frieda. Village Princess, Brightlight, and Lavinia's Blossom (all roans): 3rd on Jubilee, Roan Mary. Autumn Rose, Clara, and Ninga Jubilee Queen and 4th on Ribbon's Choice, Lady Bell, Matchless 25th, and Crimson Cloud (all reds). Bar ron won out 2nd on Topsman's Duke, Jennie Lind, Louisa, Laura, and Myrtle, and 5th on Sir Arthur Grant, Rosie 6th, Maggie 2nd, Louisa 2nd, and Jennie Lind 5th : while J. E. Smith's quintette was made up of Golden Measure 2nd. Ury Garnet, Violet, Lady Abbotsburn 3rd, and Golden Lovely. The group contests were all hotly fought out, and, briefly stated, netted the results below : Three calves bred and owned by exhibitor, 1st and 2nd, Greenway : bull and two of his get. 1st. Greenway, with Sittyton Hero. and 2nd with Jubilee ; 3rd, Graham, with Rob bie O'Day: 4th, Barron, with Nobleman. The judge here remarked that he laid great stress en the similarity of the progeny to the sire, showing his prepotency. Three animals, any age or se

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that king of the show-ring, old Topsman; 2nd, Greenway, on Jubilee's offspring; 3rd, Smith, on Golden Measure's, and 4th, Barron, on Nobleman's get. Cow and two of her progeny : 1st, Barron, with the female champion, Jennie Lind ; 2nd and 3rd to Greenway, on Red Rose and Rose of Greenwood, respectively. Herd, bull and three females any age : Barron, on a quartette by old Topsman. For herd of four, any age or sex, all bred by exhibitor: 1st and 4th were won by Barron, with a Topsman and a Nobleman combination, respectively; 2nd by Greenway; 3rd by Smith.

C. P. R. Specials .- The Land Dept. of the C. P. Railway put up some \$225 for home-bred Shorthorns, barring all winners in the open classes, thus making a very nice consolation stake. While the quality and finish of the stock brought out by this competition was, of course, not equal to that in the open class, still it was very creditable, and some sections were keenly contested. W. G. Styles was without opposition to his Graham-bred Pomeroy Favorite, a good, thick, useful bull, that had done a heavy stud season. In the yearling class there were, however, seven entries, headed by H. O. Ayearst's Prince of Lind, of Lister's breeding, a smooth, straightlined red bull, well brought out, and afterwards selected as best bull any age. John Graham had the blue on a good, useful white, Claymore. Third place went to Col. Otter, of Lynch's breeding, very well shown by Yuill Bros.; and 4th to Lord Buckingham, shown by J. T. Thomas. R. McLennan scored in a ring of five calves with Lorne Campbell, a growthy, even, red-roan; 2nd going to a good, straight red of Bennie Bros., by their Knight of Lancaster, and 3rd to a nice, mellow-handling, although thin, bull shown by Thos. Speers. In cows, W. S. Lister's Rosabelle 7th, a useful-looking cow, of the dual-purpose type, won out, and was afterwards awarded the female sweepstakes. She was followed by John Graham's Sunflower and Greenway's Duchess of Rosedale. Forest Home herd produced the winners in two-year-old heifers, with the well-grown, good, level heifers, Princess and Eveline, that have figured in the show-ring for the past two Smith scored 3rd on Normal of Beresyears. ford. A very nice quartette of yearlings were lined up, John Graham's Moss Rose being 1st, with D. Fraser & Sons 2nd, and Ayearst 3rd. Nine heifer calves were presented to the judge for placing, Graham's Red Lily proving an outstanding 1st; Bennie came into second place with a real good-topped calf in only fair fit, Fraser fol-H. O. Ayearst's was the only herd lowing. brought out.

HEREFORDS .- With the incentive of a strong demand and good prices, the whitefaces have for several years been putting up a constantly improving show, and this year made the best exhibit of the breed that has been seen at the Winnipeg Industrial. The stock showed more quality and finish, particularly in the older sections, than has before been noticed, and throughout a most creditable breed exhibit was made. The exhibitors were : J. E. Marples, Deleau; John Wallace, Cartwright; J. A. Chapman, Beresford ; and W. Purdy, Lumsden, Assa. Wallace's two-year-old bull, Maple Duke, was entitled to first place over Chapman's Lord Ingleside, by Mark Hanna, the former being a betteressing throughgrowthy bull, and po developed, out good qualities. Chapman's entry was shown in good form, but is rather undersized. The yearling class furnished the sweepstakes bull in Wallace's Buller, of his own breeding, sired by Dominion Hero, out of Milkmaid, certainly the best Hereford bull that has been shown at the Industrial. Well developed, with table back, grand spring of ribs, full flanks, deep, thickly-fleshed quarters, bulging neck veins and good head, he is indeed a credit to his breed, and also to his feeder, John Waldie. Marple's entry, Daymoor of Ingleside, sired by Mark Hanna, and bred by 11. D. Smith, of Compton, Quebec, was shown without any extra fitting. A good, straight lot of five calves lined up before the judge, for first honors Marples' Perfection being selected. He is a smooth, good-topped calf, but rather thick in the skin. Second and 3rd went to the Cartwright entries, Drewry and Waldie, the former a big, growthy chap, but rather light in the thighs and bare above. In aged cows there were saven entries, and a good, useful lot they were, possessing scale and substance, and all of them evidently regular breeders, and shown without excessive litting. As a class, however, it is noticeable that they lack the smoothness and finish of hind quarter that one sees in the breed as brought out in American show-rings. Our breeders would profit by getting bulls of higher quality. Chapman's Fairy 5th was selected the head of the class. She is not a large cow, but is wonderfully smooth and carries a wealth of meat, and her handling qualities are remarkable, certainly this particular superior to anything in the class. Wallace's Lady Belle 4th was rated 2nd, a big. deep, breedy-looking cow, shown in good orm. Purdy's entry, Empress of Beresford, stood and. She is a cow of fair size, good depth and

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the get of one bull: 1st, Barron, on the get of substance. Chapman again won out on threeyear-olds with Victoria, a very sweet, well-fitted entry; 2nd going to Wallace's Daisy, and 3rd to Marples' Valentine. In two-year-olds, Chapman won out on Downton Ingleside, of H. D. Smith's breeding, a beautifully smooth, well-fitted heifer, but lacking in spring of rib and levelness of quarter. Marples' entries, Prairie Queen and Spot, both of high quality, were placed 2nd and 3rd, respectively. In yearlings there were five to pick from. Kate, from the Cartwright string, a thickfleshed, wide-topped, straight-lined heifer, was given the red; 2nd and 3rd going to the Poplar Grove entries, Gipsy Maid and Lady Bertha, a pair of stylish, smoothly-fitted heifers. Marples again scored in heifer calves, 1st on Gem, 2nd on Sylvan, the former being a very smooth, wellput-together heifer, but handling a little hard, as in fact did nearly all the younger things. Wallace's Jenny Lind was 3rd. Marples won out on two calves under a year, bred by exhibitor. Wallace won the young herd, the trio of females the get of one bull, and also in the open herd, the wonderful excellence of his sweepstakes hull and the evenness of his females winning for him over Chapman's very creditable herd in the latter section.

POLLED ANGUS. - The exhibitors in this class sent their stuff into the ring as usual in ordinary field condition, without apparently any preparation, even to the simple one of halterbreaking. Prof. Shaw, in judging them, evidently tried to follow quality and breed type, but, whether from the difficulty of handling some of the animals or other cause, some of the awards seemed to fall like the dew of heaven, on the just and on the unjust alike. The exhibitors were: John Traquair and F. J. Collyer, Welwyn, Assa.; C. W. Speers, Griswold; W. Clifford, Austin, and A. Cumming, Lone Tree. In the male sections, Cummings won 1st in the aged bull class on Donald Mossel, and he was afterwards declared the best bull, any age. Clifford won the red tickets on bull calf and yearlings. Eleven cows were out in the aged class, and it took the judge a long time to satisfy himself as to their rating, finally selecting Collyer's Ivy of Earnside for 1st honors. She is not a large cow, but smooth and full of Angus character, with a nice quality of skin and hair. Traquair's Nora of Pitglassie was placed 2nd, and the same exhibitor's Kirkton Bridget, 3rd. There were bigger and thicker and squarer-backed cows left without place, but, as the judge pointed out, some of these did not possess as good quality of skin nor as typical Angus hind quarters and heads as those to whom he awarded ribbons. In three-year-olds, Traquair's Athelstane Charmer won out, with Speers' Midnight, 2nd. Speers and Cummings won in twoyear-olds, and Speers and Traquair in three-yearolds. Traquair won on heifer calves, the open herd, the two calves under one year, and the young herd; Speers winning the three females, any age, the get of one bull.

GALLOWAYS .- The active demand and good prices realized in the West for these shaggy blacks has given a stimulus to their breeding, and during the present season some valuable importations have been made, both by William Martin and by D. McCrae, the former the largest breeder of Galloways in the West, the latter their champion in Ontario. For the first time McCrae's herd was represented in the West, and the contingent which he sent out to do battle with the Manitoba herd was indeed an excellent one, headed by the magnificent six-year-old bull, Cedric 4th of Tarbreoch, recently imported from Scotland. He was an outstanding 1st in his class, but only after long consideration on the part of the judge was he placed ahead of Martin's recently imported McKenzie in the male championship. The aged bull has the advantage of maturity. He is a wonderfully good one, with good length and evenness throughout, great spring of rib, full crops and foreflanks, smoothly-laid shoulders and prominent neck veins, lengthy, level, wellpacked quarters and thighs, and withal a proud, bold carriage. The two-year-old will stand close up beside him, being lengthy, level, deep and smooth from shoulder to tail-head, and presenting to a remarkable degree the best features of this hardy breed. The yearling class was not strong, McCrae winning on a fairly smooth, wellgrown youngster: Martin, 2nd, and Simpson, of Poplar Point, 3rd. The Ontario entries, the Duke and Seneca, won 1st and 2nd in the calf class, with Martin's Lord Dormer, a little shaggy Feb. calf, 3rd. Of the 5 aged cows, the judge preferred Martin's Black Beauty, a smooth, level-fleshed cow with a typical head ; 2nd going to McCrae's Cordelia; good level cows, of fair quality. In three-year-olds, McCrae won on a big. thick, growthy heifer, with Martin 2nd. The Manitoba herd scored 1st and 2nd on two-year-olds; 1st with the Minnesota-bred heifer, Ethel of Wavertree, an extra thick, deep-bodied, smooth heifer, with the typical furry coat; 2nd on a home-bred heifer, Hannah 4th; while McCrae's Calla Lily, with calf at foot, was placed 3rd. After the bulls, the sensational ring was the yearling heifer class, made up of one Ontario entry and two Manitobans from St. Jean. Such thickness and

depth and quality, so much meat on the best cuts in so small compass, one seldom sees : lengthy, deep and level, smooth over the hook bones and level at the tail-head, with strong, typical Galloway heads and wonderful coats of glossy black hair, they were indeed a great trio; but, to the surprise of the ringside, the judge sent the Ontario heifer, Belle Rue, to the front. She had neither the thickness nor scale and was not one whit smoother nor stronger in breed character than Martin's Lady Hamilton, who was placed 2nd. Martin's May Blossom was given the 3rd ticket. The Ontario entries, Lismore Lady and Clemmie, were clearly entitled to 1st and 2nd honors in the calf class. With the sweepstakes bull, 1st-prize three-year-old cow, yearling heifer and heifer calf, the Ontario herd counted on a victory, but the judge, after due deliberation, sent the coveted honor to the Manitoba herd, composed of the two-year-old bull, McKenzie, the 1st-prize cow, two-year-old heifer, and the two vearlings, giving for his reason the greater money value of the Western herd.

GRADES.-There was practically no competition in beef grades, and, with few exceptions, of the dairy grade class the less said the better, some of the animals brought out being simply a disgrace. In fact, there was nothing of special merit-some tallowy old cows and a couple of highly-fed steers which, on account of age, had passed the profit point.

DAIRY CATTLE .- The report of the dairy breeds will be given in our next issue.

THE SHEFP EXHIBIT.

The commodious sheep barn was not overflowing with the mutton and wool producers, several breeders being missed from the pens. None of the stock was in high condition, and could stand improvement in that respect, although plenty of excuses are forthcoming. The method of handling followed by some owners is fearful to behold; the way some of them pull wool rivals any tales ever told of the other sex. Mr. Thos. Teasdale, Concord, Ont., again judged the classes.

COTSWOLDS .--- M. Oughton, Middlechurch, had it all his own way, and consequently took the money. Messrs. Brown, Portage la Prairie, and E. F. W. Hysop, Killarney, were missed from the pens

LEICESTERS .- Only two exhibitors out this year, yet sufficient to make hot classes, it being nip-and-tuck between the flocks, D. Sinclair. Oakville, winning first and third on two-shear rams, Alex. Gamley dropping into the 'second place. No great mistake would have been made if the third-prize ram had gone to the top of the list. In our opinion, a little bareness on the cod is not sufficient to detract from a well-covered back. In shearlings, Gamley played a lone hand, while in ram lambs, Sinclair drew out with a welldeveloped youngster with great back and loin, second and third going to Gamley. In aged ewes, Sinclair again won first with a pair of good ones, properly covered, and with healthy-looking skins, Gamley getting second and third. In shearling ewes, the tables were turned by Gamley's pair, ewes with good backs and loins, and wellshaped legs of mutton. In ewe lambs, ewe any age, and pen, Sinclair won out, Gamley taking the blue tickets, and also the premier position for pair, ram and ewe any age.

LINCOLNS .- Lytle, of Beaconsfield, had all

the entries, and showed some really fine specimens, large, well-woolled, and of mutton form. Supplies have been drawn from the flocks of Gibson and Walker, Denfield, and Capt. Tom Robson, Ilderton. Dudding blood flows in the flock, which was in good form, considering the scarcity of feed.

SHROPSHIRES.-Here again it was a fight in couples, between the Swan Lake and, Crystal City contingents, young Charlie Yule bringing out the latter flock. The Corbett entries were rather bigger sheep than the others, but otherwise little differences were shown between the two flocks; it was a seesaw game all the way through. In aged rams, a ram of great substance, standing well, and possessing typical character, from Prairie Home, went to the top, Corbett getting the other two places. In shearling rams, Corbett got second, third and fourth, and Greenway first, which might have been changed without serious damage being done, the leading Corbett sheep being rather superior on the loin and back. In ram lambs, the types varied, Greenway's winner being of good mutton form, but with rather an open fleece. Corbett came in for second, and fourth. The sweepstake for ram went to Greenway. In aged ewes, Corbett deservedly won out, second and third going to the Crystal City entry. The shearling ewes made a good class, a cracking pair of Greenway's gaining the premier position, second also going to Prairie Home, third to D. E. Corbett. In ewe lambs, Corbett had it easy on two pairs of well-developed, typical youngsters. Corbett's aged ewe and lambs gave him a cinch on the sweepstakes, which he gathered in. In pens, a good fight was put up. Corbett got the red ticket, and Greenway the other two places. The third prize should, however, we think,

have gone to Swan Lake. In pairs, ram and ewe any age, Greenway got the coveted honor after some deliberation. The Shropshire men are to be congratulated on bringing their stuff out in better shape than the other shepherds.

OXFORDS .- While last year the two, Jickling and Jull, had it between them, the Souris flock this year made it interesting for all concerned, Tolton and Arkell blood coming into the fray again. In aged rams, Jickling won out, Wood getting second and third. In shearlings, Alex. Wood's entry was easily first, a big, upstanding sheep, well covered, with good constitution and fleshed. Jull fell into second place, with Jickling third, the same order being observed in the ram lambs. The ram sweepstakes went to Wood. In aged ewes the Ontario man beat out the two Westerners with a pair of typical ewes, in rather better condition than the others. Shearling ewes, Wood took first with imported stuff, second with home-bred sheep. Jull getting third. In ewe lambs, a very good class, Wood won first, Jickling second with some home-bred ones, not quite as well fitted, or they might have been higher up, Jull getting the booby prize. The pen, first prizes went to Wood, second to Jull, third to Jickling; pairs, to Wood. The American Oxford Down Association's special on ewe to Wood, and on pen of lambs, to Jickling.

SOUTHDOWNS.-D. Fraser & Sons competed with W. M. Smith, from Scotland, Ont., and got some of the choicest bits. Aged rams, victory went to Frasers, Smith getting the other places. Shearling ram, ram any age, shearling ewes, the Ontario man sectfred, besides first and third on aged ewes and pens: Frasers getting second on pen and aged ewes.

DORSETS.—A beginner, Wm. Thompson, Emerson, ran up against the Ontario man, R. H. Harding, who has the temerity to show at Chicago and other big shows. In aged rams, Harding had first, second and third going to sheep of his breeding owned by Thompson; Harding won the bulk of the prizes. The specimens shown were rather below the standards obtaining in the other breeds, both as to fit and size.

FAT SHEEP.—Corbett got the big end of the money, Greenway being a close second. Gamley, Jickling and Lytle also got a piece of the money. The sheep exhibit could be improved by the use of rape, cabbage and some grain.

SWINE.

For the second year in succession this class was judged by Thomas Teasdale, of Concord, Ont., and, as usual, his work gave general satisfaction. As to entries and quality, the exhibit of swine was, in spite of the scarcity of feed and the comparatively small demand for breeding stock, quite up to the character of previous years. While the Berkshires, Tamworths and Yorkshires each put up a most creditable show, the Yorkshires appeared to predominate in strength of numbers and, perhaps, in average excellence.

BERKSHIRES. — The competition in this class lay principally between representatives from the herds of J. A. McGill, Neepawa, and the Hon. Thomas Greenway, Crystal City, with a few entries made by A. B. Potter, Montgomery, Assa., and James Ewans, Minnedosa. The Crystal City herd had the 1st-prize two-year-old boar in the Teasdale-bred Victor, of wonderful length and depth of side, carrying his thickness evenly throughout, with ample bone, standing well on his feet, and with a strong, masculine head. He was easily the sweepstakes boar. To the same exhibitor was accorded 3rd place on boar under one year and under six months, 2nd and 3rd on aged sows, with Brant Maid and Queen Esther, respectively; 1st on the yearling sow, Crystal Jean, a handsome, deep-sided, lengthy sow with great heart-girth, full flanks and deep, square hams, standing well on good legs. Greenway also won 1st on herd, boar and three females, any age, and 2nd on herd of four sows. J. A. McGill sent his entries forward in good fit, winning 2nd on aged boar with Lord Eden, a trifle short and rather heavy-shouldered, but with deep sides, full flanks and good hams : 1st and 2nd on yearling boars, with Duke of Clifford and Oxford Manitoba, respectively; 2nd on under one year, with The Baron, a rather short, plain entry; 1st and 2nd on two nice pigs, lengthy and even, in the under six months section : 1st and 4th on aged sows, with Charmer and Rosamond Charmer, bred by the late J. G. Snell, sired by Baron Lee, not only won in he s but was pronounced the best sow, any age. She is a well-balanced sow, of great length, depth, and evenness throughout. McGill's entry also scored in sow under one year, and 2nd, 3rd and 4th in sows under six months: 1st on sow and litter with Jubilee Bet : 1st on herd, boar and three females : 1st on four sows, any age, with Charmer, Rosamond, Jubilee Bet, and Nora. A. B Potter had but a few entries forward, and scored, 3rd in aged boars on a rather short, thick-set hog of McKenzie's breeding ; 2nd on yearling sow, and 3rd on sow and litter. A new exhibitor, Jas. Ewans, won 1st on a good, lengthy, even sow of Teasdale's breeding in the underyear class, and 1st on sow under six months.

YORKSHIRES .- The exhibitors in this class, and there was keen competition in almost every section, were: Hon. Thos. Greenway, Crystal City; Andrew Graham, Pomeroy; James Bray, Longburn; S. J. Thompson & Sons, St. James; A. B. Potter, Montgomery, and Brethour & Saunders, Burford, Ont. In the aged class, Greenway's Summer Hill Dreyfus, a fairly good hog in length, depth of side, evenness in flank and heart-girth, standing well on good timber, with a strong, masculine head and ear, was head of his, class and also sweepstakes over all ages. He was pressed hard for position by Graham's imported Summer Hill Premier, a hog with excellent back, good length and depth of side, standing on good legs, with typical York head; 3rd went to Brethour's Oak Lodge Charmer 2nd. In yearlings, Potter's entry, Jim Hill, a good even hog, of typical character, won out, with Graham's Forest Home Premier, a smooth hog, but much younger, in 2nd place, with Thompson's St. James Swell following. Brethour & Saunders had the winner under one year old. In the under six months class. Graham won 1st and 4th on the Marjory pig, First Prize, a lengthy, level youngster, standing squarely on a good set of legs. The Ontario entry was 2nd, with James Bray's Cronje, 3rd. The nine aged sows turned out in the paddock were a great lot, and yet they varied from the modern long, deep-sided, bacon type to that of the short, thick, small Yorkshire. Greenway's entry. Clara, out of the old sweepstakes winner, Miss Stamina, with a grand back and deep, level sides, a clean head, with slightly dished face and light jowl, was ranked head of her class; Potter's lengthy, level sow going 2nd: Graham's Summer Hill Royal Beauty, 3rd, and Bray's Millie sow, 4th. There were five entries in the class for yearlings," and Greenway headed it with Julia, of Brethour's breeding, a sow of extra quality, with a great back, good side and a typical head and ear. Graham followed 2nd and 3rd, with Jubilee Queen 7th and Ladysmith, a pair of smooth, level, well-developed sows; Bray following with another Millie sow. Greenway headed the class of nine under one year, with Morning Maid and Her Majesty, a pair of as handsome Yorkshires as one could find anywhere, lengthy, deep and level throughout, with grand backs, good hams, light jowls and clean heads, the ears of the latter drooping rather much, however. The 3rd ticket went to a good Marjory sow of Graham's, and 4th to the Ontario entry. There were seven sows under six months, 1st and 2nd going to the Ontario entries, 3rd to a Marjory sow from Pomeroy, and 4th to Greenway. Greenway's Julia was made female champion, the same exhibitor also winning in the open herd, in the Manitoba-bred herd, and the diploma ribbon for four sows offered by the Sheep and Swine Breeders' Association, with Clara Oughton, Sex, Crystal City Kate, and Matchless

TAMWORTHS.-This class of bacon hogs has been making steady advances in the number and quality of entries forward at the Industrial. The principal exhibitors this year were : W. E. Baldwin, Manitou; L. A. Bradley, Portage; W. L. Trann. Crystal City; W. H. Smith, Carman. Grange ; John Hainstock itor, W. M. Smith. Baldwin won, with Dr. Leyds, in the class for boars under two years, a hog of Hallman's breeding, of good length and even sides, with light head and neck and with good bone. He was afterwards champion male. To the Manitou entries also went the following prizes: 1st, on King Edward, in the under-year class ; 2nd, to Prince Napier, under six months. Bradley's winnings were : 1st on aged boar, General Buller ; 1st, 2nd and 4th on sows over two years. 1st going to Maggie, that wonderfully handsome, lengthy, deep-sided sow that for the past three or four years has won the female sweepstakes at the Industrial, and yet remains unbeaten; 3rd on yearling sow, and 1st, 2nd and 3rd on sows under one year, with a trio from the sweepstakes sow. Maggie, of extra good quality pigs; 2nd on sow under six months; 2nd and 3rd on sow and litter: 1st and 2nd on open herd; 1st and 2nd on Manitoba herd; 1st on four sowst with Maggie. Grace Darling, Maple Leaf, and Nita. Trann. who has only recently taken up with the long red bacon breed, made but few entries, scoring a 2nd on Hayfield Pride in the yearling boar class, and 1st on Copper Queen in the yearling sow class. W. H. Smith, also a new exhibitor, scored a 1st on boars under six months, and a 3rd on aged sows.

opposition in W. L. Trann, Crystal City, who succeeded in capturing the following prizes : 1st and 2nd on yearling sow; 2nd on sow under oneyear; 2nd on sow under six months; 1st and 2nd on sow and litter; and 1st on sow, any age, with the aged sow, Lady Sanders; 1st on four sows, any age, with Lady Sanders, Shanners Choice, Carrie Nation, and Hannah. In the male section, Trann won 2nd on aged boar, Klondylae Gold Dust; 2nd on boar under one year, and 3rd with boar under six months. John Oughton, of Middlechurch, had a few entries in the Duroc-Jersey class.

BACON HOGS .- Good prizes were offered for bacon hogs, in two sections of three pigs each. one for pure-breds, the other for grades, which brought out six entries in the pure-bred class, but none in the grades. Many of the competitors seemed somewhat surprised at the type selected by the judge, those about the ringside considering that the trio selected for 1st prize were too light and not carrying enough flesh. According to Mr. Teasdale, however, they were the style of hogs now in favor on the discriminating market of Ontario. The Yorkshires were strictly in it, five of the six entries being of this breed. First prize went to A. B. Potter, 2nd to Brethour & Saunders, 3rd to S. J. Thompson, the Graham entries and Bradley's Tamworths being outclassed on account of too great weight.

Profit in Pigs.

Mr. Editor,—I am glad to see in so many numbers the space given in your paper to the bacon industry. Still, I can not refrain from giving my experience. Ontario is a dairying country and shall ever be, and hand-in-hand with dairying must profitably go hog-raising for the utilizing of the skim milk, whey, etc. Nothing should be wasted ! Everything coming from the soil should be speedily returned to it. As a 6nancial problem, last year I conducted several experiments for my own benefit, the results of some of which are given below.

On May 1st I purchased two pigs, of a Berk-Yorkshire cross, five weeks old. They were from an old sow, the pair weighing 44 lbs. Up to May 12th they were fed all the shorts and buttermilk, mixed, they could easily the show signs of overfeeding. I then gave them the run of a small yard, and fed three times a day what shorts and sweet whey they would eat up clean. About twice each week I fed them either a pan of potato peelings or a few turnips, tops and all, to keep their stomachs in order. On August 9th, I sold them at 5 cents a lb. live weight, and they weighed 248 lbs., bringing \$12.40. Those pigs ate 250 lbs. of shorts, at \$1 per cwt. On a dairy farm sweet whey is plentiful and the cost is never counted. Cost of pigs \$4.00; cost of feed, \$2.50; total, \$6.50. Total gain, \$5.90, or 90 per cent.

On May 24th I purchased another pair, of York-Tamworth cross, four weeks old, from young sow, pigs weighing 32 lbs. I fed them same as above pair until Oct. 18th, and when sold, at $5\frac{1}{2}$ cts. per lb., they weighed 252 lbs., bringing §13.36. They ate in the time 325 lbs. shorts, costing \$1 per cwt. Cost of pigs, \$4.00; cost of feed, \$3.25; total \$7.25. Total gain, \$6.11, or nearly 85 per cent.

CHESTER WHITES.--Wm. McBride. of Portage la Prairie, would have scooped the pot in this class but for the timely intervention of A. E. Thompson, of Hannah, N. D., who captured a 1st on aged sow, Lyndon Queen, and a 2nd on a yearling hoar. Hillgrove Conqueror.

POLAND-CHINAS -- W. M. Smith migrated all the way from Ontario to clean up the prize tickets in this and the Duroc-Jersey class, but in Poland-Chinas he ran against some pretty stout

These experiments taught me that there is big profit in the bacon industry when carried on in conjunction with dairying, as these pigs were all pronounced by the buyers good bacon pigs. Also that pigs from a mature sow are more profitable; that shorts makes a good, all-around feed for young pigs. I could give in detail several other experiments, but will confine myself to the results obtained. From two different experiments I found it more profitable to purchase shorts than to feed a mixture of barley, oats and buckwheat, mixed in equal parts and ground. The same amount invested in shorts produced for me 600 lbs. of pork, while I could only produce 400 lbs. of pork investing an equal sum in the grain mixture. I also found that it paid better to boil whole grain for pigs rather than pay for grinding it. W T F Grenville Co., Ont.

More and more experience teaches the Canadian farmer as the years go by that to depend upon the sale of grain as a source of revenue is to trust to a broken reed. Crops are too uncertain and prices too low to make it a safe dependence. The cow and the sow will, in the long run, be found much more reliable, and hay. oats, corn and roots to be fed to stock on the farm the most profitable crops to grow. Horses, sheep and poultry are also proving profitable to raise, and the farmers who are devoting their attention to dairying and hog-raising, or to some one or more classes of stock, are feeling that they are on the safest ground. There will certainly be a strong demand for some years for live stock in all lines, owing to the well-known shortage of the supply in sight, and as a logical consequence prices will continue to be good.

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The Truth About Tuberculosis.

In an interesting interview with H. A. McCallum, M.D., M.R.C.P., of London, Ontario, recently published in the Advertiser of that city, as to his views of Dr. Koch's late deliverance, the Doctor said :

"Only after one has read the whole article of Dr. Robert Koch that was delivered before the international congress on tuberculosis, held recently in London, Eng., can any opinion be offered upon his verdict on the disunity of human and bovine tuberculosis. There has always been a diversity of opinion upon this subject, and his experiments, while not the first, are the most elaborate and masterly ever undertaken for the solution of this problem. It must be first stated that he himself does not wish to declare final judgment, but calls for other investigations. No living physician has a right to call in question either the ability or honesty of this man. He is virtually one of the founders of modern bacteriology; his contributions outweigh all others put as one. His facts have always proved scientifically true, and only as a physician has he failed, viz., in his predictions on the curative action of tuberculin. A careful sifting of the evidence upon which he offers opinion that human and bovine tuberculosis are dissimilar diseases will lead one to agree that his provisional judgment on the matter is both sane and passionless. The whole interest of his article turns on this judgment. If his view is not true, then is human tuberculosis very feebly contagious and infectious. On the other hand, if his view is correct, then must we cease the needless cattle slaughter indulged in by some authorities. We can also composedly partake of beef, milk and butter without any method of sterilization. One cannot avoid the conclusion that if cattle are immune to tuberculosis, raw beef and fresh milk contain the very defensive proteids which human victims need to defend themselves, and even effect a cure. Indeed, it is possible that one day these products will be isolated, and may therefore be taken in such large quantities as to cure tuberculosis as easily as quinine cures malaria. The battle against tuberculosis will be concentrated and simplified by the removal from the field of one enemy, viz., bovine tuberculosis.

"The cooking of beef and pasteurization of milk destroy these defensive bodies in the food, and the consumptive in any event should take his milk raw and fresh as possible.

"Coming to the question of sanitaria for consumptives, one must not forget that such institutions will care for a very small percentage of the victims, and the regulations of admitting only the very early cases will almost destroy their useful-There has spread in the medical profession ness. of this continent a wide belief that 'home treatof this continent a wide benef that 'nome treat-ment,' on the plan of the best sanitariums, is the wisest method to follow. The whole question, as pointed out by Dr. Clifford Allbut, is one of bossing the patient. The great unbossed are worse than 'the great unwashed.' Unless a physician can be master in the amount and kind of food taken, the hours of exposure to fresh air and other details, his service to a tubercular patient is lost. Let a patient become obedient to the directions of his physician, and the modern treatment of consumption at home can work wonders, and as it can begin early, better results can be had than in sanitariums. On the other hand, those who pay more heed to the laboratory work of their stomachs than its assimilation power, had better be in institutions where example and constant supervision may correct the error of their ways. "The danger of contagion has lately so filled the minds of the public that individuals are alarmed to associate at the same desk with the consumptive bread-winner; and trained nurses shrink from attendance on the sick tubercular patient. There is practically no danger in associating with a consumptive who knows how to care for his sputum. The sputum of hundreds of people in every city who are apparently healthy contain tubercular germs, and no law should be enforced unless it

THE FARMER'S ADVOCATE.

Good Beasts Always Cheap.

A good beast is always cheap, no matter what price-within reason-is paid for it. And conversely, a bad beast is always dear, even though it may be obtained at a seemingly cheap price. This has been proved over and over again, not only in elaboratelyconducted experiments, but in the experiences of our best feeders. If they can at all help it, our best graziers will never touch an inferior beast, even though they can get it at what might seem a ridiculously small price in comparison with that which they have to pay for well-bred, thrifty-looking animals. The reason for this is that these men have found out by experience that even though such animals may appear cheap at the time of purchase, they do so badly when put upon the grass that they give very little return for their keep. A good beast under the same conditions, though he may cost a few pounds more at the time of purchase, will thrive so well and put on flesh at such a rate that he will finish weeks-sometimes months-before the indifferent doer, and when he is finished he will fetch a price which will leave a much bigger margin for the time he has been on grass than his less thrifty companion. This applies to all classes of stock—to sheep and pigs as well as to cattle.—*Farmer's Gazette*.

FARM.

Prizes for Photographs.

In our Home Department of this issue, several handsome prizes are offered for the best amateur photographs of country scenes. We direct the attention of all interested in photography to this interesting competition, the conditions of which should be carefully read. We trust that many will compete.

A Dry Time.

To the Editor FARMER'S ADVOCATE :

SIR,-The annual dry time has already set in, with its sultry nights and its scorching days, when the flies multiply a hundredfold and crowd in myriads upon the cattle, eager for food, sapping their flesh and exhausting their strength in their increasing efforts to shake off their tiny torturers.

