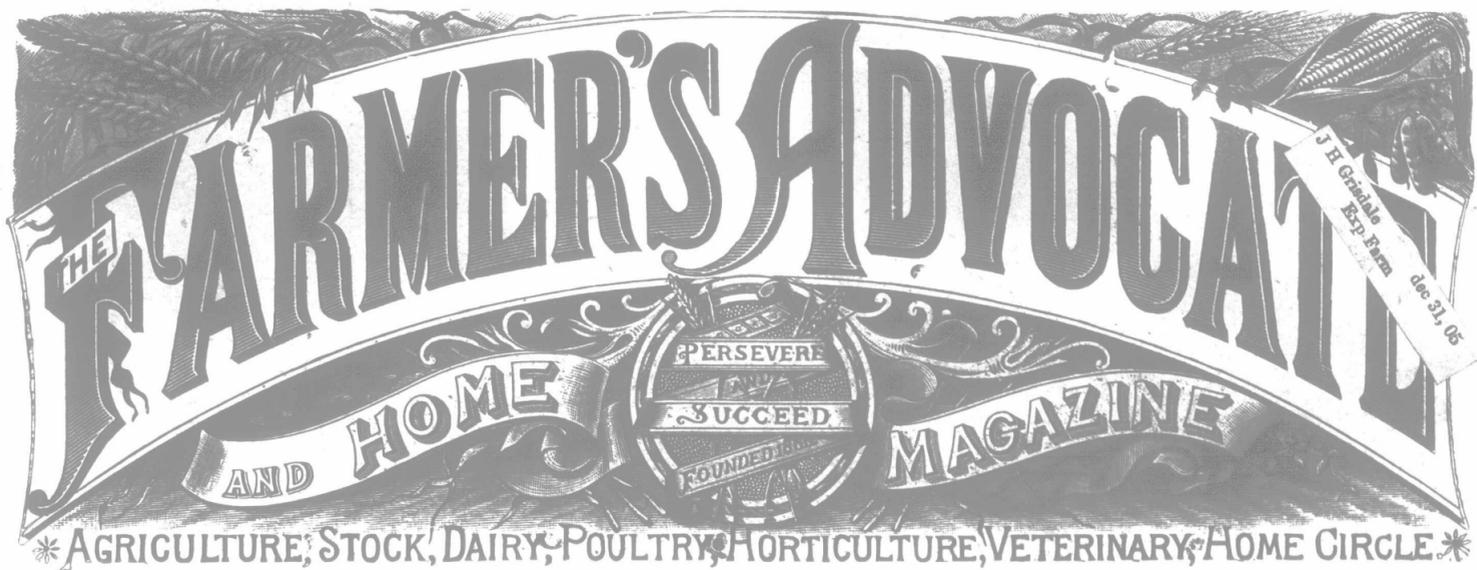


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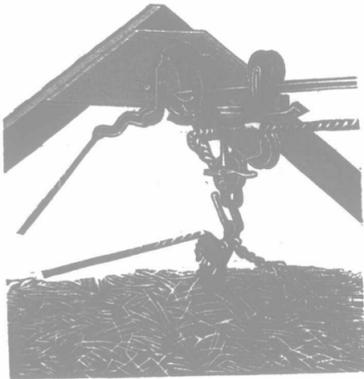
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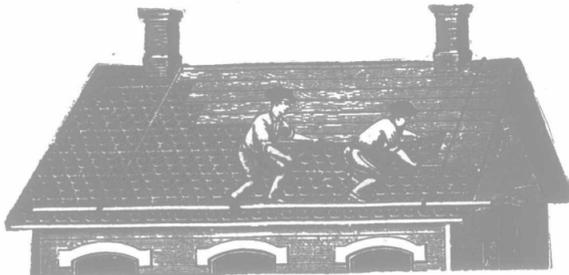
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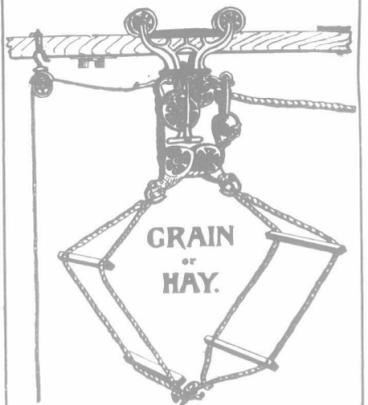
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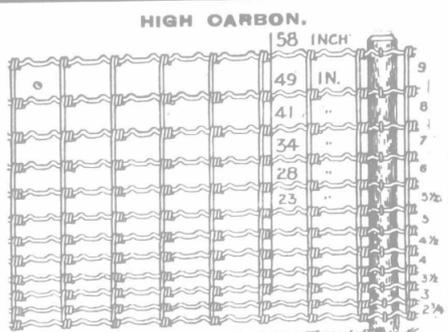
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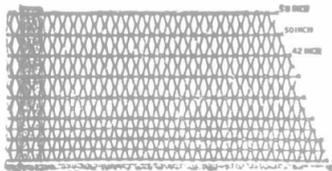
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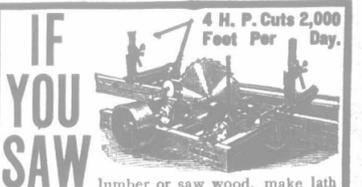


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The
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"PERSEVERE AND SUCCEED"

ESTABLISHED 1866

Vol. XL

LONDON, ONT., AND WINNIPEG, MAN., JUNE 22, 1905.

No. 665

EDITORIAL.

Co-operation Prospects in Export Fruit Trade.

The instance of British conservatism cited below by Mr. P. B. MacNamara, Canadian Commercial Agent in Manchester, Eng., reveals a difficulty that will be met in the contemplated plan of getting Old Country firms to send representatives among the Ontario Co-operative Fruit-packing Associations to buy the crop f.o.b.:

"In view of a circular letter, dated March 24th, 1905, from the Chief of Market Division of the Department of Agriculture, regarding the sale of 50,000 barrels of apples, to be packed by the co-operative apple-packing associations in Western Ontario, I called on the leading wholesale apple firms in Manchester and in Liverpool, for an expression of their views anent this plan of sale, for the purpose of presenting same as succinctly as possible. It is not looked on with any degree of favor. None of them would buy on the trees. The expense of sending an expert buyer on a problematical purchase is a deterrent. They take the ground that the individual orchards entering the co-operative packing association will produce 100 to 500 barrels of varying fruit, and that the packing of same involves the same difficulties as to grading as obtained heretofore in the hands of packers, and they offer the suggestion that the output should be disposed of to leading Canadian apple exporters, and that after the brand of apples packed by the co-operative association is known to be uniform and reliable, and is sought for by the British people, they would entertain the proposition of buying direct from the packing association."

The paternal suggestion to sell to Canadian exporters is hardly worth considering. Once organized, our growers will be disposed to reap the full reward of their enterprise by selling direct on the foreign markets, thus cutting out the middleman, and at the same time obtaining the advantage of the reputation which each association may work up for its brand. If dealers were to buy the output, they, rather than the growers, would get the credit for any superiority in packing or grading, and since there might be more or less diversity among the packs of different associations, the dealer would still be unable to guarantee uniformity in his turnover, which is one of the strong points of co-operative packing and sale. With their usual aptitude for misunderstanding things, the Old Country firms assume that the pack of each grower will vary. This, as our readers are aware, is the very thing that is avoided by the central packing-house system, which has been adopted by most of the co-operative associations.

It is at least encouraging to learn that the British buyers will be prepared to "entertain the proposition of buying from the packing associations" after their brands are known to be uniform and reliable, and are sought for by the British people. Incidentally, it strikes us that this day would be a long time coming if we left it to the exporting firms to exploit our brands. However, if the market will not come to us, we can go to the market. Supposing we should fail in an energetic canvass for trial orders, there would still be the chance of consigning to the Old Country merchants, as did the Iderton (Ont.) organization last year, with comparatively good results, and, perhaps, after a season's experience, the British houses, like the Western merchants last summer, will find it to their ad-

vantage to buy direct from the packing associations. Growers who are enterprising enough to organize may be depended upon to find some means of getting next to the British dealer.

Canada's Opportunity in the Orient.

At this moment, when the eyes of the civilized world are turned admiringly towards the little Island Empire of the Orient, it is opportune to reflect upon the commercial changes that will follow the war. The overthrow of Russian power will mean a new Asia. It is reasonable to expect that the qualities which have contributed to Japanese prowess in war, will manifest themselves also in commerce, and if the Japs succeed, as they bid fair ultimately to do, in rejuvenating the four-hundred-million nation of Chinese, opening up that immense country to the commerce of the West, the commercial map of the world will be readjusted, and the Pacific will become the highway of a traffic vaster than that of the Atlantic. For Canada, especially for Western Canada, the importance of the change can scarcely be realized. Not only shall we be in the direct line between the East and the West, but, situated more conveniently than any other modern-civilized nation except Russia, we should be able to capture a large share of the new trade that will develop. Japan will afford a growing market for many of our products. She is yearly becoming more of a manufacturing nation, importing large quantities of raw material and other articles required for native manufacture. From figures to hand it appears that her imports for the first three months of 1905 totalled \$65,250,000, against \$46,500,000 for the corresponding period of 1904. This increase, while partly ascribed to impending tariff changes, is largely due to extensive purchases of raw cotton, in which we note an increase of \$6,250,000 for the quarter year, to half a million more in imports of iron and steel, and to \$1,750,000 more in machinery and engines. These figures seem to presage an industrial development.

It is significant, too, that the question of food supply is commencing to engage the attention of the Japanese public. The trade returns show that the imports of rice exceed the exports, besides which there is imported a quantity of wheat flour, the value of this in 1903 being \$5,162,000. Meanwhile, the population, now computed at close upon 47,000,000, is increasing at the annual rate of half a million, so that, in spite of attempts to augment the production of rice by extension of the fields and introduction of agricultural improvements, it is evident that Japan will become more dependent upon foreign countries for food supply. This is Canada's opportunity. It opens up a great possibility in supplying the Japanese with flour, for instance. It is true the consumption of flour in that country, as compared with rice, is still insignificant. A greater part of that now imported is used in the manufacture of macaroni and other paste foods, which accounts for the demand for the lower grades. But the use of bread is becoming more general, and the demand for wheat flour of better quality is bound to increase. Likewise in butter and other commodities, an expanding trade undoubtedly lies at our Western door. Last year our Japanese exports amounted to the respectable item of \$418,246, an increase of more than 70 per cent. over the previous year, and it is not over optimistic to expect that within a few years this may be multiplied many fold. It will pay us well to keep our eyes on the East.

Some Notes from the O. A. C.

Those who have this season visited the Ontario Agricultural College Farm, or those who purpose doing so before the end of the month, will be interested in a few observations made by a member of our staff while on a recent visit. Without pausing to dilate on the annual improvement in grounds and campus, which now form one of the loveliest spots imaginable, a few remarks on the departments, in turn, may be offered.

Commencing with the stock, a trip through stables and fields shows the animals to be in thrifty condition, evidencing good care and oversight. At the time of our visit, a bunch of calves were running in a shady paddock near the barn. Among them were noticed a number of youngsters after the Shorthorn bull, Scotchman, all showing the stamp of the sire, which is turning out to be an excellent breeder. Incidentally, a noteworthy illustration of the law of atavism is seen in the color of his progeny. Though a roan himself, and mated successively with cows of all colors, including a goodly proportion of the same color as himself, almost all his calves have turned out either red or red and white. The bull himself has developed well, having got down somewhat closer to the ground within the last couple of years. The stock of pure-breds is annually increasing in numbers, and improving decidedly in quality. Though it is impossible for the College, with its multiplicity of breeds, to breed a first-class pure-bred herd economically, Prof. Day has succeeded very well, considering the handicap, the herd now comprising a very good bunch of Shorthorns and a creditable representation of the other leading beef breeds. The sheep we were pleased to see looking better than we have ever found them before, the lambs coming lusty and strong, with few losses. In hogs, a series of experiments with tankage and blood meal and skim milk is being repeated. It is also purposed to carry on some work to investigate the cost of producing pork from birth to market age. In these experiments they will use crosses of the Tamworth and Yorkshire, and Berkshire and Yorkshire, each way, in the hope of securing some data on the suitability of various breeds and crosses for economical pork production.

On the farm, crops, as usual, are looking fine. Indeed, the soil is getting so rich in humus and nitrogen that an excessive growth of straw is often produced, causing more or less trouble from lodging. It is rather a novel thing in Ontario agriculture for an old-cropped farm to become too rich, and the increased fertility is certainly a tribute to the system of manuring, shallow plowing, rotation and cultivation instituted by Mr. Wm. Rennie, and practiced so successfully since by Prof. Day. Passing a field of oats which showed a thick, even carpet of green, Prof. Day remarked that they had tried some different thicknesses of seeding to see whether anything could be done in this way to prevent lodging. Instead of the usual 1½ bushels, part of the field was sown at about two bushels, and on one acre the drill was set at about three bushels. We shall watch with interest for the results at harvest. Another test is to be seen on that part of the section of new seeding lying to the northwest of the dairy buildings, where a comparison is being made of tall oat, meadow fescue and orchard grasses, sown at the rate of six pounds per acre along with the usual seeding of timothy and clover. Instead of cutting hay one year and pasturing the next, the plan now followed is to cut hay two years on the area remote from the stables, and pasture two years the part most convenient; hence it is desired to find some good

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pasture grass to sow with the regular mixture in this part. So far the orchard grass promises well, although a mixture of this with one of the others may be decided upon for next year.

Apropos of the above-mentioned test of grasses, some investigations of the Experimentalist, Prof. Zavitz, on this point, will be in order:

For the past four years an interesting experiment has been carried on by the Experimental Department in comparing different pasture crops. In all, sixteen varieties of grasses and five varieties of clover have been tested. Previous to this year the growing plots of grasses and clovers have been cut six times during the summer, and the yields at each cutting were carefully weighed and noted. From the aggregate of these cuttings, the total value of the crops as pasturage was ascertained. This year a different plan is being followed. Half of each of these plots was fenced off when the crops had made sufficient growth for pasturage in the spring. On May 17th three sheep were turned onto this pasture. The sheep were left on it till May 25th. The fence was then removed to include the whole of the plots, and two steers were pastured on the plots from May 27th till June 2nd.

It was observed from this first test that the sheep ate down the timothy best, and the tall oat grass second best. The sheep seemed to like the tall oat grass fully as well as the timothy. This fact is significant, since, by experiments of the last four years, tall oat grass produced the greatest yield of pasture crop of any of the grasses in the test. Orchard grass was also well eaten by the sheep.

The cattle seemed to have a decided preference for the tall oat grass, and had it all eaten down by the end of May. They also fed upon Canadian blue grass, timothy, awnless brome, and red top, in the order named.

From this first test there is an indication that tall oat grass, orchard and some of the brome

grasses are going to become valuable additions to our pasture crops in Ontario. These grasses are succulent, rapid-growing varieties, that do well in comparatively dry seasons.

In the clover tests the sheep and cattle seemed to show a preference for alsike and common red.

Similar tests are to be conducted at intervals throughout the summer, and the final results will be awaited with interest, since some of the new varieties of grasses are giving promise of good yields and usefulness in our Province.

The Experimental Department is also carrying on other new work, a review of which will be presented to our readers a little later.

In the Dairy Department, Prof. Dean explained a system of stable ventilation which gave excellent satisfaction last winter. A description will be published later. A system of watering basins, installed lately by the Metal Shingle and Siding Co., of Preston, is being tried along one row of cows. The feature of the basin is a button which unscrews at the bottom, permitting the vessel to be easily flushed out.

In the Manufacturing Department butter is being made this summer by the sweet-cream process, which Prof. Dean considers the ideal way. The practice is to take a rich cream of about 35 per cent. fat, pasteurize it, and run it immediately into the cooler, where its temperature is lowered to 45 or 46 degrees, when it is churned at once, after the addition of a starter. In reply to a question, we were informed that they are now investigating the need for a starter, as it is by no means clear that its addition so soon before churning is of any particular advantage. We must, however, await further experiments before pronouncing on this point. Discussing the somewhat critical comments in some quarters upon the claims made for sweet-cream buttermaking, the Professor pointed out that some of the critics had overlooked the fact that pasteurizing prevented the development of injurious germs, and hence obviated the necessity of ripening to control the flavor. Judged by results, the sweet-cream butter is superior to the ripened-cream product, the former having a mild, pleasant flavor, which is preferred by the great majority of those who have compared the two, particularly the girls of the Macdonald Institute (who should be connoisseurs). It is also claimed that the sweet-cream butter has better keeping quality. In the Home dairy there are now seven makes of hand cream separators and one turbine. The latter is recommended for a herd of 25 to 50 cows.

Without mentioning the remaining departments specifically here, we may note that the teaching has progressed very satisfactorily during the past year, the discipline being even better than in former years. This may be due to the fact that the responsibility is largely thrown upon the student body, who, in the main, are orderly and gentlemanly, and who co-operate with the staff in insisting upon satisfactory conduct. One cannot visit the school without feeling that it is a very wholesome place to send a boy.

At the time of our visit no one had been chosen to fill the places of Profs. Lochhead and Harrison, though applicants are numerous. It is intended, President Creelman informed us, to secure first-class men, preferably Ontario boys who have got their training at Guelph and have since had some experience abroad. In the Biological Department it is likely that some new arrangement will be made, by dividing the work, employing as head a specialist in botany and zoology, and assigning the botany to a lecturer, or vice versa, looking ultimately to the employment of two heads over two distinct departments. Prof. Lochhead severs his connection with the O. A. C. this month to join the staff of Sir Wm. Macdonald's College, at Ste. Anne, Que. Indications point to a record attendance this fall at the O. A. C., the number of applications already in being unprecedented for the time of the year.

A trip to the College is now incomplete without a visit to Macdonald Institute and Hall and to the Macdonald Consolidated School, which stands at the corner to the left as you approach the College campus from the city. Back of the building is the school garden, which, as is well known, forms a feature of the Macdonald

Schools. There are both individual and class plots, as well as experimental plots in connection therewith, all neat and well kept. Attendance has kept up remarkably well, the percentage being 92 per cent. of the enrollment in April, and 95 per cent. in May. The School has been visited by a great many people, including a deputation from the Niagara Peninsula, who, it is said, travelled all through the district without meeting one person who could find any fault. An even more encouraging evidence of the popularity of the school is the fact that another section, viz., No. 6, Guelph, is coming into the consolidated district when the school opens after the summer vacation.

HORSES.

Cervical Vertebra Dislocation.

To the Editor "Farmer's Advocate":

Sir,—I beg to return my sincere thanks for calling my attention to the case of dislocated cervical vertebrae in colt. It was not my intention to make any comment on cases of this kind, except so far as veterinary annals are concerned. On enquiry to the editor of the Veterinary Record, a paper devoted to veterinary practice, I find there is no record over the name of a qualified veterinary surgeon of complete recovery from a true dislocation of cervical vertebrae. The fact that the injury is so common, and no authentic cases of complete recovery, makes the one reported unique. If Dr. McVicar, V. S., will send me full particulars of case, also state of colt at present, I will promise that it shall go on record. Mr. I. P. McVicar states that his Thoroughbred colt dislocated the sixth cervical vertebra. This is manifestly incorrect, and could not happen without immediate death, as this bone has no inferior spinous process, and the transverse processes are triped, consisting of three eminences, and cannot be dislocated without fracture, even in the dead subject. It is only between the third and fourth or the fourth and fifth that dislocation can occur and recovery take place. The accident is very common, complete recovery rare, and many conditions were favorable in the cases reported. The horse is aged, in poor condition, the accident soon discovered, the treatment prompt, and good help plentiful. Since reporting this case, a horse, the property of Mr. Edwards, Bracondale, met with the same disaster, but, notwithstanding every effort to restore the neck to its normal condition, the animal had to be destroyed.

Toronto. WM. MOLE, M.R.C.V.S.

Draft Horse Breeding.

English farmers favor the Shire as the best horse for the farmer to raise for work and to sell. A Live-stock Journal correspondent thus urges the merits of Shire horse breeding:

It is evident, in the first place, that the best draft horse will be the last to feel the effects of the motor on the road, notwithstanding the fact that motor plows, wagons, etc., are already in the field. But there is one advantage in a sound young horse which a machine does not possess, viz.: that the horse increases in value up to six or seven years old, if it is in anything like good hands, which the motor never does, be it ever so skillfully handled, and there is a feeling of satisfaction about owning stock—whether living or dead—which is increasing in value which cannot be felt over that which is continually decreasing.