We had reason to expect that July or, at latest, August would bring such a season, because we have had it year after year, but the question is, were the farmers and stockmen prepared for this dry spell? We answer, no! Some did, it is true, make a partial preparation by sowing some early grain for green feeding, but by going to your milk record or your cheese factory you will see that the flow of June has fallen nearly one half. Why? For want of foresight or knowledge. All make ample preparation for their stock during winter, so that many herds come out in spring fatter, sleeker and healthier than they were when they left the pastures in autumn. Why is this? Because the owners knew winter was coming, and prepared warm quarters, with plenty of fresh air and sunlight, also a copious supply of succulent food, rivalling in quality and wholesomeness the grass of May itself. This is preparation ! But look at the many herds in their pastures to-day – they are getting poorer and have failed in their milk nearly one half and are still The owners cannot help it now, because de no preparation. We know when the failing. they made no preparation. We know when the flow of milk in the dairy herd shrinks the returns in dollars fail in proportion, and to make the loss more serious, a cow when once she starts to fail cannot be made to regain her usual flow throughout the season. The progressive dairyman knows this, and in early spring he sows some peas and oats near the stables, and these he forces ahead by a liberal application of barnyard manure. Also, he plants some corn near by to feed a little later. Then, even before the dry time comes, before the cows begin to shrink, he gives his herd a green feed once or perhaps twice a day. A little will do at first, gradually increasing in quantity as his pastures fail Then he knows that if his cows cannot lie down quietly and chew their cuds, they will fail, no matter what or how much he feeds them. So he either has a small grove where they can be in the shade, or he allows them to come into their darkened stables for rest and quiet at noon. Again, he knows that it takes a large quantity of food to produce blood enough to feed so many hundreds of flies, so instead of feeding the extra food, he endeavors to dispense with flies as a domestic insect by spraying his cattle daily with something either fatal or so distasteful to insects that they prefer leaving the cows in peace. Spraying and green feeding need only last for a time, as the early October rains produce an abun-dance of grass again, and the cold nights are unhealthy for the Texans. Many dairymen are following the advice so frequently given in the FARMER'S ADVOCATE, in doing away with much of their pasture, preferring to grow a green crop and feeding indoors during the dry, sultry days of July and August. Farmers should take note and be prepared against our w. T. F. annual dry seasons. Grenville Co.

From London to Aylmer, Ont.

The stretch of agricultural country in the Counties of Middlesex and Elgin extending from London to the thriving town of Aylmer ranks among the finest in Canada. Under improving methods of cultivation, the soil for the most part produces generous crops, but the main output of the farms takes the form of dairy products hors the farms takes the form of dairy products, hogs, cattle and other stock. Driving through this district a few days since, one of the editors of the FARMER'S ADVOCATE noted many signs of prosper-ity, especially in the improvements that are being made to farm buildings, especially the barns. Few-er pretentious dwellings are being erected than at one time, the aim now being to secure comfort and convenience without extravagance. This is wise. Mortgaging a farm to erect a castle upon it is a very risky policy. Some better and more uniform system of fencing and more uniformity in the size and shape of fields would greatly improve many farms. In all directions there is apparent the need for the planting of more trees, such as maples, walnuts, and spruce.

The harvest in this area is practically over, and threshing has begun. The fall-wheat crop was light, probably little better than half a yield, owing mainly to the Hessian fly, and less will be sown this season than heretofore. For various reasons, wheat-growing through this district is not the success that it once was. Even absolutely "new" land broken from the sod, and wheat following peas, does not give anything like the yield that formerly could be counted on with certainty. The destruction of the forests, exposure to sweeping winds, irregular winter weather, periods of drought, the rapid rushing away of the water after rains-all seem to be having an unfavorable effect upon the land. The fertility is still there, the problem is how to unlock and reproduce it in the plant. For success ful wheat production there must also be a particu-larly fine tilth of soil to begin with, and, besides that, humus, moisture, and a steady snow covering in winter.

Winter. The oat and barley crops were fairly good, but the grain is light per bushel, owing to rapid matur-ing in the excessively hot spell about July first. We noticed but two fields of peas in the entire drive, so that "pea-fed bacon" will not be much in ouidence port winter. It always uses a good deal of evidence next winter. It always was a good deal of a misnomer. The hay crop was heavy and was saved in excellent condition. The appearance of the root crops is disappointing, a fact to be regretted. Mangel and turnip cultivation is not receiving the attention their merits warrant. "Not that we the attention their merits warrant. "Not that we grow roots less, but corn more," should be our policy. Early potatoes were small and few in a hill, but later ones will be better. Corn, steadily increasing in popularity with the dairy farmer and cattle feeder, is growing luxuriantly, and promises an immense crop. The questions of varieties and cattle Beder, is growing invariance, and provide an immense crop. The questions of varieties and methods of cultivation are getting to be better understood, so that uniformly large crops are counted on with certainty. A good deal of it will, be needed as supplementary feed for cows during summer and early fall, as the pastures are begin-ning to fail seriously. The frequency of summer drought also brings many dairy farmers face to drought also brings many dairy farmers face to face with the imperative problem of a reliable water supply, which is necessitating deep wells and wind power to fill the troughs.

The first cutting of clover being taken off early, second growth came on rapidly and the blossoms are already turning brown. We noticed in the drive probably two dozen large fields, so that the prospects are for a much larger output of clover seed locally than for some years past. It will all be

needed.

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germs, and no law should be enforced timess it bears on all alike, viz., sick and well. "Surgery, we are frequently told, has made wonderful advances in the last 25 years, yet a review of the subject of tuberculosis in the same period will show that medicine has made similar strides.

Ten years ago, under the most skilled hands, less than fifteen per cent. of early tuberculosis was By the modern method it is now estabcurable. lished that fifty per cent. of early cases are prac-tically cured. Similar improvement has taken place in the treatment of typhoid, diphtheria and many other diseases. Can one wonder at the frequent prophecy that cancer and tuberculosis will tically cured. be completely mastered in the next twenty-five years.

Simple Fly Repellent.

Mr. Wm. Murdock, farm manager at London Asylum, finds no difficulty in keeping the dairy herd of over 40 cows free from fly attack by applying once a week, with a brush, crude fish oil, one gallon, mixed with two tablespoonfuls of pure carbolic acid. A little of this mixture goes a long way when care-fully applied to all parts troubled with the flies.

The apple crop promises very light, but and plums, where grown and properly treated, will yield well and be of fine quality. Prices for all sorts of farm produce are likely to rule high this fall.

The Aylmer Canning Company, which of late years has developed into a great industry, absorbs a vast quantity of vegetables, fruit and poultry, paying out to farmers from \$50,000 to \$55,000 per paying out to farmers from \$50,000 to \$55,000 per year, which means an average of about \$1,000 per week, and disburse for labor in the town some \$10,000 in a year. Their output of goods now aggre-gates about a million and a half tins per annum. The material importance of such an enterprise, both to the townspeople and farmers, can be seen at a glance. The establishment occupies the great at a glance. The establishment occupies the great-er part of a large block of land, and though many extensions have been made, the manager informed

extensions have been made, the manager informed us that they were still cramped for room, and are at present making several improvements both within and without the buildings. In Aylmer we found Mr. S. T. Pettit, one of the foremost authorities on beekeeping in America, and who has done much to bring the industry to its present degree of perfection in Canada, retired from the larger activities of life and rounding out bis successful career under congenial conditions. his successful career under congenial conditions, with just enough apiary and fruit-growing to keep himself abreast of the times.

Decision of Level-headed Men. To the Editor FARMER'S ADVOCATE :

DEAR SIR,-I enclose \$2 for the renewal of my subscription to the ADVOCATE. This will be my seventeenth subscription, and will pay up to August. 1902. Perhaps it would interest you to know that at a recent annual meeting of the North Bruce Farm-ers' Institute it was the unanimous opinion of the members present that the ADVOCATE was the best agricultural paper published in Canada to-day. CECIL SWALE. Bruce Co., Ont.

The Making of Men.

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A SONG OF THE FARM.

(President Harris, of the State University, at Orono, Maine, while delivering an address before the Legislature at Augusta, asked the question, "What are the farms fit for, if not for raising of boys?" His words, being misunderstood, at first provoked dissent, but they were subsequently understood and applauded.)

"The best political economy is the care and culture of men."—*Emerson*.

A word to a restless people, in a fast and feverish age :

A perfect manhood is better than any wealth or wage.

Some are for gold-some glitter; but tell me-tell me, when Will we stand for the farm, and the college, that go to the making of men?

Yes, what is the old farm fit for? The word was wisely said ! There may be stumps in the pasture. and the house may be a

But what if a Lincoln or Garfield be here in this boy of ten? And what should the farm be fit for, if not the rearing of men?

Tis a scanty soil for the seeding, yet here we win our bread; And a stout heart may grow stronger where plow and harrow

are sped : Then break up the high, bleak hillside, and trench the swamp and the fen ;

For what should the farm be fit for, if not the rearing of men?

The crop by frost is blighted—a niggard the season seems; Yet the ready hand finds duties, and the heart of youth has dreams:

The bar and the senate to-morrow-to-morrow the pulpit or pen;

For what is the farm best fitted, if not the rearing of men?

Or, what if our lot be humbler, and we on the farm abide? There is room for noble living, and the realm of thought is wide: The sword outflash'd in the battle hath honor, we all may ken;

But is there no praise and no glory that goes with the making of men ?

Is our life in gold and silver, in clamor and splendor and pride? Is the heart's great treasure nothing, and the mind's great treasure beside?

In the mine of the soul lies our fortune-let us quarry it deep again :

Let us stand for the farm and the college, that go to the making . . . of men!

We tread the hills that the Holy, that the Beautiful has trod; We till the fields of the Infinite, we dress the gardens of God: The seer, the sage, and the prophet, they choose it, again and again:

For what is the old farm fit, if not for the rearing of men?

-Pastor Felix, in Onward.

The Problem of Farm Labor and How to Solve It.

We cannot shut our eyes to the fact that farm help is harder to get than it was a number of years ago. There are several causes that have led up to this state of affairs—some of these altogether beyond the control of the farmer, others which he could do a great deal to remedy or remove. It might do us good to review a few of the latter.

First: A great many farmers have been in the habit of hiring a man for the summer, varying from six to eight months, and at the close of the season, the hired man is turned out to shift for himself during the cold winter months, when very little work is to be had at which he can make more than his board, and some cannot get a job at all and have to board out and use up nearly all they

money for that which is not bread?" Good bread fried pork are the foods that produce pale, puny boys and girls, and weakly, dyspeptic men. If the farm "gude wife" will have good porridge of oatmeal, ground wheat or corn meal, good milk just as it comes from the cow, and eggs and good bread for breakfast; soup, meat aud potatoes and pudding for dinner; bread, and occasionally fish, and apple sauce, or fruit, as it is in season, for supper, and discard pies and cakes of all kinds, she will have stronger, healthier and happier men and children about her, and far less work. But, to return to the hired man, many good men have been driven from the farm by discouragement, in being blamed for everything that went wrong. On one occasion I was delivering wheat at the mill, when a bag became untied. A neighbor, who was looking on, called out, "I would say that it was the hired man that tied that bag." A farmer was delivering a bag of potatoes to the preacher, and, quite unexpectedly, that worthy gentleman went down cellar to show the farmer where to empty the bag. The best had been put in the mouth of the bag, and those in the bottom were of a different grade, and when the farmer had emptied them out, he felt about as small as the potatoes, and looked first at the small potatoes and then at the parson and then at the potatoes again, and finally blurted out, "It was the hired man." I can tell you from personal experience that the hired man is a very sensitive species of the human family, and that a kindly word of encouragement when he is anyways near doing his duty will do him far more good than a continual growl and blame. If you don't believe me, just try it for a season and carefully note the result.

Now, a word to the hired man. Don't expect too much. A short time ago a young man engaged with a farmer, and one of the conditions of the agreement was that he was to be used as one of the family. After a time some young lady visitors came to the house, and the hired man felt quite indignant because the farmer did not give him as flattering an introduction to the young ladies as he expected, and left abruptly and sued the farmer for his wages and for breach of contract. The judge and lawyers made considerable fun of the young man, telling him that he ought to be able to introduce himself to any young lady whose favor he expected to gain. To a young man able and capable and willing to work, I do not know of any better way of getting along in the world than to go and work on a farm with a good, square, upright man who understands his business. Do not hire with a farmer who has all the water for his stock to pump by hand, who pitches his hay and sheaves away up to the top of the mow by hand. Hire with a good progressive man, who uses all the modern labor saving devices, and makes it pay; who has good plain board, and who takes an interest in your welfare and tries to teach you all he can. Do the best you can for him. Save as much as possible of your wages, put it out safely at interest as soon as it is earned, and I am satisfied that, if you have your health and act wisely, at the end of ten years you may have at least \$1,500, which is much more than you would be likely to have if you had gone into the city. But, to return to the causes of the scarcity of farm help

Rev. Dr. McKay, in his book, "The Zorra Boys Abroad," tells of what the Zorra and Nissouri boys have done in the ranks of the learned professions. But what, I ask you, are the boys doing who remained at home on the old homesteads? It is a grand thing to have a farm in a high state of cultivation and raise fine wheat and potatoes, splendid sheep and pigs, cattle and horses; but the farm that does not raise a crop of fine brawny, brainy boys and girls every generation is falling far short of its greatest possibilities. Did not the Allwise Creator at the beginning say that "it is not good for man to be alone," and then he made the woman and ordered the human family to "be fruit-ful and multiply and replenish the earth." Yet on many farms we find one or two, or perhaps three, old bachelors, sometimes with a sister or other elderly lady keeping house, and in many instances no woman about the place at all. In the last generation these farms raised on an average a crop of about six boys and girls, and there were from forty to sixty scholars attending school. Now there are many sections where you cannot find twenty-five persons of school age. Now, these are facts. Of course, the FARMER'S ADVOCATE cannot remedy this evil, but these bachelors could, and we leave the matter with them. Another cause of the scarcity of farm help: The smaller farms, whose owners used to have boys and irls to spare to help their neighbors, are being bought up by the larger farmers. We believe the small farm well tilled is a necessity to the prosperity of the country. In many instances there is too much ambition for great things-too much expan-We read of how Laban managed his help, sion. and I knew a very respected farmer who died a number of years ago, and left a fine farm and a widow and several daughters, but no sons. The widow has conducted the farm nicely with hired help. Two different Jacobs have come along con-secutively, and each served his term for his Rachel, and the third Jacob is now finishing his term. But the good lady, so far as I could learn, never tried any of Laban's changeful tactics, but has always been the perfection of honor and fair dealing. Where the farm is larger than 100 acres, it may be all right to build a house conveniently near to

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the buildings, and get a married man and pay him to board the other help, but it generally costs more that way.

To sum up, do not let farmers be discouraged. Things will take a turn. Let us help to turn them around. There is scarcely ever a real demand for any article without that want being soon supplied. Let us hire the best man we can get, and carry out the golden rule, to do unto him as we would that he should do unto us; do not make a slave either of him or ourselves; do not make a god of money or land or animals; do not be in too much of a hurry to get out of debt. For consolation, just think of the enormous proportions of our national debt, and of how prosperous our great empire is under it. Feed the land and the animals well, get the land in the highest possible state of cultivation, remembering the saying of a great agriculturist that, it is only extravagance, or what many people would call extravagance, in methods of farming that does pay, and some day we will awake to the fact that culture is the noblest profession of man, and that the best young men are anxious to hire with us. DAVID LAWRENCE. Oxford Co.

Wheat Growing in Ontario.

To the Editor FARMER'S ADVOCATE :

SIR,—The question is often asked, should Ontario farmers continue to grow wheat? Or, in other words, now since Manitoba and the Northwest lands are being brought into cultivation, can Ontario compete with any degree of profit in the production of wheat? Had I been asked this question twenty years ago I would have answered no, but after having considerable experience in farming in Manitoba, as well as here in Ontario, I have come to this conclusion, that, everything considered, wheat can be produced with as much profit in most parts of Ontario as it can in Manitoba. We often hear of the richness of the prairie lands, where wheat can be grown continuously year after year with fair success on the same land and with very little cultivation, but I have noticed that the best crops are grown on new breaking or summer-fallow. But I am satisfied that the soil of Ontario is just as productive and will bring forth as good an average yield of wheat as can Manitoba, and this is again borne out by the statistics which show the average yield of wheat per are for the two Provinces. Ontario's average yield for the last 15 years is, fall wheat, 20.05, and spring, 15.3 bushels, and as there is only a small percentage of spring wheat grown here, the average would be about 19 bushels, and I see Manitoba's average in the same time is 19 bushels; and to obtain this yield in Manitoba, it would be safe to say that one-fourth of the crop is grown on summer fallow; that is, after deducting what is grown on new breaking. Here in Ontario, very little summer fallowing is practiced, so by taking into account the difference in the amount of summer-fallow in Manitoba, it would leave Ontario considerably ahead as regards yield per acre. It is true the land is cheaper in Manitoba, but the labor, machinery, binder twine, etc., is very much higher, as well as the extra cost of transportation. Of course, this latter is partly offset by the better quality of the grain for certain purposes. Again, there is the uncertainty. In Ontario we seldom hear of even partial failure. It is true some damage has been done this year by the Hessian fly, but this can be overcome to a great extent by sowing some-what later in the fall. In Manitoba there is the which do a great amount of damage by gh winds, blowing the soil away from the roots of the grain when only a few inches high, and many acres are destroyed in that way. Some seasons the weather sets in dry and hot from seed time, and much of the grain never does any good. I have seen thou-sands of acres of wheat that was dried up before it was six inches high. Other years it would do very well until nearly matured, then a spell of hot, windy weather would shrivel the crop and leave the grain very poor. The gophers are somewhat de-structive, especially in dry seasons. Again, there are the cyclones and hailstorms, which some seasons do a considerable damage; and last, but not least, there are the summer frosts, which some years do a great amount of damage and keep the farmers in that country in perfect terror until the wheat is cut.

earned in the summer. Is it any wonder that when a man can get a steady job all the year round in town, that he leaves the farm? To remove this cause, we would suggest that every farmer who has to hire help, even on a 100-acre farm, should hire a man by the year, and give him a fair wage and use him right. This leads to our second cause: Many hired men on the farm have not been treated kindly, and have left for other occupations.

Many hired men on the farm have not been treated kindly, and have left for other occupations. Even the locomotives on the railway are supposed to require rest; how much more the hived man! But too many farmers are like a friend of mine, who used to say to his hired man the moment that he had swallowed the last mouthful of his dinner. "Now, Davie, you might pump water for these cattle while you are resting." It was an old saying that a tailor rested while he ran. This might, on the supposition that change is rest, be quite true, but for a man who has worked all forenoon on the farm to get a rest pumping water would, to say the least of it, appear quite paradoxical. Another party told me that if a farm hand got seven hours sleep he could easily work the other seventeen hours.

If a farmer plans his work aright, he will manage so that he will not require to work such long hours, and by having a man all the year round, he can keep his work well forward, and in the winter he will have time to think out new plans for improving his farm and making it more productive. Farming generally requires much more study than is given to it. But some of the women will say that it makes more work for the housewife to have the man all the year round. I am afraid that there are very many Marthas who are very careful and troubled about many things. They must have so many pies and cakes, etc. Now, I firmly believe that it would be a good thing for the health of the farming community if there never was another pie or sweet cake put on the farmer's table. The prophet of old cried out: "Wherefore do ye spend With the above facts before us, I have come to the conclusion that for some time at least the Ontario farmer will have a fair chance for success in the production of wheat, even in competition with Manitoba or other countries. SIMPSON RENNIE, York Co., Ont.

EDITORIAL NOTE. — While it is but right and prudent to squarely recognize drawbacks, yet the marvellous results, both as regards the quantity and quality of the wheat produced in Manitoba and the Northwest, and the success of so many farmers in the vast areas peculiarly well adapted for wheatgrowing as a specialty, indicate that these adversities are not universal. The main question suggested by Mr. Rennie's letter, viz., the pros and cons of wheat production by the Ontario farmer in comparison with other crops and products, is one presenting much food for serious thought, and we should be glad if others would avail themselves of the opportunity to discuss it in the FARMER'S ADVOCATE.

Corn Instead of Wheat.

Shall we sow fall wheat this year? Shall we continue to grow fall wheat? Farmers are asking continue to grow fail wheat. Farmers are asking themselves and each other these questions, and it is well that the FARMER'S ADVOCATE is having them discussed in its columns.

To begin with, we all agree that fall wheat is not as profitable a crop as it used to be. Prices are low. When wheat sold for \$1.00 to \$1.25 per bushel, as was the case twenty to thirty years ago, to go no further back, no crop was more profitable. to go no further back, no crop was more prohable. During that period I know of one (new land) field which was broken up after the stumps were burned off, summer-fallowed, and two crops of old Diehl wheat taken off in succession. The first yielded 40 wheat taken off in succession. The first yielded 40 bushels per acre and the second 34. The first crop was sold at \$1.25, the second at $$1.12\frac{1}{2}$ per bushel. Figure that up. It amounts to \$88 per acre in two years. Those times are gone. Will they ever return? We don't know. The average price for the next five years including this year has been the past five years, including this year, has been 69 cents per bushel. Have we any reason to expect that prices in the near future will on the average be higher? We can't tell, but think not.

Another factor in the question, the one which this year has made the question a live one, is the Hessian fly. As this insect has been in the country for many years, and only once in a while has caused great loss, as is the case this year, it is not likely that in years to come losses from this pest will be continuous, but only occasional.

Another element in the case which has changed somewhat is climatic conditions. The fact that last spring scarcely any wheat was winter-killed should not make us forget that two years ago the loss from that cause was very great. During the intense frost of February what little snow had fallen was blown off, except where sheltered by forests, now so much scarcer than formerly. Some fields that year, which were not plowed up because there was on them a good stand of clover and timothy, were not threshed, but cut for hay. Three years ago, on the other hand, wheat came through the winter well; the straw was immense, but the yield of grain light. The quality was fair, but the heads were only about half filled. One man said his, which yielded 18 bushels per acre, had straw enough for 40.

On the whole, during the past ten years, oats have been a more profitable crop than wheat—not that they have been so with many farmers, but some have found them more profitable, and so would nearly all if the land to be sown with oats had been as carefully prepared and as well manured as the wheat land.

In spite of all the drawbacks, however, wheat is a favorite crop, and not without reason. Work is better distributed throughout the year. While a great deal more work is given to preparing the land for wheat than for spring grain, it comes in a less busy time. The harvesting also comes in nicely between haying and oat harvest. No other crop gives such an abundance of good straw for bedding, which is an important matter in these days bedding, which is an important matter in these days of increased stock-raising. Also, though the price of wheat may be low, it is fairly steady, and if one is short of cash at any time, he can always get a supply by taking in a load of wheat. Lastly, and most important of all, a good catch of grass can begot more surely with fall wheat than with any other crop.

We thus see that good reasons can be urged on both sides of the question. Considering every-thing, however, we believe that it would be wise for Ontario farmers to largely discontinue the growing of fall wheat. Not that it is wise to jump hastily out of one thing into another. When that is done the jump is generally made at the wrong Next year, Wheat is poor this year. time. reasoning from past experience, it will probably be good. But, having thought the whole matter over, and decided what to grow instead, farmers generally in our Province would profit by letting other countries supply the world with wheat. We say, generally, because some have land more suitable than others or it suits their rotation better, or to get grass seed to grow with a crop they must have wheat. But, generally, we say, wheat-growing in Ontario should be abandoned, except where conditions are specially favorable. But what shall we grow instead? Some will say, sugar beets. Possibly, but here again the advice quoted above would be appropriate: "Don't advice quoted above would be appropriate: Ibon t jump too quick." In chatting with a farmer lately, on a train, about the way wheat was yielding, he said he had none. "Plowed it all up and planted corn." He was sensible. Corn is the most profitable farm crop at the present time. Let us, instead of depending on wheat, plant more corn and keep more stock. T. BATY. and keep more stock. Middlesex Co., Ont.

THE FARMER'S ADVOCATE.

The Grain Rusts.

BY PROF. WM. LOCHHEAD, O. A. C., GUELPH.

The damage done by rusts every year to the grain crops of Canada may be safely estimated by hundreds of thousands of dollars. The amount of damage varies with the individual years, according to variations in atmospheric and soil conditions. During damp, warm seasons, the damage is usually so severe that in some localities but a fraction of the possible yield of grain is obtained, which scarcely pays for the trouble of harvesting and threshing.

THE LIFE-HISTORY OF WHEAT RUST.

Two stages of wheat and oat rust are probably well known. One, the Red Rust, develops in early summer; and the other. the Black Rust, in the late summer and autumn. The characteristic colors of the two stages are given by masses of spores growing in layers upon the plant body of the rust. plant-body consists of a network of threads living in the tissues of the wheat stem and feeding on the living liquid material. The spores project from the inside of the wheat stem by the rupture of the skin or bark, and are separated from their stalk by the wind, which may continue to carry them all summer to other wheat and oat fields. Thus the infection spreads by means of the red-rust spores throughout the summer. From the same plant body which produces the red spores, appear the black spores These, later in the season in equally large numbers. however, must remain dormant all through the winter on the stubble of the field before they will germinate, so that the black spores are not instrumental in the infection of new fields the season they are produced. The red spores are minute, oval, spiny, one celled bodies, but the black spores have thicker walls, and are two-celled.

In the spring the black-rust spore develops a tiny thread and produces new spores called Sporidia, which does not affect the wheat plant, but readily affects the leaves of the barberry. Two sorts of affects the leaves of the barberry. Two sorts of spores are formed on the barberry leaf by this in-fection. One kind is readily seen on the upper side, and the other on the lower surface, in yellow, minute cups called cluster-cups. It is known that the orange-colored spores when set free from the clustercups and blown away to a wheat field will infect the wheat and give rise to a parasitic fungus plantbody within the wheat stem or leaf, from which red spores are produced.

HOW THE RUST SPREADS.

In districts where barberry is common, the fungus, to all appearances, uses that shrub as a second host, and the full life-cycle is then completed, as already described. The cluster-cup spores infect some of the wheat plants close by, and give rise to plant-body within, from which red-rust spores are liberated during the early summer, and the black rust later in the season. In the vicinity of Barrie, the fields of wheat are very badly rusted this year; moreover, this destruction of wheat by rust is an annual occurence there. The infestation is manifestly the result of the spread of the cluster-cup spores from barberry hedges, of which there are three miles in the town of Barrie. In all cases the wheat close to the hedges is shockingly bad, and the futher removed the field is from the hedge, the rusting is less marked. The infested wheat has grains so shrunken that they would scarcely weigh 20 pounds to the bushel. Two or three interesting cases were noted in the same township on the influence of barberry hedges on wheat fields. A few years ago, one or two farmers planted some hedges of this shrub, but to their dis-may their wheat fields became badly infested, although prior to planting no rust had been observed. After the removal of the offending hedges, rust did not again make its appearance. Mr. C. A. Zavitz, Experimentalist at the Ontario Agricultural College, has a like story to tell. So long as a fine barberry hedge flourished along one side of a certain field on the College farm, the crops were badly rusted, but so soon as the hedge was removed, the rust failed to appear. Lately, however, the College fi adds are bad-ly rusted. It would certainly appear from these and many other cases which might be given, that if and many other cases which might be given, that if the barberry is not absolutely necessary for the con-tinuous propagation of wheat rust, it is at least a very important factor. The conditions favorable to the spread of rust are moisture and heat. A rainy season, when the intervals are characterized by in-tense heat is an ideal one for the spread of must tense heat, is an ideal one for the spread of rust. Thus, seasons when thunderstorms are frequent, and the accompanying winds are strong, will have more than the usual amount of rusted grain. The red-rust spores are distributed by the winds, and the rapidity of spread is marvellous. Those whose training has not been scientific look upon the rust as though it were like the hot blast of a fire scorching the leaves from a distance. As a matter of fact, when the red-rust spores are wafted by the wind to unaffected leaves, a period of incubation occurs, from seven to ten days or more, before the rust spots appear on the leaves and stems. It may be stated here that atmospheric conditions, such as abundant moisture, either as rain or dew, and hot spells, are not the cause of rust, but simply conditions under which rusts will propagate themselves most rapidly. It is not likely that the smoke of locomotives has any influence whatever in the spread of rust, as some farmers claim it has. It is also very essential that plants suitable to the fungus be present if the disease is to spread rapidly, for every fungus has its own peculiar plant upon which it feeds.

PREVENTION AND REMEDIES

At present no satisfactory method is known for the prevention of the loss by rust. Spraying the although theoretically good, is practically impossible, while pickling the seed grain is useless. No practicable method of "policing the atmosphere" and preventing rust spores from finding their way to the young wheat has been devised. Australia is workcrop, ing along the line of development of rust-resistant varieties, and has secured results of great practical value. "That country now has wheat varieties that are vigorous, true to name, and of exceptional quality for the particular region in which they are grown. While some attention has been given to this impor-tant question in America, little has been done in Canada. It is believed, however, that varieties of wheat with narrow, erect leaves and a stiff skin upon which there is a marked waxy "bloom" are as upon which there is a marked waxy "bloom" are as a rule less easily infected with rust than those with broad, soft, green leaves. In England, Nursery, Trump and Squarehead are highly resistant. In New York and in Canada the bearded varieties ap-pear to suffer least. Turkey Red makes a good showing, while the Glyadon of Dakota showed prac-tically no traces of rust. There appears to be no aptically no traces of rust. There appears to be no appreciable difference in resistance of the following varieties sown in Ontario-Manchester, Early Red Clawson, Genesee Giant, Dawson's Golden Chaff, and Democrat-as all were equally infected. It is apparent, from the study of plants, that if rust-resistant varieties are to be produced in a province like Ontario, where marked variations in soil and surface conditions exist, the variations in soil and surface conditions exist, the varieties will have to be devel-oped locally. Along the line of prevention of rust, it has been urged that an excessive use of nitrogenous manures, such as dung or nitrate of soda, should be avoided, as it tends to a growth of strong, soft stems to which rust spores can easily effect an en-trance. Again, good drainage is decidedly beneficial, for the dampness of the soil and thereby excessive moisture of the air will be removed, and the conditions made less favorable for the development of the fungus, as has been described.

Preparation for Fall Wheat.

LIVE STOCK AND DAIRYING INSTEAD OF WHEAT. To the Editor FARMER'S ADVOCATE :

I agree in every particular with your excellent article on "Shall We Sow Fall Wheat?" in last issue of FARMER'S ADVOCATE. We all know how hard it is to get out of an old rut. Apart from the Hessian-fly troubles, I have for some time been of the opinion that the time had come when we must largely reduce, if not altogether quit growing, fall wheat in parts of Ontario for the present, and likely for some years to come. Our only hope is in live stock and dairy products. Especially is this the case in the neighborhood of our large cities, and the sooner we admit this the better.

I would not sow fall wheat before the 10th or later than the 20th September, and prefer from 5th to the 15th.

Fall wheat does best following peas, corn or clover sod plowed as soon as possible after clover is cut. In each case, thorough surface cultivation as soon as crop is cut and a top-dressing of well-rotted manure. The best crop I ever had was on a good fallow plowed four times—not very deep; but I think the cultivator would take the place of two plowings now. We have had to quit sowing peas in our locality on account of the pea bug; this we find a great inconvenience.

I know of no variety proof against the Hessian fly. Dawson's Golden Chaff has given the best re-turns for a number of years; this year the sample and yield is very poor of all varieties in our locality. J. PICKERING. Peel Co., Ont.

A Lasting Lime Wash.

We are frequently asked for receipts for the requiration of lasting lime washes for outdoor work. One, of which a writer in a contemporary speaks very highly, runs as follows : Slake half a bushel of unslaked lime with boiling water, keeping it covered during the process. Strain it, and add a peck of salt, dissolved in warm water; three pounds ground rice put in boiling water, and boiled to a thin paste ; one-half pound powdered Spanish whiting and a pound of clear glue, dissolved in warm water; mix these well together, and let the mixture stand for several days. The wash thus prepared should be put on is hot as possible, with a painter's or whitewash brush. 10

SOW LESS WHEAT AND DO IT WELL. To the Editor FARMER'S ADVOCATE :

This district, the southern part of Perth Co., has escaped the ravages of the Hessian fly to a great degree this season, as compared with other near-by localities. There has been a few fields affected, but on the whole the wheat has suffered very little from this cause, whatever may be in store for the coming year. Notwithstanding the promising condition of the plant in the early part of summer, there is general disappointment as to yield and there is general disappointment as to yield and quality, the heads were small and the kernel shrunken, the latter being caused, no doubt, by the hot winds which ripened the grain from a week to ten davs too soon.

It is not customary to sow wheat here in August; in fact, the bulk is sown from about the 5th Sept. in fact, the blick is sown from about the 5th Sept. to the 15th. This may be one reason for the non-appearance of the fly in many fields. It is my opinion that only land that is in first-class con-dition, being naturally rich or having recently received a liberal supply of manure, should be sown to wheat, because at current prices only a full crop will pay for the use of land and labor expended. A smaller acreage than that now sown, under better treatment would give better results. My observation and experience have taught that the best results are obtained from land which has been summer-fallowed and manured (although the summer-fallow is not general here). Pasture or hay land plowed in July or early August, and then worked well till time of seeding or after; peas which have been sown on sod, either fall or spring plowing, and manure in any of these is effective every time. In the preparation it is essential that the land be plowed some time before sowing, so that it may become firm, and the surface well

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cultivated to produce moisture and give a good seed-bed.

The variety of fall wheat which invariably produces a fair crop is the Democrat. Though not such a heavy yielder as some others, it is much surer. The Genesee Giant, Jones' Longberry, Golden Chaff, all are pretty successfully grown, and the Kansas Red also has given fairly good results this year. As you state in your timely and able editorial on this subject in Aug. 1st issue, the only apparent reasons for growing this cereal are that it diversifies the work of the year, and gives a good opportunity for seed-ing down. Yours, etc., Perth Co., Ont. JOSEPH MOUNTAIN.

SOW FALL WHEAT ONLY ON WELL-PREPARED LAND.

To the Editor FARMER'S ADVOCATE :

Referring to your editorial in Aug. 1st issue, as to acreage of fall wheat compared with former years, we would not like to see less fall wheat raised in Ontario, but, rather, more. At the same time, it would be well for farmers to limit their acreage to the amount of land which they have fitted to grow wheat. Then, by carefulness in preparing the soil, they would have more wheat of better quality more satisfactory arons and more better quality, more satisfactory crops, and more land to use for other purposes.

I would consider Aug. 25th to Sept. 15th extreme dates for sowing fall wheat, and prefer Sept. 1st to 10th.

I find wheat does best following peas, clover sod and barley. Summer fallow well manured is the best preparation for wheat. Clover sod plowed once in July or 1st August, then well cultivated, or pea and barley stubble well cultivated and top-dressed with well-rotted manure, do very well.

The Hessian fly has done very little damage in our section, and I have had little or no experience with it. Cap Sheaf has taken the lead here this season, Dawson's Golden Chaff next. Not having had any experience with Hessian fly, I do not know of any precautions effective in preventing its attack. ROBT. NOBLE,

Halton Co., Ont.

FALL WHEAT AND THE HESSIAN FLY. To the Editor FARMER'S ADVOCATE:

SIR.-Regarding the best means that may be used to produce the best results in wheat-growing and to escape the ravages of the Hessian fly, I beg to submit the following :

Plow clover sod, well manured at least three weeks before sowing, cultivating the land well in the meantime; roll the ground, sow two barrels of lime to the acre the last thing before sowing. Har-row after sowing, so as to partly cover the lime and keep it from blowing. It will also give a roughness to the surface that the wheat requires. Sow any time between the 1st of September and the 25th that you find the land has plenty of moisture to produce a rapid growth. About the 10th of May sow one barrel of fine salt to the acre in the morning while the dew is on or immediately after a rain.

Persons following the above instructions on suitable fall-wheat land, nine years out of ten will have an abundant crop, despite the Hessian fly or any other fly. I might state here that in 1883, or about that time, there was as great a cry about the Hessian fly as there is this year. I treated a field as here described, and threshed 60 bushels to the acre. My first sowing on the field was on the 2nd of September and the last was the 25th. The latest sowing was the lightest straw, but all way heavy to harvest with comfort. The wheat was the old Scott variety. W. MURDOCK, Asylum Farm, London. Farmer.

Fallow is no doubt the best preparation, but may follow peas or barley and even oat stubble, which should be thoroughly prepared by cultivation. It should be plowed as soon as possible after the crop is off, and worked, that it may gather and hold the moisture. Top-dressing with well-rotted farm-yard manure should be given to insure a vigorous growth.

If it were not for the fly, I believe Dawson's Golden Chaff has given the best yields, but it is one of the very worst affected by the fly, consequently it is not safe to sow. I believe from what I have observed in travelling over a large district where the ravages of the fly have assumed large proportions, extending from west of London to 30 miles east of Niagara Falls in New York, the Genesee Giant has escaped as well as any.

I don't know of any preventive measures for the Hessian fly except date of sowing and the very best possible condition of the soil to produce a strong growth of the plant. At the prospective market prices, there is no inducement to sow much wheat, and especially on land that is not in the best condition. that would be risky in the absence of the Hessian fly. For the sake of dividing the work, both in the fall as well as at harvest, I believe it safer to sow rye instead of wheat; it will stand late sowing better, and it is a good crop to seed down JOHN JACKSON.

Wentworth Co., Ont.

SOW WHEAT AFTER FIRST FROST. To the Editor FARMER'S ADVOCATE :

DEAR SIR,-Winter wheat is not extensively grown in this section. Not more than half the farms grew fall wheat last year. I think from five to ten acres being the most on a farm. It was hurt considerably with the rust, and what was not in before the big rain on July 27th, 28th and 29th was badly sprouted.

I sowed last year on September 1st and some as late as September 20th. I prefer the early seeding, and if the growth is too rank we pasture it with the sheep two or three weeks. After it is sown let them eat it well down, then take them off and do not put them on again.

For wheat ground I prefer summer-fallow; and after peas, worked up fine with cultivator. I have seen some very good crops grown after corn was cut for ensilage, worked fine with cultivator and drilled It has stood the winter better than that sown on fallow or after other grain. The corn stubble seems to protect it.

There has been no damage from Hessian fly here for some time. The Dawson's Golden Chaff and Genesee Giant are best yielders. When we were troubled with the fly, I generally did not sow till after our first frost, which we generally got between the 15th and 20th of September. When early sown, pasture it with the sheep till October. If taken off then it will have plenty of top and be the better for the tramping. JOHN MILLER. York Co., Ont.

THE BEST FARMERS GET GOOD CROPS. To the Editor FARMER'S ADVOCATE :

SIR,-It is useless to endeavor to kill out the Hessian Fly by ceasing to grow wheat, as all farmers cannot be induced to do so. In this section the farmers who sowed good seed on well-prepared land got fair crops even this year, while many careless ones did not get their seed back. Vigor-ous, strong growing wheat will withstand the fly whether sown early or late. The early sown did FOUNDED 1866

Wheat Breeding.

An annual increase of income in three Western States alone of over \$22,000,000 from improvement of the wheat crop-this is what is being accomplished by the work of experimental wheatbreeding now carried on at the Minnesota Agricultural Station. This work and its results are described in the "World's Work" (May) by W. S. Harwood. The work of wheat-breeding, he says, was begun in France many years ago by M. Henri Vilmorin, more than a thousand new wheats having been tested by him. Ten years ago similar work was begun at the State institution in Minnesota. Mr. Harwood writes : "To create a new wheat, the pollen from the flower of one wheat must be artifically transferred to the stigma of the flower of another wheat. Wheat is a self-fertilizing plant. Left to itself, it will reproduce itself throughout endless centuries. Great care is necessary in the work, and trained men are essential. As soon as the pollen is transferred-which is done about four o'clock in the morning, at the hour when the wheat florets open-the head of wheat is encased in a tissue sack, so that the work may not be interfered with by any pilfering insect or bird. Two of the best-known varieties are selected, one for the father, the other for the mother of the new race. When the harvest comes, it may be that the new wheat has some of the poor and few of the good characteristics of the parents; or the reverse may be the case. It is impossible to say in advance what the new wheat will be. From the single head which results as the first harvest, only a handful of kernels is threshed out. This handful is of immense importance, for these kernels may become the source of a mighty race, destined not only to supplant the old wheats, but to add enormously to the wealth of the world."

DAIRY.

Home Buttermaking.

Milk should be set in a perfectly clean, wellventilated place where nothing else is kept, and the room so constructed that the temperature can be regulated as desired. There should be another room where the cream can be ripened and churned and the work of the dairy performed. Very few farmhouses have proper conveniences. The cellar is often used to set the milk in, and the kitchen used to ripen the cream in and do the dairy work. The cellar is all right if it is not used as a general storeroom for the house. Bad surroundings and bad company are fatal to making fine butter. I set the milk in common milk pans. It is better not to stand longer than twenty-four hours. This will be sufficient time to get the cream all out if the temperature of the room is 40 to 50 degrees.

When I take off the cream I keep it cold until

QUIT SOWING WHEAT FOR A TIME.

To the Editor FARMER'S ADVOCATE:

SIR, - In order to overcome the ravages of the Hessian fly, I would say discontinue sowing fall wheat for a time. No date was safe for sowing last year in this vicinity, as the fly treated all alike. We prefer to sow on summer-fallow, clover sod or pea stubble. One year ago our best wheat (about 40 bushels per acre) followed ensilage corn; the same two years ago. The land was worked thor-oughly with disk harrow. Wheat was sown about This year both early and late sown 1st October. wheat on fallow and corn ground was almost totally destroyed by Hessian fly. Crop worthless. All varieties appear to fare the same in this district; almost total failure. MATT. RICHARDSON & SON.

Haldimand Co., Ont.

GOOD PREPARATION DEFEATS THE HESSIAN FLY. To the Editor FARMER'S ADVOCATE:

In the districts infected with the Hessian fly, I think the acreage should be very much reduced, confined to what land can be put in the very best condition, and thoroughly well manured to insure a strong and vigorous growth. I come to this conclusion from the fact that in districts where the wheat is nearly all destroyed, there will be found an occasional field, put in under the most favorable conditions, but slightly affected.

Extreme dates, and between which it would be safe to sow, are 5th of September to 5th of October. I would prefer from 10th to 20th of September, that we might be pretty certain of frost before the plant is large enough for the fly to deposit eggs on it.

best here this year. This is contrary to the teaching of scientists, and is no doubt due to the greater vigor of the plant where the land is rich and put in first-class condition.

I sow fall wheat for its straw, and to get catches over, ar' consider the latter of more impordut han an verage crop of grain. Late grass I moer or early in October, on corn lowing, but cultivate well. Dawson's ff went 20 bushels; a new sort, resembing in throm N. Y. State, yielded 39 bushels and in, ey Red about 16 bushels per acre in one plot and 21 in another. The fly took about half the Dawson's, a third of Turkey Red, and in-The fly took about fected the new sort also. The best crop I ever grew was sown on clover sod, plowed about the middle of August, well cultivated, rolled, and sown Sept. The yield was 50 bushels per acre.

Oxford Co., Ont.

E. D. TILLSON.

Back from the Far West.

Back from the Far West. Mr. James Gilnour, M. P. for East Middlesex, Ont, recently returned from a visit to Alberta, where he has consider-able interests in farming land and in ranching, in which his son is engaged at Lacombe. Mr. Gilmour reports the cattle business in the district north of Calgary in a very thriving quantity of meat from a secondary class of animals not suitable for export to the East, and which heretofore was sacrificed, having a very depressing effect upon local markets. All is now absorbed at fairly remunerative prices. Very large areas of Alberta are specially adapted for ranching, which is likely to particularly in view of the fact that so much of it is well watered and adapted for stock rearing as well as grain pro-duction, ensuring a safer system of farming than those areas of Manitoba where wheat growing alone is relied upon. Settle-peact River country, which in the course of time will become the home of an extensive agricultural population.

I then stir it well and warm it to a temperature of 80 degrees, and add one pint of good pure buttermilk to every three gallons of cream. I then set it away to cool. In the summer I set it on ice or in my refrigerator. In about twelve hours the cream will be ready to churn. The ripening of the cream is a very important matter, both for quality and quantity. If it is not properly ripened it will not be developed, and it will be of a weaker body and lack in quality. If the cream be overripe the acid will be too far advanced, and the fine sweet aroma in flavor will be killed, and the quality will be poor.

In churning, scald and clean the churn properly, put in the cream, and a lump of ice will do no harm these warm days. Churn steady but not too fast; 35 to 45 minutes should bring the butter. At this stage add one quart of pure water to the churn ; it firms the butter and helps to separate it from the milk. The churning is merely a mechanical operation to bring the butter globules together to strike each other, so that they may adhere together without being broken up. If the butter is churned too warm the globules are soft and get bruised and broken ; the result will be greasy butter and no grain.

Now, the best way of getting it out of the churn. A good deal depends on what kind of a churn is used. If the barrel churn is used (I like this churn the best), perhaps the readiest way is to draw off the buttermilk and run it through a cotton cloth, so that no butter escapes in the milk, and when the milk is mostly drawn off put in a little cold brine, not very salty, give the churn a few turns, draw off the water, and repeat this operation two or three times, until the water comes off clear, then take out the butter into the

butter worker, whatever that may be. I think too much working spoils the grain of the butter and makes it greasy ; too little does not take out all the buttermilk, and it won't keep, so that a little judgment and skill is required here to do it just right.

Whether the butter be in a bowl, on a plate or on a board, don't spread it, bruise it, or squeeze it. If in a wooden bowl I press it with a wooden ladle and turn it over and cut it up in long, narrow strips, and press the milk out of it gently, pressing each strip by itself. If it is on a board, take a common bread roller and roll the butter out thin, turn and fold it a few times, but don't squeeze or spread it, but roll it out.

When all the milk has been dressed out of it, wash it with clean water with a little salt in it. Experience will soon tell a careful observer when the butter is purged of all the milk and ready for salting. Don't do any guesswork. I weigh the butter now and allow one half ounce of fine dairy salt to the pound of butter. Some prefer more salt. If the butter is for my own use, I salt to please their taste, but if for market, I never use more than one half ounce to the pound for present use. Cut the butter into thin slices and spread it over the plate and shake over it about one third of the salt, put them together, double and press them together, turn it edgewise and do the same, and press it down flat and repeat the same, adding a little more salt till finished. When finished, I fill the bowl with water or put the butter into some other vessel, where it can be covered with water or a wet cloth to keep it from the air; let it stand an hour or two. If a board and roller is used, the same process can be carried out on the board.

In preparing for market, I always see that the scales are properly adjusted, and weigh the butter into one-pound pieces, giving good weight. I weigh it all before doing anything else. When the butter is all weighed, set to work and put it up as desired, either into prints or into rolls. If rolls are neatly done up and tidily finished, they sell as well as in any other form.

When you get to market with a fine article, seek for the best customers, and give them a taste of your nice clean, gilt-edged butter : two or perhaps four cents a pound more will be your reward. Don't trade it off for groceries-you can get cash for it. Good pure butter should be found on every farmer's table, but I am sorry to say it is sometimes lacking in flavor

FARMER'S WIFE.

Butter Increasers in the Light of Science.

We know as a scientific fact that the ordinary methods in use in our dairies and creameries, if rightly conducted, practically abstract all the butter-fat, and we also know that there are no means for increasing the butter-fat in cream by the addition of foreign materials, by absorption of oxygen, or by conversion of the albuminoids, as claimed by many of those having methods for sale. Any addition to the weight of butter by artificial means must come from the admixture of curd or water, or both-and such, as we have already stated, do not yield either a legal or marketable butter, but a product which will bring trouble and loss to the maker.

How the High-scoring Cheese at the Pan-American Were Made.

In August 1st issue we published the list of exhibitors and scores of Canadian cheese at the Pan-American, in competition with the export cheese of all America. The victory then recorded is a matter of great importance to the chief dairy export of Canada, and will tend to more firmly establish our claim to premier place among cheeseexporting countries of the world. Unfortunately, all Canadian cheese is not of the same superior quality as that shown at the Pan-American, so in order to help the whole cheesemaking industry onto a higher plain, we asked the Canadian exhibitors at Buffalo the following questions regarding the making and curing of their exhibition cheese:

1. What precautions did you observe when taking in the milk?

2. Did you use a "starter"? If so, what kind, how prepared and used?

3. Did you wash the curds? If so, how, at what temperature of water, and at what stage or stages of the curd?

4. At what temperature did you put to press, how long was the cheese pressed, and how often was it turned in the press?

5. (a) At what temperature was the cheese cured? (b) Describe your system of ventilating and coolingi

(c) How long was cheese held in curing room?

(d) How often was cheese turned on the shelves? (e) What per cent. of moisture was maintained in the curing room

Let it be remembered that these makers, while they follow the standard rules for Cheddar cheesemaking, also have picked up many little methods and practices for improvement by reading dairy literature and observation and experiment, so that the lessons they teach in their respective letters are the results of keen effort anxiously and wisely pursued, and their cheese tells the tale of the wisdom of their practices.

GEORGE E. GOODHAND, PERTH CO., ONT.

1. No extra care was taken in selecting milk or making cheese. They were taken from the shelves, and represent our average quality. Have always instructed patrons at the annual meeting how to take care of milk, which they have carried out carefully, always giving us a first-class quality o

No starter was used.

Yes, by pouring water over curd, with pe 3. just after grinding. Average temperature of wa from 94 to 98 degrees, according to condition

curd, using plenty of water. 4. Put to press from 80 to 85 degrees. Pre-from 18 to 20 hours. Turned each mornin from 18 to 20 hours. hoops

5. (a) Cured at from 65 to 70 degrees.

(b) Double windows, both frosted on outs ad double doors. One ventilator in each 14 inches in diameter, reaching from ceilir agh roof about six feet, with a cowl on top. (c) One month.

(d) Every morning.

(e) From 80 to 90 per cent.

can, as I did not make up my mind until the 20th of June, so I just picked two out of my shipment. I am quite safe in saying any of my cheese would have scored fairly high. I object to all sour and tainted milk.

2. No starter was used. If I had, I would have picked the best-flavored milk and heated it to a temperature of 100 degrees, and let stand for 20 minutes, and then cooled it down before adding the starter.

3. I always wash my curds, let them be good or bad, till the whey starts to run clear, and only after milling. For gas, I use water at 108 degrees; for 100 degrees. taint,

4. The curd was put to press at 88 degrees, and aired well before hooping. Cheese remained in press 24 hours. Turned once in press just one hour after being put to press.

5. (a) I have a very warm curing room. Those cheese were cured at a temperature between 70 and 80 degrees, and a few days 84.

(b) My system of ventilating would be to have at least two air passages to project up through the roof, and have a cold-air duct at least 100 yards from factory, and deep as possible, and to have the airreceiving pipe as high as possible, so as to catch pure air, and also to have those pipes to enter room in two different places. And I would also recom-mend to dig out and fill in, so as to have a cement floor, and not have it higher than the surface of the ground, and also have the room boarded with matched (c) Cheese was cured 30 days.
(d) Turned on shelves every morning.
(e) Per cent. of moisture was high.

(e) Fer cent. of morstnee was high. I would just like to say, I find the greatest fault in cheesemakers is that they do not properly cook their curds. The old system is from 98 to 100 degrees. This is not always enough. This year I am cooking to 104 degrees and allowing three hours from time of the transmission of the property of the second se setting to removal of when have made cheese for nine years, and Lam of can \$50 would cover all my losses, and mess of that was through my thermom-eter being wrong. I am longita, to see the fay that there will be a classemakers union, and control the afacfarmer to put the makers a fair price MEGO , that the maker can his ouring tured cheese, s room to stand the heat. Considering the compe ces making at present, the maker can tion in c ais curing room. For my part, I am afford to fit ower of a factory, and I give my patrons a hille are on those points at my fall meetings.

B. DINWOODIE, MIDDLESEX CO., ONT. In replying to your favor of recent date, I take such pleasure in answering the questions you equested.

I was careful not to take in any tainted milk. 2. I took a quantity of nice night's milk and put it in a can and set it in hot water heated to a temperature of 86 degrees, then added a little of the starter from the day previous. I put in about 10

quarts to 6,000 pounds of milk. 3. Yes, they were washed after dipping and also after milling. Temperature of water, 98 degrees, and then kept thoroughly stirred till ready to go to press

4. They were put to press at a temperature of about 84 degrees; kept in the press about 15 hours; turned twice.

5. (a) The cheese was cured at a temperature of 70 degrees.

(b) Our room was cooled with the aid of a sub-

FRANK T. SHUTT, Chemist.

Central Exp. Farm.

I know of no recent investigation in relation to the formation of fat from albuminoids in the ripening of cream or cheese, but am certain that the general opinion among investigators is that there is practically no change of fat through the fatty degeneration of albuminoids in either cream S. M. BABCOCK, Chemist. or cheese. Exp. Station, Wisconsin

I would say that we have paid special attention to the possible formation of fat from albummoids during the ripening of cheese and we have yer found any evidence whatever that such takes place.

L. L. VANSLYKE, Chemist. tion, Geneva, N. Y.

Superintendents and judges of live stock at the exhibitions can, by a little thoughtfulness, greatly increase the interest to onlookers by ordering a parade of the cattle and horses in each section in the ring, by arranging them in various positions, and by placing them in order of precedence when they have decided the awards. A final parade in this order before leaving the ring would also be an interesting feature. Some mople attend the fairs to learn, and all to be intertained, and their pleasure and profit in these egards ought to be considered and catered to. The judges, too, would probably make fewer mistakes if they saw the animals walk.

The cheese exhibited by Mr. E. N. 98.25 points, were also made in my fac the same method. I would strongly adv makers to cook the curds firmly in the give sufficient acid, and stir good and dr Grind early, wash liberally, mature w, salting, salt as light as condition of cur will permit, give plenty of time before pupers, and press slowly at first and give provide them neatly, using plenty of good clear results are press as long as possible, and date and results are pressible when putting in curring means r with cheese when putting in curing room.

R. W. STRATTON, CHEESEMAKER, O. A. C., GUELPH.

1. No extra precautions used, other than the sense of smell, when receiving the milk. 2. Yes, O. A. C. bacteriological department cul-

ture. The culture was prepared according to the directions given in dairy bulletin No. 114. One-half of one percent. is the quantity used.

3. No.

4. Eighty-three degrees. About 46 hours. Once.

5. (a) Average temperature of 66 degrees for 21 days, then put into cold storage two days, at a temperature of 40 degrees.

(b) Sub-earth air duct.

Twenty-three days old when sent away.

(d) Every day (Sunday excepted).

(e) Eighty-two per cent.

In making the exhibition cheese, I did not depart from the system or standard rules for Cheddar cheese as taught in the O. A. C. dairy school, apart, probably, from the one exception of leaving the cheese in the press two days. Formalin was sprayed in curing room to prevent mould.

JAMES CRAIGHEAD, PETERBOROUGH CO., ONT.

It is certainly a pleasure to reply to your ques-

tions. 1. There was no extra care taken with the milk for the cheese which I exhibited at the Pan-Ameri-

C air duct.

(c) The cheese were made June 11th; shipped July 4th.

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ore.

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(d) Every morning. (e) I had no means of registering the degree of isture in the curing room.

Builds T. MORRISON, SPRING CREEK FACTORY, OX FORD CO., ONT. The Your letter of inquiries received a few days ago.

I will try and answer your questions as well as I can:

1. I only take in milk that is sweet and of good flavor.

2. I did not use a starter, but when I do use one I make it out of good milk-two parts milk and one part water-and before I use I skim off the cream that rises.

3. I always wash my curds just after the curd is ground, using water at a temperature of 98 degrees. Sometimes if a curd is bad flavor or working fast, I wash when the curd is dipped.

4. I try to put my curd to press at about 85 to 88 degrees. The cheese are pressed from 14 to 16 hours. and are turned in hoops every morning.

5. (a) The cheese were cured at a temperature of 64 to 72 degrees, but mostly about 67 degrees.

(b) Our system of ventilating and cooling is not by any means the latest, but we have a good cool room. It is double ceiled and lathed and plastered on walls, papered and boarded inside, and boarded again outside. We have no ice, and have holes in walls, just above the floor, and at night we open them and the windows.

(c) The cheese were cured about a month.
(d) They were turned every morning.
(e) I do not know about the moisture, as I have no register for it.

The cheesemaker must be careful in taking in milk, and then watch the acid, as I consider that it is the first stage of the work that either makes or spoils the cheese.

(To be continued in next issue.)

CUPY POOR

FARMER'S ADVOCATE. THE

REPORT OF THE MODEL DAIRY FOR THE WEEK ENDING AUGUST 6, 1901.

BREED.	Milk.	Amt. of Butte	Value at 25c. per lb.	Cost of Feed	Profit.
Shorthorns.	lbs.	lbs.			01.17
Princess of Thule	210.3	9.52	\$ 2.38	\$1.21	\$1.17 1.11
Daisy D	220.0	9.18	$2.30 \\ 2.63$	$1.19 \\ 1.21$	$1.11 \\ 1.42$
Miss Molly 24556	255.0	10.50 *	2.03 2.65	1.21	1.42
Queen Bess 21786	$231.0 \\ 244.3$	$10.53 \\ 9.19$	2.30	1.21	1.09
Rose 3rd 113205	244.0	0.10	a.00		
Total	1160.6	48.98	12.26	6.05	6.21
Holsteins,					
Meg	295.4	11.46	2.87	1.25	1.62
Tidy	275.2	10.52	2.63	$1.25 \\ 1.24$	$1.38 \\ 1.33$
Inka Mercedes	291.5	10.28	$2.57 \\ 2.75$	1.24	1.50
Hulda	292.4	$11.00 \\ 12.33$	$\frac{2.75}{3.08}$	1.24	1.84
Beauty	304.0	12.00	0.00	1	
Total	1458.5	55.59	13.90	6.23	7.67
Ayrshires.					
Kirsty Wallace.	243.5	10.59	2.63	,90	1.75
Lady Flora	221.7	8.86	2.22	.81	1.41
Alice 2nd	216.8	10.52	2.58	.90	1.68
Betsy 1st	256.0	10.99	2.75	.90	$1.85 \\ 1.83$
Pearl of Woodside	243.9	10.90	2.73	.90	1,85
Total	1181.9	51.86	12.91	4.41	8.52
Jerseys,					
Gipsy.	211.8	11.33	2.83	.98	1.85
Primrose	184.9	12.83	3.21	.88	2.33
Queen May	209.3	11.69	2.92	.85	2.07
Rexina	215.5	10.39	2.60	$.79 \\ .87$	$1.81 \\ 1.93$
Mossy	216.6	11.21	2.80	.01	1.00
Total	1038.1	57.45	14.36	4.37	9.99
Guernseys.					
Vega	188.6	10.31	2.58	.81	1.77
Cassionia	223.3	11.55	2.89	.99	1.90
Mary Marshall	196.3	12.58	3.15	.98	2.17
Madora Fern	175.9	9.93	2.48	$.82 \\ 1.01$	$1.66 \\ 1.78$
Procris.	215.7	11.66	2.79	1.01	1.70
Total	999.8	56.03	13.89	4.61	9.28
French-Canadians.					
Liena Flory	200.2	9.42	2.36	.77	1.59
Rouen	189.0	10.45	2.61	.77	1.84
Denise	. 214.0	10.07	2.52	.76	1.76
Luna	.178.4	9.18	2.05	.77 .46	$1.28 \\ 1.17$
La Bouchette	. 145.8	6.51	1.63	.40	1.1/
Total	. 927.4	44.63	11.17	3,53	7.64

GARDEN AND ORCHARD.

Canadian Horticultural Association.

The fourth annual convention of this Association was held in London on the 5th and 6th of

tion was need in London on the 5th and oth of August. There were members present from Mont-real, Kingston, Toronto, and other places. The Mayor of the City gave the delegates a cordial welcome, which was replied to by Mr. Thomas Manton, of Eglinton. Mr. Balkwill then welcomed the visitors on behalf of the local Horti-cultural Society and snoke of what was being done cultural Society, and spoke of what was being done to improve and extend the taste for flowers among the people of London. The President, Mr. J. H. Dunlop, the well-known Toronto florist, read his annual address, in which he referred to the great improvements which had been effected in horticulture du ng the last twelve or fifteen years, both in quality a 1 quantity. The result has been to create an increased demand for flowers on the part of the public, and a consequent improvement in the business of the profession. At recent exhibitions in the United States, Canadian exhibitors had been remarkably successful; for instance, at the American Rose Society's Show in New York ten first prizes were taken, and the highest honors in carnations at the Pan-American Exposition at Buffalo were won by Mr. Gammage, of London.

for Something Different?" by Mr. Thos. Bennett, of Montreal; "Can a Uniform Scale of Prices be Arranged and Maintained in the Plant Trade?" by Mr. W. Holt, of Hamilton; "Is it Profitable for the General Florist to Grow the Latest Introduc-tions in Carnations?" by Mr. G. Mepsted, of Ottawa; "How Can the Relations Between Grower and Retailer be Improved?" by Mr. Fred. Brown. of Toronto. These are all practical subjects, and of much interest to the professional florist, and they of Toronto. These are all practical subjects, and of much interest to the professional florist, and they were discussed with great animation. Many good hints were given, and everyone felt that he had learnt enough of value to well repay him for his time and expense in attending the meeting. The following officers were elected for the ensu-ing year: President, Mr. J. Bennett, of Montreal; 1st Vice-President, Mr. G. Robinson, of Montreal; Secretary, A. H. Ewing, of Berlin: Treasurer, Mr.

Secretary, A. H. Ewing, of Berlin; Treasurer, Mr. H. Simmers, of Toronto. Executive committee for three years—Mr. W. Munston, of Toronto; Mr. O. G. Johnston, of Kingston; Mr. W. J. Lawrence, of

Hamilton was chosen as the place of meeting for next year.

A Worthy Girl's Worthy Charge.

To the Editor "Farmer's Advocate":

Sir,-Perhaps you can find space in your valuable journal, so widely appreciated by farmers' wives and daughters, for a quiet conversation on the back yard, so intimately connected with the farmer's residence. The front yard, generally speaking, receives special attention, while the back yard is not considered of so great importance. I am a farmer's daughter, and can say the back yard on our farm is my special charge. In the early spring, I begin to rake the old dead grass, rake, pick and sweep up all the dirt I can find. As for rubbish, I never allow it a resting place in our back yard. There is a row of beautiful shade trees, which make it cool and shady on the hottest day in summer. The well is situated in this locality. The cleanliness and the order, the shade and flowers, and the green grass, make a scene very picturesque and inviting. When my city cousins come to our home for an outing, I always invite them to take a rustic seat in our back yard, and they always express their pleasure and delight, that brings a satis-faction to my heart. P. E. B. faction to my heart. Norfolk Co., Ont.

National Apple Shippers' Convention.

The apple shippers of America held a twodays convention in Toronto on August 8th and 9th, when the whole field of apple growing, packing and shipping was gone over exhaustively. The programme was largely filled by Americans, but Dr. Jas. Mills, President of Guelph Agricultural College; Prof. J. W. Robertson, Dominion Commissioner of Agriculture; J. M. Shuttleworth, Brantford, Ont., and other Canadians contributed valuable information. Dr. Mills showed the extent of Canada's apple export. He also scored the careless growers and dishonorable packers for their great drawback to a proper development of the apple export trade. Prof. Robertson indicated some of the causes of failure viz., want of knowledge and in apple-growing, training, farmers growing too many varieti etc. He pointed out that growers who packed their own apples and sold them themselves, made \$3.50 a barrel. This is but an example of what well-conducted methods in packing and shipping would yield. He touched upon cold transportation, pointing out that 25 ships had been fitted out with mechanical refrigeration that will keep the storage temperature down to 50 degrees.

The Pan-American Dairy Test.

During the past six weeks it has been pretty thoroughly demonstrated that, no matter what the feed, nor the amount of care bestowed on a cow, her milk flow cannot be sustained if she is at all uncomfortable. Nothing has tended to reduce the flow of milk from the cows at the Model Dairy so much as the extreme heat from which they have suffered, more or less, since the middle of June until the beginning of the present month.

There was a shortage of silage and considerable change in the bulky rations when the first hot spell came upon us, and it was generally thought that came upon us, and it was generally thought that the change of feed was, in a great measure, responsible for the falling off in milk, but as soon as we got a favorable change in the weather the flow of milk began to increase, and so it has been all through. During the past month there has been an abundance of silage and green feed, but when the temperature ran up into the nineties nothing could be done that would keep up the flow of milk, but now with the advent of cool weather the cows are again doing well, notwithstanding the fact that the flies are about as bad as they can be. Nearly all the cows are covered with a light, gauzy Nearly all the cows are covered with a light, gauzy

sheet, and fly mixtures are freely used. No fly preparation which has been used here has proven to be at all effectual in keeping the flies off more than an hour or two, but if those prepara-tions did what their manufacturers claim for them tions did what their manufacturers claim for them there would not be a fly in sight, for the cows have been frequently and thoroughly dosed day after day. A suction fan for the barn was promised at the beginning of the test, and now that we hope the worst of the heat is over, it is being put in, but it has always been a debatable question as to whether the cows would derive any benefit from it or not. A silage cutter is on the ground for the purpose of cutting green come as soon as it can be procured.

when the first crop of clover to too mature When the first crop of clover tot too mature for feed, green onto were substituted, and now the second cutting, of clover is in. Silag, is still the staple bulky food and the cows never seem to lose their apportite for it; there is a relish about t which no other food, apparently, possesses. The quality of the butter, however, has been moterially improved by the green feed, especially in the flavor. With the cooler weather there has been a decided increase both in the per cent. of fat

In the havor. With the cooler weather there Π_{43} been a decided increase both in the per cent. of $f_{4,t}$ and the other solids in the milk. The solids not fa, decreased very perceptibly during the last hot spell. The Guernseys still lead for net profit since May 1st, but the Jerseys are crowding them hard at

present, although they can hardly expect to cover a lead of \$8, which the Guernseys have at present. The Ayrshires seem to have become discouraged

by adverse circumstances, and have, apparently, lost heart in the race. The surprise of last week was the showing of the French-Canadians, when they took their place as 3rd on the list for net tney took their place as ord on the list for het profit. Nobody has been paying much attention to them, as their herdsman, a French-Canadian, speaks English very poorly, consequently he and his cows have been "sawing wood and saying nothing," but their work is now speaking for itself. They are a race of cattle but little known outside of their own Province, but it is evident that they have a race of cattle but fittle known butshee of their own Province, but it is evident that they have merit as a dairy breed. They have been a distinct race of cattle for a long period, but had been allowed to degenerate until Dr. Couture, Veterinary Surgeon for the port of Quebec, took hold of them and by judicious breeding and care has succeeded in wonderfully improving their dairy qualities. They seem to be a race of cattle adapted to "roughing it," and would probably make a better showing on short rations than any breed in the barn. They have not been highly-fed nor pampered in any way, and when they were brought here their herdsman was induced to feed a liberal grain ration, but they did not respond with a paying quantity of milk, so the grain ration has been reduced, with a result which goes to show that they can make a good profit and maintain their flesh on a cheaper ration than the other breeds. If they are not dairy cattle they are nothing, as they are too small for profitable feeding for beef.

The Holsteins are responding well and are giving a good flow of milk. They seem to respond to comfortable conditions the most readily of any breed in the barn.

In my next, I shall probably deal with the individual test of each milking in order to prove the correctness of the composite test, as we will have data covering a period of five weeks.

J. STONEHOUSE.

REPORT OF THE	MODEL	DAIRY, GI	VING TOTALS	OF EACH HERD
			1MENCEMENT	
			AND INCLU	
TH	E WEE	K ENDING	AUGUST 6, '01	

Breed.	Milk.	Amt. of Butter	Value at 25c. per lb.	Total cost of Feed.	Profit.	
	lbs.	lbs.				
Guernseys	16578.6	862.10	\$215.50	\$76.98	\$138.56	
Ayrshires.	19976.7	838.95	209,80	77.57	132.23	
Jerseys	16081.1	826.90	206.75	75.14	131.61	
Holsteins	22715.7	832.25	248.04	85.46	122.58	
Red Polls.	17554.7	792.82	198,20	77.79	120.41	
Brown Swiss	188861	777.48	194.37	81.17	109.90	
Shorthorns	19159.8	760.21	210.09	88.70	101.38	
Polled Jerseys	12280.7	647.19	161.75	60.11	101.21	
French-Canadian	15137.5	669.89	167.58	66,16	100.72	
Intab Baltad	11179.9	548.81	127.36	1	65.15	

Reports were presented and read by the Secretary-Treasurer and various committees of the Society. Messrs. T. Manton, Eglinton; Geo. Rob-inson, Montreal; and E. Dale, Brampton, were appointed judges of the trade exhibition.