Further, the initial cost of setting up horseless machinery is considerable, and quite beyond the reach of a small farmer; whereas a Shire may be bought which breeds a £500 stallion, one such instance having come under the writer's own notice, and instances are recorded of a Shire foal being bought for less than twenty sovereigns which afterwards made a thousand. No horse-hater can claim similar results from a machine made of iron and steel, without entire reconstruction. In these days it becomes increasingly necessary for a farmer who wishes to make a living to stock his farm to the full, so that he can make the most of his produce without depending on receipts by the sale of hay and grain, and it is obvious that two or three roomy Shire mares will give as little trouble as anything else, either summer or winter, and, of course, they will cheerfully do most of the work needed on an ordinary farm.

With regard to selling, a good deal depends on the nature of the holding. If it is small, then it may be best to sell the young stock as foals, and for this purpose the best sires should be used for mating with registered dams, so that the youngsters are given every possible chance of turning out "trumps," and paying for the dam and fees twice over. But the owner of sound, low-grown mares, unregistered and on the small side, need not use any screw of a stallion that comes along. Rather select one with "feet,

... joints, and feather, size, soundness and activity," and try for a really good gelding, which will make its 90 gs. at the yard gate when five years old. It is some time to wait, certainly, but he can be out to work at two years old, after which he will earn his keep and "grow into money," and certainly no better farm stock can be desired than those which will do this.

There is one great point in favor of the Shire, and that is his tractability. If haltered as foals, and at intervals afterwards, it is exceedingly rare that they give any trouble, even when the day of being harnessed comes, and it is a mistake to put that off too long, for no Shire, either male or female, is injured by doing a little light work when about two years old, and if so trained the collar may be put on at any time, and if distinction in other directions has been missed, the horse may still be profitable as a worker, and the mare as a combined worker and breeder.

The Runabout Horse.

When the high actor, Newsboy, was placed first in the runabout class at the Brooklyn show, there was a great deal of discussion over the question of: "Is a high actor a suitable horse for a runabout?"

Speaking ex-parte, we would say that, all other things being equal, the high-stepper should not be given precedence to a horse of lower action but of equal speed, conformation and manners in a runabout class. The greatest objection to a high goer in a runabout is that he is liable to cast road material into the vehicle, especially if the road is muddy. This is a strong point against the high-stepper as a runabout horse.

Then speed is a desideratum to the type. Speed and high acting are not always found in the same horse.

As a rule, the high actors present the best runabout conformation, as we have seen it. Still, it seems that to date we have been rather given to imagine that the gig horse is also the best type of runabout animal. Patient and prolonged cogitation leads us to the conclusion that we have been worshipping false gods in the runabout classes, and that instead of the chunky, heavily-conformed type which we have been calling runabout horses, when they are really more of the light brougham or gig type, the true runabout type should lean to that of the light roadster, with passable action, slighter conformation and a high turn of speed.

The objections made to the high goer in a runabout seem to be well taken. Judges and exhibitors will do well to take them into mature consideration.—[Horse-show Monthly.

STOCK.

Bath and West of England Show.

For the first time in its history, this society, established in 1777, went out of its usual district, and held its show in the Midlands. The reason for this change of venue was that the inhabitants of Nottingham desired to have within their borders an agricultural exhibition of the first importance. The Royal Agricultural Society was not available, having fixed its show in London, consequently this society, which ranks next in importance to the Royal, was invited and accepted the invitation.

The continued demand for British stud stock was clearly in evidence during the first and second days of the show. Round the pens of the Lincoln sheep and the other breeds in this section, and Shorthorn classes, it was quite noticeable the keenness with which South American buyers watched the work of the judges, and satisfactory to find they were prepared to pay high prices for the successful animals. In fact, it was currently reported, that the lucky owner of the champion Shorthorn bull refused the high price of 2,000 gs. for him.

HORSES.

The Shire horse breed was practically the only breed represented in this section. Sir P. A. Muntz was one of the leading and most successful exhibitors, winning both the gold medal for the best stallion or colt, and also that for the best mare or filly, given by the Shire Horse Society, and in addition the reserve number for the gold medal for the stallions. The champion stallion was Dunsmore Bishop, and the reserve number Dunsmore Albert Victor.

In the Hackney section the entries were not very numerous, but the superior merit found in many of the leading winners to some extent compensated for the deficiency of numbers.

The brood mare class had for its winner Miss Terry, sent by Mr. F. J. Batchelor. Mr. W. B. Tubbs won in the five-year-old and upwards class with Morning Glory. In the three and four year old classes the leading honor went to that well-known filly, Crayke Czarina, whose splendid action and beautiful symmetry made her a popular winner. The winner in the two-year-old class, Mr. J. P. Evans' Pollinaris, by Polontous, not only won in her class, but also secured the Hackney Society's silver medal for the best mare or filly. Sir Walter Gilbey, in the yearling class, won the leading honors

with Bouncing Danegelt, a very promising son of the champion sire, Royal Danegelt.

CATTLE.

Shorthorns have probably not been present in larger numbers for many years, which is mainly accounted for by reason of the central position in which the show was held. The class was judged by Mr. J. Peter, Berkeley, Glos.

The older bull class found Mr. R. Stratton's Great Mogel at its head; H. M. the King being second, with Royal Carlisle, and Mr. J. D. Willis third, with Matchless Diamond—a trio of specially good bulls.

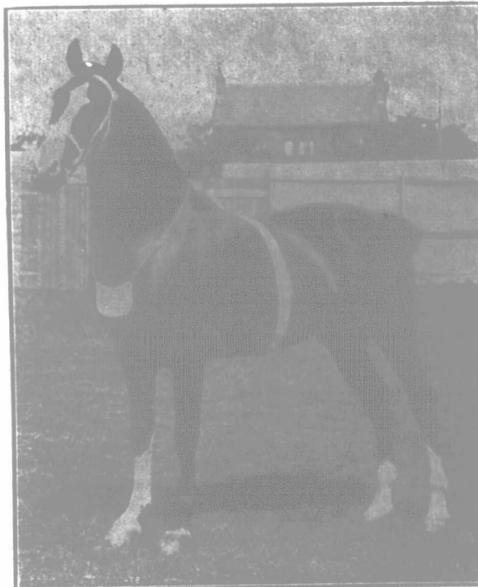
In the two-year-old class, one of the best of its age seen for some time, Mr. P. S. Mills won with the rich roan, King Christian of Denmark, a notably fine, typical Shorthorn. This was made the champion bull of the show. Mr. J. D. Willis, with Doynton Brave Archer, took second honors, and was r. n. for the championship. These bulls will meet again at the Royal Show, and that event is being looked forward to with very keen interest by all Shorthorn breeders.

The yearling bull class had Mr. J. D. Willis' Orphan Chief at its head, a very fine and promising young bull. Agricola, owned by Mr. D. Church, who has purchased him for the Argentine, taking second honors.

The cow class was specially strong in leading animals, Mr. George Harrison, with Ursula Raglan, taking first honors, and Earl Manvers second with Lady Dorothy 39th.

In the three-year-olds, first went to Ratcheugh Witch, one of Mr. W. Bell's typical Shorthorns. Sir A. Henderson won first honors with Lady Buscot Grace, in the two-year-old class; whilst in a grand class of 20 yearling heifers, Mr. A. A. Haley had the honor of winning both first and second prizes with Bright Jewel 6th and Queen of Ankness.

The Hereford section was one of considerable merit.



Lord Kimberley (7536).

Hackney stallion; brown; 15.2 high; foaled 1899. First prize Hackney Horse Society's Show, London, Eng and, 1905.

and certainly most attractive. All through the several classes the quality of this breed, i.e., uniformity of type and character, was most distinctly seen. H. M. the King, with that grand, deep-fleshed bull, Fire King, won leading honors in the older bull class; Marquis, from Mr. E. B. Turner, taking precedence in the next class, and the Royal herd at Windsor was very close up with Admiral.

In the yearling class, Mr. E. Hughes won first with Premier, and H. M. the King second with Emperor. Mr. G. D. Faber, with Ivy Lass, a cow bred by Mr. R. Green, won first in the cow class, Mr. R. Phipps taking first and second honors in three-year-olds. Mr. A. E. Hughes' Ivington Plum was the winning heifer in the two-year-old class, and Mr. C. T. Pulley won first and second honors for yearlings.

The Aberdeen Angus shown, while not a very large entry, were of particularly good quality. Mr. J. J. Cridlan was very successful, his animals winning both of the special prizes offered—the gold medal for the best breeding animal, and the silver medal for the best female. The winner of the gold medal, Wizard of Maise-more, led in the old bull class, Mr. Hudson taking second place here.

In the younger bull class, the winner, Earl Fenwick, is owned by Mr. J. H. Bridges, who also had the winning heifer in the two-year-old class. The silver-medal cow, Mabel VIII., won first prize in the cow class for Mr. J. J. Cridlan, and the Rev. C. Bolden won first in the yearling heifer class.

The entry of Jerseys was not so large as we have seen in former years, but the smaller entry did not indicate any loss of merit. The winning owners in the bull classes were Captain L. G. Gisborne, Mr. J. D. Drew, and Lord Rothschild. The competition in the cow and heifer class was very keen indeed, and many

of the entries received recognition in the award card. Between Mr. A. Miller-Hallett and Lord Rothschild there was a very close competition in the cow class. The former won with Lottie, and the latter with Day Star took second place. Lady de Rothschild went to the front in the three-year-old class, and Mrs. C. McIntosh won second and third. The two-year-old class found the latter exhibitor a close second with Havering Glorissa; first and third place was occupied by two very fine heifers sent by Mr. C. W. Armitage. Yearling heifers, another good class, was headed by Benita VI., an imported animal, exhibited by Mrs. C. McIntosh.

The sheep section was one of great interest. Cotswolds had not a large number of entries, but the average of merit was very good indeed. Mr. W. T. Garne, whose flock has a world-wide reputation, led with first-class animals in the yearling ram and ram lamb classes, and Mr. W. Houlton occupied the same position for yearling ewes.

The Lincoln breed, which has not before been exhibited at this show, took full advantage of the opportunity offered them, and made an entry of particular merit and high quality. The winning two-shear ram, owned by Mr. T. Casswell, was made champion, and his superior merit and quality was speedily recognised by the Argentine buyers present, several offers of high figures being made for him. Messrs. R. & W. Wright came second here, and Mr. H. Dudding third. The yearling ram class of 11 entries was a good one, all being commended, a sure indication of merit. Mr. Wright won first honors, and Mr. Dudding second. The latter exhibitor was first and second in the ram lamb class, with lambs of superior merit and notable quality, and Messrs. Wright, with half a dozen yearling ewes of grand character, were first and second in their class.

Southdowns came out in fine quality, Mr. C. Adeane winning first for yearling rams, a position that was closely challenged by Mr. E. Ellis, who came second. Mr. C. Berners was third, and H. M. the King r. n. In the ram-lamb class, Mr. Adeane won with a pen of notably fine lambs, and the better one of the two well deserved the champion honors he secured. H. M. the King was second, and Mr. Ellis third. The position of these two pens could well have been reversed. Mr. Ellis came in first for yearling ewes, and H. M. the King followed with another even pen.

The Hampshire Downs were represented by an entry of very superior merit and quality, and Mr. Jas. Flower had the honor of winning in three classes, whilst in the fourth, in which he was not represented, the leading honor went to a grand pen of sheep from Mr. H. C. Stephens' flock.

The Shropshires provided the largest entry in the sheep section, and in the yearling ram classes the winner from Mr. Williams' flock was one of high quality and merit. Mr. Cooper took first for ram lambs and yearling ewes.

Oxford Downs made an entry pleasing and satisfactory to all interested in this breed. Mr. A. Brassey repeated his former victory at Oxford in the yearling ram class, and also in that for yearling ewes. Mr. J. T. Hobbs won in the ewe lamb and the ram lamb classes, with animals of superior merit.

PIGS.

Berkshires were well represented, and the quality good. Mr. G. T. Inman won again champion honors for that splendid boar Highmoor Mikado. The same exhibitor was first in the breeding sow class. Mr. J. A. Fricker, Mr. A. D. Acland, the Duchess of Devonshire, and Sir A. Henderson, Bart., were all well within the run for leading honors.

Large Yorkshires made an entry of real merit and quality, and the competition all through was keen. The correctness of the awards was somewhat challenged by exhibitors and other experts of the breed. The Earl of Ellesmere was first for boars, pairs of boars and sows, and Mr. T. H. Henson for pairs of sows. Sir G. Greenall, Mr. D. R. Daybell, were also owners of some of the leading pigs, and a better lot of Large White sows have not been seen together for many years.

The Tamworth breed was a first-class entry. Mr. H. C. Stephens' herd won the special challenge cup, with a sow of very high merit. The same owner was also successful in other classes, with pigs of high merit and quality, and Messrs. D. W. Phillips and R. I. Ibbotson took the remainder of the prizes, with pigs, in nearly every instance, of high quality and merit.

Limitations to Inbreeding.

There is, probably, no one question connected with the breeding of stock that has received closer study or more extended research than that which stands at the head of this article. The theory is sound beyond question, that by breeding in a long line of established merit the particular characteristics sought become fixed in a measure proportioned to the length of the line of descent. Hence, in the case of male and female of a high merit, and both of the same line of breeding, when coupled together, the special merit of the family should be intensified in the offspring. This has been found to prove true in practice.

The close breeding in a particular line has been practiced more or less by all breeders who have acquired distinction in building up a family of animals specially noted for merit in a particular direction. It was in this way that the Jerseys was fixed, and it is through the same line of breeding that the great milk and butter

performers of that breed are now being multiplied. So, too, it was in the same way that the thick coating of flesh and the white markings were fixed in the popular Herefords, and that Thomas Bates established the notable family of Shorthorns that bore his name, and, recently, that the now popular "Scotch Shorthorns" were fixed in the type that is giving them so wide a distinction at the present time.

But there is a limit to the extent to which this line of effort in building up improvement in animals can be carried. In-and-inbreeding for the purpose of extensive development of a single characteristic, carried too far, breaks up the balance of the animal. Nature rebels against so one-sided a work. The constitution of an animal, the powers of endurance, must be built up along with performance, and kept in balance with it, or, when a trial comes, the animal will break down under the strain.

Intensive milk or butter production, as an example, cannot be built up in a cow and maintained indefinitely unless along with it are built up powers to endure the work. Milk fever among the best of cows, weakened offspring, and consequent disease in the great performing herds, are Nature's protest against the one-sided work of performance alone being carried further. All along the way, among the great masters of the art of breeding, wrecks have finally set the limit to what can be reached by continued in-and-inbreeding. The most disastrous example of this kind known in the business, probably, was the going to pieces of the cattle from the New York Mill's herd of Bates Shorthorns, sold at auction at fabulous prices, yet proving of little value as breeders afterwards. Many less noted examples are to be found among those dairymen and breeders intent on building up a herd with the one point of great performance in view.

In-and-inbreeding, therefore, has been practiced with advantage up to a certain undefined limit, but has proved a failure in every attempt to pursue it indefinitely.—[Agricultural Gazette.

The Bacon Hog Industry.

In a recent number of the "Farmer's Advocate" there appeared an article on the bacon-hog industry, dealing with the loss it was about to suffer should things continue as they are, a subject on which I would like to express my opinion.

The cause for the present shortage is easily traced to the poor price paid last fall, and the lack of discrimination in the price paid by buyers generally, as it makes no difference how good hogs a farmer raises he gets no more than the man whose hogs would make one sorry to look at.

Where the fault with the farmer lies is here: When the price goes down like it did last fall he gets rid of all his hogs; then when the tide turns he is entirely out of hogs and receives no benefit from the rise. If he would stick to the hog through thick and thin, a more even supply would be the result, and consequently better prices.

But the real cause of the trouble is the packer, who thinks he has the matter in his own hands and will do as he pleases; but just about now he is experiencing a change of mind, and to relieve himself is howling about having to import hogs and of the scarcity of coarse grain in Ontario, assigning this as the cause of the lack of hogs. Everybody knows that it is not the case. The packer claims that he is losing one to two cents a pound at the present price. Who was losing one to two cents last fall? Oh, it was only the farmer, who does not mind feeding hogs for nothing!

If things go on as they have been going it will not be long before the bacon-hog business will be ruined, and not only will the farmer suffer, but the whole country will feel it.

A few years ago our best farmers began to breed up their hogs, so as to produce the proper bacon type, and it was not long till nearly all the farmers were trying to produce the proper kind of hogs. Now a reaction has set in, and they are going back to the easily-fattened breeds. Why? Simply because they get no more for the right type bacon hog than they do for the others, and the former are not as cheaply raised.

We are now just beginning to get a firm hold on the English market, and if we are not careful we will lose what it has taken years to gain, for John Bull wants the best, and if Canada has not got it he will buy of those who have.

Here lies the remedy: Let the packer instruct his buyers to discriminate between good and inferior hogs. Let him also come down, or up, to a fair and even price for a suitable sort. Then there will be some reason for breeding bacon hogs. There will also be an even supply, as the farmer will know just what to depend on. In fact, as I would say, that all there is left for us to do is to keep the ball rolling until the

packer sees that we mean business, and if he will not see, why we will have to quit the business, and then we will see who will squeal first. Let others speak; I am sure the editor will give all a chance.

W. A. S.
Prince Edward Co., Ont.

FARM.

Eradication of Weeds.

There is probably no other question that so largely occupies the attention of the farmer during the summer, as how to get rid of weeds. Not only do they offend the eye and degrade the taste, but are a positive injury to successful agriculture. Most varieties are possessed of strong roots and a vigorous constitution, that enable them to gather nourishment from the soil more readily than is the case with the more desirable species of vegetation. It has been found that a ton of dried pigweed (*Amarantus retroflexus*) contains as much phosphoric acid, twice as much nitrogen and nearly five times as much potash as a ton of ordinary manure. Lawes found that 150 to 270 pounds of water were transpired for each pound of increase of dry matter. These pernicious characteristics demand a proper system of eradication, hence a careful study of the habits and growth of weeds, their mode of distribution, etc., is of prime importance.

Our worst weeds are for the most part of foreign origin, perhaps not one in twenty being native plants. Those indigenous to a country are not usually troublesome until introduced elsewhere, thus it naturally follows that they must be provided with some means of transportation. This is accomplished in two ways: First, by natural agencies, as wind, water, birds, animals, etc.; and, secondly, by human or artificial means, as feedstuffs, seed grain, manure, implements, threshing machines, etc. Doubtless one of the most prolific sources of weed dissemination is the buying and sowing of impure grass seed. This fact will be more forcibly realized if the prolificacy of a few weed seeds is fully understood. A common thistle head may contain 300 seeds, each producing a plant with 50,000 seeds. Shepherd's purse, false flax, wormseed mustard, curled dock, each average from 20,000 to 40,000 seeds on a plant. Our experiment stations have during the last two or three years analyzed numerous samples of commercial clover and grass seeds, which were found to contain a large percentage of the above varieties, together with others equally undesirable. In one case a sample of red clover contained over 36,000 weed seeds per pound; alsike, 49,000, and timothy, 79,000. Alarming as this may be, much may be done towards solving the weed problem, by preventing their propagation. Careful screening and the sowing of only such seed obtained from localities with a minimum of these pests would aid very materially in keeping them under control. In eradicating weeds it is well to consider them as annuals, biennials and perennials, because in most instances the treatment is simple and upon general principles. Annuals are those plants that complete their growth and ripen seed in one season, as wild mustard, purslane and ragweed; also those known as winter annuals, of which cockle and pigeon weed are examples, produce a certain growth before winter, and complete their development the following spring. If annuals are prevented from seeding they will soon die out entirely. Clean culture is, therefore, the chief essential to success. It kills growing weeds, and by causing seeds to germinate hastens their destruction. Unfortunately, many seeds are encased in an oily covering, that enables them to resist decay. Wild mustard and wild oats have been known to possess vitality after having lain in the ground for twenty years. When brought to the surface they spring into life, and may be exterminated by cultivation whenever they appear.

Biennials require two years to complete their growth. The majority of them have a long taproot, in which during the first year the plant stores up a supply of nourishment in the form of starch, which is utilized the second year in producing seeds, as burdock, blueweed and wild carrot. Like annuals, they are only productive from the seed, hence should not be allowed to mature. They are seldom seen in cultivated fields, but are very common in fence corners and waste lands where it is impracticable to use the plow. If this class of plants are cut off even with the ground they will stool out and prove more troublesome than before, but cutting two or three inches below the crown with a sharp spade or spud will always be found effective.