The Rev. Dr. Bethune, of London, gave an address, illustrated with diagrams, on "Insects In-jurious to Floral Culture," in which he described especially several species that had recently become very troublesome in greenhouses, affecting violets, roses and many other plants. He was listened to with great attention, and was given a hearty vote of thanks at the close. After a short discussion on some of the insects referred to, Mr. W. Lawrence, of Toronto, spoke on "The Advancement of Horticulture," and described the great improvements that had been effected of late years, especially in the commercial aspect of horticulture. Canadian growers were now sending roses to New York and other cities, instead of importing them, as was formerly the case. Great attention was paid to the production of "cut flowers," which had been much improved in quality, and for which there was a steadily increasing demand. In the discussion which followed. Mr. Manton disagreed with the speaker, and while he admitted the improved business conditions, he deprecated the abandonment of the culture of handsome and rare plants for the sake of growing only those that paid the best. He thought that the carnations of sixty years ago, judging from the standards then published, were far superior to any grown now. This led to an animated discussion, in which many of the florists took part.

The following papers were also read and dis-cussed : "What Can be Added to the Present List of Cut Flowers to Meet the Demands of Customers"

CUPY

POOR

The election of officers

President, Walter Snyder, Baltimore, Md. Vice-President, C. H. Weaver, Chicago. Secretary, A. Warren Patch, Boston.

Treasurer, Wm. R. Wagner, Chicago.

Executive Committee-Charles Forster, New York, Chairman; E. M. Loomis, New York; D. O. Wiley, Detroit; M. H. Peterson, Toronto; C. Davidson, Cincinnati. M.

State Vice-Presidents-Arkansas, J. L. Rea; California, S. I. Roper; Colorado, G. G. Lieb-hardt; Illinois, C. H. Williamson; Iowa, C. F. Francis; Kansas, G. C. Richardson; Massachusetts, H. F. Whitney ; Maine, F. D. Cummings; Kentucky, E. H. Bowen; Louisiana, G. W. Davison ; Maryland, E. S. Evans ; Michigan, O. R. Pierce; New Jersey, C. Wolters ; Minnesota, J. Murphy; Missouri, C. C. Bell; Nebraska, O. W. Butts; 'New York, J. R. Mott, Jun.; Ohio, J. J. Pitts; Ontario, H. W. Dawson; Pennsylvania, J. D. Hendrickson; Wisconsin, J. H. Musson: New York City, Austin Kimball: Chicago, C. W. Wilmeroth; Nova Scotia, J. M. Shuttleworth.

APPLE CROP OF 1901.-The Press Committee submitted a report on the apple crop in Canada and the United States. The committee estimates that the average for America will be about 46 per cent.

Following are the figures : -- Ontario. 35 per cent : Nova Scotia, 75 per cent.; New England. 25 per cent.; New Jersey, 40 per cent.; Pennsylvania, 40 per cent.; New York, 20 per cent Maryland, 50 per cent.: Virginia, 65 per cent

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West Virginia,, 65 per cent.; Kentucky, 35 with silkworm-gut, and severed. The urachus was cent.; Ohio, per cent.; Tennessee, 35 per 40 per cent.; Michigan, 30 per cent.; Indiana, 40 per cent.; Illinois, 40 per cent.; Missouri, 45 per cent.; Arkansas, 50 per cent.; Kansas, 45 per cent.; Nebraska, 45 per cent.; Iowa, 25 per cent.; Colorado, 85 per cent.; Wisconsin, 15 per cent.: California, 90 per cent.; Oregon, 80 per cent.; Washington, 80 per cent.

The Association decided to meet next year at Rochester, N. Y.

APIARY.

Moving Bees to New Pasture.

It sometimes happens that we have continued dry periods, when a few miles away frequent showers occur, so that I would like to move my bees to the moister locality. Again, just about here very little buckwheat is grown, whereas there are considerable aneas some ten miles away that will soon be in bloom. Kindly instruct me how to prepare my colonies for moving, how to move and leave them safely without causing loss. WM. WESTNEY. York Co., Ont.

To prepare colonies of bees for moving to new pasture, one should first remove as much honey as is expedient from the hives-i. e., all that is in the supers and some from the brood-chambers -taking care to leave enough to tide them over a possible drought before the honey begins to come in from the new fields. Then the frames, if they are not some style of fixed frame, should be fastened to keep them from jolting about in moving. A strip of separator across the top of the frames at each end of the hive, with a small cuttack driven through into each frame, will hold them quite securely. In the hot weather one is liable to encounter in August, colonies that are any way strong should be moved with supers on. The super, brood-chamber and bottom board may be fastened together to prevent the escape of bees by nailing a couple of strips of lath up each side of the hive. Where much moving is to be done, it is perhaps better to get the VanDeusen clamps, which can be fastened more quickly and with less jar to the bees than the lath. Replace the cover and quilt or honey-board by a frame covered with screen and having a space above the frames for the bees to move about and get air. Some recommend a 2-in. space between frames and screen, but the writer has moved bees successfully in warm weather with about a half-inch space. The screen can then be held in place by about eight lath nails driven through the frame of the screen into the top of the hive. The frame can be made of strips got by ripping lath once in two.

At this time of year it is better to move bees at night. As soon as the bees quit flying in the evening, shut them in by tacking a piece of wire cloth over the entrance, and load them on the waggon, with the combs running crosswise of the load. Unless the roads are very smooth, the waggon should have springs. A dray is very suitable for this purpose, or a waggon such as is used for drawing milk to the cheese factory. Throughout the whole journey watch the load very carefully, and see that your teamster is a careful driver, as a jolt that would cause the escape of a few bees from the hives might result disastrously to both driver and horses. Before starting, sprinkle the bees quite thoroughly with a watering-can, and if the night is very hot, another watering or two along the road may be needed. Liberate them as soon as possible after they are unloaded. Under ordinary circumstances, there should be no loss in moving bees ten miles or so if the above directions are followed. MORLEY PETTIT. Norfolk Co., Ont.

THE FARMER'S ADVOCATE.

then followed up to the bladder and two strands of the silkworm-gut passed between the branches and each ligated separately, and a strand then passed around and over both ligatures. The urachus was then severed about a half inch below the ligature. The peritoneum was closed with an uninterrupted suture, the ends being left long enough to hang outside. The skin was closed by an ordinary interrupted suture, directions being given to pull out the inner suture the third day. The case was followed by complete recovery

Treatment of Wounds.

Cases of badly injured knees in horses are very difficult to heal, and repair of the wounds when such accidents occur are very often hindered rather than facilitated by receiving too much attention and being too frequently tampered with by grooms and attendants. The great secret to success in dealing with cases of this kind is to keep the injured part thoroughly clean and well dressed with antiseptics-after the removal of any foreign matter which may have gained access to the wound. Wounds are best cleaned by allowing tepid water to trickle over the part out of a sponge or clean soft cloth. Should any pieces of grit or other matter become embedded in the flesh, it may be necessary to pick them out with pointed pieces of wood or any other suitable appliance that may be at hand. This done, and the injured part thoroughly washed out, wedges of tow saturated with carbolic acid, iodoform or some other good disinfectant should be spread over the part and kept applied until the blood has ceased running. The wounds should be washed out two or three times a day with a solution of some good disinfectant, say carbolic acid in tepid water, and after such washing it should be dusted over with a powder consisting of iodoform, boracic acid and Fuller's earth, say in the proportion of two parts each of iodoform and boracic acid and six parts of Fuller's earth.

QUESTIONS AND ANSWERS.

1st.—Questions asked by bona-fide subscribers to the Farm-er's Advocate are answered in this department free.

2nd.—Our purpose is to give help in real difficulties ; there-fore, we reserve the right to discard enquiries not of general in-terest or which appear to be asked out of mere curiosity.

Srd.-Questions should be clearly stated and plainly written, on one side of the paper only, and must be accompanied by the full name and address of the writer, as a guarantee of good faith, though the name is not necessarily for publication.

4th.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies can-not be given.

Veterinary.

INQUIRIES MUST BE SIGNED.

Regardless of the conditions so plainly published at the head of the Questions and Answers department in every issue, we frequently receive demands for information without names attached. This will explain to many why their questions have not been answered.

HORSE WITH A COUGH-GLUTTONY IN MARE.

1. Horse, seven years old, in apparent good condition, sleek and lively, began to cough about three months ago. Would cough and snore al-most at the same time, and continue to snore for some time. By-and-by he began to run at nose and blow as if he had the heaves. He did not seem to mind it except when standing in the stable. I gave him some condition powder, smoked him with sulphur, burnt leather, etc., which gave him great relief, and caused him to discharge at nostrils. Since then his wind seems all right, but he still continues to cough and snore, and at times discharges slightly at nostrils. Apparently there is no swelling in throat or anywhere else. Can you tell me how to treat him, as he is valuable? 2. Mare, thirteen years old, has a ravenous appetite after coming off the grass. She will eat her bedding should it be old wheat straw. Can you tell me the cause and cure, as she goes down in condition and looks mean whenever she gets ROBERT MACKAY. that way?

AMAUROSIS IN HORSE.

What is the cause of our horse going blind ? We had him out drawing fence timber, and a limb on the log caught the axe, which was lying on the ground, and turned it or threw it so that the horse struck it or it struck the horse on one of the hind feet, just about as high as where a horse usually gets tramped, making a cut about two inches across, more to the outside than the front. It bled very freely all the way home-threequarters of a mile-until we tied a small rope or cord tightly around above the cut, under the fetlock. We put him into the stable for two days, and when we took him out he was "stone" blind, but showed no signs of being weak from the bleeding. That is over a month ago, and he shows no signs of getting better. A stranger would not know, by looking at the eyes, that there was anything wrong with them. What could be done to restore the sight? He is a general-purpose horse, 10 years old. Victoria Co., Ont.

A. J. W. M.

 $\operatorname{Ans.}-\operatorname{Your}$ horse has amaurosis, which consists in paralysis of the optic nerve, and consequent blindness. This condition sometimes occurs as a sequel to loss of blood or excessive secretions. There is, at first, little alteration in the structure of the eye, except that the pupil becomes more round than normal. Eventually the eyes usually assume a bluish or milky appearance. When the disease appears as a sequel to bleeding, in many cases a recovery takes place when the blood has been again formed in normal quantities. When spontaneous recovery does not thus take place, there is little hope of the animal regaining his sight. Treatment is of little avail in most cases. Theoretically, the administration of powdered nux vomica, in two-dram doses, twice daily, should effect a cure by stimulating the paralyzed nerves. You might try this treatment for a couple of weeks or longer.

J. H. REED, V. S.

SWALLPOX - UNSOUND HORSE. 1. I hired a young man for six months. He

started work on the 25th of March. Some time in May he said he was a volunteer, and wanted to go to camp. We were very busy. I did not want him to go. I thought he had given up the idea, but the day before he went he asked again and I thought it best to let him go, as he had overdrawn his wages. The rules were every one should have been vaccinated, but he passed off a boil mark for vaccination mark, and was not vaccinated. Ten days after he came home. He did not feel well, could not work, went to his relatives and had smallpox. Has been and is now isolated in a tent. Am I compelled to take him back when recovered to finish his term? He worked only three months.

2. I bought a horse this spring for ninety dollars cash. I bought it for a sound horse. After I had had it for a while, I had it examined by a veterinary, and found she was not sound. I found out afterwards the man knew she was not sound at the time I bought it. I had an operation on her. She is perfectly sound now. Can I claim damages from him?

3. What money will guarantee a horse sound ? Halton Co., Ont. C. W. T. Ans.-1. No. But you ought to notify him

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VETERINARY.

Operation for Impervious Urachus in Foal.

Every foaling season there are many cases of impervious urachus (urinating through the navel opening) in foals. Cases with only a slight discharge and no other symptoms generally recover, with little or no treatment, while more serious attacks, in which the foal is unable to stand, considerable quantities of water through vel, and has swollen joints, are looked upon veterinary practitioner as somewhat hopedeal with. The Journal of Comparative Medicine and Veterinary Archives tells how one Dr. Anderson operated on a bad case that after-wards fully recovered: "The patient, having been kept from dam for six hours, was laid down and tied so as to leave the abdomen freely exposed. An anesthetic was administered. abdomen was thoroughly washed with soap and water, and the hair shaved from a space four inches wide by eight long, with the navel as the center. An elliptical shaped incision, five inches long and just wide enough to take in the navel, was made through the skin, underlying tissues, and the peritoneum. The umbilical vein was araced ahead until found to be healthy, ligated

Pictou Co., N. S.

Ans .- From symptoms given, I am afraid your horse's lungs are affected, and there is danger of him becoming heavy, but this condition may be averted. Be very careful to see that all food given is of good quality, and in moderate quantities. Dampen all food with lime water; also, give water of good quality. Get the following prescription: Powdered liquorice root, 6 ozs. tartar emetic, 3 ozs.; powdered gum opium, 3 arsenic, 6 drs. Mix, and make into 24 OZS.; powders, and give one every night in damp grain or bran. If necessary, repeat the prescription.

2. We occasionally see animals that will eat too much. Gluttony is occasionally seen even in the human race. It can hardly be called a disease. The remedy is to prevent the animal from getting too much. Feed good food in moderate quantities, and use sawdust or shavings for bedding. It would be good practice to give her a purgative of say 8 drs. Barbadoes aloes and 2 J. H. REED, V. S. drs. ginger.

that you consider him as no longer in your employ

2. Under the circumstances of the case, as stated, it is too late for you to make such claim effectively. It is, indeed, very doubtful whether the claim was at any time legally grounded.

3. It is not a question of amount, but one of fact and law as to whether there was really any actual and valid warranty.

COW THAT WILL NOT BREED.

1. I have a pure-bred Jersey, five years old, that has had two calves; last one about 14 or 16 months ago. She has been served three or four times, but is not in calf yet, and all the time in season. I just bought her about two months ago. Can anything be done to get her in calf?

2. Have a mare that has been roaded until she is knuckling on her hind fetlocks. Kindly advise and oblige. G. H. A. Essex Co., Ont.

Ans.-1. It is probable the former owner of your cow failed to get her in calf, and hence sold her. Such is probable from the fact that her last calf was 12 or 14 months old when she was sold. The fact that she is perpetually in heat indicates disease of the ovaries (probably tuberculosis), and if such is the case, she will in all probability not conceive, and if she should, will probably abort. You had better have her examined manually, as the cause of stirility may be a closure of the neck of the uterus. If so, have it forced open, and then breed her. If this condition be not present, she will probably remain sterile.

2. Long rest and repeated blistering will improve the condition of your horse's fetlocks. If you cannot give her rest, you can help her some by repeatedly showering the fetlocks for half an hour with cold water and applying bandages.

J. H. REED. V. S.

PERSISTENCE OF THE URACHUS AND LAMENESS IN COLT.

A colt, two weeks old, began to lose water from its abdomen, close to the navel, when one week old. We got the discharge stopped, but it became lame on its right hind leg, on which there is a crack just above the hoof, which is swollen and sore. The colt is otherwise healthy. Flease give nature of disease and cure ? SUBSCRIBER.

Norfolk Co., Ont. Ans .- Your colt had what is called persistence of the urachus. In foetal life, a small quantity of urine is secreted, and there is a tube, called the urachus, leading from the lower part of the body of the bladder to the navel opening, which conveys the urine into the foetal membranes. At birth this tube should become obliterated, as its function ceases and the urine escapes by the urethra, but in some cases the tube remains open, and urine in greater or less quantities will escape in drops, or occasionally in a stream. The sore or crack just above the hoof has no connection with the above condition, and doubtless has been caused by an injury, and is the cause of the lameness. It would be good practice to apply a warm linseed-meal poultice to the crack, changing it twice daily for a few days, and dress with 1 part carbolic acid to 40 parts sweet oil.

J. H. REED, V. S.

TO DEVELOP ACTION IN HORSE - VACCINATION FOR ANTHRAX.

1. How will I shoe or weight a three-year-old colt, from a Hackney stallion, to develop his high-stepping qualities as much as possible

2. There has been an outbreak of anthrax about six miles from here. Would it be well to vaccinate the cattle, and if so, how would it be done? Could a farmer do it himself? McD.

Stormont Co., Ont.

Ans .-- 1. Have your colt shod with a rollingmotion shoe; that is, a shoe without any calkins. Instead of having a toe calkin, have the toe of the shoe nicely rounded. Gradually increase the weight of the shoes until you discover what weight causes the best action. Use a Liverpool bit with a little curb, but do not teach him to pull too hard on the bit. Make him drive up promptly, but do not force him too fast. You will soon see at what pace he acts well. Keep him at that pace, and after a while he will probably go faster. It requires patience and considerable skill to properly develop action in a horse.

2. In order to render cattle immune from anthrax, it is necessary to inject a serum especially prepared for the purpose. This serum, I believe, can be procured in New York. A farmer who has the proper instruments might be able to inject his own cattle, but the instruments would cost more than the operation. As you are so close to where they are using the serum, you can get par-J. H. REED, V. S. ticulars there.

FATALITY IN CALVES.

This spring my calves all died. They would swell on both sides of the head, like lump jaw, linger for a week or so and seem to choke. I had them tied in a stone stable ; it was rather damp. Was it that caused it, or what was the trouble, or what should I have done for them?

WM. HALLAHAN, JR. Huron Co., Ont.

THE FARMER'S ADVOCATE.

ON ROUND - SILO CONSTRUCTION.

1. If a silo were required 24 ft. high, and you intended building with two lengths of plank, 121 ft. long by 6 in. wide, and had ends matched at planing mill, making a slanting splice, would you allow that splice to run straight around, or cut plank so that the splice would come 8 ft. from bottom and top alternately?

2. A plan was given me the other day as cheaper and better-i. e., the silo would stand better when empty-to have plank split at planing mill into $\frac{1}{2}$ -inch lumber, thus making four i-inch boards from each plank. Then put up scantling as studs for round silo, nail on the inside the lumber horizontally; next, put on tar paper and another thickness of $\frac{1}{2}$ -inch lumber, and silo is complete when required height is reached. Kindly give your opinion in next issue, and if you advise the latter, how thick should the studs be on outside of silo ? and greatly oblige, FARMER.

Prince Edward Co., Ont.

Ans.-1. We would recommend that the splices be 8 feet from the bottom and top alternately, and that two of the bands be of 2-inch hooping, and that they cover the two splices.

2. We are in receipt of your favor regarding the construction of silos, and in reply beg to say that we have two, 26 ft. in diameter by 38 ft. high to plate. They are constructed of 2-in. by 4-in. studding, set 16 ins. between centers, into a foundation of stone and cement. They are sheeted inside and out with two thicknesses of halfinch boards, the inner and outer covering having a thickness of tar paper between the boards. In ordere to sustain the heavy pressure, we have found it necessary to strengthen them with two heavy band-iron hoops, placed 5 ft. and 8 ft. from the ground. The above construction we have found to give splendid satisfaction, but would hardly care to risk building one with only a sheeting of two half-inch boards with tar paper between, as the blank air space obtained by covering both sides of studding helps greatly so keep out frost, and the extra thickness of boards also strengthens the structure. The sheeting of ours runs around. If we were building a silo 14 ft. in diameter, we would build it of 2-in. by 6-in. staves, and instead of making it 24 ft. high, have it not less than 30 ft. The deeper the silo the better, within reason. Although we feed a large herd, our 26-ft. diameter silos are too large to get the very best results; a feed only takes a skimming from the surface over so large an area, whereas if we could take off three or four inches at a time it would be all the better. Otherwise, our silos have given us the best of service, have not had to renew a single board yet, although they have been up seven years. Between each studding we have bored an inch hole from the outside, which we cork up tight when full and take out when empty, so as to give ventilation and preserve the wood.

J. M. SHUTTLEWORTH.

" Bow Park," Brant Co., Ont.

I doubt very much if half-inch lumber would bend to a 14-ft. circle sufficiently true to make a tight wall, unless of extra quality. The lumber is apt to crack or break at the knots when sprung to a much smaller circle than twenty feet studs 4 in. enough for any size of silo built on this plan.

HUNGARIAN GRASS FOR SHEEP - CLUTEN MEAL FOR COWS AND HOGS.

Is Hungarian a good feed for sheep in winter? At what stage should it be cut "

2. What is the feeding value of gluten meal for milk cows and hogs, compared with shorts at the A SUBSCRIBER. same value per ton? Glengarry Co., Ont.

Ans.-1. We have never used Hungarian grass for winter-feeding sheep, nor do we consider it particularly suitable, although no doubt sheep would do fairly well if given it cut green and well cured. Sheep prefer a leafy todder, also an occasional change of diet. We would recommend cutting the crop early, just as the heads are shooting, curing it carefully in the cock, and testing the feeding cautiously for a few weeks. Since Hungarian hay does not agree with all classes of stock, it would be well to supplement the Hungarian with hay of some other sort (clover preferred), or pea straw.

2. Gluten meal contains considerably more nitrogenous matter than does shorts, hence is more valuable for feeding dairy cows. Some cows, however, do not take to the gluten meal very kindly, and in that case it is of little use. We fed gluten meal quite extensively last winter, and got satisfactory results from it. Gluten meal is to be preferred to shorts in balancing a ration consisting of largely corn silage and timothy hay. Where clover hay is used, it is not so valuable for balancing rations. For hogs, I should judge that shorts would be much better, as this feed seems to be especially well adapted for feeding these animals. I have not heard of gluten meal being fed to hogs, except in experimental work fed along with other grain. Below is the composition of these two foods :

Gluten meal Shorts	Water. 8.2 11.8	A sh. 0.9 4.6	$\frac{29.3}{14.9}$	hydrates. 61.6 68.7 (Henry)
O A C Dairy I	Dept.		Н. Н.	DEAN.

O. A. C. Dairy Dept. ARE THE SEEDS DEAD?

A large number in this section seeded down this spring (timothy and clover) ; it sprouted all right; and grew until it was about one and a half or two inches high, when the dry weather struck it, about the beginning of June. We had no rain during June, and it wilted away. Some think it will come again, as we have plenty of rain now. Please let us know, through your valuable paper, and oblige?

JOSEPH STUBBS. Huron Co., Ont.

Ans.-It is impossible to say definitely whether the timothy and clover will come on all right, as that depends on the extent to which the plants are injured, and on the fertility of the soil, and on the rainfall after harvest. We have frequently seen bare fields at harvest time become green soon after a shower, and turn out to be well clothed with grass and clover before the end of the growing season. At any rate, with occasional showers the next few weeks will probably decide whether the fields are fit to leave or be plowed up. We would plow the seeded fields last, if that has to be done.

THE LOSS IN SPREAD MANURE.

Ans .-- Your calves probably died from a form of catarrh, caused by the unsanitary surroundings. It is probable you would have avoided the loss if you had placed them in a dry, clean, wellventilated stable. Treatment would have been of little avail without changing quarters, and then a spontaneous cure would have resulted.

J. H. REED, V. S.

Miscellaneous. CHEAP COUNTRY PAINT.

In looking over the May (1888) number of the "Advocate," page 135, I came across a cheap country paint, composed of hydraulic cement and skimmed milk. I would like to know is there any difference between it and Portland cement? If there is any difference between the two, where can I procure the hydraulic cement ?

T. H. CASSIDY. King's Co., N. B.

Ans .- Portland cement is not classed as hydraulic cement. What are known as rock or native cements are hydraulic cements, and are usually used for external applications to buildings. It can be got from Isaac Usher, Queenston, Ont., or John Battle, Thorold, Ont. To apply it, mix with skim milk to a proper consistency to apply with a brush. The Spramotor Co., London, Ont., sell first-class cold water paints, also spraying machines to put them on. We believe they are cheap and durable. Their painting machine would apply the cement and milk paint very rapidly, or it can be applied with a brush.

OIL OR MINERAL DEPOSITS.

I have a piece of ground that several people who have seen it think contains oil or mineral. It is a black color, about 20 feet in circumference, and has always been the same : it is in a sandy field. Any little stone thrown on it will SUBSCRIBER. turn black in about a year. Dufferin Co., Ont.

Ans.-Write Dr. G. M. Dawson, Director Geological Survey Department, Ottawa.

I would not build again on this plan if building. The round concrete silo that is being largely built in this section this year is by long odds the best silo I have seen anywhere.

H. SMITH. Huron Co., Ont.

EGYPTIAN WHEAT WANTED.

Would you kindly, if possible, inform me, through the columns of your valuable paper, where I could procure Egyptian fall wheat for seed (bearded red wheat)? My neighbor had some mixed with Dawson's Golden Chaff, and the Egyptian seemed to be about all that was left in the field when he cut it. I would like to get about fifty bushels of it, if possible, as it is the hardiest wheat I have ever grown.

A SUBSCRIBER. Simcoe Co., Ont.

Ans.—It is interesting to learn that the Egyptian variety of fall wheat possesses merits so enviable as those referred to by "Snbscriber." It is probable that Egyptian Amber, a variety that does well in Ontario, is identical with the sort wanted. Any of our readers having Egyptian or Egyptian Amber seed for sale would do well to announce it in our advertising columns Sept. 1st issue.

FALSE FLAX (Camelina sativa.)

I am sending you, under separate cover, sample of weed found growing in this section. Will you kindly let me know its name, habits, and whether it is of a destructive nature?

FRED H. ORRIS Middlesex Co., Ont. Ans .- We have already referred to this weed, false flax, twice this year in response to enquiries. In June 15th issue, page 405, we gave a description and treatment of it, and referred to it again July 1st, page 440. Last year we published a good illustration of it in our issue for July 2nd, page 386. We refer Mr. Orris to these back numbers, as no doubt he has had wisdom enough to preserve them.

To what extent does manure lose its fertiliz-ing value if it is allowed to lie on the top of the ground from two to four days after spreading ? Would there be any difference in this respect between manure in the spring that has not heated in the pile and manure that has been saved READER. during warm weather.

Middlesex Co.

Ans.-Unless there comes a heavy rain and washes away a portion of the manure, there is practically no loss of fertility by reason of the manure being allowed to lie spread for a few days on the surface of the ground. The only loss that occurs in manure, apart from leaching,'is by volatilization of gases formed during fermentation, and since fermentation does not continue in manure thinly spread on the land, the loss at such a time is insignificant.

BOOKS ON HORSES AND SHEEP.

I read the "Farmer's Advocate" regularly, and like it very much. Could you advise me where I could get a book on the care and training of horses, especially race horses, touching harnessing, feeding, saddling, and breaking ; also the different ailments of horses, their symptoms, and remedies? I also want a book on sheepraising, as sometimes sheep apparently in good condition die. JOSEPH BRIDGES. condition die.

Durham Co., Ont.

Ans .- We would call attention to our published list of books in August 1st issue, page 515, as every book in that list is a good one on its especial line. A book not in that list, but one which a person interested in race horses should have, is Ed. Geers' " Experience With Pacers and Trotters." It was reviewed in the "Farmer's Advocate," May 15th issue, page 346. We would also recommend "Veterinary Elements" for Mr. Bridges, and either "The Domestic Sheep," Stewart, or "The Sheep,"-by Rushworth. We can furnish any or all of these books at the regular retail price, or as premiums, according to our published announcement.

RESULTS OF THE HATCHING SEASON.

In your issue of June 15th I noticed an article complaining of poor luck in the hatching of chicks this season. The writer thinks it was because the eggs were infertile. We had rather a different experience from A. R., and would like to know the cause, so if you will publish it and explain the cause, so if you will puolish it and explain the cause and suggest a remedy, it may be helpful if it should occur again. In the early part of the season we had good luck, hatching from 52 eggs 42 season we had good fuck, have ning from of the season we set chickens. In the latter part of the season we set five hens on thirteen eggs each, but hatched only 15 nve nens on thirteen eggs each, but natched only is chickens. Upon examining the eggs after the hens had got through hatching, the greater part of them had a perfect embryo, they being well formed and appeared as if they should have hatched all right. The question is, why did they not hatch as well as the others? The eggs were not chilled, for the hens were never off their nests more than ten minutes at a time, and it was not very cold at that time. The hens that laid the eggs which were set were fed the same as they were when they laid the eggs from which the first chickens were hatched. They had just as much exercise both indoor and It could not have been the difference in the age of the eggs, because one of the hens had eggs laid all in one day. The dead chicks looked natural, and some of them had even absorbed the yolk, which every one knows is absorbed just before hatching. Our chickens are fed three times a day now, having a warm mash in the morning. They have pure water to drink and a free range READER.

Huron Co. Ans.—There are several possible reasons for Reader's poor hatch late in the season. It is generally believed that a severe thunder storm will kill chicks in the shell when they have reached a certain stage, and as there have been several of them this season, perhaps that is the explanation. Another cause might be toosmany hens to one male, thus reducing the vitality of the later chicks. It is pretty generally admitted that one male should have not more than 10 or 12 females under his charge. What have our readers to say on this subject :

TO FIT A BOY TO FARM.

I have a boy 17 years old, now working in the office with me. I would like to fit him for a farmer. Can you give opinion of the best course to take ? Keep him here a year or two longer, then send him to Agricultural College, or put him with a farmer now for a year or two, then send to the College? Any suggestions you may give may be of value to others besides myself. W. S. HUTCHESON.

Halifax Co., N. S. Ans.-By all odds we would recommend that the boy spend at least two years and three would be better-with a good farmer before sending him to college. The college is no place to learn the first principles of farming, which are most substantially picked up doing the everyday work in the field, garden and stable. We would say he is better to be paid wages, when he will be expected to take the paid wages, when he will be expected to take the rough with the smooth, which gives an important part of a boy's preparation to farm well. In this way it will be discovered whether or not he will care to farm, on which should depend the decision of sending him to an agricultural college. The writer spent three years at an agricultural college, and, after observing the two classes of students those from the farm and those direct from towns or cities—we conclude that the endeavor to train a boy for the farm by a college course first is commencing

THE FARMER'S ADVOCATE.

OYSTER-SHELL BARK-LOUSE (Mytilaspis pomorum.)

I enclose you a sample cutting from limb of an apple tree. It is on a Russian apple, and the bark on the tree is literally covered. What is it? Is it injurious? What is the remedy? J. K. T. Lambton Co., Ont.

Ans .- The twig of apple tree was almost entirely covered with scales of the oyster-shell barklouse, a very destructive and pernicious insect, which prevails throughout many apple-growing regions. It appears in the form of minute scales, about one-tenth or one-twelfth of an inch long, of a brownish or grayish color, closely resembling that of the bark of the tree, and somewhat like the shell of an oyster in shape, and adhering to the surface of the bark. Where the trees are badly infested, the health and vigor of the tree will be seriously impaired, and it may be killed. If one of these scales be raised early in spring, there will be found beneath it a mass of yellowish or whitish eggs, which hatch about the middle of May small lice that appear as mere specks to the naked eye. These move about over the bark a few days, when they fix themselves upon it, inserting their tiny beaks far enough to reach the sap. Here they continue to increase in size. and by the middle of the summer have secreted their scaly coverings, like those shown on the twig. These pests are best destroyed by scraping the trunks and larger branches during the winter and early spring. It can be done with a hoe, and should be followed by thorough scrubbing with a rough brush dipped in a solution, made by adding one part of crude carbolic acid to seven parts of a solution made by dissolving one quart of soft soap in two quarts of boiling water. In May or early in June, when the young lice will have hatched, the trees should be sprayed thoroughly with kerosene emulsion.

LOSING TURKEYS.

I have a lot of young turkeys, six weeks old. They have been dying off with a sort of diarrhea; cannot account for it, as I have been very care-ful in feeding them. The discharge is yellow. They grow weak, and finally die. Can you give D. M. PEDEN. me any remedy?

Wellington Co., Ont.

Ans .- Poultry diseases are difficult to diagnose and treat satisfactorily. Besides clean quarters, wholesome food and fresh air, give a teaspoonful of Epsom salts in two quarts of soft food once a day for three days, and follow with Douglas' Mixture, as follows : Sulphate of iron, 4 ounces; sulphuric acid, strong, 2 drams ; water, 1 quart. Add one ounce to a gallon of drinking water. This, given for a couple of weeks, should tone up the birds and send them on their way rejoicing.

MARKETS.

FARM GOSSIP.

Norfolk Co., Ont.

Some parts of this county have suffered severely from drought, and in these sections crops of nearly all kinds are a partial failure, while local showers in other sections have brought them through in fairly good condition. In driving across the country it is wonderful to see the changed conditions in a few miles.

partial failure, while local showers in other sections have brought them through in fairly good condition. In driving across the country it is wonderful to see the changed conditions in a few miles.
The harvest is about gathered, and is of a very variable condition. Much of the wheat crop was destroyed by the Hessian fly. It is surprising to note the difference in fields on the same farm or in the same neighborhood. Occasionally you would see a fairly good field, while near by other fields were almost totally destroyed. What caused the difference? Usually later sowing, though some say the red wheat escaped the fly bater sowing. Those who do sow will be wore attention to stock-raising. Those who do sow will be wait to all of the insect.
The exceedingly hot, dry weather of the last of June and beginning of July injured the oat crop very greatly, shortening the straw and injuring the filling of the grain. The same may be said of the peas sown for the canning companies, whose beaking will be very light compared with former years. Very few field peas were sown.
Barley was injured by the Hessian fly, but no great breadth is a an injure of the last of dowell.
The archer as a mixture with oats. Corn has come forward very rapidly and promises a good yield, and there is a law of the last few days the later ones should do well.
Torchards generally are quite bare of fruit. Occasionally you will find one quite well loaded, or a variety or two has done well, but the apple crop is away below the average and the writer. Baldwins, Spies and Wagners are bearing quite a crop. We are index one for its of early varieties, Early Harvest and Cayuga Red are done well, but the apple crop is away below the average and the same will hold good with pears and plums. With the writer, Baldwins, Spies and Wagners are bearing quite a crop. The are general view, the prospect for the farmer is not a fight one. Were it not for the dary industry and fairly good primes, as, indeed, very many will.

Oxford Co., Ont.

Oxford Co., Ont. We are getting along nicely with the harvest. The mixed frain that we sowed oats, barley and wheat has done fairly well. The barley is not well filled; in fact, 1 have not seen good barley this year. The straw is a splendid crop, but the barley as well as the wheat. I did not see any barley cut of like the wheat. I think the failure in the barley is entirely on account of the great heat, which cooked it without giving time to fill properly. The oats have done better, but will not, we think, be as plump as last year. We have about one and a plood loads per acre of oat sheaves. Our wheat was very por-did not yield one load to the acre, and a good part of that was timothy and weeds—and those who have threshed say that the sample is very poor. Several farmers have told me that the sumple is very poor. Several farmers have told me that we cut early for hay, which is now getting up to be a niee avoin the end of August or beginning of September plow down for wheat, not sowing uitil nearly the end of September, and perhaps we may sow lool bls. of salt or more per acre after the we tak is to one head high. Fall wheat forms a very important and of our out. We propose to sow land plaster on this, and perhaps we may sow lool bls. of salt or more per acre after the we have is two inches high. Fall wheat forms a very important of our out.

wheat is two inches high. Fall wheat forms a very important part of our rotation, and we would miss it very much if we had to give it up.
Tor mangolds and corn are doing splendidly, but, on account of the rains that we have had, there has been extra work in hoeing and now the ground is not as clean as it should be. Our corn got one less cultivating than usual. Potatoes are also looking splendid, but those who have been digging for using say that there are only very few in a hill. Our turnalps have not done as well as usual, although I thought we been had soil in better condition when the seed was committed to the ground, but they will likely do better when the weather gets cooler. Turnips do not, as a rule, do well in very hot weather. I have not seen any real good turnips this year. We had a part of a field of flax which has done well. One of my oldest neighbors said that he never saw a better crop of flax. I think it will generally be very good. We have commenced to phow a field on which we had fall wheat, intending, if there is sufficient moisture in the ground, to sow rape, to make fall pasture for then pigs and young stock. We think that it is a good thing to plow the stubble over as soon as possible.
Our cows are now pasturing on the Hungarian makes very sowed for them, but I do not think that Hungarian makes very fallen off considerably in their milk. The hot weather and the soling it off allen off considerably in their milk. The hot weather and the soling cattle are doing well. The calves eat a feed of chop very day.
Mether we have not heard of many sales yet. The offers were mostly by the dollar. Cheese keeps pretty steady for them ills, the fully price of i cents. The drovers are anow paster to may and they every may farms. Live hogs reached the unprecedentedly high price of i cents. The drovers are around trying to buy up the grassif steems, but we have not heard of many sales yet. The offers were mostly by the dollar. Cheese keeps pretty steady at about 8 cents. Mute have not

Still Buying Canadian Horses.

SUIII BUYING CANADIAN PORSON. Capt. E. R. Maudslay, of England, a retired officer of the 16th Queen's Lancers, accompanied by Veterinary Major Rowe. are making a tour of Canada, inspecting and buying remounts for the British forces in South Africa. Capt. Maudslay is the agent of the purchasing commission for the Government. He looks over the horses offered and judges of their general fitness for army purposes, and Major Rowe examines them for sound-ness. Capt. Maudslay said so far the home Government has made no move towards establishing a remount station in Canada.

Canada. The kind of horses wanted are medium -sized, clean

Canada. The kind of horses wanted are medium sized, clean-imbed, sound, active horses, between the ages of five and ten, preferably broken to saddle. They must be strong, as they have a considerable weight to carry. The ordinary soldier, with his rifle, 60 rounds of ammunition and his kit is no small load. The horses are divided into three classes—cavalry, artil-load. South Africa. Maddalay. "830 on July 6th, on the transport, Rembrandt, and on July 20th, 1,000 followed on the Indian. There were two previous shipments. The next is on Aug. 14th, when 800 or 900 horses will be shipped. Of these, about 200 will have been bound by Col. Dent, who has lately been at Calgary. — Carb. Maudslay has been buying at Montreal, Ottawa, Paris, Goderich, Toronto, Listowel, and other places. — Tarcata Market Reforms.

Toronto Market Reforms.

market

at the wrong end, and is generally disappointing. VITRIFIED BRICK FOR STABLE.

We intend to use vitrified brick, such as is used for street paving, for a horse-stable floor. Would they be as cheap and satisfactory as cement concrete for a cow-stable floor and wall? F. W.

Ontario Co., Ont.

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5.

Ans.-We have not seen paving bricks used for walls, nor for cattle-stable floors, but for horse-stable floors they serve a good purpose, when, perhaps, cement would chip or wear with the sharp shoes of the horses. In our judgment, Queenston or Thor-old cement would be preferable for the cattle stable, as it would be cheaper and make a stronger wall than the bricks, on account of their very smooth, hard surface, which might prevent them from binding well together with mortar. We believe where one has suitable gravel, free from soil, and some field stones, there is no class of material will surpass cement for walls and cattle-stable floors.

DESTROYING WILD MUSTARD.

Would you kindly inform me through the columms of your paper, how to get rid of wild mustard? Will sulphate of copper kill it? If so, please give C. T. D. directions for using it.

Westmoreland Co., N. B.

Ans.—Destroying mustard by spraying with cop-per sulphate is beyond the experimental stage. This year the Provincial Government of Ontario had out a travelling sprayer, treating mustard-infested fields in several districts with the object of teaching farmers how to spray, and also its effects upon the mustard plant. The solution is made by dissolving sulphate of copper in the proportion of two pounds in ten gallons of water. It should be sprayed over the crop when the mustard is just commencing to flower, at the rate of 50 or 60 gallons per acre. The spraying is readily done by using a potato sprayer, having several nozzles attached so as to do several rows at once. The Spramotor Co., at London, Ont., makes a special attachment for spraying mustard, and their catalogue tells all about doing the work.

Prof. Robertson Abroad.

Prof. Robertson Abroad. The second second

receipts for July, 1900, and this year are now given :

	July, '00.	July, 01.
Cattle	11,025	14,213
		12.574
Sheep		
		10.729
Hogs		
Receipts		\$604 03

"Thus showing an increase in the number of cattle, a decrease in sheep and hogs, and increased receipts of fees. Last year (1900) saw the largest revenue yet collected from cattle-market fees, etc.

	7,256.00
ed storage, etc	9,700.00
	7,225,00
ent by G. T. R.	333.00
ent by C. P. R	100.00

\$35,214.00 16,700.00

Expenditure

Net profit..... \$18,514.00

"The total income and expenditure for the last ten years was as follows : Income Expenditure

2	10110		9																			I	I	come.	ŀ	Expenditur
	1890.									,				,					•			\$		12,935	1	\$ 5,760
	1891														÷	•	•		•					19,070		11,180
	1892.														×,									20 879		22,536
	1893.														÷									20,483		13,778
	1891				-																			20,310		$15,008 \\ 16.865$
	1895							ł								÷			•	0				25,286		16,805
	1896				÷																			25,323 25,040		19,980
	1897						•					•	ł	20			•				• .			32.847		15,466
	1898								×	•		e i			•	•					#.)			33,437		17.576
	1899							-			•					•		2	•					34,706		17,000
	1900													Ċ							*			34,700		11,000
																						_	-			

\$270,316 \$171,973

\$270,316 \$171,973 "This means in the last ten years the city has received nearly \$100,000 surplus in hard cash from the cattle market direct, and yet it is difficult to get the slightest repair or improvement done. One way out of the difficulty is to appro-priate Stanley Park and take the market to front King street. A building could be erected facing the street, worthy the name of offices. The pens could be used daily as sale yards and all stock left over could be kept in the present yards behind. Opening the market at 5 a. m. during the summer months, closing at four in the afternoon; during the winter months the hours of business should be from 7 a. m. until 3 p. m. No transaction should be registered only between these hours, as the by-law provides. This would put an end to a great amount of dissatisfaction that now exists, many deals being put through before market hours and the market often kept open for tardy sellers and unwilling buyers until late in the day."

Toronto Markets.

542

Toronto Markets. Receipts at the cattle market on Aug. 8th and 9th were 90 loads all told, and to-day (Aug. 9th) 401 cattle, 996 sheep and lambs, 17 calves, 1,100 hogs, and 22 horses from the Northwest in transit for Montreal. *Export Cattle.*—Trade in export cattle somewhat brisker; prices recovered to almost their normal figure. Choice stock sold as high as \$5.12}; average quality sold at \$5.00. Prices ranged from \$1.61 to \$5.12}; one lot \$5.15 per cwt. The cables from the Old Country report an improved tone, with steady prices. Steamer space was offered freely by agents, who rarely appear on this market for export cattle boats. Mr. Wm. McClelland bought one load of cattle, 1,150 lbs. average, at \$1.50 per cwt. Mr. W. H. Mayne sold one load of cattle, 1,325 lbs, each, the pick of the market, at \$5.12} per cwt. Mr. R. O'Leary sold one load of cattle, 1,250 lbs. average, at \$4.70 per cwt. Messrs. Dunn Bros. bought 5 loads of export cattle from \$5.00 to \$5.154 and \$5.20 per cwt. Messrs. Coughlin Bros. bought 10 loads of export cattle, average 1,350 lbs., at from \$4.75 to \$5.15 per cwt. *Butchers' Cattle*—There were too many of the poorer class

In the expert extite, average 1,500 hs., at from \$1.000 states of expert externs the expert externs of the poorer class of cattle offered; several loads remained unsold at the close of the market. For choice, picked lots the market was firm, and buyers were unable to secure as many as they wanted. Choice, picked lots of butchers' cattle, equal in quality to best exporters, weighing 1,000 to 1,200 lbs., sold at \$1.50 per cwt. Good butchers' cattle are worth from \$1.00 to \$4.25 per cwt. Mr. Jas. Rowntree bought 2 loads of butchers' cattle at from \$3.00 to \$4.50 per cwt. Bulls — Heavy export bulls sold at \$4.00 to \$4.25 per cwt. Feders.—Very few short-keep feeders on offer. There was some activity and desire to purchase the light class, but not many on offer. Short-keep, good quality, were quoted at \$4.20 per cwt.

cwt. Stockers.—A few good stockers sold readily at \$3.25 to \$3.75 per cwt., from 400 to 600 lbs. average weights. There is no great demand and not many on offer. Inferior quality, mixed

per cwt., from 400 to 600 lbs. average weights. There is no great demand and not many on offer. Inferior quality, mixed colors, sold at \$2.50 per cwt. Sheep.—The run of sheep large ; demand poor, in conse-quence of the unsatisfactory state of outside markets, and export trade dull. Export ewes, \$3.40 to \$3.50 per cwt.; bucks, \$2.50 to \$3.00 per cwt.' Mr. Wm. Dulmage sold 20 sheep at \$3.50 per cwt., and 50 lambs at \$3.50 each. Lambs.—The lamb trade fairly good ; all on offer of good quality, sold readily at \$2.50 to \$4.00 per head or from \$4.50 to \$5.00 per cwt. This practice will be general in the near future, as it is more satisfactory to drovers and butchers. Milk Cows.—Only a few cows of good quality on offer. All sold readily, at from \$35.00 to \$50.00 per head. Good dairy and family cows wanted. Calces.—Great range exists in the quality of calves ; poor, half-starved bobs, as they are termed, sold at from \$1.00 per head, while choice, whole-milk fed calves sold up to \$10.00 per head, Hogs.—This market is a puzzle. Drovers report scarcity of hogs from all parts of the country, but any advantage in price or conditions of weather bring out large supplies. Aggain and again have we noticed that when the price drops a quarter hogs disappear as if they were all sold. A slight rise, and in come over 1,000 per day. This unequal supply keeps the packing houses in a constant turnoil—one or two weeks rushed, the next two weeks quiet and shut down. Best select bacon hogs, not below 160 lbs., not above 200 lbs., unfed or watered, quoted at \$7.25 per cwt. Market steady and unchanged. Light and thick fat at \$6.75 per cwt. Unculled car lots sold at \$7.00 per cwt. Extreme comparative.

Extreme comparative

pric	es to-day.	2 weeks	ago.	last y	ear.
Export cattle	\$ 5 15	\$ 5	20	\$ 5	
Butchers' cattle	4 35	- 4	75	4	65
Bulls	4 00	4	25	4	25
Feeders	4 25	4	25		50
Stockers	3 25	3	25	3	00
Sheep		3	00		90
Hogs	7 25	7.	25	6	25
Milk cows, per head.	45 00	50	00	45	
Lambs	3 50	4	50	3	50

Same date

Buffalo Markets.

East Buffalo, Aug. 13.—*Cattle*.—Offerings, 5 cars: demand light; steady and unchanged. Veals and calves—Very few offered for sale; fair to prime handy veals, \$5.50 to \$7; grassers and skim milks. \$2.25 to \$3.25. *Hogs.*—Offerings, 16 loads; fair demand; best heavy, \$6.17[‡]; fair to choice Yorkers, \$6 to \$6.15; mixed packers, \$6.10 to \$6.15; medium to choice heavy, \$6.15 to \$6.25; pigs, \$5.65 to \$5.85; roughs, \$5.25 to \$5.50; stags, \$4.25 to \$4.60.

SHOWS AND SHOWING.

Two Trophies for Dairymen.

Challenge 6 Chees erty.

The Ontario Winter Fair.

The directors of the Ontario Provincial Winter Fair met at Toronto, on August 9th, and decided to hold the next show at Guelph, from Tuesday, December 10th, to December 14th. The Executive Committee will fix dates for the acceptance of entries, etc. Mr. A. W. Smith was elected President, and Mr. F. W. Hodson Vice-President. Mr. A. P. Westervelt was re-elected Secretary. The proposal to have all carcasses entered for competition put up at auction the last afternoon of the show was accepted, as was the suggestion that in order to identify the animal and render comparison between the scoring alive and as dressed carcasses easy, when entry for dressed-carcass competition is made the name and number of the animals must be given i) pure-bred classes and a distinctive name in grade classes. Competition will also be restricted to steers under three and heifers under four years. The competition for dressed carcasses in sheep will be confined entirely to wethers. In section 2, grades and crosses for bacon hogs, alive and dressed, the prize list was rearranged as follows: 1, \$25; 2, \$20; 3, \$15; 4, \$10; 5, \$5; and the sweepstakes will be for \$50. It was also decided to give three prizes in all classes. Prof. Graham was added to the Poultry Association's representation to the Fair Board. The offer of Mr. A. F. H. Jones, Manager of Traders' Bank, Guelph, to give a prize of \$10 in gold for the best three bacon hogs from the County

Mr. A. F. H. Jones, Manager of Traders' Bank, Guelph, to give a pizz of \$10 in gold for the best three bacon hogs from the County of Wellington was accepted.
Prize for export steers.—The Board decided to give \$100, divided into four prizes of \$20, \$25, \$15, and \$10, respectively, for the best three export steers ow ned and fed by the exhibitors for at least three months previous to the show.
Committees.—The Committees were appointed as follows: A, W. Smith, A. F. H. Jones, J. M. Duff, John M. Tyson, Henry Wade, John M. Corkindale, Sheep.—Messrs. James Tolton, John John S, W. Smith, A. F. H. Jones, J. M. Duff, John M. Tyson, Henry Wade, John M. Corkindale, Sheep.—Messrs. James Tolton, John John S, W. Smith, M. Smith, John A. McGillivray, J. M. Gardhouse, James Miller, Swine-Messrs. Win.Jones, George Green, Prof. G. E. Day, Thomas Teasdale, G. B. Hood, J. E. Brethour. Bacon G, Sosand dressed carcasses Messrs. Hodson and Jones were associated with the members elected by the packers. Dairy—Prof. Dean, G. W. Clemons, R. G. Murphy, Henry Wade, Prof. G. E. Day, Poultry—W. McNeil, London; A. Tyson, Guelph; K. Hodson and W. R. Graham, Reception—Hon, John Dry, et M. Hodson and W. R. Graham, Reception—Hon, John Dry, et M. Hodson and W. R. Graham, Reception—Hon, John Dry, et M. Hodson and W. R. Graham, Reception—Hon, John Bry, E. M. Hodson and W. R. Graham, Reception—Hon, John Bry, E. M. Hodson, A. W. Smith, President Mills, Mayor J. Kennedy, A. F. H. Jones, J. M. Duff. Superintendent of Build, and John Barber. Dairy—G. W. Clemons.
Tudges—The following judges of swine were appointed upon the following, were appointed to take charge of the various stones. Sheep.—Jas, S. Houdand, in reserve. Thos. Teasdal, G. B. Hood in reserve. Yorkhires and Tammy of the Breeders' Association on hive hydright. Shropshire Downs, Merinos and Cheviots, Wenth, W. M. Gardhouse, Shropshire Downs, Werinos and Cheviots, With G. C. Dreen in reserve. James Tolton, With Henry Yakel in reserve, in grades and crosses, Massrs. Jas

We publish herewith an engraving representing the challenge cups to be given by the Toronto Industrial Exhibition to the maker of the highest-scoring factory cheese and the highest-scoring creamery butter. The cheese or butter maker who wins either of these tro. phies will hold it for one year, but must win the same three times before

it becomes his prop-

Eastern, Sherbrooke, Que. Western Fair, London, Ont Brome Corner, Que Bowmanville Fair. Nova Scotia, Halifax, N. S Centrall Canada, Ottawa, Ont E. Zorra, Tavistock Lennox, Napanee. Scugog Agricultural Society, Pt. Perry, O South Lanark, Perth, Ont. Strathroy Fair, Strathroy, Ont. East Elgin, Aylmer, Ont. South Grenville, Prescott, Ont. Morthern, Walkerton, Ont North York, Newmarket, Ont. North York, Newmarket, Ont. Haldimand, Cayuga. Palmerston South Huron, Seaforth. Uxbridge. Central Bruce, Paisley. Victoria Road Atwood, Ont. Prescott, Vankleck Hill, Ont. Prince Edward County, Picton, Ont. Central Brant, Paris, Ont. South Renfrew, Renfrew, Ont. Central Wellington, Fergus, Ont. Central Wellington, Fergus, Ont. South Renfrew, Renfrew, Ont. Central Wellington, Fergus, Ont. Central Wellington, Milverton. Morth Brant, Paris. Mornington, Milverton. Amabel and Albemarle, Wiarton. Whitby. Central, Lindsay. York Township and Weston Fair.	.Aug. 31-Sept. 7
Western Fair, London, Ont	Sept: 5-11
Kingston, Kingston	Sept. 9-13
Brome Corner, Que	Sept. 10-11
Nova Scotia Halifor N.S.	Sept. 12-13
Central Canada Ottawa Ont	Sept. 14-21
E. Zorra, Tavistock	Sept. 14-22
Lennox, Napanee.	Sept. 10-17
Scugog Agricultural Society, Pt. Perry, (Ont. Sept. 17-19
South Lanark, Perth, Ont	Sept. 17-19
Strathroy Fair, Strathroy, Ont.	Sept. 17-19
South Grenville Prescott Ont	Sept. 17-19
Guelph Central, Guelph, Ont	Sept. 17-19
Northern, Walkerton, Ont	Sept. 17-19
North York, Newmarket, Ont	Sept. 18-20
North Waterloo, Berlin	Sept. 20-21
Russell County, Metcalfe, Ont.	Sept. 23-24
Haldimand Cavuca	Sept. 24-25
Palmerston	Sept. 24-25
South Huron. Seaforth	Sept. 21-25
Uxbridge	Sept. 24-25
Central Bruce, Paisley	Sept. 24-25
Victoria Road	Sept. 24-25
Atwood, Ont	Sept. 24-25
Prescott Vankleek Hill Ont	Sept. 21-26
Peterborough Central Peterborough On	t Sept. 24-20
Great South-western and Union, Essex, C	ni. Sept. 24-26
Great Northern, Collingwood, Ont	
Prince Edward County, Picton, Ont	Sept. 25-26
Ventre Simcoe, Barrie	Sept. 25-27
North Brant Paris Ont	Sept. 25-27
South Renfrew, Renfrew, Ont	Sept. 20-27
Central Wellington, Fergus, Ont	Sept. 26-27
East Grey, Flesherton.	Sept. 26-27
North Brant, Paris	Sept. 26-27
Amabel and Albemarle Wiarton	Sept. 26-27
Whitby	Sept. 26-27
Central, Lindsay	Sept. 26-28
York Township and Weston Fair.	Sept. 27
Tyendinaga, Shannonville	Sept. 28
Great North-western Godorich Ont	.Sept. 30-Oct. 2
Huntley, Carp. Ont.	$\dots \dots \cup \bigcirc $
N. R. of Oxford, Woodstock, Ont.	Oct. 1-2
Stayner	Oct. 1-2
Orillia	Oct. 1-2
South Waterloo Calt	Oct. 1-2
New Westminster, B. C	Oet 1.4
Victoria, B. C.	Oct 1-5
North Grey, Owen Sound, Ont	Oct. 2-4
East York, Markham, Ont.	Oct. 2-4
North Kenfrew, Beachburg, Ont	Oct. 3-4
S. Oxford Otterville	Oct. 3-4
World's Fair, Rockton, Ont	Oct. 8.0
Elmvale	
Beaverton	Oct. 8-9
Caledonia, Caledonia, Ont.	Oct. 8-10
Georgina and North Gwillinhury	Oct. 10-11
Sutton	Oct. 10 11
Ashfield and Wawanosh Branch, Dungan	non,
Mornington, Milverton Amabel and Albemarle, Wiarton. Whitby Central, Lindsay York Township and Weston Fair. Tyendinaga, Shannonville Carleton, Richmond, Ont Great North-western, Goderich, Ont. Huntley, Carp, Ont. N. R. of Oxford, Woodstock, Ont. Stayner Orillia Arran, Tara, Ont South Waterloo, Galt. New Westminster, B. C. Victoria, B. C. North Grey, Owen Sound, Ont. East York, Markham, Ont. North Renfrew, Beachburg, Ont. Bolton S. Oxford, Otterville World's Fair, Rockton, Ont Elmvale. Beaverton. Peninsular, Chatham, Ont. Caledonia, Caledonia, Ont Georgina and North G willimbury. Sutton Ashfield and Wawanosh Branch, Dungan Ont. Norfolk Union, Sincoe, Ont Ontario Winter Fair, Guelph.	Oct. 10-11
Norrolk Union, Simcoe, Ont	Oct. 15-17
Ontario Winter Fair Guelph	Oct. 16-17
and a moor ran, onerphisses and	Dec. 10-14
UNITED STATES	

UNITED STATES.

owa, Des Moines	Aug. 23-31
phio State, Columbus, Ang	26_Sont 5
Ang Ang	30-Sent 6
. 1. State, Syracuse	Sont 0 11
Visconsin, Milwaukee	Sopt 0 14
lissouri, Sedalia	. Sept. 9-14
ndiana, Indianapolis	Sept. 16-21
nterstate Louisvillo Kr	Sept. 16-21
nterstate, Louisville, Ky	1. 23-Oct. 5
linois, Springfield	t, 30-Oct. 5
ansas City Show and sales	Oct. 7-11
t. Louis	Oct. 7-26
hicago International Nov	30-Dec 7

Fall Fairs. CANADA.

Dundas County, Morrisburg, Ont..... Aug. 27-29 Industrial Fair, Toronto.....Aug. 26-Sept. 7 Eastern, Sherbrooke, Que.....Aug. 31-Sept. 7

Stanstead, Que.

per lb., 8c. Toronto, Aug. 9, 1901.

Montreal Markets.

Montreal Markets. Montreal, Aug. 12. –There were about 600 head of butchers' cattle, 100 calves and 600 sheep and lambs offered for sale at the East End Abattori to-day. There was an active demand, with firm prices paid for the best cattle, but the common and inferior stock continues dull of sale and brings pretty low prices. A few of the best cattle sold at from 4½c. to 4½c, per lb., but they were nothing extra; pretty good cattle sold at from 3½c. to near 4½c, per lb., and the common dry cows and thrifty young stock brought from 2½c. to 3½c, while the canners brought from 2½c. to 3½c, per lb. Calves were in good demand, and good large veals sold at from 3½c to 3½c, per lb, for good large sheep, and the butchers paid from 3½c. to 3½c, per lb, for good large sheep, and the butchers paid from 3½c. to 3½c, per lb, for the others. Lambs sold at from \$2.50 to \$3.75 each. Hogs.—Fat hogs sold at from 9c, to 6%c, per lb, and a few choice lots at 7c, per lb, weighed off the cars.

Chicago Markets.

Chicago, Aug. 13.– Catlle.– Receipts, 4,000; good to prime, \$5.60 to \$6.25; poor to medium, \$1.15 to \$5.40; stockers and feed-ers, strong to 10c. higher, \$2.25 to \$1; cows, \$2.50 to \$4.35; heifers, \$2.10 to \$5.30; canners, \$1.50 to \$2.25; bulls, \$2.40 to \$4.25; calves slow, \$2.25 to \$5; Texas steers, \$3 to \$4.65; West-ern grass steers, \$4.60 to \$5. *Hoys.*–Receipts, 19,000; opened shade higher; closed easier; top, \$6.20; mixed and butchers', \$5.55 to \$6.15; good to choice heavy, \$5.65 to \$6.20; rough heavy, \$5.50 to \$5.60; light, \$5.50 to \$6; bulk of sales, \$5.72; to \$6. *Sheep.*–Receipts, 14,009; good to choice wethers, \$3.75 to \$4.35; fair to choice mixed, \$3.25 to \$3.85; Western sheep, \$3.25 to \$4.40; yearlings, \$3.75 to \$4.45; native lambs, \$2.40 to \$5.65; Western lambs, \$4.40 to \$5.65.

Orders for Army Hay.

Another order for 10,000 tons of hay has been received by the Agriculture Department at Ottawa, from the Imperial authorities. This will make 68,000 tons which will have been sent from Canada to South Africa, valued at about \$680,000.

That Homemade Pea Harvester.

To the Editor "Farmer's Advocate":

SIR,—Will you kindly state in your next issue of the FARM-ER'S ADVOCATE that the pea-harvester attachment which appeared in your July 15th issue is covered by patent, which I have found out since sending you said article. By doing so you will greatly oblige. J. K. LIVINGSTON.

P. S. Tolton Bros, claim that said attachment is covered by their patent No. 48130, and Wortman & Ward claim it is covered by their patent No. 62234. J. K. L.

.....Dec. 3 6

One of the Finest.

One of the Finest. A happy holiday is looming up in the future, when the Central Canada Exhibition Association at Ottawa will hold their annual fall fair, from Sept. 13th to 21st. The number and quality of the live stock, farm produce and mechanical exhibits, the balloon ascension and parachute leap, the band of trained elephants, the running and pacing ostriches, the horse races, the grand spectacular "The Siege of Tien-Tsin," the fireworks and the long list of special attractions go to make up a pro-gramme of amusement which cannot fail to please each and every visitor to the fair. The cheap rates of travel make this excursion available to all, and no one should miss seeing the Cornwall and York, who by a happy coincidence will be in Ottawa during the week of the great exhibition. The faction of the Association in throwing open their agri-eultural implement building free to all who desire to exhibit satisfaction among manufacturers. Not only is space free, but power is also supplied gratis, in consequence of which the manu-advantage before thousands of people at a trifling cost. Agri-culturists and stockmen will do well to write Mr. E. McMahon, Secretary, 26 Sparks St., Ottawa, for space applications, entry forms, and information.

The Western Fair.

The Western Fair. The outlook for Western Canada's Great Fair at London, Sept. 5th to 14th, is bright with promise. The parklike grounds are in the finest condition, the buildings having been improved and freshly painted. Assurances of the entries of live stock are exceedingly encouraging. The Western invari-ably has the cream of the stock of the country in all classes, and the Toronto winners are often rightly defeated here. A marked feature of the show this year will be the increased number of exhibits of actual demonstration in manufactures on the ground, a number of prominent firms having intimated their intention to put in manufacturing machinery in various limes. We are assured that the special attractions will be the best ever seen here, and the fact that the trained elephants which caused such a sensation at the Winnipeg Exhibition have been secured for London will make the show more attractive and interesting than ever before. Those who have seen the performances of the Three Graces and Tom Tom, the baby elephant, say the people go wild over the exhibition, and declare it the most exciting and amusing feature they have ever seen at a show.

1866

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Dutch Lullaby.

Wynken, Blynken and Nod one night Wynken, Blynken and Nod one night Sailed off in a wooden shoe—
Sailed on a river of misty light Into a sea of dew.
"Where are you going, and what do you wish?" The old moon asked the three,
"We have come to fish for the herring fish That live in this beautiful sea; Net of silver and gold have we, Said Wynken, Blynken, And Nod. And Nod. The old moon laughed and sung a song, As they rocked in the wooden shoe, And the wind that sped them all night long Ruffled the waves of dew; The little stars were the herring fish That lived in the beautiful sea. "Now cast your nets wherever you wish, But never afeared are we !" So cried the stars to the fishermen three, Wynken, Blynken, And Nod. And Nod. All night long their nets they threw For the fish in the twinkling foam, Then down from the sky came the wooden shoe, Bringing the fishermen home; 'Twas all so pretty a sail, it seemed As if it could not be; And some folks thought 'twas a dream they dreamed. Of sailing that beautiful sea; But I shall name you the fishermen three: Wynken, Blynken, Blynker And Nod. Wynken and Blynken are two little eyes, And nod is a little head, And the wooden shoe that sailed the skies Is a wee one's trundle bed: So shut your eyes while mother sings Of wonderful sights that be, And you shall see the beautiful things As you rock on the misty sea, Where the old shoe rocked the fishermen three— Wynken, Blynken, And Nod. —Eugene Fie

-Eugene Field.

Holiday Notes. No. 2.

Upon the beach, enjoying the cool lake breezes after a hot day, sat a group of summer visitors more or less known to one another before they met for their holiday at Placidia. They were perched in various attitudes upon the oddlyshaped, but not incommodious, natural seats and benches formed by the firmly-embedded driftwood. The children of some of the elders were still at work upon their last sand fortresses, trench diggings, or throwing sticks into the water for their own amusement or to gratify the persistent and almost human appeals of the beach doggie, who adopted every one in turn as his playfellow and comrade. Some were gathering ossible bonfire, and others who had wood for gon'e on the long pier to fish, were being anxiously watched for by the mothers of the group, who never felt quite comfortable until in the distance they could descry their little fisher-people wending their way homewards. Until then, they only had joined fitfully in the general conversation, with the " oh ! and ah ! and yes ! and no ! and indeed ! and to be sure !" which is so very noncommittal, and yet is better, perhaps, than absolute silence. Our talk, for the writer was one of the group, was very desultory at first, but if we may be said to have settled down at last upon anything definitely worthy of the name of topic it was upon a blending of two, viz. : Opportunity and Individuality, the value of the former depending upon the strength or weakness of the latter. It began this way : Little Mollie and her sister Jeannie came up to us together, the elder and stronger carrying quite a big bit of plank, and the younger the forked branch of a mall tree, both of which they had committed to waves, and had patiently watched "to see they'd behave," they said. "But, Marmee, dn't behave at all, the stupid things ! t came a little way in, and then they ttle way out. They never tried to help themselves one bit, and we gave them such chances ! We paddled in ever so far to give them a push, and they might have been sailing away across the lake by now, if they hadn't been so stupid. The plank did roll over and over once or twice, and another time it stood right up on end, and I clapped my hands and cried out, 'There goes my raft before your tree, Jeannie,' but I suppose it got tired of trying, and so now it shan't have another chance." "Childish prattle and childish deductions, but an object lesson, hevertheless," said one of us. "Why, Placidia tself might learn from it, for Placidia has had its opportunities, only it has been too blind to avail itself of them." "Well," said another, "I

THE FARMER'S ADVOCATE.

believe, humanly speaking, the success or nonsuccess in most lives depends upon the use made of opportunities, for surely these come to all. Some age content with an aimless drifting, being borne unresistingly upon the waves of circumstance, oarless and rudderless, and then they wonder why they are always left behind in the race. They have no mental or moral backbone. They are failures, but the fault is their own, although they are not likely to discover the fact for themselves."

"Amongst the many lessons conveyed either by hyberbole or emblem, and bequeathed to us " I think none from the past," says • Mrs. X., could be clearer than that which represents Opportunity as a closely-draped figure, with just one lock of hair over its forehead, but with none whatever behind, to teach us that if we want to use our opportunity we must grasp it by the forelock as it passes us by, for once having passed, it is gone forever. So few of even the thinkers amongst us put the full time-value on the 'now,' whilst the big majority of ordinary folks seem to consider that 'to-morrow is as good as to-day,' and that ' time enough when it is wanted,' are very good mottoes and form allsufficient excuses for their own lack of promptitude."

"All you say is very true," agreed Mrs. Y., " and no one should know that better than I, whose temptation it is to procrastinate, even in spite of many a bitter lesson as its outcome. Worry is worse than hard work, and always is the result of having to do two days' work in one. You may as well do it first as last,' says the common-sense part of me, but the lazy part of me argues upon the other side, and with inclination to back it, you may be quite sure which most frequently wins." "I suppose," put in practical Mrs. Z., " that we all have had many a lesson to prove the value of using, the folly of misusing or of wholly neglecting our opportun-ities; but we may not be so ready to make a clean breast of it as Mrs. Y. here, who, doubtless, is no worse than the rest of us. We reap as we sow. The indolent farmer, who does not make hay when the sun shines, will have none worth taking to market when hay fetches a good price in winter time, and she who neglects to take the proverbial 'stitch in time,' will not only save nine,' but will probably have a garnot ' ment beyond hope of repair when she most needs one. There is no lack of old adages to teach us the theory, but personal experience is the best teacher after all, and often our failures prove the most needful lessons we can learn. But here come the children.'

And with the children came Merry Milly Molloy, as we all love to call her.