Perennials continue to grow and produce seed indefinitely. They are of two classes: Those that produce themselves from the seed only, such as ox-eye daisy, dandelion and yarrow, and creeping perennials, which are reproductive not only from the seed, but also by means of creeping rootstocks that run along beneath the surface, and are supplied with numerous buds, from each of which springs up a new plant. They are by far the most troublesome of all weeds, and require very thorough treatment. Representatives are Canada thistle, bindweed and couch grass. Land infested by these should not be worked during wet weather, as wherever the roots are bruised a sprout is started, and the labor involved only serves to increase the difficulty. Shallow cultivation is imperative, as these weeds are surface feeders, and deep plowing transplants them beyond reach. As a general rule the land is best cleaned by putting in some hoed crop, but occasionally on badly-infested areas a bare fallow will prove to be the more profitable method. Some perennials may be killed

on small patches by pasturing with sheep or covering thickly with straw, and as no flowering plant can live without leaves, any means of preventing their growth will literally starve the roots to death.

A proper rotation of crops is a valuable means for killing weeds of any variety. It will have been observed that certain crops are conducive to special kinds of weeds. For instance, meadows and pastures encourage the growth of curled dock, ox-eye daisy and plantain; fall wheat and rye is congenial to cockle, pigeon weed and chess, and spring grains to mustard, wild oats and foxtail. Keeping this fact in mind, it will be seen that the remedy sought may be found in a rearrangement of crops, such as sowing spring grains on land infested with weeds common to fall grains, and vice versa. In the first case the cultivation required from putting the crop in will destroy any weeds that had started to grow the previous fall, and in the latter instance the crop will be harvested before the seeds of any foul growth can mature. Dense growing grass lands generally smother out annuals, but are troubled with biennials and perennials. These should be kept in check pretty effectively by practicing a three or four years' rotation that would include a hoed crop following sod. To summarize, avoid as much as possible the distribution of weed seed, and employ rational methods in eradicating those that do grow. By a careful study and application of the few essentials enumerated, any weed can at least be kept under control should complete extermination be impracticable.

Elgin Co., Ont.

J. H. M.

Rape as Pasture.

With frequent rains and flush pastures of grass in June, farmers are apt to fail to make provision for the dry time that may come and generally does come later in the summer or in the early autumn when the grass fails, and regrets are indulged that some provision has not been made to tide over such a contingency.

Rape as a forage or pasture plant, probably fills the bill for this purpose better than any other for sheep and pigs, and also for cattle other than the milking cow, in which case it is likely to affect the flavor of the milk and butter. For sheep it is par excellence, the most rapid flesh-producing green feed available. For young cattle and for those intended for feeding for beef in winter, a rape pasture in the fall puts them in the best possible condition to go on gaining in weight rapidly. For pigs, according to experiments conducted by Professor Carlyle, at the Wisconsin Station, it was determined that an acre of rape properly grown, when combined with corn and shorts, has a feeding value equivalent to 2,436 pounds of a mixture of these grains, and a money value of \$19.49 per acre; that rape is a better green feed for pigs than good clover pasture, the pigs fed upon rape having made, on the average, 100 pounds of gain on 33.5 pounds less grain than was required by the pigs fed upon clover pasture with the same grain ration, and that rape is the cheapest and most satisfactory green feed for swine.

June is the favorite month for sowing rape, though it may be sown to advantage any time in July. We have seen a good crop grown on clover sod plowed immediately after harvesting a hay crop, the land being rolled and harrowed directly after the plowing, and the seed sown broadcast at the rate of four or five pounds per acre and harrowed in, though, as a rule, better results may be expected where the seed is sown at the rate of two pounds per acre in drills 24 to 30 inches apart, and the horse hoe used between to conserve moisture and hasten growth.

Where a suitable drill for sowing on the level is not available, the ordinary grain drill may answer the purpose, using the grass-seed attachment, closing part of the openings and directing the rubber tubes into certain of the holes at a distance apart of from 21 to 26 or 30 inches, the land being first rolled firmly to prevent the seed being too deeply covered, a very light covering being sufficient. The ideal preparation, however, is a fall-plowed field, brought to as fine a tilth as for turnips, and sown and cultivated in the same way. Rape seed is so nearly like turnip seed in appearance that only an expert can distinguish between them. The price of rape seed rarely exceeds ten cents per pound, and is sometimes sold as low as five cents per pound. Dwarf Essex is the variety sown for pasturage purposes. It is usually fit to pasture in six to eight weeks after sowing, but stock should not be turned on it until it is twelve to fourteen inches high, as the stronger the stalks, the greater the feeding value. After being eaten down it will spring up again and give a second or third crop if stock be kept off it for a few weeks. It is not materially injured, but rather improved by frost, and is relished by stock right up to winter. There is no cheaper or more profitable supplementary pasture crop than rape. There is some danger of sheep or cattle bloating upon it at first if turned into it while it is wet with dew or rain, but when they get used to it there is little danger from this cause. It is well, however, when practicable, to allow the animals access also to a grass pasture for variety, though in the case of sheep and pigs this is by no means essential.

Eradicating Quack Grass.

This weed, which has given many farmers a great deal of trouble, goes under a variety of names. Its commoner names are couch, twitch and quack, and its scientific name is *Triticum repens*.

This weed, while seriously and universally condemned, has not been an unmixed evil to all whose farms have become more or less infested. Many farmers have found that the extra cultivation usually necessary for its eradication has paid well in the increased available fertility of the land, the result of killing the roots in the soil and the unlocking of lazy plant food.

I have had considerable experience with this plant, and have learned that it is an unequal fight with the weed when the ground is wet or the season showery. I have found that there are two methods more or less successful in its extermination, and commensurate with the amount of perseverance of the operator. We have learned much in studying the nature of the plant. Of course, it is a perennial, and is propagated by both seed and root, or, more correctly speaking, underground stem, as that is really what the root is. A portion of root with a joint carried to a moist soil, will start to grow, and produce other plants. We should avoid letting it go to seed, of course. Any hay containing much couch grass should be cut early—before the seed has formed sufficiently to reproduce itself, else there is danger of it being spread through the application of stable manure. The roots usually grow in the surface soil to the depth of three or four inches. The first method to adopt is surface cultivation, and use the sun and frost as much as possible to destroy the pest. Work at it, therefore, in the hottest and driest time of the year, which is usually after harvest, in August and September.

As soon as the crop is harvested plow the ground with a two-furrow gang, and turn the grass up to the depth which it grows, and then, with a spring-tooth cultivator and light harrow, work on the surface as many of the roots as possible, exposing them to the sun. If the roots are not too bad I like to kill them on the ground, as they furnish a lot of plant food for succeeding crops. If too bad to do this, rake up into winrows with the horse rake or weeder, and when dry enough to handle pile it in small piles and burn it, or cart it away to a stone heap or some place where it will die. There are some people who think it will grow from the ashes. I feel pretty safe, however, when it is reduced to ashes. I then plow, cultivate, and harrow again, and do as much work as I have time for in the fall in this way. Then, late in the fall, just before the ground freezes up solid, I rib the land, and let the frost help. If snow does not fall too soon and prevent the roots from freezing hard, the frost seems to freeze the moisture out of the roots, and thus kill all that are exposed. In the spring I prepare this for a crop of corn, and by planting it in hills, and cultivating both ways, the quack grass is pretty well subdued. In the spring preparation for corn, I would apply the manure and use a disk, as that chops up the roots more or less, and helps to smother the roots in the ground by the thorough cultivation afterwards.

The smothering process entails less work. One way of applying this principle is to let the quack get nearly headed out and then plow it down deep when the ground is quite dry, following with good cultivation, and this method has proven successful. However, it is pretty heavy work, and could only be used to advantage in some seasons and on the looser soils.

I find a satisfactory way is to plow shallow late in the fall, just before it freezes up for good, and leave the ground rough by cultivating it down so the roots stick up all over. The frost does a share of the work. Then, after the spring rains are sown, replot this ground; disk and thoroughly work the land until the soil is loose. In order for the quack roots to grow again they must have the soil packed close to them; then, we wish to prevent them getting air or light and thus storing up more vitality. After the danger of late spring frosts are over, sow with buckwheat, and when about a foot high plow it under in time that a seed-bed can be prepared on this for sowing buckwheat again by the 12th or 15th of July. This crop, sown at the rate of three pecks to the acre, I would harvest. The buckwheat sprouts quickly, grows rapidly, shades the ground perfectly, keeps the soil loose, and most effectually smothers the quack. There are some who apply the same principle by working the land as I have previously described until the middle of June or July 1st, and then sow millet (German millet preferred) quite thick, and this smothers the quack just as effectively.

The main principles I have observed in killing quack grass are, to use the sun when the soil is hottest, and the frost of early winter, thorough cultivation to get the soil loose, and then follow with a smothering crop. Thorough cultivation in a hoe crop is a smothering process.

T. G. RAYNOR.

The Meadow Lark.

This is a common bird in Ontario, but, unfortunately, its numbers are decreasing year by year. We do not need to seek far to find the cause of this. The enemies which are destroying this noble bird are crows, skunks, etc., and men with shotguns. We cannot keep the natural enemies altogether in check, but surely something can be done to prevent the wanton slaughter by the so-called sportsman—more correctly speaking, the ignoramus from town who thinks it is sport to hear a gun go off. The meadow lark does not fly high nor swiftly, and is therefore an easy mark. The farmer should order all of these shooters off his premises, and use every other effort to protect the bird which is one of the most useful to him.

From March till November we see this feathered friend in our meadows and cultivated fields. It feeds exclusively on insects, and to a large extent on those which are our especial enemy, viz., cutworms, wireworms, etc. Never have I known or heard of a meadow lark eating fruit or grain, though he may be seen in an apple tree making a meal on caterpillars and the like. Although the wireworm and cutworm are both under the surface of the ground in the day time (night is the time for "deeds of darkness"), they cannot escape the long, sharp bill which instinct directs to their hiding-place. Later on in the season, beetles, caterpillars and grasshoppers form the food of both old and young. Even in winter (and I have known them to stay here all winter) they do not eat grain. I examined the stomach of one which was shot in January by a "hunter" (he won't come hunting here again in a hurry), and it contained insects and grubs,

low places, as a rule, has more humus or vegetable matter in its composition, and hence is in better physical condition to promote vigorous growth of crops, which may account for the greater production of straw. The rotting of turnips or potatoes in low ground is generally owing to insufficient drainage and an overplus of water in the land.—Ed.]

Making Hay.

There is every prospect that the hay crop in most sections of Canada this year will be heavy. If well handled this may prove a valuable asset to the farmers of this country, not so much from its sale in the raw state as from its judicious use in feeding stock, in the production of meat and milk and its products, and the growing of young animals. The value of hay for these purposes depends largely upon harvesting it at the right time and in the best condition. It is a mistake to delay the commencement of the harvest until the bulk of the crop is near the ripening stage, as the stalks then become woody and lose much of their palatability and nutritive value, and the crop is more easily and seriously damaged by dew or rain in the process of curing. Of course, one must be guided in the cutting of the crop by the condition of the weather, and a showery season may defeat the best of intention and effort. But if the weather be favorable, it is well to begin the harvest early, for the reason that if it is unduly prolonged by unfavorable weather, or delayed from lack of help, the last cutting is liable to become overripe, and to deteriorate in feeding value. Another important consideration in favor of early cutting of clover is that the aftermath is certain to be much more abundant, and this, in the event of a dry time after harvest, may prove a boon as pasture for stock, or may be harvested as a second crop of hay if not needed for pasture.

These remarks apply especially to the clovers, but also to a considerable extent to timothy and other grasses as well.

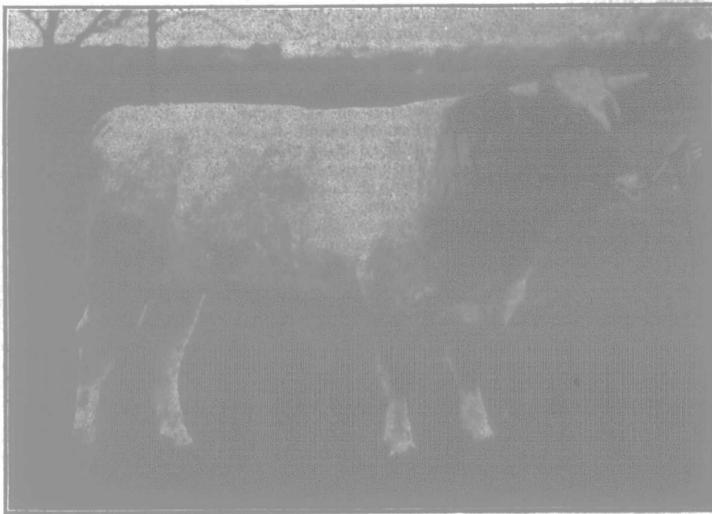
The less partially dried clover or hay of any kind is exposed to the influence of dew or rain the better will be the quality of the hay. It is, therefore, important that it should be dried quickly, by exposure to sun and air, by being turned and tossed repeatedly, either by fork or tedder, and gathered into coils the same day, or, if sufficiently dried, loaded from the winrow and stored before dew or rain falls upon it. The early-cut hay is more likely to be well and safely cured if left for two or three days in cocks to sweat before stored in larger quantities, while later in the harvest it may be cut and stored

the same day or the second day. This is quite practicable where the tedder, the side-delivery rake and hay loader are used, as in that case the hay is not at any time packed tightly as with the old-style rake, but handled loosely, and is more exposed to wind and sun in the entire process.

The Forestry Building at the Lewis and Clark Exposition, at Portland, Ore., is an imposing structure. It required no carpentry, being built entirely of logs and cedar-bark shingles, framed together with tree nails and big, old-fashioned wooden pins. It occupies a space 102 by 206 feet. The base logs are 6 feet in diameter by 52 feet long; the logs above these, which make the walls, are not less than three feet in diameter, while the roof-supporting pillars are 6 feet in diameter and 48 feet high. The roof and upper part of the walls are of cedar shingles. The logs are all left in their original state, with the rough bark still clinging, and nothing has been done which would lend an air of civilization.

Two years' investigation of red clover at the Maine Experiment Station showed, among other things, that the European clovers were invariably smooth and free from hairs on stem and leaves, while American clovers were invariably more or less hairy. It is thought this may be an important fact in relation to the dustiness of hay.

If You Want Anything AND DON'T KNOW WHERE TO GET IT, AN ADVERTISEMENT IN THE "WANT AND FOR SALE" COLUMN OF THE "FARMER'S ADVOCATE AND HOME MAGAZINE" WILL GET IT FOR YOU. THE FARMER'S ADVOCATE AND HOME MAGAZINE, LONDON, ONT.



Moonrise.

Junior two-year-old Shorthorn bull. Winner of first prize at Birmingham and at the Royal Dublin show, 1905.

which it evidently had eaten in some refuse piles in a nearby garden.

The nest is built on the ground in the hayfield. Often when the hay is cut the young birds are left unprotected from the heat of the sun and sometimes perish. It is very easy to bring a stick from a fence or tree "the next round," and by placing it upright in the ground and piling some hay round it, to construct a screen. Here I have known the old birds to feed and care for the young till they were able to find the few seconds occupied in building the structure were never missed from the day's work.

"Woodman, spare that tree."
Sportsman, spare that meadow lark!
LOCHIEL.

Manuring for Uniform Production.

A well-respected retired farmer told me the other day that he believed hollows or lowing portions of fields required manuring as well as hills. I believe otherwise, for in a bad year in a wheat field (winter-killed) the hollows are the spots that grow little or nothing; or in the case of a good year, grain in the hollows is apt to lodge, and part of it stays lodged till plowed under. Again, if roots are grown in the field in a wet year the hollows are a mess of rotten turnips or potatoes. My idea is that this is due to too rich soil; consequently, I believe in manuring so as to bring an even crop over the field on ordinary rolling, loamy land. However, I ask the opinion of others on this subject.

J. H. J.
Brant Co., Ont.
[Note.—Where the surface of a field is rolling or hilly, the low places receive some benefit from leaching from manure applied to the high land, and the washing by rains of part of the best of the surface soil from the hills to the hollows, so that the low places do not need so much manure as the higher land. The soil in

Farmers Demand Better Mail Service.

The East Middlesex Farmers' Institute, at the recent annual meeting, adopted, unanimously, resolutions in favor of Government regulation of the telephone service reaffirming their approval of free rural mail delivery, and asking that hereafter rural post offices receive a daily mail service. In the discussion, several strong speeches were made in support of these propositions, particularly the latter. Cases were cited where in old and well-settled farming communities farmers are only receiving their mail two and three times per week, while in the city, a few miles distant, people have their mail delivered at their homes twice daily. In many cases farmers have to go long distances to their local post offices, and then to have only a service twice or thrice weekly, with business of importance at stake, is coming to be regarded as an imposition which should not be endured, and for which there is no good justification, when the resources of the Government are considered. The action of the East Middlesex Institute is, therefore, commendable, and should be adopted by farmers' meetings generally. Copies of the resolutions adopted should, in all cases, be forwarded to the local member of Parliament, and also to the Postmaster-General. Personal representations by letter, pointing out specifically the needs of communities for a better mail service, should also be made, and will materially aid in securing what is desired. People can hardly expect, if their requirements are not made known, to have them promptly met.

DAIRY.

New York City Milk Supply.

The past ten years have shown wonderful advancements in the betterment of the milk supply for human consumption. Five years ago the trend was to fix the value of milk by its food contents—the solids it contains—and for all practical purposes this was estimated from the fat contents of the milk. This, however, did not satisfy the public, especially the medical profession, which is deeply interested in the subject. It was felt that milk should not only contain the maximum food value, but that it should reach the consumer in as sweet, pure and clean a condition as possible; or, in other words, that it should be fresh and clean. The cleanliness of milk is ascertained by a bacteriological examination to determine the number (colonies they are called) of bacteria in a cubic centimetre of milk. A cubic centimetre is one-thirtieth of an ounce.

That the public at large is taking a greater interest in a pure-milk supply for large cities, is evidenced by publications on the subject appearing in the American monthly magazines and in the New York City daily press. As the largest city on this continent, it is interesting to know how the citizens of New York are supplied with that very necessary article of diet, milk. The consumption in Greater New York every day is approximately 1,500,000 quarts, besides the condensed milk and cream, of which a large quantity is used. It is distributed by 3,500 wagons and 11,500 stores. With the ever rapidly-increasing population of New York an increased quantity is required each year—about 1,500,000 quarts.

Of the 1,500,000 quarts distributed in New York every day, about 450,000 quarts are bottled, and the bottled milk includes about 6,500 quarts of certified milk and 2,000 of inspected milk. About 1,000,000 quarts are sold from stores every day. Certified and inspected milk is produced under the direction of the Medical Society of the County of New York, which has formulated stringent rules for the production on the farm, looking to absolute cleanliness. An agent of the Society inspects the premises before a permit is given. The Society gives to the producer a metal cap, bearing its name, with which to seal the top of each bottle. It makes weekly bacteriological examinations of the milk to see that it does not contain more colonies of the bacteria than are allowed by their rules—in case of certified milk, 30,000 inspected, 60,000.

Right here it may be said that the Board of Health of New York City does not consider milk unhealthy which contains a million bacteria per cubic centimetre. The minimum fat in inspected milk is four per cent.

The certified milk sells at from 13 to 15 cents a quart. Nearly all groceries and delicatessen stores sell milk (dipped milk)—that which is dipped from forty-quart cans—and some sell bottled milk, though comparatively very little of it. The usual price of bottled milk is eight cents a quart, and of dipped milk five cents a quart, in summer, and six in winter. In thickly-populated sections of the city some "dipped milk" is sold as low as four cents a quart, but this is done as a "leader."

The milk supply of Greater New York is drawn from a radius of from 400 to 450 miles of New York City, and includes the States of New York, New Jersey, Pennsylvania, Connecti-

cut and Massachusetts, and a small quantity comes from Canada at points adjoining this country. There are 20,000 cows kept within the city limits, principally in the suburbs.

There are 1,223 dealers selling milk. As is usual in a business of such vast proportions, the greater part of the milk trade is in the hands of "leaders" in this business. One firm delivers close to 75,000 bottles in a day in Greater N. Y., and another over 40,000. There are also "leaders" in the can trade, who deliver forty-quart cans to the groceries and delicatessen stores.

The price paid each month for milk is fixed in the preceding month by the N. Y. Milk Exchange, an incorporated body, composed of about 100 of the leading dealers of New York. The price is usually two to two and one-half cents in summer, and from three to three and one-half cents per quart in winter. An American quart is about one-fifth less than the imperial. The freight and five cents a can for ferrage are deducted from this price. New York is an island. The North River runs on the New Jersey side of it, and the East River on the other side. There are but two railroads entering the city, consequently the most of the milk is brought over on the ferries in large four-horse wagons; hence the charge of five cents a can ferrage. The freight depends upon the distance from which the milk is shipped. If within a radius of 40 miles from the city, the freight per 40-quart can is 23 cents, for 100 miles 26 cents, for 190 miles 28 cents, and for any distance beyond 190 miles 32 cents.

The milk supply of this city is made at 15,000 farms, and is gathered at some 450 receiving stations (or creameries as they are called) which are scattered in different sections of the State, and are usually owned by the dealers in the city.

The "milk trains," contrary to the old custom, are run on express time, and often exceed in speed the fastest passenger train. Some milk is bottled on the farm, though the greater part of that intended for bottle delivery is shipped in cans to save freight, and is bottled in the city in the large plants of the dealers. The milk trains begin to arrive about nine o'clock in the evening, and continue to arrive until near midnight. It is a sight to see the enormous wagons drawn up at the long platforms at which the milk is received, and crossing over the ferry with the empty cans and returning with the full ones. The milk is iced in transit by the railroad. Blocks of ice are placed on the cans, and if any ice is left over on arrival the railroad people give it to the milkmen to place on or around the cans in transporting them across the city.

The milk supply is controlled by the Department of the City of N. Y. Board of Health, of which the chief official is the health commissioner, appointed by the mayor. The health commissioner is also president of the Board of Health. Each borough into which Greater N. Y. is divided has its local board of health, but the head office is in Manhattan—Old New York before consolidation.

The Board has thoroughly-equipped laboratories and a very large staff of employees. Among them are thirteen inspectors, whose duty it is to inspect milk on its arrival in the city, at the groceries and delicatessens, and on wagons in transportation across the city, or while being delivered to customers. They have power to seize and condemn any milk that does not comply with the law. Two of these inspectors are employed by the State Board of Agriculture, but are paid by the city and are under its directions, as the jurisdiction of the health commissioner of New York City does not extend beyond its limits.

One of the most stringent laws of the Board is that the milk on arrival must not exceed 50° F. in temperature, and must not be at any higher temperature when exposed for sale in stores. When milk is at 50 F. the growth of bacteria is retarded; at 80 to 95 bacteria multiply very rapidly. If the inspectors find the milk exceeds 50, either on arrival or in stores, they turn it into the river or gutter.

The use of preservatives is not permitted, and a constant warfare is waged against their use. Formalin is that which is most often used by those who try to avoid the law. Formalin in the milk renders the casein less digestible, especially by children. The adding of gelatine to cream to thicken it is a favorite device.

The sale of skim milk is prohibited. While it is known that the fatty substances of whole milk are necessary for infants, there seems no good reason why so valuable an article of diet as skim milk, which could be sold so much cheaper than whole milk, should not be permitted to be sold, except for fear that it might be palmed off as whole milk. Skimming, or adding water or skim milk to whole milk, is punishable by fine. The Health Department uses the Babcock test to determine if milk has been adulterated.

As I have said, the authority of the Board of Health extends over the milk only when and after it reaches the city, but the readers of the "Farmer's Advocate" need not be told that, to ensure a clean, pure milk, the beginning must be made

at the farm. It is a deplorable but undeniable fact that too many farmers have a deep-rooted objection to taking proper precautions in the production of milk. Dr. Darlington, President of the N. Y. City Board of Health, has found by experience that a little persuasion is good, but that forceful measures are sometimes better. He and his State inspectors are constantly visiting the farms where the milk is produced and the creameries where it is received. If they find milk is being produced at the farm under unsanitary conditions, or that preservatives are being used, the farmer has pointed out the error of his ways, and suggestions are made to him for the betterment of such conditions. Often a word to the wise is sufficient; but if the farmer is obdurate and will not comply with the requirements of the Health Board, an inspector camps on his trail. A visit is paid to the creamery which receives his milk, and the one in charge is told of the inadvisability of receiving any more milk from that particular farm. If the farmer ships his milk to the city by rail, it is followed by the inspector and promptly dumped into the river when it reaches here. Dr. Darlington believes in persuasion first, as he has no desire to put anyone out of business, but if the health of the people of this great city, especially that of infants, is jeopardized by unsanitary or unwholesome milk, drastic measures have been and will be applied by the Health Board impartially to the farmer, the middleman or the seller.

All raw milk, as contrasted with condensed milk, sold in New York, must contain not less than three per cent. fat and twelve per cent. total solids. By this it is presumed that the ratio of fat to solids other than fat are as one to three, and this is the usual ratio necessary to comply with the legal requirements of each State in this country. In England it is 3 per cent. fat and 8.5 per cent. solids other than fat. I would like to know where there is any large quantity of milk which contains not more than 3 per cent. of fat and has 9 per cent. solids other than fat. If there is I do not know it, and I am pretty familiar with the milk situation and milk analyses. Will some of your readers enlighten me? Let them look at the public tests and examine the ratio of fat to solids other than fat, and see if it accords with the usual legal rate of the United States—one to three. I am perfectly aware I am raising "a leading question," but it is one worthy of being discussed.

A strange condition of affairs in this State exists, caused by the existing laws in regard to the fat in milk. By the laws, as they are now, the farmer's cows can produce milk containing less than 3 per cent. fat. The producer can deliver such milk to the receiving station, and he cannot be successfully prosecuted for selling it; but the moment the receiver sells this milk he can be successfully prosecuted for selling milk below the legal standard. But the dealer or his agent at the receiving station are fully alive to the situation. A "clarifier" is run at the creamery, or at the N. Y. City depot, to clarify the milk. It is nothing more or less than a centrifugal separator. The cream is separated from the milk, and ALL the cream and skim milk, or separated milk, are supposed to be added together again. But are they? I will leave your readers to decide this question by stating the facts. In certain sections of this and other States milk is delivered at the receiving stations containing 5 per cent. fat; frequent analyses by the Babcock of bottled milk sold at 8 cents a quart, rarely show more than 4 per cent. fat, and often between 3 per cent. and 4 per cent. What became of the fat that was in the milk between the time it reached the receiving station and its delivery to the consumer? It has been repeatedly asserted in print, and not denied, that at certain receiving stations eleven 40-quart cans of whole milk will be received, and when it has been clarified 1 can of cream and 10 cans of whole milk will be in its place. Yet the legal requirement of 3 per cent. fat has been complied with.

The Board of Health has an appropriation of \$30,000, with which it employs trained nurses to visit the thickly-populated parts of the city where the poorer classes live, and teach them how they can best care for their milk, how to pasteurize it, and how to modify it. During the past winter I delivered a lecture in New York, Brooklyn and Long Island City, under the joint auspices of the Boards of Health and Education, on "Milk from the Farm to the Table," illustrated by stereopticon views. The audience was very large on each occasion, and seemed very much interested in the subject. The lecture was educational.

Dr. Darlington is a progressive, energetic, painstaking official. His department has happily been removed by him from politics, and a vast amount of good has been accomplished. This is evidenced by the fact that at the present time but 10 per cent. of the samples of milk taken by the inspectors as suspicious (not 10 per cent. of the whole) are condemned as adulterated or deleterious, whereas five years ago 33 per cent. of suspicious samples were condemned.

As a natural result, the death rate among in-

infants has decreased to a very appreciable extent. With the crowded conditions of part of New York; with the foreign element, unused to our customs or even to our language, and ignorant on the subject of milk, the tremendous death rate of a few years ago among infants was traceable to a large amount of milk unfit for human consumption being sold in the city. I am glad to say that science and practice, going hand in hand, have made such vast improvements in our milk supply that New York has never seen such good milk as it has to-day, and that no large city in this or any other country is receiving any better milk than New York.

VALANCEY E. FULLER.

Caring for Milk on the Farm.

The following notes, sent out by the Ontario Department of Agriculture and Dairymen's Associations, were prepared by Prof. H. H. Dean, of the Ontario Agricultural College, and are worthy of careful study by every milk producer:

The cows should be healthy and clean. Colostrum (Beistings) should not be sent to the factory. The stable and pasture should be clean, dry, and free from bad odors and bad-smelling weeds. The food should be clean, pure, sweet and wholesome. Cows giving milk should not be allowed to eat brewers' grains, distillery slops, turnips or tops, rape, mouldy meal, spoiled hay or spoiled silage, cleanings from the horse stable, or anything which would tend to taint the milk.

Either rock or common salt should be accessible to the cows at all times. Plenty of pure water ought to be within easy reach of milking cows. Foul, stagnant, or very cold water, are injurious.

Cows should be milked with clean, dry hands, after wiping the teats and udder with a damp cloth. The milk should be strained at once after milking through a fine wire strainer, and also through two or three thicknesses of cheese cotton. The strainer needs special care in keeping it clean. The pails and can must also be clean. The milk should be removed from the stable or milking yard as soon as possible after milking. It should be cooled at once to a temperature of 60 degrees—certainly below 70 degrees—by setting the cans in tanks of cold water, and by stirring the milk, in order to facilitate cooling rapidly. Where a supply of cold water, under pressure, is available, one of the many forms of coolers will do the work more quickly, but it is very necessary that the air be pure where this form of cooling is adopted. After the milk is cooled to 60 degrees (and where Saturday night's and Sunday morning's milk is to be kept over until Monday morning, the cooling should be so low as 50 degrees in the hot weather), the cans may be covered with the lid or with a piece of damp, clean cotton. By leaving one end of the cotton in the water, evaporation will tend to keep the milk much cooler. Night's and morning's milk should be kept separate as long as possible.

If the milk be placed on a milk-stand for some time before it starts to the factory, the stand should be covered and boarded in on the sides, and the whole neatly painted a white color. Milk should be protected from the rays of the sun, from the dust and from the rain-water.

If possible, the cans should be covered with a canvas cover while on the way to the factory, especially in hot, dusty weather. It is needless to say that the wagon, the man, the horses and the harness should be clean, and a credit to the great dairy industry of Canada.

Where practicable, the cans which are not used for the returning of skim milk should be washed and steamed at the creamery or cheese-ry

as soon as possible after being emptied. Sour whey or buttermilk should not be put in the cans, as the acid destroys the tin and causes the can to rust. Rusty cans cause bad flavor in the milk. It is safer not to run whey in the milk can. A separate vessel should be used for this purpose, if the whey must be returned to the farm. If the whey must be returned in the milk can, it should be emptied at once upon its arrival at the farm, and the can thoroughly washed and aired in the sunshine before milk is put in it again. The whey tank must also be kept clean. The two main points in caring for milk are, to have everything clean, and to cool (especially the night's milk) as rapidly as possible to a temperature below 70 degrees, and to 50 or 60 degrees, if possible.

BE CLEAN! KEEP COOL!

Rules for the Milkers.

The following is the text of the rules for milking issued by the Danish creameries to the farmers:

MILKER, MARK THIS WELL.

1. The cow is a living machine. (a) Kindly treatment entails less labor and gives more milk.
2. Good work improves the living machine. (a) Milk clean. Clean milking develops the udder, and with this increases the quantity of milk, and (b) You receive richer milk. (c) Remember that the milk last drawn is by far the most valuable.
3. Cleanly milking. (a) You should wear tidy and clean clothes. (b) Have the milk pail clean as well as the creamery can. (c) Thoroughly clean the udder by rubbing with a piece of linen. (d) Wash the hands thoroughly before milking. (e) Let the udder be quite dry before you begin to milk.
4. Carry out the work properly. (a) Milk with dry hands. (b) Seize the teats with the whole hand. (c) Keep a gentle pressure on the udder. (d) Milk as fast as you can, and never cease working until the milk is wholly drawn. (e) Don't strain the teat beyond its natural length. (f) Remember the value of the last drops.
5. Healthy state of the udder. (a) If there be soreness or lumps in the udder or teats, stoppage in the milk canal, or unnatural colored milk, don't mix the milk with any other, and don't send to the creamery.
6. Milking times. (a) Begin milking always at

fixed times. (b) Milk the same cows in the same order. 7. Regard this excellent work as one of honor.

FARMER, MARK THIS WELL.

1. Clean the cows.
2. Have good air in the stalls.
3. Light should be freely admitted.

POULTRY.

The Feeding of Chickens.

Several queries have recently reached us, asking for information as to the cause of death of chickens, and post-mortem examinations have, in most instances, revealed the fact that improper feeding was responsible for the loss. There is no great difficulty in the feeding of chickens, and there is no reason at all why errors in this direction should occur. Nevertheless, several poultry-keepers, not only beginners, but also those of experience, constantly find much trouble in the feeding of their birds. Appended are just a few of the errors into which poultry-keepers commonly fall in chicken-feeding:

1. Giving too much soft food and not sufficient hard grain.
2. Giving foods of a too-concentrated character.
3. Not supplying a sufficient quantity of animal and green food.

Chickens do best when fed a little at a time, and at frequent intervals. Where they have plenty of means for exercise they may be given as much as they will eat; but more than this should not be placed before them, as the surplus amount is bound to become fouled and tainted by lying about the yard, and so not only become wasted, but is calculated to give rise to serious troubles, that may end fatally if, perchance, the chickens may partake of it in such a condition.

Attention should also be paid to the importance of providing a constant supply of fresh, clean water. No more common cause of disappointment in chicken-rearing exists than that of neglecting to keep the drinking water pure and fresh. Impure and dirty water, whether it be in vessels that have not been refilled for perhaps two or three days, or in a stagnant pool, is one of the most fruitful causes of disease among poultry, both as chickens and as older birds. Several of the most successful poultry-keepers make a point of changing the water left for their chickens as often as two or three times in a day.

The Row Among the Reds.

To the Editor "Farmer's Advocate":

Sir,—I see by your paper of June 8th that some are having a little difficulty in distinguishing between the Rhode Island Reds and American Reds. There is no distinction, as they are the same breed. The single-comb Rhode Island Reds were admitted to the Standard last year. The rose-comb variety were to be admitted a year later. Some few of the breeders of that variety alone decided to name them American Reds, and as such the committee having charge of the compiling of the Standard admitted them. It was not done legally, however, and that is what has caused the kick. When the only difference in the two breeds is their combs, we think they are easily distinguished by calling them single-comb or rose-comb, without giving them two distinct names. S. H. SMILEY, Elgin Co., Ont.



G. Gordon Whyte, B. S. A.



G. B. Rothwell, B. S. A.



W. C. McKillican, B. S. A.



W. J. Lennox, B. S. A.

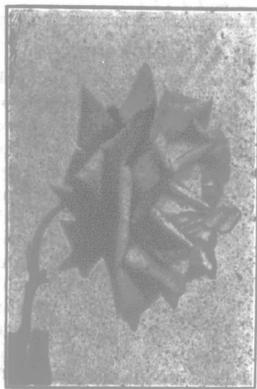


Harry McFayden, B. S. A.

GARDEN AND ORCHARD.

Luther Burbank and His Work.

Our readers will be much interested in seeing to-day the portrait of Luther Burbank, whose apparent miracles in plant life have drawn upon him the attention of the world. Of his work it is scarcely necessary to speak. Everyone knows something of what he has accomplished, of how he has banished the thorns from the cactus, turned the yellow California poppy crimson, produced an everlasting that will not lose its perfume, and created new fruits—the plumcot, for example, which is a cross between the plum and apricot—while marvellously improving others; but not everyone, perhaps, realizes the economic value which his productions possess. To quote from the New York Independent: "Varieties of fruit have been produced that are more prolific and hardier, growing in regions where the old varieties failed; the fruit season has been prolonged several months by early and late bearing varieties; keeping qualities have been developed so as to stand long distance shipment; fruits have been made larger, stones removed, thorns eliminated, shells made thinner, flavor, color and odor improved, and entirely new fruits produced. Grains and fodder plants have been made larger, more prolific, more nutritive, and to have less waste; cotton, rice and sugar cane have been improved. To flowers have been added beauty, grace, perfume, size and color. . . . The practical value of this can scarcely be estimated."



Burbank Rose, which took the Gold Medal at the Louisiana Purchase Exposition, St. Louis, 1904.

Mr. Burbank lives very quietly at his home at Santa Rosa, Cal., where he is carrying on his experiments on a gigantic scale, which requires all of the vast profits which he has reaped as a reward of his labors. On his farm at Sebastopol, Cal., "there are now growing 300,000 varieties of plums, each tree grafted so as to contain 500 different kinds; at one time there were nearly or quite 500,000 lilacs growing on the place, and 26,000 roses; the thornless blackberry was selected from 65,000 seedling plants, and from nearly a million seedling pears no tree worthy of propagation was produced." But, quietly as he lives, his name has travelled far to lands across the sea, and everywhere it meets with recognition. When it was spoken in the French Chamber of Deputies at Paris recently, "every member arose to his feet as a tribute of honor."

The following letter, from his sister, to the Independent, tells something of his life:

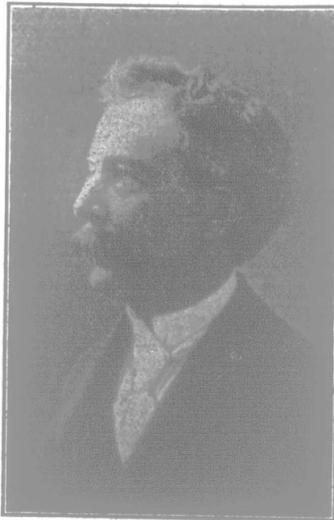
My brother was born March 7th, 1849, in the beautiful and historic town of Lancaster, Mass.; reared on a New England farm, loving nature in her varied forms, he made the best use of all his opportunities.

My father was a man of scholarly tastes and strong convictions, a good business man, who gave each child the best example and education in his power; while my mother, possessing a remarkable fondness for flowers, no doubt transmitted the inventive and horticultural tendencies to her son. Luther's first toys were the plants in the window and in mother's flower garden; he never ruthlessly destroyed a blossom, but loved them as things of life, and a bright flower placed in the baby hand would always stay the falling tears.

A quiet, retiring child, shrinking from notice, Luther spent much of his time with nature; he knew more than anyone else about the apples in the orchard, the wild berries on the hillside and in the meadow grasses, the chestnuts and hickory nuts in the woods. He knew where to find the first blossoms of spring and the brightest flowers of summer. The birds and animals allured him, and no rock, tree or cloud escaped his notice. The habit of observation and classification, with the power of individualizing which he possesses in such a remarkable degree, was early developed. Both in the district school and the Lancaster Academy he excelled in scholarship, and was a favorite with teachers and classmates. Our home was always supplied with good literature, and the town had one of the best public libraries in the State; he availed himself of these advantages, delighting in books of science, yet his reading was not limited to one subject. At one time his thoughts were directed toward the practice of medicine

as a life work, and the science of health has always been of great interest to him; with naturally a frail body, of such practical use has been the knowledge acquired that few men have been able to accomplish as much real work in life as he. Utilizing all his powers, physical and mental, at the age of fifty-five years, he each morning takes a cold sponge bath and a few physical-culture exercises, and is as active as a boy; harmony with nature has kept mind and body young and vigorous.

Another subject of interest to him is mechanics, always keeping in touch with the latest discoveries and inventions; his early experiments along this line were

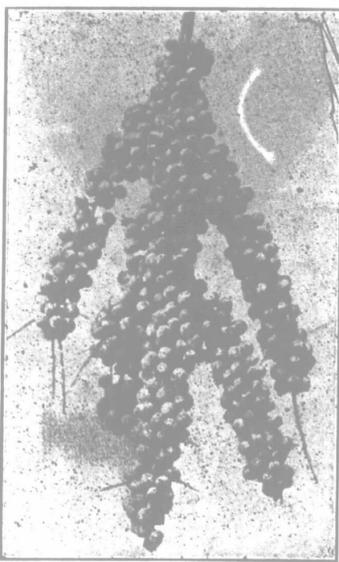


Luther Burbank.

with an o'd teakettle in the backyard. While studying at the Academy winters, he spent the summer months at Worcester learning the patternmakers' trade; his letters written to the home folks while there reveal his intense love of nature, and to her call he responded, beginning his real life work in the production of the Burbank potato in 1873.

Coming to California in 1875, the letters to the New England home tell how the beauties of the Santa Rosa Valley, afterward to become his home and the scene of his plant transformations, appealed to his enthusiastic temperament:

"I firmly believe this is the chosen spot of all the earth, the climate is perfect, the air so sweet that it is a pleasure to drink it in, the sunshine pure and soft. The mountains which gird the valley are lovely, and the valley is covered with majestic oaks placed as no human hand could arrange them for beauty. The gar-



Improved Peach Plum. Branch 3½ feet long. (Reduced from life size.)

dens are filled with tropical plants, palms, figs, oranges, vines, etc. Rose trees climb over the houses, loaded with every color of bud and blossom. English ivy fills large trees, and flowers are everywhere, even now (November). The birds are singing, and everything like a beautiful spring day. I took a long walk to-day, and found enough curious plants in a wild spot of about an acre to set a botanist wild."