"What are you good folks holding such a solemn conclave about ?" she asked. "On our opportunities, eh; and the now-or-never way some of them come to us? I am afraid you will think mine a somewhat flippant contribution to your talk, but it has its moral, nevertheless. Do let me quote to you some quaint speeches made by a certain Mrs. Verstage, a character in Baring Gould's story of the 'Broom Squire,' which, oddly enough, I was only reading just now whilst watching the youngsters on the pier." Turning over the pages quickly, Milly read, with her usual vim and sense of humor, what the hostess of the old Ship Inn had to say upon our subject a century ago. " Opportunities," said Mrs. Verstage, "be like fleas, to be took sharp or away they goes. They be terrible long-legged. 'Twas so with little Temperance Noakes, who might a' had the chimbley-sweep if she'd let 'un kiss her when he asked, but she said, 'wash your face fust,' and she's an old maid now, going on sixty. Then there was Betsy Purvis, who was a bit of a beauty, and gave herself airs. She wouldn't have Farmer James, as his legs was so long he looked like a spider; and she wouldn't have Odger Kay, as his was too short and he looked like a badger, so it came in the end that she married Purvis, who had both his legs shot off in the wars. That come of her being too finical with her fust chances, and she didn't get no others." "I grant you," said Milly, when we had had our laugh at Mrs. Verstage's comical retrospect, " that perhaps the good woman might have put it a little less broadly, and that her remarks were confined to the strictly matrimonial aspect of your subject, still there may be some Temperance Noakes or some Betsy Purvis amongst us who might benefit by her words of warning. Happily, there are other opportunities open to the intelligent girls of the 20th century which were denied to those of the so-called good old times, when not to marry was to make shipwreck of your life. Opportunities are ours for useful as well as for successful lives, and, better still, opportunities for special training to fit us to make the most of those lives for ourselves and others, even if homes of our own are denied us. Oh ! girls, it will be our own fault if we fall short of the opportunities God has given us." And here Milly gathered her small brood together and bade us a cheery good-night, which broke up for the nonce our little stump parlia-H. A. B. ment upon Placidia beach.

Thanks.

(From Our Dumb Animals.)

- I thank Thee, Father, for the summer time. The golden days of glory and delight— The days when the glad year is in its prime. Warmed by Thy love, and by Thy smile made bright.
- And for the peaceful armies of the flowers, That hang their banners out above the sod, Saluting with sweet scents the passing hours, And blessing me, I thank Thee, O my God !
- I thank Thee for the melody of rills, And for the glad bird-music in the air; And for the echoes of the purple hills, And children's voices at their evening prayer.

I thank Thee for the rush of mountain streams, And for the beauty of the quiet lake; And for the generous warmth of dancing beams, And for a world grown happy for Thy sake.

- I thank Thee for the cool, calm summer sea, The playful ripple of the gentle waves, And for huge billows tossing restlessly, And for their music in the moss-lined caves.
- I thank Thee for the long, sweet days of light, And for the gloaming with its hues sublime; I thank Thee for past seasons of delight, That came to me with the glad summer time.

-Marianne Farningham.

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Recipes.

CHICKEN AND BEANS.

For those who like beans, here is a good way to cook them : Dress a chicken (if old, parboil it), cut in pieces just right to serve. Parboil white beans, about a pint; butter a baking-dish, then put in a layer of beans, then a layer of chicken, then beans, then chicken, till the dish is full, having beans on top. Have the chicken broth seasoned to suit, and pour over the beans and chicken. Bake about three hours, or till done. If the fowl is young, don't parboil, but season in the dish and use hot water. Be careful that they don't cook dry.

LEMON SNOW PUDDING.

Soak a box of gelatine in a cup of cold water for an hour; add two cups of sugar and pour over all a quart of boiling water. Stir for a minute and flavor with the juice of two large lemons. Strain, and pour the mixture into a bowl set in a pan of cracked ice. When cold and beginning to thicken, beat stiff, whip in the stiff-ened whites of five eggs and beat for fifteen minutes. Pour into a mould wet with cold water and set in ice to form. Make a custard of the yolks of the eggs, let it get very cold, and when the pudding is turned out, pour this custard about the base.

The Care of the Feet.

Foot baths of cool water, into which a considerable amount of listerine, half a cupful at least, is put, will be found to be a great relief to tender feet. A chiropodist, who gave this advice, says, further, that the nails should always be cut straight across to the level of the top of the toe, as a preventive of ingrowing nails. They will never grow in if the corners are left untouched, unless the shoe is worn entirely, too short. "Darned stockings, too," he said senten-tiously, "keep me in business. Walking, at its best, is hard upon the feet of the city dwellers, who must tramp these unyielding pavements. The tiniest darn frets and rubs the skin, and is likely to create an inflammation which it will take professional treatment to relieve. Almost as bad as the darned stocking is the stocking with a hole in it. Few persons think of the comfort of their feet until the discomfort rouses them to desperate measures. In point of fact, no part of the human anatomy repays care so well as the feet, and no part more promptly and painfully resents abuse.

Home Hints and Helps.

A refrigerator is as necessary in your housekeeping as a range. A poor refrigerator will eat its head off with ice; a good one will save you its price in a few seasons.

To clean the silver spoons and forks, in everyday use, rub them with a damp cloth dipped in baking soda, then polish them with a little piece of chamois skin.

Salt and vinegar will be found the best for scouring the copper preserving-kettle; a lemon cut in half and dipped in salt will remove all stains.

It is never extravagant to buy good, expensive table linen, as every dollar added to the cost adds to the length of time it will give service.

You can make your kitchen a model of cleanliness and beauty if you adopt up-to-date methods in its arrangements.

A little finely-grated horseradish added to milk will keep it fresh for several days.-(Canadian Housekeeper.

A daily variation of the plainest fare will go far to supply the lack of elaborate living. -(Canadian Housekeeper.

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THE FARMER'S ADVOCATE.

Humorous.

THE CHILDREN'S CORNER.

A Very Odd Girl.

In school she ranks above her mates, And wins the highest prizes : She bounds correctly all the States, And tells what each one's size is ; In class she will not prompt a friend, For she doesn't believe in telling ; She heeds the rules from end to end, And never fails in spelling. "She's just as odd as odd can be!" Say all the school of Esther Lee.

She keeps her room as neat as wax, She keeps her room as neat as wax, And laughs at Peter's mockings; She mends Priscilla's gloves and sacques, And darns the family stockings; She dust she sitting-room for Kate, She cares for baby brother, She fashions balls and kites for Nate, And runs for tired mother. "She's just as odd as odd can be!" Say all at home of Esther Lee.

For little crippled Mary Betts She saves her brightest penuies; She never, never sulks or frets If she doesn't beat at tennis; With happy words she's sure to greet Children in lowly by-ways; She guides unsteady, aged feet Across the bustling high ways. "She's just as odd as odd can be !" Say all the town of Esther Lee.

Katie's Saturday.

"Dear me!" sighed Kate, when she got up that Saturday morning. "What can be the matter?" said mamma,

laughing at the doleful face.

"Oh, there's thousands and millions of things the matter!" said Katie, crossly. She was a little girl who did not like to be laughed at.

"Now, Katie," said mamma, this time seriously, "as soon as you are dressed I have something 1 want you to do for me down in the library. "Before breakfast?" said Katie.

"No, you can have your breakfast first," mamma answered, laughing at the cloudy little face.

Katie was very curious to know what this was, and as perhaps you are, too, we will skip the breakfast and go right into the library.

Mamma was sitting at the desk, with a big piece of paper and pencil in front of her.

"Now, Katie," she said, taking her little daughter on her lap, "I want you to write down a few of these things that trouble you. One thousand will do."

"Oh, mamma, you're laughing at me now," said Katie, "but I can think of at least ten right this minute.

"Very well," said mamma, "put down ten." So Katie wrote : "1. It's gone and rained so we

can't play croquet.

"2. Minnie is going away, so I'll have to sit with that horrid Jean Bascom on Monday. "3

Here Katie bit her pencil, and then couldn't help laughing. "That's all 1 can think of just

Magistrate (to prisoner) —" It appears that you have given Murphy a black eye." Prisoner—" Yes, your honor, but I am willing to give him a sovereign as compensation." Magistrate (to prosecutor)—" You hear what the prisoner says. Are you willing to accept the sovereign ?" Prosecutor (excitedly)— "Rayther, sor! (To prisoner)— Come outside and black the other oye at the same price, me bhoy!"

Pat—" Begorra, Mike, honesty's the best policy, arter all." Mike—" How ?" Pat—" Remember the ole dog I stole ?" Mike— " Yes." Pat—" Well, I'd tried to sell him, but could only get five shillings for 'im, so I took 'im to the ole lady that owned 'im, and she gave me 'af a sov."

Teacher —" Willie give me a sentence in which the verbs 'to set' and 'to sit" are used correctly. Willie (after a brief deliberation)—" The British Empire is a country on which the sun never sets and on which no other country ever sits."

You look very contented," said a charitable old lady to an laborer. "I don't believe that you consider your work Irish laborer. beneath you

'aix, an' Oi do, ma'am," was the witty reply. "It's a well Oi'm diggin'.

"Liz," said Miss Kijordan's youngest brother, "do you say woods is 'or 'woods are'!" "'Woods are, 'of course," she answered, "Whyl" "Cause Mr. Woods are down in the parlor waitin' to see

you.

A friend of ours, who was recently stopping at Bourne-mouth, was greatly annused by overhearing the following conversation of a young couple: "Arry-" I don't like this place; it's too relaxing." "Arriet-" Neither do I. Give me an embracing place for

choice A sportsman had with him a boy to carry his game-bag.

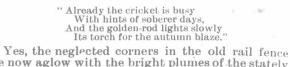
A sportsman had with him a boy to tary his game see. Having missed five pheasants in succession, the sportsman cried as he shot at the sixth: "There! I hit him! I saw the feathers fly-didn't they?" "Yes," replied the boy, drily. "Yes-they flew off with the hind"

bird.'

Little Girl (who has been lately undergoing a dental opera-tion), reading an account of a big cricket match, exclaims: "Oh, father, the poor cricketers! If I were a man I would not be a cricketer." "Why, dear? What is the matter?" "Why, father, the paper says that at half-past six, stumps were drawn."

were drawn

An old gentleman when passing a little boy selling news-papers at a street corner remarked —" Are you not afraid you will catch cold on such a wet night, my little man?" "Oh, no," re-plied the boy, "selling newspapers keeps up the circulation, sir."



Ingle Nook Chats.

are now aglow with the bright plumes of the stately golden rod, the royal blossom of our later summer soon we shall see its companion, "little purple soon we shall see its companion, "little purple aster," unfolding its azure petals; and while we revel in the beauty of the sight, we remember, with almost a sigh, that the beautiful summer is indeed fast slipping away. What then? Shall we, while yet all about us is gladness, grieve because the future may hold a possibility of gloomy days? Ah, pp! We light to the full in the glown of the property no! We live to the full in the glory of the present, storing up bright scenes and pleasant memories to gladden the future (a well-filled mind is a good pre-ventive of "blues"), and when the summer bids us adieu, we shall "speed the parting guest," and remember that

' Still we find, when summer days have flown, Each season hath some beauty of its own."

I am indebted to "An Onlooker" for a very kind letter referring to the Ingle Nook and "Hope's" column, from which the following is an extract: With regard to country and city life you voiced my sentiments just to the point. Barren is the mind and heart that cannot find something to elevate the nature near. VOCATE; it was a familiar friend when a girl at home years ago, and I do enjoy The Quiet Hour. God bless you, 'Hope.' That subject, 'The Presence of God,' is one of those refreshing bits we can drink

in amid the everyday worries of common things." With all good-will I repeat "Onlooker's" words, "God bless you, Hope," for, like your fair namesake, you are every day bringing thoughts of peace and words of comfort to busy hearts near and afar; bright drops of goodness and gladness that invigor-

ate the zeal that ofttimes flags beneath the myriad cares of our busy lives.

Another of our "guests" writes of the Memory Gem contest: "To me the competition seems a most praiseworthy one, for we know that nothing will better refine and purify our sympathies than the reading of poetry. If we let these gems of thought be imbedded in the memory, they will arise to give us nobler ideals of life and higher conceptions of duty. It is for this reason that this competition is essentially one of helpfulness and pleasure to those participating in it.'

Such letters as the above are very encouraging to those who contribute to the different columns. It is gratifying to know that one's efforts are meeting with some measure of suc-cess, and I thank the writers for their kind appreciation. "Nancie"—The matter of your

address has been satisfactorily settled; the mistake was mine.

"McGinty"-Glad to hear from you and to know you are persever-ing in your studies. "A learned ing in your studies. Certainly. professio S. A. R.-Your contributions duly received, but not examined, except casually; result next issue.



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this minute," she said. "Well," said her mother, "I'll just keep this paper a day or two.

That afternoon the rain had cleared away, and Katie and her mamma, as they sat at the window, saw Uncle Jack come to take Katie to drive; and oh, what a jolly afternoon they had of it!

Monday, when Katie came home from school, she said : "Oh, mamma, I didn't like Jean at all first, but she's just a lovely seatmate. I'm so glad ;

aren't you?" "Oh!" was all mamma said, but somehow it made Katie think of her Saturday trouble, and the

paper. "I think I'll tear up that paper now, mamma,

dear," she said, laughing rather shyly. "And next time," said mamma, "why not let troubles come before you cry about them? There are so many of them that turn out very pleasant if you'll only wait to see."

A Question.

If you will kindly tell me, please, What animat I am, I shall be very thankful I'm grandma's "blessed lamb."

My brother Archie says "that kid" Upsets our whole big house : And when I tease my grandpa, I'm just his "little mouse."

I give Aunt Bess a letter, and She says, "Thank you, my deer. And then I'm papa's "monkey," Which certainly is queer.

And Uncle Charlie says I'm stubborn As a "good-sized mule." My mamma calls me her "sweet heart," When I've been good at school.

Now, this is all confusing To a man who is so wee, call myself just "Teddy"; Pray, what would you call me?

"The Gleaners."

Our picture almost needs the artist's coloring to do it justice-to show the sunset tints which warn the gleaners that it is nearly time to hie them homewards. It matters not whether it is intended to be representative of a harvest field in the East or West, it is an autumn scene familiar to us all.

It recalls many a memory of a country evening stroll in the dear homeland, where the high hedges were strewn over with the long, unshredded cornstalks from the loaded wagons, and the mothers of the village, surrounded by their tribe of youngsters, were hastening through the narrow lanes to their quaintly - thatched and rose - garlanded cottage homes, with arms and aprons laden with treasures from the harvest field. And who can look upon any such scene, either in reality or by representation, without a thought of that lovely Scripture idyl of Ruth, the Moabitess? Whilst to the farmer in any land, who almost as a matter of course welcomes into his fields the gleaners who may ask an entry therein, it must be a happiness to realize that he has obeyed a direct command of the Giver of All: "And when ye reap the harvest of your land, thou shalt not make clean riddance of the corners of thy field when thou reapest, neither shalt thou gather any gleaning of thy harvest : thou shalt leave them unto the poor, and to the stranger : I am the Lord your God."--Leviticus xxiii. : 22. H. A. B.

An old farmer, feeling his end to be near, called in his lawyer to make the will. "I give and bequeath to Mary, my wife, the sum of one hundred pounds a year. Is that down, maester?" "Yes; but she may marry again. Won't you make a change in that case?" "Well, write again an'say; 'And if my wife marries again, two hundred pounds a year. That'll do, won't it, maester?" "Why, that's doubling the sum she would have if she re-mained unmarried. It is generally the other way: the legacy is lessened if the widow marries again." "Ay; but him as gets her 'Il desarve it !"

K. C.—You are almost a neighbor, are you not? I often pass through your village. Come again. Do any of you belong to the class commonly known as camera fiends? If so, it will please you to know that we mean to have a

CAMERA COMPETITION.

As a new departure, we announce a "Camera Competition," which will surely give pleasure to the many lovers of amateur photography. We offer six prizes, as follows:-lst, \$3; 2nd, \$2; 3rd, \$1; 4th, \$1; 5th, 50c; and 6th, 50c.; for the best photography.

best photographs of country homes, groups of animals, gardens, pretty bits of scenery, or anything of that nature, subject to the subjoined rules :

All photographs must not be less than 4×5 inches in size, and mounted, and must be the work of amateurs.

All photographs must be clear and distinct in detail, and well finished. They must reach the FARMER'S ADVOCATE, London, Ontario, not later than October 1st, 1901.

The photographer's name and post-office address, and the name and location of scene, must be written on back of photograph. Any person is at liberty to send more than one

photograph if desired. We reserve the right to use y photograph entered in competition.

All the prizewinning photographs will become the property of the FARMER'S ADVOCATE for the purpose of illustration. We also reserve the right to purchase at a fair valuation any photographs that do not win a prize.

Postage stamps must be enclosed if competitors wish photographs that do not win a prize returned.

Do not make any mistake in the address, as such delay might debar you from the competition.

THE HOSTESS.

Ingle Nook Chats, Pakenham, Ont.

A pretty, artistic parlor and a clean and orderly kitchen, do not necessarily imply a peaceful home or a clear conscience.

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THE FARMER'S ADVOCATE.

THE QUIET HOUR.

Wishes Fulfilled.

"We are builders, and each one Should cut and carve as best he can; Every life is but a stone, Every one shall hew his own, Make or mar, shall every man.

Do you remember how many old fairy tales described the granting of three wishes ? Very often the wishes were all thrown thoughtlessly away on trivial things, and the chance of winning a valuable gift was hopelessly lost. How full of interest is the wonderful story of a similar offer made to Solomon when God appeared to him in a dream and said, " Ask what I shall give thee." He did not waste the glorious opportunity. No wonder his request for wisdom pleased the Lord. He did not desire it for the sake of winning admiration or fame, but in order to perform the duties of his high and responsible station faithfully and thoroughly. Perhaps we wish that God would make the same offer to us. There is something very fascinating about the idea of miraculous gifts bestowed simply for the asking. But the best gifts never come to us without effort on our part. There is no royal road to learning, and surely Solomon had to work hard for the promised wisdom. He tells his son to cry after knowledge, and lift up his voice for understanding, searching for wisdom as for hidden treasures. He could not value wisdom so highly and yet neglect any opportunity for acquiring it. Wisdom and understanding exceeding much, and largeness of heart, even as the sand that is on the seashore, were given to him by God in answer to earnest prayer and diligent study. His knowledge of trees, from the cedar of Lebanon to the hyssop that springeth out of the wall, his knowledge of beasts and of fowl and of creeping things and of fishes, was surely not altogether miraculous. Where there's a will there's a way, and many a man has heaped up a treasure of wisdom by the help of prayer and earnest effort. The old saying that the gods help those who help themselves, is as true as ever. We need not envy Solomon, or wish that God would offer us a gift for the asking, for He has done that already. The promise to His disciples, who have faith and doubt not, is : "All things, whatsoever ye shall ask in prayer, believing, ye shall receive." This offer is not given without restriction-happily for us-as our prayers are often very unwise, and might easily bring down a curse instead of a blessing on our heads. Wisdom is promised to those who ask in faith and with unwavering earnestness. Anyone who wavers in his petition, asking now for this gift, now for that, and caring little for either, need not think that he shall receive a full and free answer to his prayer. St. John says that if we ask anything according to His will we shall have the petition granted. The warning has been given over and over again that the prayer of the wicked is an abomination to the Lord. Prayer is not a charm, like Aladdin's lamp, magical for good or evil in the hands of anyone who possesses it. God does not put such awful power into the hands of His enemies.

"I sometimes think God's heart must ache. Listening to all the sad. complaining cries, That from our weak, impatient souls arise, Because we do not see that for our sake Us organized of the same of the same set of the same set.

Him, you will soon find that you care very little

for the prizes the world offers. They will be almost valueless in your eyes compared with the grand prizes of love, joy and peace for which you are striving.

"God often would enrich, but finds not where to place His treasure-nor in hand nor heart a vacant space." Just because God does say to each one of us, "Ask what I shall give thee": just because He generally gives, sooner or later, the things we desire with all our might, we ought to fix our affections on really valuable gifts, and not waste the opportunity by wishing for trifles.

"I think God sometimes sends what we have cried for, Year after year in vain, To prove to us how poor the things we've sighed for, And how beset with pain.
The human heart can know no greater trial Than comes with this confession, That the continued sorrow of denial Was better than possession." HOPE.

Travelling Notes.

When Jamie Soutar, one of Ian Maclaren's quaintest and best drawn characters of the Drumtochty group in "Auld lang Syne," wants to mislead his cronies as to his really benevolent and unselfish motive for taking the astounding step of a visit to London, he tells them he goes because he is anxious 🎬 tae improve his mind." "Why are ye glowerin" at me as if I was a fairlie? Has a Drumtochty man no as muckle right to see the metropolis o' the countrie as ither fouk? A've been wantin' tae see the Toor o' London, whar mony a lord hes pairted wi' his head, and Westminster Abbey, whar the mighty dead are lyin', and the Hooses o' Parliament, where they haver a whole night through, and the streets, whar the soond o' feet never ceases. Well, Jamie goes, and how, after all, in the carrying out of his benevolent scheme, he sees not even one of the wonderful sights, is it not written? Fan and I, nevertheless, agreed we could not do better than follow "in pairt" Jamie's programme, saying laughingly, as we buttoned our gloves and shook out the folds of our everindispensable umbrellas, "Have not two Canadian girls a right to see the metropolis of our countrie and to improve our minds the same as ither fouk?" Let us brace up, and take the Tower of London for our morning's outing. So, my dear "Advocate" readers, it is extracts from our "Tower-day notebook " which I venture to offer you now.

It is inevitable that what I have to tell must have a flavor of the guidebook about it, because all our gathered information as to facts and figures came naturally from such records or from the oft-repeated stories told by the cicerones who conveyed our party from spot to spot. What I cannot attempt to portray is the depth of emotion which stirred both our hearts as we trod upon historic ground, as our feet pressed the very stones which, could utterance have been possible to them, must have cried out with horror at the tragedies which they have dumbly witnessed and were powerless to avert. One, indeed, needs to brace up, mentally as well as physically, if one has but the very smallest bump of imagiupon one's cranium, or in the recesses of one's heart a chord of veneration to be struck, as the eye rests upon scenes made sacred by sorrows and suffering none the less real because endured so long ago. To reach our goal we had to pass over the Tower Bridge, which, with its approaches, is half a mile long, and is one of the feats of engineering which will make the 19th century celebrated. This bridge, which is simply gigantic, has a framework of fine steel, took eight years in its construction, and cost over £1,000,000 sterling. The marvellous working of the machinery which raises what are called the central bascules, each of which weighs 950 tons, to admit of vessels passing under the structure, is wholly beyond my power of description. It should be seen by every visitor to London. Ancient records give the date of the building of the Tower of London as 1078, the White Tower being used by William the Conqueror as a royal palace and fort. Its walls are 15 feet thick, and it was under its staircase that the bones of the two little princes were found who were so foully inurdered by their wicked uncle, Richard the Third. William the Conqueror removed two bastions of the old wall of London, encroaching upon civic boundaries. It is, therefore, a precinct itself, which belongs neither to the city nor the county, and now covers an area of 18 acres within the garden rails. In Richard the First's time further trespasses were made. The interior is of the plainest character, strength and security, rather than beauty, being the first consideration. The Chapel of St. John is considered the finest specimen of Norman architecture in England, and the armory contains the finest collection of arms and armor in existence, much of it having been worn by sovereigns and others famed in English history. Rust, damage, and even neglect, have

wrought havoc in the original collection, but enough remains to give "the creeps" to any timid spectator, especially if that spectator be a woman, and tender of heart. One mounted figure wears an armor weighing 60 lbs.; another specimen (of the time of the eighth Henry) weighs 75 lbs., whilst that of his horse turns the scales at 84 lbs. Upon some of the armor are curious and appropriate, but upon others most incongruous, engravings. Of the latter, we noted a breastplate bearing a representation of the crucifixion, and on another (date 1514), besides the rose, pomegrante and other badges, were groups representing incidents in the life and death of St. Barbara and St. George. But I must not indulge in detail, or I should have to copy from the catalogue the long list of crowns, diadems, sceptres, and dazzling jewels-the diamonds, the sapphires and the emeralds-upon which for a few brief moments only we were permitted to feast our eyes.

We were not allowed to see the Chapel of St. Peter, where, in the words of the old historian, Stow, there lie "two dukes between two queens: the Duke of Somerset and the Duke of Northumberland between Queen Anne and Queen Katha-rine; all four beheaded." Here, also, are buried Lady Jane Grey, and Lord Guildford Dudley, the Duke of Monmouth, and the three Scotch lords beheaded for their share in the rebellion of 1745. The space in front of the chapel is called Tower Green, once used as a burial ground. In its center is a small, square plot paved by the order of Queen Victoria. This marks the site upon which stood the scaffold where occasional private executions took place, amongst them Queen Anne Boleyn; Margaret, Countess of Salisbury; Queen Katharine Howard; Jane, Viscountess Rochford; Lady Jane Grey, and the Earl of Essex. Our guide stated that all of these were beheaded with an axe, except Queen Anne Boleyn, whose head was cut off with a sword. In the case of the Earl of Essex, the executioner was nervous or clumsy, for he was not able to do his work with less than three strokes, for which want of skill he was mobbed and beaten by the populace on his way home. Three centuries and a half separate the first from the last name upon the execution roll. Let us take this fact for our comfort, and also remember the warlike times which inspired such cruel reprisals and alone could make them possible. I should like to have told of the Beefeaters, the name surmised to be a corruption of '' Buffetier ''—one who attends the stdeboard; in other words, a servitor-but my allotted space forbids more than a bare mention of all else we saw; of the Traitor's Gate, or Door of Doom, which opened from the old river highway to ad-mit under its archway, and up its "fateful stairs," those who were to be imprisoned, with rarely any hope of escape from death; of the Towers, among which were pointed out to us the Bloody or Wakefield Towers, the Bell Tower, the Byward Tower, the Beauchamp or Chobham Tower, upon whose inner walls are several inscriptions of most touching interest, notably that of "Iane," supposed to have been inscribed, not by herself, the Lady Jane Grey, the "ten days" queen," but by her imprisoned husband, Lord Guildford Dudley. Oh, the pity of it ! Oh, the double tragedy of it ! For from the window of her separate prison, "she saw her husband go

He answers not, or answers otherwise Than seems the best to our tear-blinded eyes. This is love's hardest task, to do hard things

This is love's hardest task, to do hard things For love's own sake, then bear the murmurings Of ignorance, too dull to judge aright The love that rises to this wondrous height He knows we have not yet attained; and so He wearies not, but bears complaint and moan, And shields each willing heart against His own, Knowing that some glad day we too shall know."

When God promises gifts He expects men to work for them. Palestine was promised to Israel, yet it had to be conquered, inch by inch. at the cost of a severe struggle. Even in playing games we never prize what is gained without effort. A man who sets his heart on winning anything-riches, knowledge of any kind, righteousness, the favor of God or man-is pretty sure to secure what he is aiming at.

The moral of this is-and it would never do to write a " Quiet Hour " without a moral-that we should "covet earnestly the best gifts." Why are we not good tempered and unselfish ? Why do we fail in so many ways to live up to our Christian profession ? Why are our prayers so languid and unpartuable? Is it not because we don't really and thirst after righteousness? We want better and make some effort in that we don't throw all our strength into the desire as Jacob did when he refused to give up the struggle with the angel unless he was blessed-and he got the blessing.

Now don't say that you can't control your wishes, that if you care more for earthly things than for heavenly, it isn't your fault. Wishes and tastes can be cultivated. If you read only trashy books you will soon be unable to appreciate sensible literature. If you live too much on weets you will lose your taste for substantial d wholesome food. If you don't think about God, and try to serve him day after day, you will tore less and less for spiritual gifts. On the other hand, if you try to live for Him and obey

his execution, and his headless orth to body brought to the chapel 'in a carre,' while the scaffold was being prepared for her own death on the green in front, which took place on the same day, Monday, 12th February, 1554.

Every visitor enters the Tower itself by way of the Martin or Middle Tower, and as he passes through the gateway is reminded that, whatever its vicissitudes, no foreign foe has ever entered its portals. As we left it, our very souls bowed down by the mysterious secrets which those hoary walls had whispered to us, we could not help rejoicing that it was so, and also that we ourselves lived in days when, in spite of much needing amendment and with many wrongs still to be righted, even the mildest of these horrors could never be repeated, for the mists and darkness of the past are being dispelled by the brighter light which, thank God, now shines above us, and which, if only our eyes could see it, is ready to guide our fect into the paths of peace.

MOLLIE.

Drink Plenty of Water.

If you wish to retain your youth to "a good old age," one of the most important things to remember is not to eat too much meat. Meat once a day, in small quantities, is sufficient.

Vegetables and fruit should always be eaten freely, and drink plenty of water. It is a curious fact that most people drink too little instead of too much water; at least a quart a day is desirable. A pint of hot water, sipped slowly before eating, is very good when a tendency to rheumatic troubles exists.

Always cat slowly; nothing will age you more quickly than an improper assimilation of food, and this is one of the faults most of us commit.

Important Dispersion Sale OF A HIGH-CLASS HERD OF REGISTERED AYRSHIRE CATTLE The property of R. S. Brooks, Brantford, Ont., will take place on the TORONTO FAIR GROUNDS, DURING THE WEEK OF THE FAIR. ON THURSDAY. SEPTEMBER 5TH. 1901, AT 2 P. M. 14 head of registered Ayrshires—12 females and 2 bulls. Terms of sale: \$50 and under, cash; over that amount, approved endorsed notes will be taken at 6 months, or 5 per cent. per annum discount for cash. Catalogues on Application. BOX 329. om R. S. BROOKS, Brantford, Ont.	II ki sh on m ar ou pn M E
"Post" Fountain Pen something that every man, woman, boy and girl needs.	
It is a wonderful tribute to the greatest invention in fountain-pen construction of the age. THE PRICE OF \$3.00. IT CANNOT BE PURCHASED UN- DER THIS PRICE ANYWHERE. The patentee has a hard-and-fast agreement with the trade and agents that \$33 shall be the lowest retail price. By a special agreement we are in a position to make A Great Offer: we will send one of these pens to anyone who sends is three new subscrib- ers, accompanied by \$3.00 in cash.	A I full tea ate Fo J 66
General Lew Wallace, the author of the greatest book of the age, "Ben Hur," also "Prince of India," "Commodus," etc., says in a letter in his own handwriting : "The fountain pen, Post, was received, and I have taken the liberty of trying it thoroughly. Please accept the excuse for failure to acknowledge sooner. "I have tried every pen of the kind on the market, and now unhesistatingly give the preference to the Post. It not only feeds itself with less care, but has the immeasurable advantage of re-supply without inking the fingers. I do all my work with it."	G Sho qua hei Th Wo enc sto wh

Lew. Wallace.

O show our confidence in this pen, we will send you one O show our connacce in this per, we will send you one on trial for a week upon receipt of \$1.00, which, if not entirely satisfactory, you can return to us and we will refund you the \$1.00 paid us. If satis-factory, you must send us the names and addresses of the three new subscribers and \$2.00 additional cash.

ADDRESS-The Wm. Weld Co., Ltd., London, Ont.

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It is

GOSSIP. Two Royal Show prizewinning Tamworth pigs were shipped July 20th, per S.S. Lakonia, from Glasgow, to the order of Messrs Reid& Co., Hintonburg, Ont. The boar is the best of the

THE FARMER'S ADVOCATE.

KEMP'S

NSTANTANEOUS Sheep Dipping Fluid Ils ticks, lice and all parasites or insect l.fe on teep, hogs, horses, and cattle ; destroys mange

The best dip in the market. Thorough, per-nanent, effectual. Cheapest and best disinfect-nt for surgical and medical purposes, barns and uthouses. Used in the proportion of 1 to 100.

ONLY RELIABLE CATTLE FLY KILLER.

If your druggist does not keep it, we will ex-ress a half-gallon tin (prepaid) to any address in lanitoba, B. C., or the Territories, for \$1.25. Isewhere in the Dominion, \$1.00.

W. W. STEPHEN & CO., MEAFORD, ONT., AGENTS FOR THE DOMINION

arding (LIMITED)

RESIDENTIAL For the primary and and^{bes} higher education of young ladies. Beautily situated. Strong staff of experienced chers. All branches. Expenses moder-First term begins September 16th. or particu'ars address :

J. BAKER, M. A., HARDING HALL,

61 TALBOT ST., LONDON, ONT.

GOSSIP.

Geo. Isaac & Bros., 'Bomanton, Ont.:--" Our orthorns have done well during the summer d are in prime condition. We have now in arantine 28 head of choice bulls, cows and ifers, selected from best herds of Scotland. ey will be home about the 20th of September. e will be pleased to answer any correspond-ce of parties wishing to purchase first-class bock, and invite breeders to inspect our stock hether they purchase or not."

CAMDEN VIEW STOCK FARM.

CAMDEN VIEW STOCK FARM.
A short distance west of Thamesville, Ont., is the home of Messrs. A. J. C. Shaw & Sons, breeders of Shorthorn cattle and Berkshire pigs, where Mr. Shaw, Sr., has been breeding purebred animals for over 30 years, and during all that time has been very careful in the selection of both sires and dams. Thoroughly understanding the various families and tribes, and being a critical judge, the herd to-day will stand creditably in comparison with the best. The Messrs, Shaw are not show people, but believe in keeping their animals in No. 1 shape for breed-ing and usefulness, and do not believe in excessive crowding for show purposes. The result is their stock is in the best of breeding condition, well developed, and gives universal satisfaction to their many patrons. Their herd is rich in the blood of the famous Cruickshank Victoria bull. Indian Chief. Among the earlier Scotch-bred dams was Gipsy Queen 3rd, daughter of Gipsy Queen (imp.), and sired by Imp. Tofthill. She traced directly to the well-known Kinellar Mina family. A number of her descendants are now on the farm, prominent among which is the cow, Bothwell Queen, sired by Imp. Windsor. This grandly-bred and beautiful cow has left the Messrs. Shaw a number of high-prized animals. An extra nice 3-year-old is the heifer. Lady Minto, of the popular Miss Ramsden family. She is sired by Earl Buckingham 24560, by Earl of Moray, who sired a number of top-notchers, including Nominee, champion bull of Canada and sweepstaker at Omaha, Neb. This cow's dm is Kinskellar Shorthorn from the ground up. Perhaps the cream of the herd is the store due of the same family is Ramsden's Princes, sired by Commander Messy. Show and show of first prizes, the Messrs. She and cure were ly proportioned, the stored by Commander Mint with a broad, level back and very very large, deep lengthy with a stock and very very proportioned, the stored by Commander Minter 200 on the farm, prominent and an the level is there an extra nice lot, show ing that stock and v

FOUNDED 1866

Auction Sale of Clydesdales. An important event to breeders of Clydes dales will take place at Grand's Repository Toronto, on Tuesday, September 3rd, at 11 o'clock sharp, when a splendid collection of carefully-selected registered Clydesdales rising three years old, fillies and stallions, mostly bred from imported stock will be sold to the highest bidder. This is a choice lot, and well worthy of inspection. The sale will take place on Tuesday of the second week of the great Industrial Exhibition of Toronto, and will be over in time to attend afternoon events at the fair. Catalogues containing particulars and pedigrees will be ready shortly, and may be obtained by writing to Walter Harland Smith, Grand's Repository, Toronto.-Advt. -0m

NOTICES.