Since coming to California he has collected plants from all parts of the globe. In recent years he has

had collectors in foreign lands, and has been greatly assisted by botanists and explorers.

Penetrating into the secrets of nature, finding unknown truth in familiar facts, he has acquired a knowledge of the habits, characteristics, adaptability and latent possibilities of plant life possessed by no other. This has required patient toil, privations and self-denial; often misunderstood, sometimes misrepresented, thwarted and disappointed, but never discouraged or impatient, he has gone steadily on with his experiments.

Life is very simple in the vine-covered cottage at Santa Rosa, with his plants as his only family; the mother, now past ninety years of age, shares his home and rejoices to see her son honored of the world, revered by associates, respected by employees and loved by all.

Strong in his principles and convictions, he uses neither tobacco nor alcoholic drinks, and employs no men addicted to their use; he recently declined to have a new brand of cigars bear his name and portrait. He subscribes to no creed, believing that each to-morrow should

"Find us farther than to-day."

Tender in his nature, he may be seen some early morning in summer as he carefully examines certain plants, to gently open the petals of a poppy where some belated bee, in his task of carrying pollen from flower to flower, had become imprisoned by the closing of the flower for the day; the bee's smothered cry had reached his sensitive ear, and very tenderly he sets the little captive free, watching its glad flight in the bright sunlight. The only secret of success that he claims is honesty with nature. When upon introduction one said: "I believe you are the man who improves upon nature," he rather indignantly replied: "No, sir; I only direct some of her forces."

My brother has opened broad fields for development and made earth richer. May his life be a continued inspiration to the young.

He says: "I shall be content if because of me there shall be better fruits and fairer flowers."

Berry and Fruit Baskets.

It is desired to hereby draw attention to Section 5 of the Act entitled "An Act Respecting the Packing and Sale of Certain Staple Commodities," (1, Edward VII., Chap. 26), which reads as follows:

5. Every box of berries or currants offered for sale, and every berry box manufactured and offered for sale, in Canada, shall be plainly marked on the side of the box, in black letters at least half an inch square, with the word "Short," unless it contains when level-full, as nearly exactly as practicable:

- At least four-fifths of a quart, or
- Two-fifths of a quart.

2. Every basket of fruit offered for sale in Canada, unless stamped on the side plainly in black letters at least three-quarters of an inch deep and wide, with the word "Quart" in full, preceded with the minimum number of quarts, omitting fractions, which the basket will hold when level-full, shall contain, when level-full, one or other of the following quantities:

- Fifteen quarts, or more;
- Eleven quarts, and be five and three-quarter inches deep perpendicularly, inside measurement, as nearly exactly as practicable;
- Six and two-thirds quarts, and be four and five-eighths inches deep, perpendicularly, inside measurement, as nearly exactly as practicable; or
- Two and two-fifths quarts, as nearly exactly as practicable.

3. Every person who neglects to comply with any provision of this section, and any person who sells or offers for sale any fruit or berry boxes in contravention of this section, shall be liable, on summary conviction, to a fine of not less than twenty-five cents for each basket or box so sold or offered for sale.

4. This section shall come into effect on the first day of February, one thousand nine hundred and two.

By an Order-in-Council of June 9th, 1905, the foregoing section, and also section 4 of the Act, were assigned to the Minister of Agriculture for administration. In order to protect the public, and those box and basket manufacturers who are now complying with the law, the Honorable Minister directs that steps shall be taken to have the law enforced. Box or basket manufacturers will please accept this warning, and be guided accordingly. The Dominion Fruit Inspectors will be instructed to watch for violations of Section 5, but any person may lay an information against those who fail to carry out the provisions of the Act.

A. McNEILL,
Chief of Fruit Division.

Can Be Safely Commended.

I thank you for the beautiful knife you sent me as a premium—it far exceeds anything I had hoped for. I always speak a good word for the "Farmer's Advocate and Home Magazine," for I think every farmer ought to take it. We save every copy, and then we have it for reference when required.

Que.
HERBERT FERRIS.

Spray Potatoes for Fungus as Well as Bugs.

Although, since the advent of the unwelcome potato beetle, spraying potatoes with poisons has become common, it is only of recent years that very much attention has been given to spraying for blight and rot. There is, nevertheless, abundant evidence to prove that the use of Bordeaux mixture in conjunction with Paris green is highly profitable in sections where the above troubles occur.

Like all fungous diseases, blight and rot, must be combated by preventive measures. Bugs may be poisoned and their ravages checked after they have appeared in some numbers. Not so with fungi, which, having once gained entrance into the plant, cannot be checked, although spraying may still be of some service in preventing the infestation of one plant from another. It should be borne in mind that the mycelial threads of the fungus permeate the plant before any blight or rot is apparent; hence, if we wait for signs to appear, a surprisingly large proportion of hills may have been infected. The only way in which spraying can be of use in combating fungus is in keeping the vines coated with the spray mixture, so as to kill the spores before they have a chance to enter the plant tissues. It may be noted here that late blight and rot are both caused by the same fungus, acting in one case upon the leaves, in the other upon the tubers. Spores ripen upon the leaves, fall upon the ground, and are washed through the soil upon the tubers by rains. Hence spraying for late blight ordinarily prevents any but slight damage from rot.

No one need point out the loss caused by rot, but a word may be in place on the damage done by blight, which stops the growth of vines prematurely, and thus reduces not only the yield, but the quality of the tubers. In some tests at Geneva, N. Y., it was noticed that the growth of unsprayed potatoes was checked very early, and was practically ended by the first of September. As might be expected, these immature tubers were of inferior quality. This was shown by chemical analyses, and by a cooking test. Fifty consecutive hills on a row sprayed five times with Bordeaux were dug separately, and the same number were taken from an adjoining unsprayed row. In the fifty sprayed hills there were 265 tubers, in the unsprayed ones only 221, and the potatoes from the sprayed hills weighed almost twice as much, on the average, as those from unsprayed hills, weights being 6 1-3 and 3 1/2 ozs., respectively. Chemical analysis showed about one-sixteenth more dry matter per pound in the sprayed potatoes, and one-ninth more starch. In cooking tests, the sprayed potatoes were found noticeably more mealy than the others, and they were pronounced of much better quality by all who ate both.

But the most convincing argument for spraying will be found in some figures on yield, obtained from the popular edition of Bulletin 264, of the New York Experiment Station, on "Potato Spraying Experiments" in 1904. Under direction of the Station authorities, a number of "Farmers' business experiments" were conducted last year. Fourteen potato-growers who were intending to spray co-operated with the Station in the work, and carried out the tests. The growers furnished apparatus and material, and did the work as best suited their own plans. Each experimenter was required to leave a few rows unsprayed in a representative portion of the field. The Station merely gave advice when asked to do so, and supervised the harvesting sufficiently to obtain an accurate measure of the effect of spraying. A row or more in the untreated part was compared with a similar row or rows in the sprayed section. The tests were all on a large scale, 2 2-3 acres being the smallest area sprayed, and the fields were scattered all over the State. In thirteen out of the fourteen experiments there was a gain from spraying, the average being 62 1/2 bushels per acre. Note these facts:

Average increase in yield per acre.....	62 1/2 bush.
Average cost of spraying per acre.....	\$ 4 98
Average cost per acre for each spraying.....	93
Average net profit per acre.....	24 86

The number of applications ranged from three to ten, and they were made with apparatus varying in power and efficiency from a five-gallon compressed-air sprayer carried by the operator, to a power sprayer treating six rows at a time and covering fifteen acres a day. The essential features are a fine spray and a proper mixture.

Since spraying for bugs is necessary anyway, it should require no argument to convince growers of the advantage of combining with it the bluestone and lime, especially seeing that the lime makes the Paris green adhere better to the vines, and also prevents injury to the foliage. Bordeaux and Paris green have given the best results of any mixture tried at the New York Station. Directions for preparing have been often given in this paper, and may be found in issue of March 30th. The formula is: Bluestone 5 pounds, quicklime 5 pounds, Paris green 4 ounces, water 40 gallons. Slake the lime and

dissolve the bluestone in separate vessels; mix the Paris green with water to a thin, soupy paste, and stir into the barrel into which has been previously put the milk of lime, the bluestone solution, and water enough to make 40 gallons.

When the potato beetles first appear, spray with this mixture, and repeat every ten days or two weeks thereafter, so as to keep the foliage coated with the spray mixture as long as the plants remain green. The Paris green, of course, may be omitted after the bugs cease to be troublesome. If rain comes before any application is dry on the vines, the treatment should be repeated, but spraying should not be stopped just because it "looks like rain." Just after a warm rain, followed by muggy weather, blight spreads fastest, and the plants most need protection. It requires but a short time for the mixture to dry on the vines, and then it takes a heavy rain to wash it off. Every effort should be made, therefore, to complete the spraying before the rain comes. The man who sprays with Paris green only is not half doing the job.

Maine Experiments with Vegetables.

Bulletin 113 of the Maine Agricultural Experiment Station gives a summary of some of the results of the horticultural work of that Station.

It is shown that the earliness and productiveness of tomatoes is in direct ratio with the earliness of setting in the field; that trimming the plants after a part of the fruit has set, increased the yield more than one-third; and that transplanting the young plants at least twice before removal to the field is advisable.

Studies of the cabbage showed that frequent transplanting before removal to the field increased the average size of heads; that handling the young plants in pots gave better results than handling them in boxes; that depth of setting had very little influence on the size of the heads; and that trimming the plants at time of setting is not specially important.

APIARY.

June in the Apiary.

Keep up with your bees, especially in June, for there is no time when a little delay may bring about such loss as when the bees are in the clover. Don't let them get ahead of you, or you may lose a large part of what you have been working for. June is the month when spring work, such as getting the bees and appliances into shape for the honey harvest; gives place to the hiving of swarms and the putting on of the supers. And happy is the bee man who has his hives fairly boiling over with bees and a great big stack of nice white extracting combs ready to pile on top of them when he sees the fields of clover begin to show white and the tops of the combs in his hives to do likewise. For each colony of bees a man should have two, or even better, three, supers of extracting combs, in order that the first honey stored may have plenty of time to ripen before it has to be extracted to make room for what is to follow. The time, to put on the first super is when the bees begin to show signs of crowding below by bulging the tops of their combs and depositing wax on the sides of the top bars of the frames. If the putting on of supers is delayed beyond this time, excessive swarming is liable to result. The time to put on the second super is when the bees have got well started sealing the first. Set the second under the first, and the bees will hustle in both. If the lower super be filled before the first is nearly all sealed, a third is necessary, as in no case should the honey be extracted until it is at least three-quarters sealed. If it is all sealed, so much the better. Space the frames wide apart by putting only seven in an eight-frame super, or eight in a ten-frame one. The bees then draw the combs out very thick, and it is not unusual to get from eight to ten pounds from one comb. If there are not sufficient combs to go around, use full sheets of foundation instead, and never think of putting on an extracting super without a queen-excluder between it and the brood nest. There is nothing it pays a beekeeper better to have than a big stock of extracting combs—more than he thinks he will need—for when the bees get a big run of honey from basswood, as they sometimes do, it will surprise anyone who has never seen it before how fast they will fill up the supers. The basswood flow only lasts about a week or ten days, but there is nothing that is more worth while being ready for when it comes; and if you are not ready it won't wait.

I have taken the "Farmer's Advocate and Home Magazine" for several years, and have received a great deal of benefit from it. J. E. RINCH, Durham Co., Ont.

NEWS OF THE DAY.

Canadian.

A rich discovery of gold-bearing quartz has been reported from the north of Frontenac Co., Ont.

Hon. David McCurdy, for 24 years member of the Nova Scotia Legislative Assembly, died June 10th of pneumonia, at Baddeck, N. S. He was 95 years of age.

Mrs. Leonidas Hubbard, wife of the explorer who perished in the interior of Labrador last year, has arrived at Halifax, on her way to Sillisport, where she will organize a party and take up the work at the point where her husband gave up his life.

This is the last year in which the military camp will be held at Niagara, where the 400 acres set apart for the purpose are entirely inadequate. The next camp for the district will probably be in Northern Ontario, where the Government has reserved 25,000 acres as a military training ground.

British and Foreign.

The torpedo mines carried by the sunken Russian warships are now coming afloat, and rendering navigation very dangerous in the Sea of Japan.

Lieut. Peary will make another attempt to reach the North Pole. His expedition will set out from New York on the Steamer Roosevelt on July 4th.

Russia has agreed to Washington as the point at which negotiations between Russia and Japan are to take place.

The Danish Imperial family has refused the crown of Norway for one of its Princes. In Norway the Norwegian tricolor has in all places been hoisted instead of the union flag.

In commemoration of Togo's victory, a lighthouse whose light will be visible for 80 miles, covering nearly the whole scene of battle, will be erected on Okino Island, Japan.

Germany has addressed a note to the Powers, proposing an international conference on the Moroccan question, qualifying the step by the assertion that it has been authorized by Morocco. Germany's action in the matter is looked upon as the beginning of a possible European crisis.

Theodore P. Delyannis, the popular Premier of Greece, was assassinated recently while on the way to the Chamber of Deputies at Athens. The assassin, a professional gambler, stated that he did the deed in revenge for the Premier's order that all the gambling houses in Greece be closed.

THE FARM BULLETIN

The Argentine exporters of live stock to Great Britain, in order to avoid the prohibition of the importation of live animals, now send 1,500 live sheep weekly to Antwerp, where they are slaughtered, and the fresh mutton is sent across to England. The enhanced price received for the Argentine-Antwerp mutton encourages this circuitous mode of trading.

One cause of the dearth of apples in Great Britain at the present time is the comparative scarcity of Australian apples. Last year nearly 700,000 cases were brought to the British market, but this year's aggregate is not expected to reach over 400,000 cases. This probably explains why from four pence to six pence a pound is being asked for Australian apples.

Wm. Rennie writes: "We beg to call your attention to the article on 'The Clover Midge,' June 8th 'Farmer's Advocate,' page 850. In the third last sentence it should read, 'While the red clover is fertilized by the bumblebees, which are not developed in time for the FIRST crop,' instead of second crop as it appeared."

What of the Round Cement Silo?

A good many round cement-concrete silos have been in use in Canada for several years, and a correspondent who is about to build wishes several readers of the "Farmer's Advocate" to send us for publication the result of their experience, stating: 1st, dimensions and thickness of walls; 2nd, how constructed, materials used, how finished, and cost; 3rd, how has the silage kept in them, compared with the tub silo; 4th, what kind of hoops were used, and where obtained? All this information can be put in a very short letter which we trust our readers will send by an early mail.

Temiscaming Farmers' Institute Meetings

Supt. Putnam has arranged Farmers' Institute meetings in the Temiscaming District as follows: Hanleybury, July 5th; New Liskeard, July 6th; Hillview, July 7th; Milberta, July 8th; Uno Park, July 10th; Hanbury, July 11th; Earleton, July 12th; Headship Corners, July 13th; Hilliardtown, July 14th; Judge, July 15th.

The speakers will be Prof. C. A. Zavitz and Prof. J. B. Reynolds, Ontario Agricultural College, Guelph, who will discuss a wide range of practical subjects in relation to crops, seed grain and cultivation.

P. E. Island.

The crop is now all in. Grain has come up well, but the weather is so cold that there is little growth. Cattle of necessity went to pasture very early, as fodder was all used up. This, with the cold weather, keeps the grass very short. Most of the cheese factories have opened up for business, with a very limited supply of milk. Still we hope for a fairly good dairy season later on. Our cheese make is always small the first half of June, especially so in late seasons. So far we have had abundance of rain, and with a higher temperature that must come soon we will expect rapid growth. Notwithstanding the scarcity and high price of grain, we believe all our farmers have been able to get seed, and, besides, considerable seed oats has been sent from here to Cape Breton, as well as to other places in the Maritime Provinces. Seed oats has been worth here from 55 to 60 cents per bushel, and it is now worth 50 cents for shipping. We will have much more clover in our meadows than last year, and we look for a pretty good cut of hay. But it is too early to estimate the crop yet, as the latter part of June and the first part of July is the critical time with our hay crop, as well as the early grain. There is a fair appearance of bloom on the apple orchards where they have not been destroyed by snow, but many of our best orchards have been so broken down with the weight of snow last winter that they are almost ruined. Still there is considerable being done to save some of the best trees by trimming, grafting and bolting up some of the best branches. Two men are employed by the Government to assist the farmers at this work.

John Richards, Esq., of Bideford, Prince County, our noted Polled-Angus and Shorthorn breeder, has lately returned from an extended visit to England and Scotland, where he has selected some excellent specimens of the above breeds for his already large herds. They are still in quarantine in St. John. Mr. Richards is our most enterprising breeder, and is doing a grand work in the stock interests of the Island. A Farmers' Institute campaign is arranged to last a month here. Duncan Anderson, of Rugby, Ont., and W. F. Stephen, of Quebec, will be the visiting speakers, and will be assisted by four local men. We will expect good results from the addresses of two such capable experts in their different lines. Mr. Anderson is a good all-round farmer and stock-raiser, while Mr. Stephen is, we understand, a practical and successful dairyman. Potatoes are almost unsalable here this spring, and there are quite a large quantity in farmers' cellars; 15 cents is the best offer per bushel of 60 pounds. Eggs are 14 cents. Montreal buyers have been procuring pickling stock here, which has kept the price up so far.

The Binder Twine Industry.
(Ottawa correspondence.)

An intimation has been given in advance that one of the features of the parliamentary budget speech to be delivered this week will be an announcement of some form of encouragement to the binder twine industry. It will be remembered that the duty was removed and twine put on the free list in 1897. In 1903 about 14,000 tons of binder twine was used in Canada, 6,500 tons being made in this country, and 7,500 tons imported. With the development of agriculture and the increase of wheat and other cereal crop areas, the quantity of twine required is rapidly increasing. There have been enough twine factories and spindles in Canada to make the twine required, but a good many of them have been forced to shut down on account of U. S. competition. The International Harvester Company was this season in a position to set the prices for the trade. Whether the proposed encouragement to the independent factories of Canada will take the form of bounty or a moderate duty is not stated. The latter affects the consumer directly, in so far as prices are concerned, but a bounty being drawn from the general treasury of the country is contributed by all who pay towards the revenues of the country. It is stated that the International Harvester Company have had plans prepared for some time for a big twine factory in Canada, if the duty were re-imposed, corresponding

to their agricultural implement works at Hamilton, Ont. It was also announced last week that the Plymouth (Mass.) Cordage Co. have decided to establish a Canadian factory. This company have supplied a large proportion of the imported twine in the past. They are conservative in their methods, and stand in the United States as the one great concern independent of the International Harvester Co. It is said that they have bonded a site at Welland, Ont., and contemplate a factory employing several hundred hands. That these concerns propose establishing themselves permanently on Canadian soil speaks plainly of their faith in the future of the country, and also gives color to the authenticity of the report re tariff changes contemplated by the Government.

Investigations at Central Experiment Station.

(Ottawa correspondence.)

Among the investigations conducted in the Laboratory at the Experimental Farm, Ottawa, during the past year were the following:

Examination of a process patented in Denmark for the preservation of milk. Dr. Horch, of Copenhagen, was the patentee, and it was claimed that by putting the milk through this process, namely, treating it with hydrogen peroxide, it would keep sweet for an indefinite length of time. Samples of milk treated in this way were received at the Experimental Farm, and although the milk was sweet and fresh, it had certain objectionable features, such as flavor, etc., that precluded the success of the process.

Examination of certain instruments recently invented for rapidly ascertaining the amount of moisture in butter:

A recent law passed by the British Government forbids the importation of butter containing over a certain per cent. of moisture, therefore it is very important that the exporters should have some means of determining quickly and efficiently the amount of moisture in the goods about to be forwarded. Some of the instruments examined were found to be fairly efficient if used properly, while others were totally useless.

An investigation of supposed changes in the composition of the fat in cheese when it is kept in cold storage.—This investigation was undertaken owing to the fact that it was alleged in England recently that some Canadian cheese was adulterated with foreign fat, and when an analysis showed that such was not the case, the British merchant who had purchased the cheese claimed that some change must have taken place in the composition of the cheese while they were being kept in cold storage. The investigation at the Farm proved conclusively that no change whatever took place in the composition of the fat in cheese while being kept in cold storage.

An examination of a process for making butter recently exploited in the United States. It was claimed that by adding certain chemicals to the cream more butter of better quality could be manufactured than by the ordinary process of buttermaking. The process proved to be of no use whatever, and, according to Prof. Shutt, was another sample of the faker game so much in evidence in the United States.

A bulletin will be issued in the course of a few days from the laboratory, containing an analysis of the different grades of wheat of the Northwest, with discussion thereon. As is generally known, the wheat grown in the Northwest is graded into different classes, according to quality, by a Government official in Winnipeg, and is sold according to classification. The principal grades of wheat are No. 1 hard, No. 1 northern, No. 2 northern, No. 3 northern, No. 4 extra, No. 4 and No. 5. There are some grades lower than this, but they are not used to any extent for milling purposes. The claim was advanced by a large number of farmers in the West that the difference in price between the different grades was not warranted by the difference in milling qualities, hence the analysis.

Get Out Your Camera.

In view of the popularity attending those in previous years, we have decided to have another camera competition, or rather six competitions, as follows:

A—Photographs of farm homes, showing house, grounds, trees, etc.

B—Photographs of orchards or gardens.

C—Photographs of buildings and live stock, or any farming operations in which people or animals are at work.

D—Photographs of interior views of rooms in houses, showing arrangement of furniture, kitchen appliances, etc.

E—Photographs of cheese factories or creameries, with surroundings.

F—Rural school and grounds, with group of pupils. In this section we particularly desire photos of schools where grounds and surroundings are well kept.

The prizes will be, in each section:

- First prize \$3.00
- Second prize \$2.00

RULES FOR COMPETITORS.

All photographs must be mounted, and preference will be given to those not smaller than 4x5 inches in size.

They must be clear and distinct. In making the awards consideration will be given to the judgment displayed in the choice of subjects and to the suitability of the photographs for illustration purposes.

They must reach the office of the "Farmer's Advocate and Home Magazine," London, Ont., not later than July 15th, 1905.

The name of the competitor, with P. O. address, and the section or sections in which photographs compete, must be marked on the back of each photo, as well as the name and location of the view depicted.

Any competitor may send in more than one photo, and may enter in all six sections, but may not receive prizes in more than two sections, nor more than one prize in any one section.

All photographs entered for competition shall become the property of the "Farmer's Advocate and Home Magazine."

No photograph from which any engraving has been made is eligible for competition.

The beautiful month of June is the season par excellence for obtaining beautiful views of the various kinds for which our prizes are offered. Every Province in Canada and the adjoining States should be represented in this friendly competition.

Automobile Restrictions Applied.

(Ottawa correspondence.)

At its June session the Carleton (Ont.) County Council passed a by-law offering a reward of \$10 to any person who secures the conviction of the owner or driver of an automobile for any infraction of the law while driving on the roads of the County. During the past couple of summers great trouble has been experienced by farmers driving on the public highways, owing to the reckless driving of chauffeurs who come out from the City of Ottawa to speed their machines on the country roads. Several accidents have occurred recently, owing to horses becoming frightened by automobiles tearing along at a reckless pace. At the present time it is hardly safe for a lady to drive a horse on the roads of the County.

Wants Anticipated.

Please find enclosed renewal to the "Farmer's Advocate and Home Magazine." Let me say I often think of asking your opinion on different questions, but generally find the answer when looking over the next issue of the paper—always in season.

ANDREW GAMMIE.

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City Girl (pointing to a wild plant by the wayside): "What's that?" Country Cousin: "That's milkweed." City Girl: "O yes, what you feed the cows on, I suppose."

Not Familiar.—Literary Young Man (at party): "Miss Jones, I suppose you are familiar with 'Crabbe's Tales?' Young Lady (scornfully): "I was not aware that crabs had tails." L. Y. M. (confusedly): "I beg pardon, Miss, I should have said read 'Crabbe's.'" Y. L. (still more scornfully): "And I was not aware that red crabs had tails either."

Contents of this Issue.

MARKETS.

Toronto Horse Market.

Seasonable dullness has again characterized the local horse market the past week, and as a result of the slackening in the demand prices of most classes are lower.

According to the Canadian Horse Exchange, the range of prices is: Single drivers, 15 to 16 hands \$125 to \$200

Burns & Sheppard report prices as follows: Single roadsters, 15 to 16 hands \$150 to \$175

Toronto.

LIVE STOCK.

Export Cattle—Tone of prices fairly firm, at \$5.25 to \$5.30 per cwt.

Stocks and Feeders—Scarce, and about steady.

Milch Cows—Some good stock is wanted, for which from \$30 to \$50 is offered.

Sheep and Lambs—Steady.

Hogs—The trade is improving, but very slowly, and the general tone is dull.

BREADSTUFFS AND PROVISIONS.

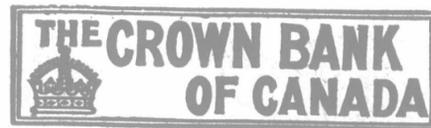
Ontario grain dealers comment on the fact that this season shows supplies of all kinds of grain generally scarce, or at least hard to get.

In ordinary years, of course, some lines show scarcity at this season, but the fact that this condition applies to all lines makes this year exceptional.

Wheat—No. 2 red and white at 98c., with a sale at \$1 for a special lot.

Flour—Ontario, 90 per cent. patents, \$4.40 to \$4.45, buyers' sacks, east and west, 15c. to 20c. higher for choice;

Manitoba, \$5.40 to \$5.50 for first



Capital Authorized, \$2,000,000.00. Head Office, Toronto, Ont. Edward Gurney, President.

EVERY DESCRIPTION OF BANKING BUSINESS TRANSACTED

Special attention given to accounts of Cheese Factories, Drovers and Grain Dealers, and all out-of-town accounts.

SAVINGS BANK DEPARTMENT. Deposits of Twenty cents and upwards received, and interest at 3 per cent. per annum, compounded four times a year, without presentation of passbook.

G. de C. O'GRADY, General Manager.

patents, \$5.10 to \$5.20 for seconds, and \$5 to \$5.10 for bakers'.

Millfeed—Bran, \$13; shorts, scarce, \$17.50 to \$18 for car lots, outside.

Barley—45c. for No. 2, 43c. for No. 2 extra, and 41c. for No. 1 malting outside.

Rye—60c., outside.

Corn—Canadian, nominal; American, higher; No. 2 yellow, 63c.; No. 3 yellow, 62c., lake and rail freights.

Oats—Firm; holders are asking 45c. for No. 2, outside, with 43c. bid.

Peas—70c. to 71c. for No. 2, west and east, 75c. for milling.

Buckwheat—59c. to 60c., east or west.

Dressed Hogs—No great amount of business is being done.

COUNTRY PRODUCE.

Butter—The best is commanding good prices, even with the over good supply that dealers have on hand.

Creamery, prints 18c. to 20c. do, solids 18c. to 19c.

Dairy lb. rolls, good to choice 15c. to 16c.

do, large rolls 14c. to 15c. do, medium 13c. to 14c.

do, tubs, good to choice 14c. to 15c. do, inferior 12c. to 13c.

Cheese—Prices on job lots, 10c. to 10c. Eggs—Are selling well, prices continuing at 16c. to 17c.

Potatoes—There are not very liberal receipts of old, and a slight scarcity is noticed.

Baled Hay—There is no local trade, and this morning prices were reported down to \$7.75 to \$8 for No. 1 timothy.

FARMERS' MARKET (Retail Prices).

Wheat, white \$1.00 to \$1.02 do, red 1.02

do, spring 90 do, goose 78 to 80

Buckwheat 54 Rye 62 to 65

Barley 49 Hay, No. 1 timothy 9.00 to 10.00

do, clover, mixed 7.00 to 8.00 Straw 10.00 to 10.50

Dressed hogs, light, cwt. 9.25 do, heavy 8.75

Butter 17 to 20 Eggs 18 to 22

Old chickens, dressed 10 Spring chickens 20 to 25

Full chickens 14 to 16 Turkeys 13

Potatoes, per bag 70 to 85 Apples, Spies 2.00 to 3.00

do, others 1.25 to 2.00 Cabbages, dozen 50 to 75

do, new, case 2.00 Beef, hind quarters 9 to 10 1/2

Montreal.

Butter—Good to fine creamery, 18c. to 19c., with holders demanding 19c. for choicest townships creamery.

Cheese—Finest Quebec, 9c.; finest Ontario, 9c.

Eggs—Firm; wholesale, 16c. to 16c. Potatoes—Fairly strong, 65c. per bag being paid for choicest stock on track.

Manitoba, in bags, car lots, \$20 ton. Bran dull; Manitoba, in bags, \$17 to \$18 ton.

Grain—Dull. Oats, No. 3, in store, 46c. to 47c.; No. 2, 47c. to 48c. bush., car lots.

Hides—Firm of late; quoted laid down in Montreal, with 1c. to tanners; No. 1, 10c.; No. 2, 9c.; No. 3, 8c.;

sheepskins steady, at \$1.20 each with the wool on, and 25c. each clipped.

Spring lambskins, also 25c.; calfskins, 18c. for No. 2, and 15c. for No. 1; horse hides dull, as usual, prices \$1.50 to \$2.

Tallow, dull, quoted at 4c., and rough, 1c. to 2c. pound.

Live Stock—Much improved feeling in export market last week.

Some fine stock was shipped from here to different points in Great Britain and Europe, among them being 250 head of distillery cattle to Switzerland, via Havre.

A further shipment will take place this week to the same country, these being the first shipments from Canada to that market.

Another unusual feature was the arrival of 170 Mexican cattle on the local market after a trip of about ten days.

These sold at the rather good price of 4c. A few choice cattle here brought 5c. to 6c., fine selling at 5c. to 5c.;

good butchers' stock ranged from 4c. to 5c. for the bulk, and mediums, 3c. to 4c.; common, 2c. to 3c.;

Another noteworthy live-stock offering last week was a bunch of American hogs. General prices of select hogs, 7c. to 7c.; mixed, 6c. to 7c., off cars.

Milch cows in good demand, \$30 to \$55 each. Calves, \$2 to \$8, according to quality, and spring lambs, \$3 to \$5 each.

Sheep, 3c. to 4c. lb. Horses—Dull; broken-down animals, \$50 to \$75 each; ordinary cheap ones, \$75 to \$125; good express horses, 1,100 to 1,300 lbs. each, \$150 to \$200;

draft horses, 1,400 to 1,500 lbs., \$200 to \$250 each, and 1,500 to 1,600 lbs., \$250 to \$300 each; carriage horses, according to quality, weighing 1,100 or 1,200 lbs., \$200 to \$500 each, and riding horses about \$250 to \$400 each.

Hay—No. 1 timothy, \$9 to \$9.25; No. 2, \$7.75 to \$8.50; clover and clover mixed, \$6.75 to \$7.25.

Beans—Choice primes, \$1.70 to \$1.75 per bushel, \$1.50 to \$1.60 in car lots.

Honey—White clover, in combs, 12c. to 12c. per section, in 10-lb. section; extract, in 10-lb. tins, 7c. to 7c.; in 60-lb. tins, 6c. to 6c.;

Chicago.

Cattle—Good to prime steers, \$3.40 to \$6.25; stockers and feeders, \$2.50 to \$4.65.

Hogs—Mixed and butchers', \$5.25 to \$6.50; good to choice, heavy, \$5.40 to \$5.50; rough, heavy, \$4.75 to \$5.25; light, \$5.25 to \$5.45;

bulk of sales, \$5.35 to \$5.45. Sheep—Good to choice wethers, shorn, \$4.50 to \$5; fair to choice, mixed, shorn, \$3.50 to \$4.40;

native lambs, shorn, \$4.50 to \$7.

British Cattle Market.

London.—Cattle are quoted at 11c. to 12c. per lb.; refrigerator beef, 9c. to 9c. per lb.; sheep, 13c. to 14c. per lb.

Buffalo.

Veals—\$4.50 to \$7. Hogs—Active; heavy, \$5.60 to \$5.65; mixed, \$5.65 to \$5.70; Yorkers, \$5.70; pigs, \$5.70 to \$5.75; roughs, \$4.75 to \$4.90; stags, \$3.25 to \$3.75; dairies, \$5.40 to \$5.65.

Sheep and Lambs—Lambs, \$4.50 to \$6.75; yearlings, \$5.50 to \$5.75; wethers, \$5.15 to \$5.25; ewes, \$4 to \$4.25; sheep, mixed, \$2.50 to \$4.75.

QUESTIONS AND ANSWERS.

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

2nd.—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.

3rd.—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th.—When a reply by mail is required to urgent veterinary or legal enquiries, \$1 must be enclosed.

Miscellaneous.

DAMAGE FROM STREAM.

We have running across the corner of our farm a runway or small hill, which had its natural ending on the farm directly across the road from our farm.

1. Can we collect damages? 2. For how long back can we get damages?

3. Do you consider \$500 an unreasonable amount? 4. What is the best way of finding the amount of damages?

5. Can we only get damages for the land directly destroyed by the water, or can we get damage as an injury to the farm generally?

Ans.—We consider that you are entitled to some relief in the way of damages and otherwise, but we can see that there are legal difficulties such as make it necessary that you should proceed most discreetly, and we would recommend that you place the matter in the hands of a solicitor with instructions to make the necessary application to the Municipal Council for compensation in respect of damage already done and provision against future injury.

We cannot estimate the amount of actual damage; and, in view of the difficulties we have alluded to, we think you ought not to expect or to press for any great sum, but should instruct your solicitor to make the best settlement possible, and not to resort to litigation unless absolutely necessary in order to get the case disposed of on something like reasonable terms.

HOLIDAYS.

A man or youth came out from England last May, hired to a man, no mention being made concerning legal holidays. He hired again this March to another person for the year, no mention being made at the time concerning holidays or Sundays off.

1. Can these two men claim the holidays and every other Sunday off? 2. What are the legalized holidays? Four there are, I believe?

3. Can a man claim double pay for working holidays? Ont. AN OLD COUNTRYMAN.

Ans.—1. Yes, but subject to the doing of such chores as must of necessity be attended to every day.

2. The statutory public holidays are: Sundays, New Year's Day, Good Friday, Easter Monday, Victoria Day, Dominion Day, Labor Day, the day fixed by proclamation for the celebration of the birthday of the King, Christmas Day, and any day appointed by proclamation for a general fast or thanksgiving.

3. No, unless there be an agreement for it.

In answering the advertisement on this page, kindly mention the FARMER'S ADVOCATE.



Life, Literature and Education.

Charles Dickens.



(Biographical sketch.)

Thirty-five years ago this month there died in England the novelist, who, perhaps, more than any other English writer, has endeared himself to all classes of people, both in his day and ours. In London the anniversary is being made the occasion of a great demonstration in his honor; in Canada, it is but fitting that we, too, should pay his memory tribute.

Charles Dickens was born Feb. 7th, 1812, in Landport, Eng., where his father was a clerk on a small salary in the navy pay-office. With a large family, and naturally "shiftless" habits, the elder Dickens found the problem of making both ends meet too much for him. His little children were reared in poverty, and he was finally imprisoned at the Marshalsea for debt. In passing, it may be said that he still lives in the immortal Micawber, who will go down the ages "waiting," like many another of his clan, "for something to turn up." The mother of the family seems to have been scarcely more "thrifty," and as a consequence the education of the children was sadly neglected. During his early years, however, Charles made up for this by an insatiable habit of reading. Even at the age of eight years, his genius was already showing itself by his devotion to Fielding, Smollett, Lesage and Cervantes, writers who have been wont to tax much more mature intellects. At a later day he added to these favorites Shakespeare, Addison, Steele, Ben Johnson, Carlyle, Scott and Goldsmith. The Bible was at all times his stay.

Having at last been liberated from the Marshalsea, his father went to London, where he obtained the position of reporter for the London Chronicle, and here in this big city were spent the saddest days of the author's life—the saddest, and yet the richest in the material whose elaboration was afterwards to make him famous. For a time he worked at odd jobs along the Thames, and even was apprentice in a blacking establishment, mingling with many of the people who afterwards were resurrected for all time in his books. His schooling appears to have been confined to three or four years in

as many educational institutions, one of which, doubtless, afforded the basis of "Squeer's Academy," in "Nicholas Nickleby." For a short time afterwards he was clerk in an attorney's office, where he became conversant with the legal facts and characters which appear in his writings. But, for the most part, such education as he attained was due to his own efforts. Among other things, he taught himself shorthand, an acquisition which stood him in good stead; in fact, his whole earlier life, unwittingly as it was, seemed to have a direct bearing on the work of his after life. By reason of his acquirements in shorthand he was given the position of reporter for the True Sun, in the gallery of the House of Commons, a position which later led to his appointment as general reporter for the Morning Chronicle. In this capacity he was sent here and there all over England, and so enabled to travel in stage-coaches, lodge in inns, and mingle with the great mass of "common" people, in whose description he is at his best, and whose every trait and peculiarity he perceived with hawk-like keenness and registered in his memory with an unflinching tenacity.

From reporting he soon turned to original work, first in a series of newspaper articles which appeared as "Sketches from Boz." In 1836 appeared the "Pickwick Papers," whose success was so marked that the struggling young journalist of twenty-four found himself immediately one of the most popular writers in England. From this time his pecuniary troubles were at an end. In fast succession came "Oliver Twist," "Master Humphrey's Clock," "Nicholas Nickleby," "Old Curiosity Shop," and "Barnaby Rudge," all of which were widely read and lucrative. In 1841 he sailed for America, and, on his return, published those works, displeasing enough to the American people, which marked him as a satirist of the first order—"American Notes," and "Martin Chuzzlewit." In 1843 appeared "The Christmas Carol," "The Chimes," "Cricket on the Hearth," and "The Haunted House." The next year he went to Italy, and finally settled for a time at Lausanne. Here were written "Pictures from Italy" and "Dombey and Son." Following these came "David Copperfield," "Bleak House," "Hard Times" (his poorest work) and "Little Dorrit." About 1850 he established the magazine, "Household Words," which still exists as the official organ of an association known as the "Dickens Fellowship."

Besides accomplishing this enormous amount of writing, he was for several years connected with theatrical companies, acting as stage manager, playwright, and, on occasion, even as actor. In 1856, also, he began the fatal series of "reading" tours, which netted him an additional fortune, but finally resulted in undermining his health. In the same year he bought his famous old place, "Gadshill," where unfortunate domestic complications immediately led to his separation from his wife. Once more he plunged into work, and "Tale of Two Cities," "Great Expectations," "An Uncommercial Traveller," and "Our

Mutual Friend," appeared in quick succession. In 1868 he again came to America on a reading tour, but returned to England broken down in health, and began his "Mystery of Edwin Drood," which was never finished. On the 8th of June, 1870, after working at his book all day, he was suddenly stricken with paralysis, and died the following morning. On the 14th of June he was buried in Westminster Abbey with the ceremony which Great Britain offers as a last tribute to those who have proven themselves the worthiest among her children.

The Literary Genius of Dickens

A just criticism of the work of Charles Dickens would require nothing short of a volume; nay, to it has been given the space of many volumes. Yet, upon this anniversary of the great author's death, a few words, in passing, may not be amiss. It has often been a matter of wonder as to why his books have taken such a hold upon the public—for they are still, and promise to be indefinitely, among the most popular on the sales' counters. Faultless they are not. Occasionally their narrative drags until it becomes almost wearisome; almost invariably they show lack of system and balance in construction; in some portions there is ample evidence of hurried work, in others a straining for theatrical effect, due, probably, to the author's passion for the stage. Here and there, even, one may detect a positive lack of skill in inventing a natural sequence of events to bring about a desired situation. His style, though in general masterly, and in places ascending to the very highest type of literary art, is not uniformly up to the recognized standard of excellence. Yet he is, perhaps more than any other English writer, beloved by the great reading public, and his works have been translated into almost every other language in which books are written or read.

The greatest secret of his popularity, probably, lies in his unbounded sympathy, and that keen insight into the motives and thoughts of men, which—since human nature does not change, though its outward manifestations may—has rendered Dickens, like Shakespeare, "of no age," because belonging to all. Add to this his inimitable humor, his pathos, his power of vivid word picturing, and the fact that he excels most of all in depicting the great middle class—the class to which the majority of people belong—and it does not appear wonderful that he should be popular. We like to laugh, we like—so far as our reading is concerned—to cry, we like to encounter ourselves and those whom we meet, on paper. In all this, and more, Dickens gratifies us. He understands the human heart. He interprets humanity to itself. The world understands him.

It has been claimed that Dickens' characters are, as a rule, caricatures. But, as has been observed, "this objection has been chiefly launched by those who never knew the classes of which he has written." Possibly, also, it has been hazarded by those whose vision is not so keen as they credit it to be.