Cold-storage Temperature. – Madison Cooper, Minnesota, Minn., has prepared and issued in convenient form a Fahr. thermom-eter scale, showing the correct temperature at which to keep perishable food and other prod-ucts, viz., meats, fruits, vegetables, dairy prod-ucts, etc. He sells it for 10 cents, and it is worth much more to any household.

One of the most desirable farms in the ban-One of the most desirable farms in the ban-ner Province of Ontario, owing to the death of the late owner, Mr. J. P. Phin, of Hespeler, Ont., is advertised for sale in this issue. This farm of 115 acres, known as "The Grange," is admirably situated for convenience to post office, railways stations, and markets, and is completely equipped with first-class dwelling and barns, and a splendid orchard of choice fruit. The farm, the soil of which is, we be-lieve, a rich clay loam, has been mainly de-voted to stock-raising, and hence is in the best of condition. To anyone seeking an ideal farm home this is a rare opportunity.

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that the Province may get the benefit of the value of the timber. **Milk Fever in Cows**.— Dr. Wm. Mole, of Toronto, member of the Royal College of Vet-erinary Surgeons, London, England, has pub-lished in pamphlet form a very practical and useful treatise on parturient appoplexy, or milk fever, in cows, in which he explains the causes and nature of the complaint and gives helpful information and instruction as to its prevention, the treatment of the patient, and the application of the best remedy that has yet been discovered, which is that known as the Schmidt treatment, which has been more than once described in the FARMER'S ADVOCATE, and which Dr. Mole has proven in his practice to be eminently success-ful and satisfactory when properly applied, ef-fecting a complete recovery in almost every case in from 8 to 12 hours. This treatment, which has attracted wide-spread attention and is acknowledged by scientists and practical men to be quite beyond the experimental stage, is fully described in Dr. Mole's pamphlet, which is for sale at the nominal price of 25 cents, and will be mailed at that price on application to the author, whose address is 443 Bathurst street, Toronto.

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Hintonburg, Ont. The boar is the best of the first-prize pen at the Royal, at Cardiff, exhibited by Mr. D. W. Phillip, and sired by Knowle Hiawatha, winner of 7 first prizes, and never beaten. The gelt was selected from the first-prize pen at Cardiff, shown by Mr. R. Ibotson, sired by the second-prize winner at the Bath and West of England Show this year.

A FAMOUS SCHOOL.

Date and particulars of sale will be given in next issue.

next issue. The American Aberdeen-Angus Breeders' Association has appropriated the sum of \$4,000 to be used in connection with the Chicago Inter-national Live Stock Exposition, which will oc-cur during the first week of December, 1901. Mr. W. C. McGavock, of Mt. Pulaski, Ill., will render all requisite aid and give needed information from time to time upon matters relating to the sale of Angus cattle which occurs during the week of the show. week of the show.

the Bath and West of England Show this year. A FAMOUS SCHOOL. The Central Business College, of Stratford, On the best commercial schools of Canada to-day. Over a dozen business college have lately applied to this college for com-applications have been received in one day. Mr. W. J. Elliott, the Principal of the college, has reason to be proud of the excellent reputs is nailed free to all interested in getting a busi-ness education. OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN. COWS FROM JULY 6 TO 27, 1901. Direct at the scheme of the five were of full age to yas tosted 19 days after calving : Milk 405. Sty, tested 19 days after calving : Milk 405. bust ter fat 11.55 lbs, equivalent butter 89 per cent, fat. Three were of the four-year-days, tested 19 days after calving : Milk 405. bust ter fat 12.55 LL coss, or 16 lbs. 85.7 per cent, fat. Three were of the four-year-days, tested 19 days after calving : Milk 405. bust ter fat 12.55 LL coss, or 16 lbs. 85.7 per cent, fat. Three were of the four-year-days, tested 19 days after calving : Milk 405.5 lbs, butter fat 12.55 LL coss, or 16 lbs. 85.7 per cent, fat. Three were of the four-year-days, tested 15 days after calving : Milk 405.5 lbs, butter fat 12.55 LL coss, or 16 lbs. 85.7 per cent, fat. The coss or 15 lbs. 57.7 per cent, fat. The se vere and the five four-year-days, tested 15 days, after calving : Milk 305.5 lbs, butter fat 12.55 LL coss, or 16 lbs. 85.7 per cent, fat. The se vere and the there year-old elass, averaging: Age 2 years 6 months 21 days, bust ter fat 12.55 LL coss, or 16 lbs. 85.7 per cent, fat. The se vere and the tree year-old elass, averaging: Age 2 years 6 months 21 days, bust ter fat 1.55 bs, equivalent butter 80 per cent, fat. The se records, nearly all, were nadd dairymen record, so really all were nadd dairymen record, so really all were nadd dairymen record, so really all were nadd dairymen record, were blas, 1 dozs, or 10 bbs, 2 dozs, 57 per cent, fat. The se records, nearly all, were nadd d

NOTICES.

A Desirable Farm on the Market. choice farm, of rich clay and sandy loan, in Middlesex Co., Ont., 15 miles from London and near to post office and other privileges, is advertised in this issue.

Farm and Herd for Sale. – A choice farm of 128 acres and a small herd of Shorthorn cattle, including a young imported Scotch-bred bull, are advertised in this issue by Mr. Manson Campbell, of Chatham, Ont. The farm is tile-drained and well fenced, and the buildings are said to be up to date and in good condition, the water supply ample, and the price and terms reasonable.

Foronto.

will be mailed at that price on application to the author, whose address is 443 Bathurst street. Toronto. Growth of the Business College Idea. — In a day marked by the consolidation of busi-ness interests, perhaps no more important step has been taken than the recent organization, under the name of the Federated Business Col-leges of Ontario, Limited, of nine of the most widely-known and oldest-established business colleges of the Province. This federation in-cludes the British American Business College, of Toronto, Ontario, established over 40 years, with Mr. David Hoskins, C.A., Principal; Forest City Business College, of London, Ontario, with Mr. J. W. Westervelt Principal; Hamilton Business College, Hamilton, Ontario, with Mr. C. R. McCullough Principal; the Sarnia (Nimmo's) Business College, Sarnia, Ontario, with Mr. W. Brooks Principal; the Metropoli-tan Business College, Ottawa, Ontario, with Mr. S. T. Willis Principal; the Galt Business College, Galt, Ontario, with Mr. G. E. Wiggins Principal; the Berlin Business College, Berlin, Ontario, with Mr. A. W. Young Principal; and the St. Catharines Business College, St. Catharines, Outario, with Mr. T. F. Wright Principal. The advantages that will come to young men and women preparing themselves for the activities of business by putting themselves in close touch with so strong an amalgamation of business educators will be obvious to students them selves, as well as to parents and guardians. It means a combining of business wisdom that must help unmistakably to advance the mate-rialinterests of young men and women. Located in the leading commercial centers of the Prov-ince, a wide door of possibilities opens when the student shall have completed his course. It is a rule of the colleges in the federated Business (of leges has just been issued from the press, and valueble to all who contemplate taking a busi-ness education because of the valuable informat-ion contained between its handsome covers. A copy of this prospectus will be sent to any one who wil his or her home

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SAFE LOCK **Metal Shingles**

ARE FULLY ILLUSTRATED IN OUR

CATOLOGUE. NEW

Our Baby shingles and free catalogue will satisfy you that we have the best-constructed roofing on the market. Ask for them.

Ottawa, January 27th, 1900. Gentlemen,—The Galvanized Steel Shingles pur-chased by me last fall were used to roof the dwelling house on my farm at Myrtle, Ont. The workmen who put them on pronounced them of excellent qual-ity. When the work was completed they presented a very pleasing appearance. I do not expect to have to touch the roof again during my lifetime. I recom-mend your shingles to anyone desiring a really good roof. F. W. HODSON, Live Stock Commissioner.

STEEL SIDING. Just what is wanted to dress up an old build-

	wanted to dress up an old build- ing, or to con- struct a new one with. It
	keeps out the wind, and, con- sequently, makes a build- ing very dry
PRESSED BRICK.	Low in price, and easily put

Our Catalogue Shows Many Patterns.

Garrison Road, Feb. 18, 1901.

Garrison Road, Feb. 18, 1901. Dear Sirs,—I am well satisfied with your Shingles and Siding. "Safe Lock" Roofing is far ahead of wooden shingles. It has a fine appearance. The Siding will never need to be painted again. I shingled my barn four years ago with wooden shingles, and they were not on six months until they warped up by the sun and rain, and leaked in a good many places. Yours truly, JESSE W. BENNER.

METAL CEILINGS.

A correct substitute for plaster. We will give you a sample ceil-ing for one of the rooms in your house at a low price, knowing that if you true a manuale that

THE FARMER'S ADVOCATE

What Ontario Farmers Say About the Massey-Harris Binder.

Newcastle. Ont., July 31, 1901. MASSEY-HARRIS Co., Limited, Toronto: DEAR SIRS., – I purchased a No. 4 Binder, 7-ft. cut, from your agents, Moon & Staples, and I must say it excels all ideas I had of what a binder ought to do or would do. I started it in as heavy a crop as could grow, opened up the field and never had to stop once. It will elevate and handle any crop. Intending purchasers of binders should not hesitate in buying a No. 4 Massey-Harris, 7-ft. I have cut 25 acres in a day. I cut 15 acres yesterday afternoon with three small horses, and the ground was soft after the heavy rains. The No. 4 Binder is perfectly balanced, there being no weight on the pole. The knotter does its work in a per-fect manner. I have now cut 150 acres, and can cheerfully recommend it to all intending purchasers. Wishing you the success such machines merit, Yours truly, D. J. GALBRAITH.

Omennee, Ont., July 27, 1901. MASSEV-HARRIS CO., Limited, Toronto: GENTLEMEN,—The No. 4 Binder I purchased from your agent, T. A. McCrea, is all, and even more, than you claim for it. The application of roller bearings makes the draft extremely light. The tilting, reel and knotter shifting levers are simple and easy to handle. I have cut15 acres of short and tangled barley and wheat, and made a clean job of it; part of it was on a very bad hill. I have tested the machine thoroughly and am satisfied that I have a perfect machine in every way, and do not see that you can make any improvement on it. I can freely recom-mend it to intending purchasers. Yours truly, C CONNU hasers. Yours truly, C. CORNEIL.

St. Thomas. Ont., July 26, 1901. MASSEY-HARRIS Co., Limited, Toronto: GENTLEMEN,—The6-ft. binder purchased from your agent, A. C. Campbell, has given entire satisfaction, runs light with two horses, misses no sheaves, requires no repairing, and I can fully recommend it to anyone wanting a first-class binder. Yours truly. THOMAS FUTCHER.

SOUTHDOWNS AND COLLIES.

ng, or to con-struct a new one with. It keeps out the wind, and, con-Imported and home-bred prizewinning aged sheep. After the Pan-American a number of particularly good ram and ewe lambe. Collie puppies, by im-ported Holyrood Leek and champion Alton Monty, out of noted prizewinning dams. nakes a build-ng very dry and warm.

ROBT. MCEWEN, BYRON, ONT. AI LOWAY LOI GE STOCK FARM. Rail'y Stn., London.

Wanted Oct. 1st Foreman and shep herd, to take entire charge, small farm, about 40 miles from New York, where winter feeding and early lamb raising are specialties. Address, stating wages expected expected_

J. R. T., care Farmer's Advocate, London.

GOSSIP.

At a special meeting of the committee on prizes of the Holstein-Friesian Association of America, held in Syracuse on Tuesday, July 9th it was voted that the Association will duplicate all prizes offered by the New York State Fair Commission in the butter-fat test, provided the prizes are won by recorded Holstein-Friesian cows, thus making a total of \$500 if won as above. Arrangements have been made with the officials of the Pan-American Exposition

whereby all cattle to be shown at Buffalo may remain at the State Fair in Syracuse until Thursday evening, September 12th, at which time they will be sent by special train to Buffalo. Judging cattle at Buffalo will begin Monday,

GOSSIP. George B. Phin, Hespeler, Ont., writes, on August 9th: "Shropshires are doing finely. I will show 20 at Toronto and the Pan-American.

A number of enquiries have been received from advertisement in FARMER'S ADVOCATE, and a sale of five shearling rams to George McKerrow, of Sussex, Wis. I have a splendid lot of ram lambs for the fall trade, and a number of good yearlings.

lambs for the fall trade, and a number of good yearlings." Mr. H. J. Davis, of Woodstock, Ont., writes from England of his importation of Yorkshires and Shorthorns, recently shipped per steamer Lakoma, having been selected by himself, and comprising six superior Yorkshires, including one very fine boar, 12 months old, bred by Philo Mills, Ruddington Hall; two fine young sows, bred by the same gentleman; one in-pig sow from the well-known herd of Messrs Daybell & Son, Bottesford; also two very large yearling sows, of great depth and quality, from the noted herd of Lord Roseberry, Dalmeny Park. These sows are bred to the best stock boar in use in this large herd of high-class Yorkshires. In Shorthorns, my purchases included the 2-year-old roan heifer, Mina, by British Prince 74135, and being the same breeding as the great bull. Scottish Champion, the highest-priced bull sold by Mr. Marr, and now at the Iowa Agricultural College farm; also a neat red yearling heifer by the same sire, and having for her dam Helen 17th, by First Consul, bred by A. Cruickshank. For a stock bull, I have selected the promising bull calf, Bapton Chancellor, selected by W. S. Marr, Uppermill, for use in his own herd, and bred by J. Deane Willis, Bapton Manor; sired by Silver Plate, and having for his dam Crocus, by Captain of the Guard. The yearling bull now in use at Collynie being of the same breed-ing, something good should come from this bull. Mr. Davis, since his return home, writes: "In looking over my young stock of Yorkshires, I have come to the conclusion that I never had a better lot to offer. They are the ideal bacon type and mostly sired by imported boars." SHORTHORNS IN QUARANTINE. We have information of the following list of

SHORTHORNS IN QUARANTINE.

SHORTHORNS IN QUARANTINE. We have information of the following list of importations of Shorthorns now in quarantine at Quebec. Others may have arrived later: For W. D. Flatt, Hamilton, 31 females, 2 bulls; for Geo. Isaac, Markham. 18 females, 3 bulls; for Robert Miller, Stouffville, 7 females, 1 bull; for H. J. Davis, Woodstock, 2 females, 1 bull; for J. G. Robbins & Sons, Horace, Ind., 18 females, Mr. Davis also has a choice lot of Yorkshire hogs included in his importation, which will be due at Woodstock in a few days, and Mr. Miller has a very large importation of sheep of different breeds, some 230 in all. JUDGES AT TORONTO EXHIBITION.

JUDGES AT TORONTO EXHIBITION.

sheep of different breeds, some 230 in all.
JUDGES AT TORONTO EXHIBITION.
The following gentlemen have been appointed as judges in the live-stock classes:
Cattle.—Shorthorns—Arthur Johnston, Greenwood; A. W. Smith, Maple Lodge. Herefords and Devons—G. de Warren Green, Toronto; R. Gibson, Delaware; Prof. Day, Agricultural College, Guelph. Polled Angus and Galloways—John Miller, jr., Brougham; John G. Davidson, Collingwood. Fat cattle and sheep—T. O. Robson, St. Mary's; David Rowntree, Weston, Grades—John Gardhouse, Highfield; John Miller, jr., Brougham; John G. Davidson, Cattle.—John Gardhouse, Highfield; John Miller, Markham. Ayrshires—G. H. Muir, Bougie, Que.; A. Kains, Byron. Jerseys—R. Reid. Berlin. Guernseys, Polled Angus, West Highland—W. W. Ballantyne, Stratford. Hosteins—R. S. Stevenson, Ancaster. French-Canadian cattle
R. Ness, Howick, Que.
Sheep.—Cotswolds—Thos. Teasdale, Concord. Leicesters—W. Parkinson, Eramosa. Lincolns – John Geary, London. Shropshires, Southdowns and other Downs—J. C. Duncan, Lewiston, N. Y. Oxford Downs—Jas. Tolton, Walkerton. Dorset Horns—T. W. Hector, Erindale. Merinos—G. P. Everett, Mount Vernon. *
Swine.—Berkshires, Poland-Chinas, Chester Whites, and Durces—Major G. B. Hood, Guelph; R. Vance, Ida. Yorkshires, Tamworths and other breeds—Henry Deedles, Breslau; R. J. Garbutt, Belleville. Ont. Bacon hogs—James Leach, Toronto; C. T. Hodges, Brantford.
R. HONEY'S HOLSTEINS AND YORKSHIRES.

R. HONEY'S HOLSTEINS AND YORKSHIRES.



None gentine without the signoture of the Saurence, Williams Co-Sole Importers for the U.S.& CANADAS, CLEVELAND.O.

⁹ U.S.& CÁNADAS. **CLEVELAND.O.** The Safest, Best BLISTER ever used. Takes the place of all diments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTEILY or FIRING. *Impossible to produce scar or blemish.* Every bottle is warranted to give satisfaction. Price **31.50** per bottle. Sold by Druggists, or sent by Express, charges paid, with fuil directions for its use. Send for free descriptive circulars. THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

First-class FARM for Sale,

In Harwich, Kent Co., 3 miles from Chatham, Ont. 128 acres. About 100 acres cleared, well fenced and tile-drained. Dwelling house (brick), milk house, 2 large barns (one of them'a bank barn, 40 x 80), and silo; artesian well, water unlimited supply; imple-ment house, hogpens, and all necessary buildings. Possession November 1st. Can plow at once for wheat if desired. Also one imported SHORT-HORN BULL, Scottish Clansman, calved October, 1899, and nine cows and heifers. registered, and in 1899, and nine cows and heifers, registered, and in calf to above-named bull. Will be sold reasonable and on terms to suit.

MANSON CAMPBELL, Chatham, Ont.

FARM FOR SALE.

225 ACRES Lobo Township, Middlesex County, Ontario. Soit rich clay and sand loams, strong and clean ; 20 acres tin ber ; good sugar bush ; wells and living water ; excellent 2-story brick dwelling, 9 rooms ; bank barn, stone wall ; frame drive barn, etc. School, churches, stores, physician, mills, etc., near by. Daily mail delivered at door. London 15 miles. Price only \$13 000. One of the best farms for either grazing or grain in Ontario. Must be sold to close estate. Write immediately. o

A. A. CAMPBELL, Molsons Bank Building, LONDON, ONT.

FOR SALE OR LEASE: BEST HOG OR STOCK FARM IN CANADA.

200 ACTES virgin land in best locality, best township,best county, in Canada. Corn turned out 150 to 200 bush. to acre in locality in 1900. Crop failure unknown. Whole Lot 20 (twenty), 7th Con., Dover East, Kent Co., Ont. Fronts whole width on Bear Line, 7th and 8th Con. Roads at either end. School, store, P. O. just opposite. Seven miles to Chatham, best mar-ket in Province. Seventy-five acres under crop, 30 to 40 acres ready to break. balance best bush pasture in county. Small house, good stable and granary, fair fences, 2 unfuling wells, plenty cordwood, and \$300 or \$400 worth timber. If not sold by 1st October, will lease for term of years. Make offer to **GEORGE C. BROOKE**,

GEORGE C. BROOKE,

CARE BANK MONTREAL, CHATHAM, ONTARIO.

BEAN RAISERS OF CANADA ! As we have had frequent enquiries regarding our well-known

MILLER BEAN HARVESTERS,

we are now prepared to quote price to Canadian farmers, delivered at Toronto. Our harvester has been on the market 20 years, and is used in every bean-raising State in the United States. every bean-raising State in the Write for catalogue and price. om

LE ROY PLOW CO. 160 Lake St.

price, knowing that if you try a sample that you will never be satis-fied until all the rooms are covered. Can be put on right over the plaster. Send us exact size of your ceiling for estimate.



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Leach, Toronto; C. T. Hodges, Brantford. R. HONEY'S HOLSTEINS AND YORKSHIKES. Minster Stock Farm, the property of Mr. R. Honey, Brickley, Ont. is situated in the County of Northumberland, six miles from Hastings station on the G. T. R. Mr. Honey is one of the up-to-date breeders of Holstein cattle and Yorkshire hogs. The herd of cattle was founded some ten years ago, one of the first dams being Minster Maid 771, bred by Edward Markling & Sons, of Fenella. A daughter of this cow now in the herd is Rose of Minster Farm 1507, sired by Spring Valley Prince 8678. This cow is a very heavy and persistent milker, giving at present, on nothing but grass, 70 lbs, of milk per day. Another cow of extra dairy form is Laura of Minster 2022, sired by Duke of Streets ville 988, and out of the same old dam. A particularly promising 3-year-old is Queen of Minster 2033, a full sister to the last described, Laura of Minster. One that deserves special mention is Jongste Aaggie's Maud of Minster 2013, sired by Netherland Tirania Baron 1162, dam Laura of Minster. This cow shows extra good dairy form, and no doubt will make a record. A num-ber of heifers, some in milk, some not, are from this last-named sire. They are a nice even lot, and those in milk aregiving promise of develop-ing into more than ordinary milkers. The present stock bull is Lady Tensen's Sir Rooker f338, sired by Queenie Rooker's Champion 939, dam Lady Tensen 1513. This bull is a splendid model of Holstein conformation, and is proving himself a No. 1 sire. In Yorkshires will stand favorable comparison with any herd. The sow, Honey's Goodenough 3763, by Perfection, out of Blenheim, is an enormous, big, lengthy animal, and as a dam has very few equals. Another big, long sow is Baron's Type 5338, also sired by Perfection, dam Fearless 3162, by Bismarck 2162, out of Flower of Brickley 3132. The present stock boar is Legacy 2nd 3669, sired by Oak Lodge Hotspur (imp.) 3042, dam Floss 296. He is proving a first-class sire. The y forth the class of stock he offers for sale

IT PAYS TO ADVERTISE IN THE FARMER'S ADVOCATE. Le Roy, N. Y., U. S. A

NOTICES.

NOTICES. The Goold, Shapley & Mulr Co., Limited, of Brantford, report that their new line of "Ideal" gas and gasoline engines is proving very suc-cessful. Not only are the engines running per-fectly and giving the utmost satisfaction, but orders are coming as fast as they can be handled. The firm is putting in still further addi ions of up-to-date machinery, and doing everything possible to meet the large demand for their engines. They are preparing a fine ex-hibit for the Toronto Industrial Exhibition, and invite all who are interested to inspect their full line during the fair. **The Daughter's Education** —Much is being

and invite all who are interested to inspect their full line during the fair. **The Daughter's Education** — Much is being said and done and written regarding the train-ing of the farmer's son, but, to our mind, the daughter's education deserves equal attention, and this it does not, in many cases, receive. But with the advent of better times, the ques-tion has come to the front. The idea is not that she 'should receive merely the so-called "accomplishments," but a good, all-round training, including business education and do-mestic science. Such we take to be the aim of Alma Ladies' College, beautifully located amid healthful surroundings at the City of St. Thomas, Ont. Erected at an original outlay of about \$100,000, the school is splendidly equipped thronghout, and is flourishing under the prin-cipalship of Rev. R. I. Warner, whose educa-tional attainments and methods are of a very high order. He has ralled about him an ex-ceptionally able staff for all departments, and we do not wonder that "Alma" attracts stu-dents especially from all parts of Western Ontario, and about one-fifth of the total num-ber from adjoining States. The attendance is increasing, and it affords us pleasure to com-mend to the attention of our readers Principal Warner's announcement elsewhere in this issue. From personal visits to the College, as well as from the record of its graduates, we can bear testimony to the efficiency of the in-stitution. Homelike in its character, the best of moral influences sefeguard its students. In view of all the superior advantages offered, the terms are reasonable, and heads of families and others would do well to communicate with Principal Warner for more detailed advan-tages.

548

Lake View Farm for Sale 200 ACRES.

Lot 11, con. 1, Hope Tp., Co. Dürham; half mile west of Port Hope. Soil good clay loam; well watered by two living streams. New brick house-11 rooms, hitchen and woodshed attached; also six-room cot-tage. Goot barns and stables, and 10 acres full-bear-ing comband. For further watering archive ing orchard. For further particulars apply to

GEO. HILL & SON, PORT HOPE, ONT. LAKE VIEW.



Alma College.

(University affiliation.)

Offers superior educational advantages, and at very reasonable rates

Alma's buildings, equipment, staff, scholastic status, and general high record, place it in the front rank of Canadian Ladies' Colleges.

- Alma prepares for High School Entrance, and carries its students through all High School and Collegiate Institute work
- Alma's Music Conservatory is among the old-est, most efficient, and most fully equipped music schools in Canada, 'and is so recog-nized by best musicians. The syllabus of Toronto University is followed, and students carefully prepared for the University local examinations. This matter is worthy of careful investigation by students.
- Alma's Fine Art Studio excels. Its work carried half the prizes to Canada at the Chi-cago World's Fair.
- Alma's Elecution Department received last year, from one of the great Boston Elecu-tion schools, warmest commendation for its excellent work in developing good reading voice
- Alma has a fully-equipped Business College. Best typewriters, offices for practical busi-ness. English branches taught in Col-legiate classes. It will pay to enquire into Alma's advantages as a business school.
- Alma has the best-equipped Domestic Science Department to be found in any Canadian Ladies' College.
- It Pays to invest in your daughter by giving-her the best education attainable. By com-mitting her instruction to Alma College, you secure advantages equal at least to the best on all lines of mental, moral and social training

Write for catalogue to-

REV. ROBERT I. WARNER, M.A.

PRINCIPAL.

ST. THOMAS, ONTARIO.

-om

THE FARMER'S ADVOCATE.

GOSSIP.

Wm. Lochhead, B. A., M. S., Professor of Bi-ology, has been spending some time at Cornell University, N. Y., studying fungous diseases and insects.

Note the advertisement, on page 546, of the dispersion sale of the high-class herd of Ayr-shire cattle, property of Mr. R. S. Brooks, Brantford, Ont., to take place on Toronto Fair Grounds, on Thursday, Sept. 5th.

Grounds, on Thursday, Sept. 510. R. J. Hine, Linden Farm, Dutton, Ont., breed-er of Oxford Down sheep, makes a change in his ad. and writes: ---"As I have sold my show flock to Mr. G. W. Heskett, of Ohio, I shall not exhibit this year, but old customers and new will find some choice Oxfords at Linden Farm should they want anything in that line. Hav-ing abundance of grass, our sheep were never in better shape. Some of the yearling rams we are offering are from Royal-winning ewes as well as rame, and I think are fit to go any-where."

LEICESTERS AT ABERDEEN.

LEICESTERS AT ABERDEEN. At the Royal Northern Show held at Aber-deen last month the Leicesters made a quality show. For aged rams Mr. McIntosh got first prize with his Edinburgh and Highland win-ner. For shearling rams Mr. David Hume, Brechin, won first and second ; the first being his champion winner at the Highland, a per-fect sheep, sired by Prince Hal. He also won the championship at Aberdeen. Mr. R. Taylor won third with a quality sheep. Mr. McIntosh was first for three ewes, Mr. Hume second. The latter was also first for three shearling ewes and for three ram lambs, Mr. Taylor second, Mr. McIntosh third. Mr. McIntosh was second with shearling ewes.

BROOKS & LANGMAID'S SHORTHORNS, COTS WOLDS, AND YORKSHIRES.

BROOKS & LANGMAID'S SHORTHORNS, COTS-WOLDS, AND YORKSHIRES. Rock well Green, Spring Brook and Meadow Fats stock farms are owned by Messrs. J. W. and S. S. Brooks and J. G. and G. A. Langmaid, and are situated near Courtice P. O., Ont., and aboutsix miles north-east of the flourishing town of Oshawa. The Messrs. Brooks & Langmaid are atvicely engaged in the breeding of pure-bred stock, including Shorthorn cattle, Cotswold sheep, and Yorkshire hogs. For some years back these gentlemen have paid special atten-tion to the importing and breeding of high-class Cotswolds. Among the various Old Country breeders with whom this firm have had dealings may be mentioned such prominent Cotswold Forgland. There are at present on the farms some 200 head of Cotswolds. A few of the im-ported ones that particularly attracted the writer's attention were the ewe, Garne's 233, stred by Maddon Lane 487, dam Flock, L. H., Vol. H., p. 15; Charming Pearl 906, and numer-ous others that might be mentioned. The head sire in use last fall is the sweepstaker, Swan, wick 98, sired by St. Albans 187,85, dam, R S 27. During the last three years this flock hascaried off the enormous number of 105 first prizes, 48 septonds, 10 pen prizes and 1 medal, besides diplomay, which is all that need be said as to their quality. The young ones are an extra and will be on hand at all the leading fall shows. In Shorthorns, this firm at present is show a conformation from which grows the top-notchers. The Yorkshires here are in keeping with all the rest of the stock. Nothing but the best is good enough for the Messrs. Brooks & singmaid, and being

WILLOW LODGE BERKSHIRES.

"The Grange Farm" for Sale. AN IDEAL GENTLEMAN'S RESIDENCE.

It consists of 115 acres, situate half mile north of town of Hespeler, 7 from Galt, and 8 from City of Guelph-all good markets.

80 acres are under a high state of cultivation; 16 acres of hardwood bush; 19 acres cedar swamp. Buildings all comparatively new and in first-class shape. Consist of white brick residence-twenty rooms; bath room; excellent cellars. Heated by hot air. Lighted by electricity.

Red brick, 9-room dwelling ; good cellar. Bank barn, 50x70; horse stable, 30x50; pigpen 18x20; henhouse, 18x20; ice house, and workshop

J. R PHIN or A. J. BREWSTER, Hespeler

There are four wells on the place, and the fences are in good repair. There are 10 acres in orchards and garden.

FOUNDED 1866

In orchard are 10 acres in orchards and garden. In orchard are 180 Northern Spy, 10 R. I Greening, 20 Russet, 10 Duchess of Oldenburg, 10 Snow, 10 Wealthy, 10 St. Lawrence; 10 Ontario, and a number of other varieties. About fifty each of pear and plum, 25 cherry, about 40 choice grapevines, and several varieties of rasp-berry and currant bushes.

For further particulars and terms apply to

or GEO. B. PHIN, or W. E. PHIN, Esq., 59 Sussex St., Toronto. On the Premises.



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REAL ESTATE AGENT.

Has for sale a 480-acre ranch, 16 miles from Yorkton of a mile from yearly school and post office; splen-did house, furnished with three coats of plaster; stab-ling for 100 head of cattle and horses; 3 acres of garden, stocked with all kinds of fruits and vegetables; wells at house and stable. River runs one mile accoss ranch, 200 acres splendid timber; 400 tons of hay. Price, \$4,000; \$200 down, \$800 in April, bal-ance to suit purchaser, who can secure a homestead adjoining,

Has for sale in Yorkton town-site lots 50×180 feet to a 20-foot lane, \$25 each, cash or time; clear title. Get one while price is low.

Has for sale in Yorkton 2 acres, all under cultivation, brick veneer house 22 x 26, and log stable. This is a

real cheap property. Price, \$400. Has for sale several farms and a large number of sections of unimproved farming lands; for instance, sections 7 and 17-27-1, at \$3 per acre, 10 equal annual instalments at 6% interest.

Wm. Simpson will select for you a homestead with as good results as if a personal selection had been made, and without loss of time to you.

Agent for making homestead entries, fire, life, accident and live-stock insurance.

OFFICE : Broadway, Yorkton, N.-W. T. TELEPHONE 28.

PLEASE MENTION THE **FARMER'S ADVOCATE** willow LODGE BERKSHIRES. WILLOW LODGE BERKSHIRES. In no class of marketable farm animals has greater improvement been made in the last few years than has been made in hogs. The old-time, short, thick, fat hog is a thing of the past. With the introduction of pork-packing factories, turn-ing out an article required in the English mar-ket, a complete revolution took place in the build and conformation of that staple animal. Instead of the thick, fat hog, the long, deep-sided, narrow-shouldered kind immediately sprang into favor; and perhaps in none of the existing breeds has a greater transformation taken place than in that old, time-honored breed, the Berkshire. Some of the finest, up-to-date specimensof that breed to befound in Canada are owned at Willow Lodge Stock Farm, Snelgrove, Ont., the home of Mr. Wm. Wilson, who is a young man of more than usual shrewdness and ability, and went into the raising of pure-bred Berkshires out of love for the business, as well as the pecuniary gain accruing therefrom. His first venture in pure-breds was in the purehase of that grand sire, Dictator 5944, bred by N. H. Gentry, Sedalia, Mo. He was sired by Victor 12th 4566, dam Bubble 3453, by Enterprise (imp.) 137.8. Among the get of Dictator was a large number of prizewinners. Another sire thathas left Mr. Wilson a large number of money-makers is longfellow 10th 8633. This boar is well named, for in truth he is a very large, lengthy fellow, with plenty of substance, and has proved him-self as ire of more than ordinary worth. He is sired by Longfellow 8632, dam Highelere 8631, by Wantage King (imp.), and was bred by C. I. Hood, Lowell, Mass. Another sire at present in when the farm is the yearling Galant Prince 7691, bread by N. H. Gentry, Schalia, Mo., sired by Dictator, dam Eveline Highelere 6611, by Victor 14th 4566 was sired by Imp. Enterprise, out of Bonnie Burlf 2785, by Longrange (imp.), and is all that could be desired in a dam, as the powing sters amply prove. Another very



GOSSIP.