In a little book called "Friendship of Art," Bliss Carman has told of examining the work of an artist friend who always painted his shadows blue. To the poet this coloring seemed unnatural, and he objected. His friend simply told him to "use his eyes." He did so, and, after a short time, was astonished to find that all shadows appeared to him blue, a thousand times more beautiful than the brown ombres he had imagined them to be, simply because he had not seen aright. Possibly, among many of Dickens' critics, a little closer observation of real life might bring about a modification of this criticism as to his "exaggeration." Certain it is that, the more of Dickens we read, the more often do we meet his very "creations" on the street, in our business, in our homes. True, he often forces the "eccentricities" of his characters upon us by reason of constant repetition, but this repetition serves its purpose in giving a distinctiveness to each individual among the hundreds of which he treats, and without it his works would lose immeasurably. His books contain matchless examples of the very highest literary art. What, for example, could excel the ability to portray Sairey Gamp in such a way as to disclose to our minds the besotted, repulsive creature that she was in reality, and yet enable us to see her live in the story, without a feeling of nausea? Again and again he is equal to this achievement.

Dickens' books, unlike those of Howell's and others of a highly-lauded school, were all written with a purpose. He was a champion of the poor and downtrodden, and threw his whole soul into their cause. He wrote neither for money nor for fame, although both of these came to him; and who can say that his very ambition that his books should do good was not the true well-spring of his marvellous success? When writing, he laughed and cried with his paper children, and more than once grew positively ill over their troubles. Could the expression of such feeling be other than powerful? However that may be, the fact remains, and will remain, so far as literary foresight can prophesy, that he ranks among the most beloved of those who have contributed to the world's literature.

The Death of Little Paul.

Little Dombey closed his eyes with these words and fell asleep. When he awoke the sun was high, and the broad day was clear and warm. Then he awoke—woke mind and body—and sat upright in his bed. He saw them now about him. There was no gray mist before them, as there had been sometimes in the night. He knew them every one, and called them by their names. "And who is this? Is this my old nurse?" asked the little child, regarding, with a radiant smile, a figure coming in.

Yes. Yes. No other stranger would have shed those tears at sight of him, and called him her dear boy, her pretty boy, her own poor blighted child. No other woman would have stooped down by his bed and taken up his wasted hand and put it to her lips and breast as one who had some

right to fondle it. No other woman would have so forgotten everybody there but him and Floy, and been so full of tenderness and pity. "Floy! this is a kind, good face. I am glad to see it again. Don't go away, old nurse. Stay here! Good-bye!"

"Good-bye, my child!" cried Mrs. Pipchin, hurrying to his bed's head. "Not good-bye?"

"Ah, yes! Good-bye! Where is papa?" His father's breath was on his cheek before the words had parted from his lips. The feeble hand waved in the air, as if it cried "Good-bye!" again.

"Now lay me down; and, Floy, come close to me and let me see you."

Sister and brother wound their arms around each other, and the golden light came streaming in, and fell upon them, locked together.

"How fast the water runs between its green banks and the rushes, Floy! But it's very near the sea now. I hear the waves! They always said so!"

Presently he told her that the motion of the boat upon the stream was lulling him to rest. Now the boat was out at sea. And now there was a shore before him. Who stood on the bank!—

"Mamma is like you, Floy. I know her by the face!"

The golden ripple on the wall came back again, and nothing else stirred in the room. The old, old fashion! The fashion that came in with our first garments, and will last unchanged until our race has run its course, and the wide firmament is rolled up like a scroll. The old, old fashion—Death!

O, thank God, all who see it, for that older fashion yet, of Immortality! And look upon us, Angels of young children, with regards not quite estranged, when the swift river bears us to the ocean!—[Charles Dickens, in "Dombey and Son."

Up from Slavery.

II.

The story of how the little colored boy, Booker T. Washington, conquered every obstacle which confronted him in his never-wavering determination to obtain an education, reads like a romance. While at work in a coal mine he overheard two miners speak of a great school for colored people somewhere in Virginia. It was called the Hampton Normal and Agricultural Institute, at which poor but worthy students could work out all or part of the cost of their board, and at the same time be taught some trade or industry. He resolved at once to go to that school, although he had no idea where it was, how many miles away, or how he was going to reach it. He was fired by the one ambition—to get to Hampton. The thought was with him day and night and never left him, till after long service, patient waiting, and the learning, meanwhile, of many other practical lessons, he presented himself at its gates, which were to him as the gates of Paradise. The story of that intervening time is well worth the reading. A year and a half of it was spent under the strict supervision of a mistress whose teachings were of great value, and who rewarded his fidelity to his trust by furthering his great work later on. "Even to this day," writes the founder of Tuskegee Institute, "I never see bits of paper scattered around a house or street that I do not want to pick them up, a filthy yard that I do not want to clean it, a paling off a fence that I do not want to put it on, an unpainted or unwhitewashed house that I do not want to paint or whitewash it, a button off a coat that I do not want to put it on, or a grease-spot on the floor that I do not want to take it away." And so was learnt the lesson which has passed into the training of many others since—that everything must be done systematically and promptly; nothing must be either slipshod or slovenly, whilst

at the bottom of all must be found absolute honesty and truth.

HOW HE GOT TO HAMPTON.

Tramping part of the way, getting occasional rides in trains, wagons or cars, as his very small resources allowed, and once having to walk the whole night through, outside an hotel which would not admit him on account of his color, Booker at last reaches Richmond, Virginia, 82 miles from Hampton. He had never been in any large city, knew no one, and was without a copper left in purse; moreover, he was so hungry that the sight of the food stands, "with fried chicken and apple pies," was almost unendurable. He walked the streets till after midnight, "tired, hungry, and everything but discouraged," and then, finding a spot where, the sidewalk being elevated, was a nook into which he could creep, the weary traveller, at the extreme of physical exhaustion, snatched some hours of slumber, undiscovered and undisturbed by the tramp of feet overhead. For many nights the undaunted boy, having obtained work in the unloading of a ship, slept under the sidewalk, until he had earned enough to carry him to the promised land. Having been so long without proper food, a bath, or change of clothing, no wonder that there were doubts in the mind of the teacher to whom he presented himself, as to his admission; but at last she gave him his chance. "The recitation room needs sweeping; take the broom and sweep it."

"Never," tells Booker, "did I receive an order with more delight. I knew that I could sweep, for Mrs. Ruffner had thoroughly taught me. I swept that room three times. Then I dusted it four times—all the wood-work, every bench, table and desk; moved every piece of furniture, and cleaned every closet and corner. I had the feeling that, in a large measure, my future depended upon the impression I made upon the teacher in the cleaning of that room. She was a 'Yankee' woman, and knew just where to look for dirt, and her reply was, 'I guess you will do to enter this Institution,' and that made me the happiest creature on earth, for it paved the way for me to get through Hampton."

Working early and late, preparing his studies as best he could, he mounted step by step upwards. Everything was new to him at first; even his very bed was a puzzle to him. The first night he slept under both sheets; the next night on the top of both of them, until, by watching his room-mates, he learnt that he was to sandwich his body between them. Greater problems were unravelled by his growing powers of observation, and difficulties, unsurmountable, as they would have appeared to most people, white or black, melted away before his indomitable will and steadfastness of purpose. From a pupil he became a teacher, supremely happy to use any opportunity which offered to help others as he had been helped himself, with or without fee or reward, until finally, in 1881 there came to him an invitation to his life-work in the form of a telegram, dated Tuskegee, Alabama, from the promoters of a proposed Normal School there: "Booker T. Washington will suit us. Send him at once." H. A. B.

(To be continued.)

Appreciation of the "Quiet Hour."

The following has just been received: Dear Hope—of the Quiet Hour,—You do not know how much your words in the Quiet Hour to-day on "Rest in the Lord" have cheered my heart. Have just been reading it in the quiet of this peaceful beautiful evening. It has been a day full of trouble and heart pain to me, and those beautiful words of Rest seemed to come to me as a special message, and have turned my thoughts away from home cares and worries to the beautiful world above, and my heart finds Rest. Thanking you so much for those as well as other cheering words, for I always love the Quiet Hour,

I am always a WELLWISHER.



Puzzle Competition.

I will give you a few problems this week, but don't send in your answers just yet. You shall have full directions later on. C. D.

I. A farmer had two sons. He gave nineteen cents to one and six cents to the other. What time would that be?

II. An acrostic. Nature's renovator. Hard water. Proper. A numeral. Not far.

My initials when read downwards and my finals read downwards give the name of one of the apostles.

III. A charade. My First is a short and familiar name You give to an islander well-known to fame,

And if you reverse it you mention the place Where sometimes that islander's found in disgrace.

I'm sorry to say that all I have left Is caused by my First when of reason bereft;

In fact, I am told that when out of employment He looks on it quite as natural enjoyment.

I wish I could add that my Whole is a name That all of his countrymen justly could claim.

IV. A riddle. When has a man four hands?

V. A flower wedding.

1. What was the bridegroom's name?
2. The bride's name?
3. At what hour was the wedding?
4. Who was one dark-eyed bridesmaid?
5. One from between the mountains?
6. One precise maiden guest?
7. What sealed the marriage contract?
8. What did the bride wear on her head?
9. What did she wear on her feet?
10. What kind of glove did she wear?
11. What style of collar?
12. What was the color of her eyes?
13. What fop was at the wedding?
14. What bashful guest?
15. What waved over the house?
16. What homely gifts did two country cousins give the bride?
17. What did the bridegroom wear on his coat?
18. What did the bride say to her friends when she went away?
19. What star shone on the newly-married pair?
20. How long will their love endure?

I am a word of 14 letters. Tom and Harry, who were 1, 2, 3, 4, 5, 6, 7, 8 companions 6, 8 school, were 11, 10, 14 day talking together of the glorious 6, 1, 5, 9, 11, 10, 4 of men, both on 4, 14, 6 and land. "For my part," said Harry, "I admire 10, 6, 12, 11, 13, 14, 11, 7, and 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14 more than many others."

"But," said Tom, "1, 6, 7, 10, 11, 8 you admire 10, 14, 13, 4, 2, 3 as much." My whole is a city of Europe.

Sowing and Mowing.

Be careful what you sow, my boy, For seed that's sown will grow, And what you scatter day by day Will bring you joy or woe. For sowing and growing, Then reaping and mowing, Are the surest things that are known And sighing and crying, And sorrow undying, Will never change seed that is sown.

Be watchful of your words, my boy, Be careful of your acts, For words can cut, and deeds bring blood, And wounds are stubborn facts. Whether sleeping or weeping, Or weary watch keeping, The seed that is sown still will grow; The rose brings new roses, The thorn tree discloses Its thorns as an index woe.

Be careful of your friends, my boy, Nor walk and mate with vice; "The boy is father to the man";

Then fly when sins entice! The seed one is sowing Through time will be growing, And each one must gather his own; In joy or in sorrow, To-day or to-morrow, You'll reap what your right hand has sown!

A Small Hero.

We did not know he was a hero, but I think he was, and perhaps after you read this little story you will agree with me.

He was a square-shouldered little boy who lived on our street. His mother was quite troubled because he had such mannish ways before he was fairly out of babyhood. But he was "nobody's baby." He had a pair of blue overalls, such as nice boys on our street wore when they played in the dirt, and when those were on he had a funny way of taking long steps and standing with his feet far apart, as if he were about as tall as his father.

Half a dozen other Tom Thumbs, who also wore overalls and took long steps, chose Charlie for their leader. Instead of calling them Kenneth, and Willie, and Joe, our Charlie used their last names—Knox, Robinson, Clarke, and so on—while they called him MacArthur, or, still better, "Mac." He was happy when he could be "Mac" all day.

These dear little pygmies had a big football which some older brother had worn out, and they "blew it up," and patiently mended it day after day, and kicked it so vigorously that usually the kicker fell backward into the dust, but that was taken as part of the game.

Charlie's mother used to say: "Charlie is a born leader. Oh, if I could only know he would be a good one!" I can tell you, boys, between ourselves, that ever so many mothers are thinking of that very thing.

Well, one day a little chap wandered into our street and began to play with Charlie and his "regiment"—for that is what he called the boys who followed his lead. I do not know what sort of parents or home this bad boy had, but somewhere he had taken lessons in evil, and before he had been with them a half hour, he began to swear, taking the name of the "great" God in vain. Charlie stopped playing and drew a long breath.

"Did you do that a-purpose?" he asked.

"Yes, and I'll do it again," replied the boy from outside, as he did.

"Robinson!" cried Charlie, to his oldest follower.

"Here!" answered Willie, running to Charlie's side, while the rest of the boys followed.

"He swore," said the little captain, standing very straight and pointing to the culprit, "and we don't play with boys that swear, on this street."

"No, we don't; no, no!" they responded.

"What'll we do with Sullivan?"

"You can't do anything. I'll stay here if I'm a mind to," said the boy, kicking dust toward them.

"Not if you swear when the Commandments say not to," answered Charlie.

"No, sir; not if you swear," echoed the others.

"And we don't want you if you've got bad words inside," added the leader.

"I don't care; men say 'em' on the street," said the defiant Sullivan.

"But this regiment don't and you can't play with us 'less you promise never to again."

The boy took up a stone to throw, but as he looked at the six determined little figures he dropped it and turned sulkily away.

"Tell your mother to wash out your mouth with soap-suds," said Willie Robinson.

"And don't you come again till—you's over it," added the captain, as if the dreadful habit were a disease.

They waited until "Sullivan" turned a corner, and then they went on with their play.

But Charlie's mother, who sat beside an open window, could not see to set another stitch until she had wiped the tears from her eyes. But they were not "sorry" tears. MRS. O. W. SCOTT.

Unaware.

(Sent in by F. R., Sydenham, Ont.)

They said—"The Master is coming
To honor the town to-day,
And no one can tell at what house or
home

The Master will choose to stay."
Then I thought while my heart beat
'wildly—

"What if he should come to mine?
How would I strive to entertain
And honor the Guest divine?"

And straight I turned to toiling,
To make my home more neat—
I swept, and polished, and garnished,
And decked it with blossoms sweet.
I was troubled, for fear the Master
Might come ere my task was done,
And I hastened and worked the faster,
And watched the hurrying sun.

But right in the midst of my duties,
A woman came to my door:
She had come to tell me her sorrow,
And my comfort and aid to implore.
And I said—"I cannot listen
Or help you any to-day,
I have greater things to attend to,"
And the pleader went away.

But soon there came another—
A cripple, thin, pale and grey,
And said—"Oh! let me stop and rest
A while in your home, I pray;
I have travelled far, since morning,
I am hungry, and faint and weak,
My heart is full of misery,
And comfort and help I seek."

And I said—"I am grieved and sorry,
But I cannot keep you to-day.
I look for a great and a nobler Guest,"
And the cripple turned away.
And the day wore onward swiftly,
And my task was nearly done,
And a prayer was ever in my heart,
"That the Master to me might come."

And I thought I would spring to meet
Him,
And treat Him with utmost care:
When a little child stood by me
With a face so sweet and fair—
Sweet, but with marks of teardrops,
And his clothes were tattered and old,
A finger was bruised and bleeding,
And his little bare feet were cold.

And I said—"I am sorry for you,
You are sorely in need of care,
But I cannot stop to give it,
You must hasten elsewhere."
And at the words, a shadow
Swept over his blue-veined brow,
"Someone will feed and clothe you,
dear,
But I am too busy now."

At last the day was ended,
And my toll was over and done,
My home was swept and garnished,
And I watched in the dusk, alone,
Watched, but no footfall sounded:
No one paused at my gate:
No one entered my cottage door;
I could only pray, and wait.

I waited 'till night had deepened
And the Master had not come,
"He has entered some other door," I
cried,
"And gladdened some other home."
My labor had been for nothing,
And I bowed my head and wept,
My heart was sore with longing;
Yet, spite of all—I slept.

Then the Master stood before me,
And His face was grave and fair,
"Three times to-day I came to your
door,
And craved your pity and care,
Three times you sent me onward,
Unhelped and un comforted,
And the blessing you might have had was
lost,
And your chance to serve has fled."

"Oh! Lord, dear Lord, forgive me
How could I know 'twas Thee?"
My soul was shamed and bowed
In the depths of humility.
And He said—"The sin is pardoned
But the blessing is lost to thee.
For failing to comfort the least of Mine,
You have failed to comfort Me."



A Royal Guest.

Behold thy King cometh unto thee.—

S. Matt. xxi.: 5.
She . . . saw Jesus standing, and
knew not that it was Jesus.—S. John
xx.: 14.

To-day I must abide at thy house.—

S. Luke xix.: 5.

The Spirit of God lies all about the
spirit of man like a mighty sea, ready
to rush in at the smallest chink in the
walls that shut Him out from His own.
—Geo. MacDonald.A missionary, talking with some lepers
in India about the second coming of
Christ, asked: "Do you think He will
come to-day?" The answer came quick-
ly and earnestly: "We don't know, but
we hope so."Don't we know? He who said to
Zaccheus, "To-day I must abide at thy
house," says to each of us to-day,
"Behold, I stand at the door, and
knock: if any man hear My voice, and
open the door, I will come in to him,"
Unless He is already inside—an honored
Guest—He must, even now, be standing
at the door seeking admittance. He isthe tomb, who saw the Master she loved
standing beside her "and knew not that
it was Jesus."An old wood-cut represents Christ as
the Bridegroom appearing to the Bride—
the Soul. He is holding a mask before
His face, and the Bride shrinks back in
fear because she does not recognize her
Lord. Instead of welcoming Him she is
trying to escape, for the beauty of the
loving face behind the frowning mask is
hidden from her sight. Is it not often
so? Christ appears to us sometimes in
all His wonderful beauty, and our souls
are enthralled by that glorious Vision.
But sometimes He comes in a strange
and terrible disguise. Pain, sorrow,
poverty, death force their way into our
homes, and, instead of meeting them
bravely and looking for the love which
is surely hidden behind the mask, we try
to escape. Some valuable gifts they are
sure to leave behind—unless we fight bit-
terly against God's will in sending such
stern messengers—but we can only find
"joy" in tribulation if we are clear-
sighted enough to recognize the Bride-
groom through His strange disguise. If
we do know Him surely we can be strong
and brave enough to hold out welcoming
hands; even though, like
many another wise
physician and surgeon,
He should offer a bitter
cup of healing medicine,
or cut us to the quick.
Instead of shrinking
away from His touch,
let us try to press near-
er, even though we can
only grow like Him
through fellowship with
His sufferings.

"O shun not thou the
Loving Cup
Nor tremble at its
hue;
There is no bitter in the
bowl
But Jesus drank it
too.
He counts thy tears, and
knows thy pain,
Yea, every woe is
weighed;
And not a cross He lids
thee bear,
But once on Him was
laid."

It is very easy for me
to talk, isn't it? when
my life is all sunshine;
but I dare not hold up
a low ideal, even though
I utterly fail to practice
what I preach.
But it is not only in
dark days that "thy
King cometh unto thee."
In spite of the sorrow
of the world—which we
are apt to think of in a
mass—in spite of the
personal troubles which
force themselves on the
attention, there is a
vast amount of sun-
shine in most lives. And,
if the Light of the
world can lighten the
worst kind of dark-
ness, what a glory He
can shed on our happiest hours, for His
Face is as the sun that shineth in his
strength. What can make our hearts more
glad than welcoming our Guest, talking to
Him, quietly listening to His words,
doing Him willing service? Do we al-
ways know Him when He stands waiting
for a welcome? He may not knock at
the actual door of our house like the
poor woman, the cripple or the little
child in the poem. But someone there
surely is within reach, in ministering to
whom we may minister to our King. If
only we always remembered His presence
in our midst what a pleasure the every-

day routine work of life would become.
Then everything would be "worth while,"
and we should never chafe at the ap-
parent dreary monotony of duty. The
"common task" which has to be done
every day would then be always new and
beautiful. Then we could never fret at
the little interruptions and disappoint-
ments which come straight from His
hand; we could never grow impatient
with other people, because we should see
Him in them, and should know that to
be cross or unkind to them would be to
rebel against Him. If we really felt His
invisible presence in the room harsh or
ill-natured words to or about anyone
could never be uttered, we should never
think of indulging in rude or unseemly
behavior before our Royal Guest, and—
most important of all—we should keep
careful guard over our thoughts, know-
ing that they are naked and open to His
sight.