D. G. Ganton, Elmvale, Ont., writes :- "I am more than pleased with my space in the FARM-ER'S ADVOCATE. Every mail brings enquiries for Yorkshires. I might say that the Shrop-shires I am offering now are extra choice, well covered, and nice pink skin. Wishing your valuable paper every success."

Anyone thinking of farming in British Columbia should write for descriptive pamphlet of farms for sale in the Lower Fraser Valley—the garden spot of

sale in the Lower Fraser Valley—the garden spot of the Province. We have compiled the largest and most complete list of farms, orchards, cattle-grazing and garden lands, and fishermen's attotments, in the Province. It has been very carefully selected, and we have a personal knowledge of every property described. Prices range from \$3.00 per acre to \$250.00 per acre, and in extent from I acre to 1,000 acres. In the Lower Fraser Valley, and on the coast lands around Vancouver, we rarely have more than a month of frost and snow at outside, and the ther-mometer has only sunk to zero twice in ten years.

valuable paper every success." The auction sale at Chicago, August 7, of Shorthorn cattle from the herd of Geo, Harding & Son, Waukesha, Wis., was well attended by breeders from many States, and was, consider-ing the great drought and consequent scarcity of feed in the West, a decided success, the 39 females selling for an average of \$693, and four bulls for an average of \$302, or an average on the 43 head sold of \$556. The highest price was \$1,625, for the 3-year-old American-bred cow, Julia Marshall. The imported cow, Village Belle, bred by Mr. Duthie, sired by Pride of Morning, and imported by H. Cargill & Son, brought the second highest price, \$1,065. Dora Stamford, bred by J. & W. B. Watt, Salem, Ont., sold for \$800, and Imp. Craibstone Baron-ess, bought from Capt. Robson, liderton, brought \$1,035.

HOPE, GRAVELEY & CO., VANCOUVER, B.C. 536 Hastings St. CRAMMING MACHINES, ATTENING COOF Incubators and Brooders Prof. P. P. T. L. M. POULTRY SUPP A. J. MORGAN, MFR., LONDON. oni Catalogue free.

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Mrs. Aaron Medron, of Savannah, Ga., writes: "I had piles and rectal trouble for years until it was unbear-able any longer. As I had often seen Pyramid Pile Cure advertised, I deter-mined to try it, and for two years have never ceased to congratulate myself that I did so, for I have been entirely cured of rectal troubles, and two packages of the Pyramid did it." The Pyramid Pile Cure contains no cocaine, opium nor any injurious drug whatever, and is absolutely safe, pain-less, and never fails to cure piles in any form.





boars ready for ser-vice, sows ready to br-ed, and younger pigs of all ages. Also show pigs can be show pigs ca had by writing. H J. DAVIS, WOODSTOCK, ONT.

Importer and breeder of choice Large White York-shires and Shorthorn cattle.



AUCTION SALE OF TIMBER BERTHS.

AUCTION SALE OF TIMBER BERTHS. **DUBLIC** NOTICE is hereby given that pursuant to authority of Orders in Council, the Red and White PINE TIMBER in the following townships in the DISTRICT OF ALGOMA, namely: The Townships of GRAHAM (part), HART, CARTIRE, LEVACE, JARVIS, ANDERSON, CHESLEY, GILLMOR, WHIMAN, CURTIS, and RUTHERFORD (part), and certain areas be-tween the PIGEON RIVES and the ARROW RIVER waters in the District of TUNDER BAY, will be offered for sale by Public Auction at the Parliament Buildings, in the City of Toronto, on TUESDAY, the SEVEN-TEENTH day of SEPTEMBER next, at the hour of ONE o'clock in the afternoon. At the same time and place certain forfeited and abandoned Berths in the Town-hips of DIGEY, SIRR-BORNS and LUTTERWORTH, in the District of HALIBUR-TON and County of VICTORIA, will be offered for sale, the purchasers of these latter Berths to have the right to cut all kinds of timber.

the purchasers of these latter Berths to have the right to cut all kinds of timber. Sheets containing terms and conditions of Sale and information as to Areas and Lots and Concessions comprised in each Berth will be furnished on appli-cation, either personal or by letter, to the Depart-ment of Crown Lands, Toronto, or the Crown Timber Agencies at OTTAWA, SAULT STE. MARIE and PORT

THE FARMER'S ADVOCATE.

GOSSIP.

GOSSIP. Some changes at the agricultural colleges across the lines recently made will be of in-terest to our readers. Jno. A. Craig, Professor of Animal Husbandry at the Iowa College. takes up newspaper work with the Homestead, Des Moines, Ia. The vacant position will be oc-cupied by Wm. J. Kennedy, the present In-structor in Animal Husbandry at the Illinois College. H. Harold Hume, Professor of Botany at the Florida Station, goes to the Louisiana College at an increase of salary, his work in the South being of a high order. All of the men are ex-O. A. C. students. Messrs, Alex, Hume & Co., Menie, Ont., in

ex-O. A. C. students. Messrs. Alex. Hume & Co., Menie, Ont., in ordering a change of ad. of Ayrshires write: "We sold our November, '99, bull, through our advertisement with you, to a party 60 miles above Ottawa, which cleans us out of yearling bulls. The calves we offer are sired by our im-ported bull, and dams are deep and persistent milkers, and they are fit to go into any 'show-ring. As we have three times won first prize for bull calf under 6 months, at Toronto, we ought to know a little about what is needed. We wish to reserve one, but any one, for exhi-bition and would like to sell the others to make room for our August calves now coming on, so bition and would like to sell the others to make room for our August calves now coming on, so will give a bargain to quick purchasers. Our show herd is coming on nicely, and we hope to win a few of the honors at the coming large ex-hibitions. We expect to meet with strong opposition at Toronto and elsewhere, also to meet our many friends throughout the Domin-ion, and will be prepared to supply any customer in our line with good stock at reasonable prices."

ion, and will be prepared to supply any customer in our line with good stock at reasonable prices." Mr. A. W. Smith, Maple Lodge, Ont., writes: "We are very much pleased with our Leices-ters this year, and especially the lamb crop. We never had a better lot. They are mostly by Imp. Stanley, a magnificent sheep and first prize at the Royal Northern Show, Aberdeen, when a lamb. His breeder, Mr. Hume, has done what has probably never been done before with Leicesters at the Highland Society Show, Scotland, the great show for Border Leicesters. With a twin sister to Stanley he won the gold medal, 1900, and a full sister as year older in 1899, and this year he has won with the get of same sire first and second for shearling rams, first and second for shearling ewes, and gold medal for best sheep on the ground. Our imported ewes are bringing us something choice to the get of Stanley and other of our imported rams, and I believe it is very rare to see as good a bunch of shearling rams as we are able to show, the get of one ram, Simon Smart, illustrated in ADvocare last fall. We expect to have an exhibit at all the leading exhibitions. Our Shorthorns were never in better shape, and sales of both Leices-ters and Shorthorns are numerous and satis-factory." factory.

PARK STOCK FARM.

factory."
PARK STOCK FARM.
Half a mile east of Oshawa, Ont., is Park Stock Farm, the property of Mr. James Lenton, breeder of Shorthorn cattle, Yorkshire pigs, and poultry. In Shorthorns the herd represents the favorite Scotch Missie and Victoria families. The stock bull is Duke of Ops 29129, sired by Commander 21384, a Cruickshank (Tipper by Sittyton Stamp, dam Lakeview Mysie 25585. He is a superb animal, of grand substance, and is leaving an extra nice lot of calves. A remarkably nice Mysie-bred cow is Mysie Bell, sired by Strathallan Stamp 19924. dam Canada Mysie 5th 19800. This cow has an extra good red heifer sired by the above bull, which, from present indications, should make a prizewinner. Among the other dams is the extra good Victoria Belle, sired by the Sittyton Victoria bull, Victor Hugo 10132, dam Zoe 16230. Another is Oshawa Lass, sired by Alderman 17883, by Imp. Oxford, bred at Kinellar, dam Miss Victor. Considerably above the average is a roan heifer out of the cow, Victoria Belle, and sired by Grand Sweep (imp.). A ten-months-old bull deserves special mention, a nice rich red, sired by Grand Sweep, out of Oshawa Lass. This young bull gives promise of being an extra good one. He is very even, showing great depth, on short legs. There are also three heifers sired by Imp. Tofthills that stand well in the front rank.
In Yorkshires, there are some as good as the possible best. The sow, Lady Ross 1544, by Conqueror 366, dam Lavina 470, could scarcely be beaten on earth, unless by a prejudiced judge. Fault could hardly be found with her as an ideal of the bacon type. There are a number of years exhibited at all the leading shows with his full share of success. His present stock includes Silver and Golden Wyandottes, Barred Plymouth Rocks, Pekin ducks, Bronze turkeys, and peafowl. Mr. Lenton's advt. appears in this issue.



The Strathy Wire Fence Co. IMITED), OWEN SOUND, ONT.

STAYS CANNOT BEND & WILL SPRING BACK TO PLACE WHEN PRESSURE IS REMOVED. CLYDE @ SHIRE HORSES WM. SMITH, COLUMBUS, ONT.,

SCOTCH SHORTHORNS, LEICESTER SHEEP. IMPORTER AND BREEDER OF Stock of different ages and sexes for sale Two stal549

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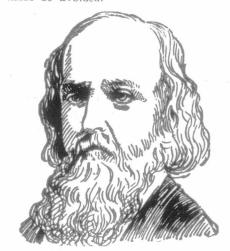


550

For Well People.

An Easy Way to Keep Well.

It is easy to keep well if we would only observe each day a few simple rules of health. The all-important thing is to keep the stomach right, and to do this it is not necessary to diet or to follow a set rule or bill of fare. Such pampering simply makes a capricious appetite and a feel-ing that certain favorite articles of food must be avoided.



Prof. Wiechold gives pretty good ad-vice on this subject. He says: "I am 68 years old and have never had a serious illness, and at the same time my life has been largely an indoor one, but I early discovered that the way to keep healthy was to keep a healthy stomach, not by eating bran crackers or dieting of any sort. On the contrary, I always eat what my appetite craves, but for the past eight years I have made it a daily practice to take one or two of Stuart's Dyspepsia Tablets after each meal, and I attribute my robust health for a man of my age to the regular daily use of Stuart's Tablets. "My physician first advised me to use them, because he said they were per-fectly harmless and were not a secret patent medicine, but contained only the natural digestives, peptones and dias-tase, and after using them a few weeks I have never ceased to thank him for his advice. "I honestly believe the habit of tak-

tase, and after using them a lew weeks I have never ceased to thank him for his advice. "I honestly believe the habit of tak-ing Stuart's Dyspepsia Tablets after meals is the real health habit, because their use brings health to the sick and ailing, and preserves health to the well and strong." Men and women past fifty years of age need a safe digestive after meals to insure a perfect digestion and to ward off disease, and the safest, best known and most widely used is Stuart's Dys-pepsia Tablets. They are found in every well-regu-lated household from Maine to Cali-fornia, and in Great Britain and Aus-tralia are rapidly pushing their way in-to popular favor. All druggists sell Stuart's Dyspepsia Tablets, full-sized packages at 50 cents, and for a weak stomach a fifty-cent package will often do fifty dollars' worth of good.—Advt.

For Sale Two choicely-bred SHORT HORN and heifers, with calves at foot and bred again to imported Red Duke = 36084 = (77585). 54 head to select from. DAVID MILNE & SON,

THE FARMER'S ADVOCATE.

GOSSIP.

The Jersey cow, Sharab, owned by Dr. Wat-ney, Pangbourne, Berkshire, England, though only four years old, is reported to have yielded 948 lbs. of butter during a period of 21 months. Sharab comes of a noted strain of Jerseys, as her dam, Sherbert II., won a certificate of merit at the Jersey Cattle Society's trials, while her grandam, Sherbert, won several medals for excellence as a butter producer.

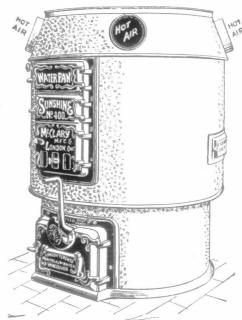
merit at the Jersey Cattle Society's trials, while her grandam, Sherbert, won several medals for excellence as a butter producer. Mr. John Campbell, Woodville, Ont., writes of the Fairview Shropshires:-"It is expected that the flock is going to make this season the best show since it first appeared in the show-ring some eighteen years ago. All of last year's winners have gone forward steadily but surely, with one exception. The yearling rams, The Standard Bearer and Diamond Jubilee, are far better as two-shears than they were last year, when they won so handsomely. The six ram lambs, winners at Toronto, London, and Chicago, and of first and second prizes in pens of three at Winter Fair, Guelph, have all developed into choice specimens of the breed. This year's ram lambs are the best Fairview has produced so far. The shearling ewes have made excellent progress. They, with a fresh one added, make two unusually strong pairs. And the tale is about the same when the ewe lambs of 1900 are observed. Probably one not exhibited last year is one of the best and a fitting mate to Campbell's 971, which won second place at the International, Chicago. And this year's ewe lambs by New-ton Lord, while but young in days, are most wonderful get. Think of a show ram in high fit for the first three years of his life still vigor-ous and promising to be still useful. Of 22 ewes turned to him last fall, 20 were in lamb to his service. It is his owner's intention to show at Toronto a full pen of his get to compete for the special, bred by exhibitor, viz., I ram any age, 4 ewes and 2 ewe lambs. Exhibits will also be made at London and the Pan-American, all being well. Mr. Campbell has received notice of the arrival at quarantine of a smal importation of choice Shropshire rams. HIGH PARK STOCK FARM. " Par excellence." is the motto which was

HIGH PARK STOCK FARM

importation of choice Shropshire rams. HIGH PARK STOCK FARM. "Par excellence" is the motto which was adopted by A. M. & Robert Shaw, at High Park Stock Farm (near Brantford, Ont.), thir-teen years ago, when they founded what has proved to be one of the banner Galloway herds of the Dominion. Starting with the best that could be bought in Canada, ever careful in the selec-tion of sires, using nothing but the most per-fect in conformation and bred in the most royal strains, the result has fully come up to their most sanguine expectations, for in their large herd can be seen the most perfect speci-mens of that ancient and time-honored breed : straight-backed, deep, fleshy bodies, beautiful heads, extremely short legs and beef to the hocks: in fact, nothing more seems to be desired in their make-up. The majority of the younger ones are sired by that great, ponder-ous, royally-bred bull, McCartney 9739, by Glencraig 5028, dam Imported Carline 5932, by Blackamore. McCartney has sired a very large number of prizewinners. Representa-tives of his get last fall won at Toronto, 1st on yearlings, five 2nds, and three 3rds; at London, two lsts and four 2nds; and at Brantford they swept everything, with the exception of one prize. There is at present on the farm a very superior 2-year bull. Sir Arthur 15045, sired by McCartney and out of Gem 3rd of Drumlanrig 2835. Drumlanrig is a name that stands im-mortal in Galloway breeding annals. This bull is decidedly smooth in build and conformation, and will compete for honors at all the leading shows this fall. Imported Flora McErin 11082 is a cow of high merit, some very choice ari-mals on the farm being out of her. She is sired by John Frost 4285, dam Sally of Penning-hame 5731. She was bred by Thomas Biggar & Son, Chapleton. Scotland. The yearling heifer, Belle B 2nd 16890, is a grandly-proportioned animal. She is sired by College Gambler 12808, dam Belle B of High Park 11738. Another extra good one is the 2-year-old heifer, Fl

AN IMPORTANT IMPORTATION.

Sunshine Patterns Sold



Two weeks ago the Sumhan mit Foundry Company, of Geneva, N. Y., bought duplicate iron patterns of the "Sunshine" Furnace, so that they could manufacture and sell this splendid Canadian heater in the United States.

This in itself proves that the "Sunshine" is the best heater made in Canada.

The Summit Foundry Company could have bought duplicate iron patterns of any other furnace made in Canada, but they preferred the "Sunshine."

Free Pamphlets telling all about this heater sent to any address.



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AUG SHO years a few R For S

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Contains correct proportion of sulphur, all mixed and ready for bath. For thirty years Laidlaw's To-bacco Powder Dip has had steadily increasing sale. Many hundred millions of sheep have been dipped with it. Non-poisonous; no injury possible to sheep or wool. For full particulars and prices, write—

ROBERT MARR, WALKERTON, ONT.

JERSEYS FOR SALE. Two choice bull calves of the highest breeding and of true dairy type, at moderate prices. W. W. EVERITT, Chatham, Ont, DUN-RDIN PARK FARM, P. O. BOX 552.

PLEASE MENTION FARMER'S ADVOCATE.

Erin. Look out for these heifers at the coming shows. AN IMPORTANT IMPORTATION. From the London Live Stock Journal we clip the following:—"On July 12th, Messrs, Alfred Mansell & Co., of Shrewsbury, shipped on behalf of Mr. Robert Miller, of Stouffville, Ont., 232 sheep of various breeds. The selec-tion comprised sixteen grand Oxford Downs, viz., one of Mr. Treweeke's first-prize pen of ewe hambs and one of Mr. H. W. Stilgoe's reserve number pen at the R. A. S. E., Mr. Treadwell's second -prize two -shear ram at Cardiff Royal, Mr. R. W. Hobbs' second-prize pen of ewes, and one out of the third-prize pen at the same show; also five excellent shearling rams selected from the prizewinning flock of Mr. J. T. Hobbs. The Dorsets consisted of the first-prize shearling ewes at the Royal and two other show ewes, three first-prize ewe lambs and two second-prize lambs at the Royal (Coun-ties Show, and two good ram lambs, all from that successful breeder, Mr. W. R. Flower, Seven Dorsets, of both sexes, were also bought from Mr. E. T. Culverwell. The Hampshires consisted of two shearling rams, including one which was let at 90 gs. as a lamb, and one ram lamb and three smart ewe lambs from Mr. James Flower's noted prize knolas contained no less than eight first-prize Royal winners, all bord by Mr. W. T. Garne, viz., three gearling rams, three ram lambs, four yearling ewes, and four ewe lambs. The Cotswolds contained no less than eight first-prize Royal winners, all bred by Mr. W. T. Garne, viz., three first-prize ewes, three first-prize ram lambs, and two first-prize ewe lambs: and from the same breeder, seventy-three sheef, of both sexes and various ages, including several show sheep, were procured. Two good rams and two ewes were supplied by Mr. W. Houlton. The Shrop-shires were an exceedingly choice lot, and quite equal to anything Mr. Miller has taken out before. They comprised the second-prize (Mr. R. P. Cooper's) pen of shearling ewes at the Royal, a grand ram out of Mr. P. L. Mills' pen at the R. A. S. E., fifteen

om T. E. ROBSON, ILDERTON, ONT.

SHORTHORNS: We are offering for sale 8 years old, by Mungo 2nd and Scottish Bard. Also a few cows bred to Baron's Heir. -om ROBT. GLEN, Owen Sound, Ontario.

For Sale: 3 Shorthorn bulls of first-class Scotland's Fame (imp.) and Bold Britain, bred by John Issac, Markham. Also some choice cows and heifers. F. A. GARDNER, Britannia, Ont. PEEL COUNTY. om

T. DOUGLAS & SONS, STRATHROY, ONT., BREEDERS OF

SCOTCH SHORTHORNS.

100 HEAD TO SELECT FROM. Offer for sale 8 young bulls, and cows and heifers of all ages, of the most approved breed-ing, bred to (imp.) Diamond Jubilee =28861=, at head of herd. Farm one mile north of town. om



- 40 Imported Cows and Heifers,
- 40 Home-bred Cows and Heifers, 11 Imported Bulls and Bull Calves,
- 13 Home-bred Bulls and Bull Calves.

Railway stations—Pickering, on main line of Grand Trunk Railway, 22 miles east of Toronto, and Clare-mont, 23 miles east of Toronto, on the C. P. Railway. Catalogues on application. om

ASHTON FRONT VIEW STOCK FARM.

Six Shorthorn Bulls for sale, from 8 to 15 months old; all of choice breeding. Also Cotswolds of all ages for sale at all times. Visitors welcome. A. J. WATSON, Castlederg, Ont. C. P. R. Station and Telegraph Office, Bolton; or G. T. R., Polcrane: Palgrave

Clover Leaf Lodge A number of choice young bulls, heifers and cows, excellent milking strains. Correspondence invited, R. CORLEY, Belgrave P. O., Ont, and G. T. R.; Wingham, C.P.R. om

SHORTHORNS FOR SALE Young stock of both sexes, reds and roans. JOHN R. HARVIE, ORILLIA, ONT. JAS. DORRANCE



Shorthorns - Young bulls 0 - 1

THE FARMER'S ADVOCATE.

Shorthorns and Leicesters. Herd Established 1855

A number of young bulls, cows and heifers for sale. Herd headed by imported Christopher 28859, and Duncan Stanley =16364=. Grand milking cows in herd. Also a number of Leicesters of both sexes, from imported foundation.

JAMES DOUGLAS, CALEDONIA, ONT

MILK FEVER IN COWS. Symptoms, cause, and treatment by the Schmidt system explained by

R. WILLIAM MOLE. M. R. C. V. S., Price 25c. 443 Bathurst St., Toronto,

CENTRE WELLINGTON SHORTHORNS Herd consists of Scotch and Scotch-topped females, with Lord Stanley 4th =22678 = at the head. Stock all ages for sale. Farm adjoins the town. 0

H. B. WEBSTER, Fergus, Ont. Box 66.

R. Mitchell & Son, Burlington Jct. Station, Nelson, Ontario

Large herd of Scotch and Scotch-topped Short-horns of the most popular Aberdeenshire tribes, including 4 imp. bulls, 12 imp. cows and heifers. Also a number of home-bred yearling and two-year-old heifers, and 7 good, thrifty home-bred bulls, from twelve to fifteen months old. Write for cata logue.

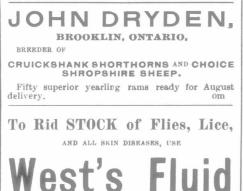
SHORTHORNS, COTSWOLDS AND BERKSHIRES FOR SALE.

> One yearling bull; 9 bull calves; cows, heifers and heifer calves; 7 yearling rams; 20 ram lambs; ewes and ewe lambs; young pigs, from 6 weeks to 2 months old. F. BONNYCASTLE & SONS, Campbellford P. O., Ont.



SHORTHORNS.

FOR SALE.—Bulls: Two 1 year old and one 8 months. A few heifers of choice breeding and superior quality. AMOS SMITH, Trowbridge P.O., Listowel Stn.





(4)Grain, Jan. 8th.

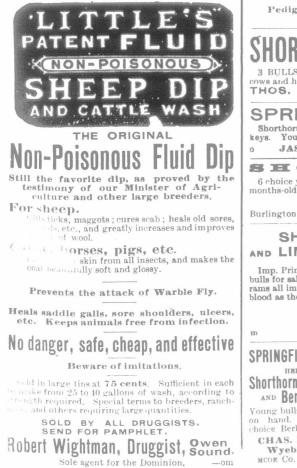
(5) Four Weeks' Course in Poultry Raising, Jan. 10th. Send for circular giving full information as to cost, terms of admission, etc. om JAMES MILLS, M.A., President. July, 1901.

Farmers!

Now is the time to build your stable floors, hogpens, etc. You will find QUEENSTON CEMENT the cheapest and best. I warrant all structures when my instructions are carried out. Investigate my patented system of

VENTILATION.





Standard Sheep Dip is Good, also Cheap.

WHICH IS ALSO A SURE CURE OF

CONTAGIOUS ABORTION.

Manufacturers: The West Chemical Company, TORONTO, ONT.

Pedigree forms free to customers.

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SHORTHORNS (imported) 3 BULLS : 1 two year-old, 2 one-year-olds. A few THOS. RUSSELL, EXETER P. O.

SPRINGBANK FARM. Shorthorn Cattle, Oxford Sheep, and Bronze Tur-Young bulls for sale.

JAS. TOLTON, WALKERTON, ONT.

SHORTHORNS. 6 choice young heifers, 4 imported cows. Also 16-months-old home-bred bull. o

A. P. ALTON & SON, Appleby P.O. Burlington Junction Station.

SHORTHORN CATTLE AND LINCOLN SHEEP.

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

> J. T. GIBSON, DENFIELD, ONT.



When properly arranged, it will give you perfect sanitary stables. It is free to all of our patrons.

For pamphlet, prices, and other particulars, write to

ISAAC USHER, QUEENSTON, - ONTARIO.

Rapids Farm Ayrshires.

REINFORCED BY A RECENT IMPORTATION of 20 cows, 2 bulls, and a number of calves, selected from noted Scotch herds, and including the male and female champions at leading Scottish shows this year. Representatives of this herd won the first herd prize at the exhibitions at—

Toronto, London, and Ottawa, in 1900.

Come and see or write for prices.

Young Bulls and Heifers for Sale, bred from High-class Imported Stock.

Robert Hunter, Manager

for W. W. Ogilvie Co., Lachine Rapids, Quebec.

High-class Shorthorns and Yorkshire Pigs. NOW, FOR THE FIRST TIME,

Goble's Station, G. T. R., 10 miles east of Wood-stock, 2 miles from farm. Visitors met. -om -om

Just now three 10-months bulls, got by imp. Sirius 15281, great big massive fellows with lots of flesh and quality – away above the average. Also a few superior young cows in calf, and 5 or 6 heifers. We are booking orders now for the spring trade. Can ship some in six weeks. JAS. MCARTHUR, GOBLE'S, ONT. Goble's Station, G. T. R., 10 miles east of Wood

HENRY STEVENS & SONS, LACONA, OSWEGO CO., N. Y



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TROUT CREEK HERD OF SHORTHORNS.

Since our Chicago sale we have imported sixty-two head, including some Royal winners; they were pronounced in Scotland superior to past importations. We try to import the best, believing that this is one of the ways to assist in improving the breed on this side of the water. Being thoroughly convinced, also, that a bull of the right sort is even more than half the herd, we have decided to keep the following choice ones:

Imp. Lord Banff,

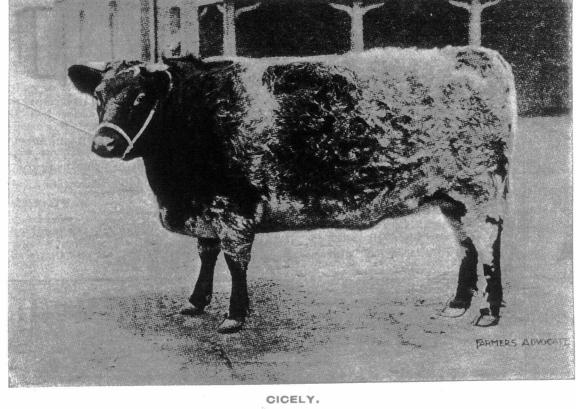
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Bred by A. Watson; of the Campbell Bessie family.

Imp. Consul.

Bred by J. D. Fletcher; of the Campbell Claret family. Consul was awarded first at Edinburgh, first and champion at Provincial Union, first and champion at Creiff, and second at the Highland. His sire, Watchword, bred by Wm. Duthie, was first at the Highland in 1895 and 1896, and got by Scottish Archer. Watchfire, by Watchword, was first at the Highland, 1897. Consul is the highestpriced bull imported to Canada.

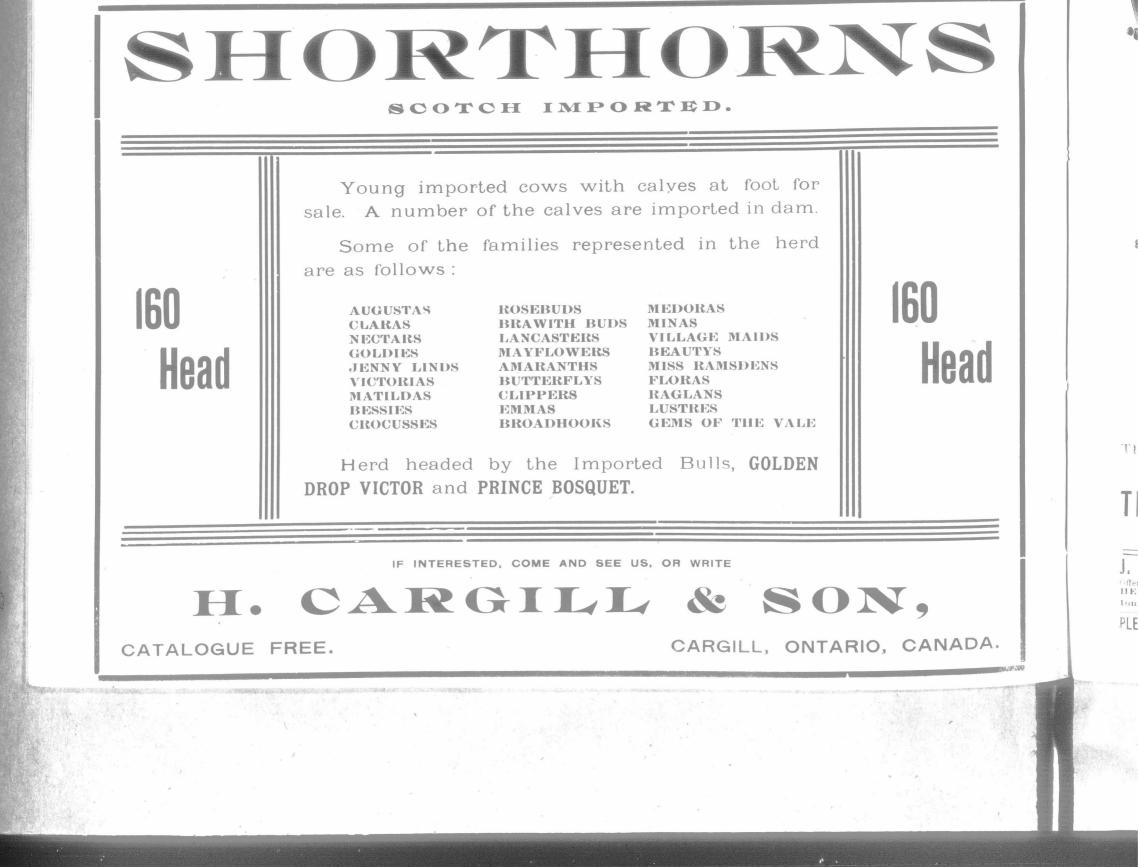
Hamilton is a city of over 50,000 inhabitants, located on main line of Grand Trunk Railway, between Chicago and Buffalo; also connected by Canadian Pacific Railway and Michigan Central Railway-branch lines.



Bred by Her late Majesty the Queen ; undefeated in her class and many times champion ; imported by W. D. Flatt-

We have at present for sale the red yearling bull, Singapore, by Golden Star, 1st and champion at Royal Northern last ar. We have also a good Canadian-bred bull for sale, fit for service. year.

W. D. FLATT, 378 HESS ST. SOUTH, HAMILTON, ONT. JAS. SMITH, MANAGER.



Imp. Silver Mist.

Bred by Wm. Duthie; of the famous Missie family. He had many friends for first choice at Messrs. Marr and Duthie's sale. Mr. Beck, representing the Prince of Wales, made next to last bid.

Imp. Wanderer's Last.

Bred by W. S. Marr; also of the Missie family. Is the last calf got by that renowned Cruickshank bull, Wanderer. Mr. Marr considers this youngster very promising.

We keep in our herd a choice lot of both imported and Canadian cattle, of both sexes, from which to make selections. Personal inspection invited. Parties desiring to see the herd will be met on arrival of trains at Hamilton if notice is given. Visitors always welcome.



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Ayrshire Bulls: Write to J. YUILL & SONS, Carleton Place, for special prices on Ayrshire bulls from 14 years to 6 months. Four over 16 months, fit for service, from special milking stock. Sired by prize bull, Jock of Burnside —1684—, also females of all ages. Shrop-shire sheep of all ages; a number of fine ram lambs. Berkshire pigs of either sex, of the best bacon type. B. P. Rocks. -om

ALFRED MANSELL & CO.,

SHREWSBURY.

ST., STRAND, LONDON W. W.

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carefully executed. 0

Lincolns, Shorthorns, Berkshires.

THE FARMER'S ADVOCATE.

BROAD LEA OXFORDS.

We have a choice lot of lambs this year, bred from we have a choice lot of names they star, our imported rams, Royal Warwick 3rd King 1st, some weighing 17 lbs. at birth, good shearling ewes and rams. Also a few 3rd and May shearling ewes and rams fitted for show purposes. All of which we are offering for sale at reasonable prices. om HENRY ARKELL & SON. reeswater, Phone



for shipment.

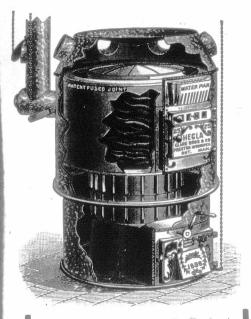






Summer Hill Herd

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The Patent Fused Joint AS USED IN OUR URNACE ULA

is the most valuable improvement in furnace construction in recent years. By means of this patented method we fuse the steel and iron which go to make up the dome and radiator into ONE SOLID CASTING. There is no danger of cement falling out, to let the dust, smoke and gas escape into the house. Another feature of the Hecla is that it will burn

EVERY KIND OF FUEL COAL, WOOD OR PEAT.

Send us a sketch of your house, and let us give you an estimate.

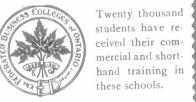
CLARE BROS. & CO., PRESTON, ONT., WINNIPEG, MANITOBA. -om

AT BARGAIN VANIZED WIRE GAL PRICES. Fifty car loads of new galvanized wire, in short lengths. Never was used. Comes from 6 to 10 gauge. Put up 100 lbs. to a coil and only one size wire to each bundle.

one size wire to each bundle. es range from \$1.40 to \$1.90 per 100 pounds. Our Free Catalogue No. 343 for the asking. We handle all kinus of sup-plies from Sheriff's and Receiver's Sale. Chicago House Wrecking Co. West 35th and Iron Sts., Chicago.

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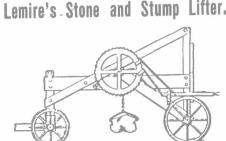
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