Living always with people whom we ad-
mire and consciously try to copy is sure
to result in our becoming steadily more
and more like them, and the only way of
becoming changed into the image of
Christ is to gaze on Him day after day,
and to reflect, as a mirror, the shining
brightness of His character. That is the
best kind of preaching, too, for every-
body is attracted by beauty; and those
who continually look at the King in His
beauty grow surely—though, perhaps, al-
most imperceptibly—in the beauty of holiness,
and so attract others nearer to the
Great Source of soul-beauty. Shall I
tell you of a beautiful life that is being
quietly lived in Toronto? A noble
woman is so eager to entertain the King
royally that she goes out washing by
the day. This she does, not to earn
money for her own necessities, but that
she may be rich enough to receive into
her country house 16 poor girls for sev-
eral weeks each summer. This is not a
second-hand illustration, but an actual
fact that I know of myself. She washes
for a friend of mine, who declares that
her presence in the house is "a real
benediction." Of course it is! One
who sacrifices herself in order to enter-
tain the King so loyally is sure to carry
His presence with her everywhere she
goes. People cannot fail to take knowl-
edge of her that she has been with Jesus.
When the Light of the world lights a
candle, and it burns with such a bril-
liant flame as that, it certainly cannot
be hid. A life lived always with the
Greatest must be great, no matter what
"common" work may spoil the white-
ness of the hands.

What an honor it would have been to
hand our Lord His tools, or to work
under His direction in the carpenter shop
of Nazareth! Well, may not every man,
woman and child work with and under
Him on the farm, in the shop, kitchen
or school? And when Christ dwells in
a human soul the fragrance shed by His
presence, who is the Rose of Sharon and
the Lily of the Valley, whose very Name
is an ointment poured forth, will fill the
whole house with sweetness. As some
aromatic earth says in an Eastern fable:
"I was common clay till roses were
planted in me." Perfumes are not only
pleasant to the senses, many of them
have a healthful influence. MacMillan
says that during a visitation of cholera
in London and Paris, none of the people
employed in the perfume manufactories
were attacked by the disease. And he
also states that the essences of some
flowers—such as lavender, mint, thyme,
etc.—in contact with oxygen in sunlight,
exert a very purifying and health-inspir-
ing influence on the air. So is it with
fragrant lives, they unconsciously purify
the moral atmosphere. Scandal cannot
breathe in their presence, and they touch
with healing power diseased souls, wak-
ing fresh aspirations after holiness.

"As some rare perfume in a vase of clay
Pervades it with a fragrance not its
own,
So, when Christ dwelleth in a mortal
soul,
All heaven's own sweetness seems around
it thrown."

HOPE.

Camera Competition.

We wish to call the attention of our
Home Department readers to our
"Camera Competition," which is now in
progress. If you have a camera, this is
the time to use it. For further particu-
lars, see page 924 of this issue.



The Light of the World.

By Holman Hunt.

your King, and has a right to the best
room in your house, the highest throne
in your heart. The beautiful verses
given above, which were sent in by one
of our readers, show how often He is
refused admittance, even by those who
think He is the One they must delight to
honor. If we live in the future, dream-
ing of the great things we should like to
do if only we had plenty of time and
money, of course we can never catch up
to our opportunities. He is here to-
day; we have right in our hands the
opportunity of ministering to our Royal
Guest. Don't let us be like Mary at

the tomb, who saw the Master she loved
standing beside her "and knew not that
it was Jesus."

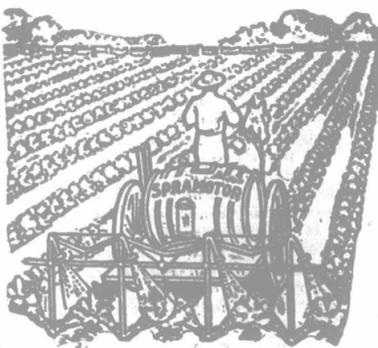
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"ROSENDALE, Wis., March 8, 1905.
"I am pleased to be able to say to you that I have used the United States Cream Separator for more than ten years. I used the first one for several years, and later exchanged it for a larger one of the latest styles. I am satisfied that the U. S. Separator is the best separator for farm purposes, and that its wearing qualities are of the best, and cheerfully recommend the U. S. Cream Separator to anyone intending to purchase a Separator for its durability, simplicity and construction. It is a clean skimmer and easily cared for. We have used our separator twice a day and skimmed the milk from 30 cows, and it never failed to do the work which it was required to do. To all appearances it will last a good many years to come."
"F. H. SCRIBNER."

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402A ADDRESS ALL LETTERS TO BELLOWS FALLS, VT.

Special Notice to Our Readers.

When writing any advertiser in this issue kindly state plainly that you saw Ad. in the **FARMER'S ADVOCATE AND HOME MAGAZINE.**

In answering any advertisement on this page, kindly mention the **FARMER'S ADVOCATE.**



The Play Impulse.

Summer is here with its charm—and its work. Yes, the work is not lacking; what with the gardening on land, and the haying, berry-picking and harvesting looming up in the near future, it hardly seems as though there will be breathing time until the long days have gone and the nights begin to lengthen into the dull November. But if there is work, there is also compensation, if we but take time to recognize it. Have you ever thought of this while driving along on a bright June morning? Perhaps your way ever and anon takes you past a woods with its deep, cool shadows, and the sun striking the leaves above into green-gold. You peer into the depths and see little clumps of ferns and all the tender green things of the wood standing up as though rejoicing in life and the summertime. What a fresh smell everywhere! What a bracing tonic in the air, going to the blood! What cleanliness of the atmosphere, in which not even a dust-mote floats! What a gurgle of music everywhere—peewees, warblers, thrushes,—they are all at it; the bobolink, too, pouring forth his heart in the meadow yonder. Perhaps, if you are very fortunate and live in the right district, you may chance to hear the flute call of the white-throated sparrow. "I love dear Canada, Canada, Canada," reiterated over and over from the depths of the swamp, though you are not likely to see the little songster, for he is very shy. He wears the plainest of brown coats, but he has a song to be waited for in the intervals.

But what rambling on is this! What I really set out to say was that, if we are wise, we will crowd as much pleasure as possible into our short glorious summer. Of course, there is work to be done and money to be made, but there are also rich memories to be stored away, and humdrum levels of life to be brightened. One should not neglect one's work; neither should neglect the demands of one's nature, one of which is the "play impulse," which has been implanted in each one of us, and which, if we are good, wholesome, whole-hearted, normal people, is likely to last right on into old age. Human nature when uninterfered with, calls for pleasure just as it does for any other necessary side-line of life, and if we have no such craving in us we may be sure that we have permitted it to become stifled by overwork, or avarice, or carelessness. Possibly we have "got out of the way of going out," and imagine it is more bother than it is worth; but probably if we just take the trouble of "fixing up" a little and going across the fields to a neighbor's, or to a picnic maybe, or for a little drive, we shall be surprised at our capacity for enjoyment, and pleased at the renewed brightness and energy with which we shall return to our other duties. At all events, it may be wise for us to observe that it never pays to become fossilized.

Above all, do the young need wholesome pleasure. In them, the play impulse is strong. As soon almost as the babe can stretch out his tiny arms, he begins to "play with" things, and this activity, just for the sake of amusement, if allowed its natural course, is likely to continue for the next twenty or twenty-five years, through the stages of tag, and baseball, and football, and all the rest of it. Nor is the time so spent wasted. By this "play," muscles are hardened, shoulders straightened, eyes brightened, blood purified, and brains cleared for the urgent work that must come to them. Some even go further than this, and declare, as Charles Wagner has in his "Simple Life," that morality itself depends upon this gratification of simple pleasures. Among sad sights is that of young boys and girls worked into old men and women before their time, slaving away from morning till night, then dropping into bed too wearied to care for being young. Young people should certainly be taught to work, and expected to work, were it only

for the discipline, but they should also be given a little time for pleasure. Football and such strenuous games, perhaps, they will neither require nor care for, but be sure the odd half day given to a fishing excursion or picnic party will not be wasted. It will be abundantly paid for in grateful memories of the old home, and sturdy appreciation of the parents who have not forgotten what it means to be young.

In the towns, the play impulse is beginning to be fully realized. Few of the town-folk who do not lay out accounts for getting some of the best of the summer; whether it be boating, or golf, or the riding club, or the delights of a cottage in Muskoka, by the ocean, or among the islands of Iona and beautiful Temagami, the summer must bring its outings. To the country, no less than the city folk, do the green woods and pleasant paths call. Old and young, if they are wise, will take advantage of the invitation, and, in their own way, whether in making long trips or little ones about home, whether in pleasant social gatherings with friends, or in simply taking time to drink in the beauties of lane and wood and hillside, and all the interest of the little birds and animals which fit among the greenery, will make some attempt at least to accept a few of the good things held in store by the summer of 1905.

DAME DURDEN.

"Farmer's Advocate" office, London, Ont.

Cooking a Husband.

Dear Dame Durden,—I have often thought of entering your "Ingle Nook" for a chat, but have been just selfish enough to enjoy the chats of others without trying to help along. I look forward every week with much interest to the contributions. In one of the issues I noticed that "May View" has asked for a recipe to cure husbands of lounging about the house on Sundays instead of taking their wives to church. I have a recipe that perhaps might serve. She might try it.

"In selecting your husband, you should not be guided by the silvery appearance as in buying mackerel, or by the golden tint, as if you wanted salmon. Be sure to select him yourself, as tastes differ. Don't go shopping for him, as the best are always brought to your door. When bought, tie him in the saucepan with a strong cord called Comfort, as the kind called Duty is apt to be weak. Husbands sometimes fly out of the saucepan and become burned and rusty on the edges, since, like lobsters and oysters, you have to cook them alive. Make a clear, strong, steady fire out of Love, Neatness and Cheerfulness. Set him as near this as seems to agree with him. If he sputters and fizzes, don't be anxious. Some husbands do this until they are quite done. Add a little sugar in the form of Kisses, but no vinegar or pepper. A little spice improves husbands, but it must be used with judgment. Don't stick any sharp instrument into him to see if he is becoming tender. Stir him gently, watching the while lest he should lie too close to the saucepan and so become tasteless. You cannot fail to know when he is done. If thus treated, you will find him very digestible, agreeing nicely with you and the children."

MOUNTAIN VIEW.

Prince Edward Co., Ont.

"Where is the captain, Miss Bruce?" asked a gentleman passenger to a young lady.

"He went to see—"

"Of course he did, a captain always goes to see," he interjected.

"Well, I mean he skipped ashore—"

"Oh, no, a skipper generally skips to sea."

"I mean the captain ran ashore to see—"

He laughed and she sailed away.



CHATHAM Incubators

can be depended upon. If the eggs that go into them are fertile they will hatch surely as the sun rises. Simplicity of working parts makes the Chatham so easy of operation that the women folks and children can run it as well as anybody. There is no danger of overheating. The regulator is so perfect that it can't "go wrong." No sad experience with roasted chicks if you use a Chatham. There's good money in poultry if you get started right. Buy the time-tried and well-known Chatham and be sure of results. We are so sure of results that we give you two years to pay for the incubator. No Cash until November, 1905. Our superb **FREE BOOK** entitled "How to make Money out of Chicks," gives you the whole story of successful poultry raising by incubators. Send for it.

The Manson Campbell Co., Limited
Dept. 1 Chatham, Ontario.

"MUSICAL"

The tone of the
POPULAR

Sherlock-Manning ORGANS

is pronounced by experts
to be perfect.

Characteristically
Sweet yet Powerful

A rare combination,
backed up by

Durability

It will be a pleasure to
send you a descriptive
Catalogue.

The Sherlock-Manning
Organ Co.,
London, - - Canada.

SUPERFLUOUS HAIR



We can't send you anything to use at home to permanently destroy this disfigurement. There is positively nothing that will eradicate it forever but Electrolysis. Satisfaction guaranteed. A practically painless treatment, recommended by all up-to-date physicians. If afflicted, let the hair grow, and come to us for treatment. Get our book; it describes everything.

WE CURE ECZEMA and all skin troubles
GRAHAM DERMATOLOGICAL INSTITUTE,
Dept. F, 502 Church St., Toronto.

Portrait of the Late Bishop Baldwin

11 x 15, on heavy plate paper, suitable for framing, together with memoir, the funeral service and sermon on the occasion; price for the two, 25c.; 5 sets, one address, \$1.00; cash with order.

The London Printing & Lithographing Co.,
LONDON, ONTARIO.

WARREN'S RUBBER COMPLEXION BRUSH for the face, neck and arms. No woman who owns one of these wonderful brushes need have any further fear of wrinkles or blackheads. Mailed for 50c. in stamps. Card for order and free catalogue of everything. THE COSMETIC SPECIALTY CO., London, Ont.

IF YOU'D LIKE EVERY WOMAN to write for our NEW Suits and Samples, call at 30-312 Suits in the Union and Institute. Suits up to \$10.00. Shirts, waist suits in lawns, etc. \$7.50 up. Manager SOUTHCOTT SUIT CO., London, Ont.



Narcissi Withering Off.

Dear Flora Fernleaf,—Your articles in the "Farmer's Advocate" have been so helpful that I am turning to you to solve some of my difficulties.

Would you please tell us in your department of the "Farmer's Advocate" (1) why so many Narcissi buds form and then do not mature, but wither before bursting the sheath? I have thought it is because they need to be separated again, or else to be planted deeper. If that is the case: (2) How deep should they be planted? (3) How far apart, and how many bulbs should be in a group? (4) How often should they be separated? (5) What length of time should elapse between lifting and replanting, and how should they be kept during that time?

The bulbs which I have are Grape-Hyacinths, Narcissus, Daffodils, Crocuses, Lily-of-the-Valley and Tulips. I know that though they receive the same treatment, it varies; but I do not know to what extent. I have also some Parrot Tulip bulbs. Are they more delicate than the more common varieties? I notice they do not multiply nearly so quickly.

Novral, Ont.

Ans.—This tendency to wither off has been a source of disappointment to many ardent Narcissus lovers. It has usually been attributed to hot, drying winds and lack of moisture, yet we have known Narcissi to fail to mature even in rainy season when there was but little sunshine. We have also known them to act provokingly in gardens under the best of care, while at the same time in a graveyard, not far away, on a neglected grave, and, apparently, under most adverse conditions, dozens of the white blossoms were waving in the wind with all the lustiness in the world. Possibly the explanation of the difference lay in the fact that the Narcissus, like many other bulbous plants, resents too much interference. We cannot tell you positively what will prevent the blight, but the following method of culture may rid you of the trouble: Plant the bulbs in September in good turfy loam, in a permanent border where it will not be necessary to disturb them until the bulbs become crowded; once, perhaps, in every four or more years. If necessary to add manure to the soil, let it be so old as to be quite mucky; otherwise manure should never touch the bulbs, nor should it ever be applied in liquid form. Put the bulbs in about seven inches deep and eight to twelve inches apart, and remember to divide them just as soon as they become crowded, as if this is not done they will cease to bloom. When the surface of the ground becomes frozen on the approach of winter, cover the border with straw manure to a depth of five or six inches, raking it off again as early as possible in spring. Narcissi should never be planted in a hot, exposed situation, nor in one in which the drainage is not good. If there are not plenty of spring rains, they should be watered very frequently.

To question 5, would say that Narcissus bulbs should not be taken up at all, except for thinning purposes, or when one wishes to move them to a new place. In such cases they should not be kept out of the ground any longer than necessary. A little moist sphagnum moss will keep them fresh until one can replant them again, if not convenient to do it at once. Have not space to-day to treat of hyacinths, etc., but shall try to do so at some future time. As to the Parrot tulips: Yes, they are more delicate than the ordinary kinds, but they are very beautiful.

RE ENGLISH IVY.

A correspondent writes us that she has seen English Ivy growing out of doors near Sarina, Ont. Sarina is, of course, in Southwestern Ontario, one of the mildest portions of the Dominion. We have still to learn that it has been successfully grown out of doors in the more rigorous portions of Ontario, Quebec, or the Northwest, but shall be glad to hear

if any of our correspondents have managed to have it do so.

A FEW SEASONABLE HINTS.

Begin now to root slips and start young plants for your winter window garden.

An occasional sprinkling of ashes about the roots of Sweet Peas will help them. Remember that Sweet Peas, Dahlias, Red-hot Poker Plant and Lilies, in particular, require plenty of water. Soak them right down to the roots whenever the soil becomes dry.

Give annuals plenty of shallow cultivation with a hoe, taking care, of course, not to cut their roots. They will repay you for your trouble.

Shrubs, according to a good authority, should be pruned soon after the flowers are off. Remove only the sprouts which have flowered and any decayed wood or straggling shoots. This will induce a good growth of new wood during the summer, and prepare a copious supply of blossoms next year.

This is the time for resting plants intended for winter blooming. Turn the Calla over on its side somewhere, and give it no water whatever until September. Most other plants require a little occasionally to keep them from dying outright. Don't be alarmed if the leaves drop off; that is what they should do when plants are resting.

The Light of the World.

Many of our readers who cannot find it possible to see Holman Hunt's famous picture, "The Light of the World," while it is on exhibition in the various cities of Canada, will be interested in seeing the copy of it which appears on our Quiet Hour page to-day. Fifty years ago, the man who painted it became seized with the desire to throw upon canvas a symbolical illustration of the great message of the Gospel, the love of God to man as manifested in His Son Jesus. Accordingly he painted his first "Light of the World," a comparatively small picture, which was placed in the chapel of Keble College, Oxford, and which has received the enthusiastic approbation of Ruskin and other artists and art critics. During the next half century, the idea remained persistently with Mr. Hunt, gaining in force and expansiveness as the time went on. He saw faults in his picture and resolved to paint a copy of it, with the defects eliminated. At almost eighty years of age he set to work again, and the result was the present picture, double the size of the original, a picture so strong, so simple, so touching, that, as has been said, "even the chattering" who come to criticize "advance their impertinences in an undertone." The picture was bought by the Hon. Charles Booth, who became so impressed with it that he resolved to have it shown in all of the British colonies, then placed permanently, as a gift to the British people, in the National Art Gallery in London. To this decision is due its present tour through Canada.

"The Light of the World" ranks as one of the greatest religious pictures of all time. The weed-grown garden, the door overgrown with vines, and latchless, signifying that it must be opened from within, tells its own story; while in the attitude and expression of the Christ, the most careless must perceive the infinite patience and persistent love of the Saviour of mankind. As Prof. Archibald MacMechan has said, in the Presbyterian: "You forget as you gaze that this is an affair of canvas and light and purchasable pigments cunningly disposed. You seem visibly in the presence of the majesty of divine love and suffering and mercy. 'Art thou a king then?' Thou sayest that I am a king.' And He will yet rule all kindreds, and tongues, and nations, and peoples."

A song of the farm in the summer-time,
Of sowing and seeds' increase;
And let it with hope and happiness ring,
And carol of birds and sweet odors bring.

And labor and health and peace.

THE LEAVENWORTH CASE.

By A. K. Green.

CHAPTER XXXII.—Continued.

Nestling close to me, she gave herself up for one wild moment to a genuine burst of tears.

I looked at her in uncontrollable emotion. "Oh, Mary," said I, "have I only succeeded, then, in making you miserable?"

"If I had not been taught to love money so!" she said at length. "Oh, oh! they talk repentance and a change of heart! If some one or something would only change mine! But there is no hope of my ever being anything else than a selfish, wilful, mercenary girl!"

That same night she made a discovery which increased her apprehension almost to terror. This was nothing less than the fact that Eleanore had been keeping a diary of the last few weeks. "Oh," she cried, in relating this to me the next day, "what security shall I ever feel as long as this diary of hers remains. And she will not consent to destroy it, though I have done my best to show her that it is a betrayal of the trust I reposed in her. She says that it is all there to show her reasons for doing as she has, and that without it she would lack means of defence, if uncle should ever accuse her of treachery to him."

I endeavored to calm her by saying that if Eleanore was without malice, such fears were groundless. But she would not be comforted, so I suggested that she should ask Eleanore to deliver it to me until she should feel the necessity of using it. The idea struck Mary favorably. "Oh, yes," cried she, "and I will put my certificate with it and so get rid of all my care at once!" And before the afternoon was over, she had seen Eleanore and made her request.

It was acceded to with this proviso, that I was neither to destroy nor give up all or any of the papers except upon their united demand. A small tin box was accordingly procured, into which were put all the proof of Mary's marriage then existing, viz., the certificate, Mr. Clavering's letters, and such leaves from Eleanore's diary as referred to this matter. It was then handed over to me, and I stowed it away in a closet upstairs, where it has lain undisturbed till last night.

Here Mrs. Belden paused, with a look in which anxiety and entreaty were curiously blended. "I don't know what you will say," she began, "but led away by my fears, I took that box out of its hiding-place last evening, and, notwithstanding your advice, carried it from the house, and it is now—"

"In my possession," said I, quietly. "Impossible!" she exclaimed. "I left it last night in the old barn that was burned down. I—you cannot have it, unless—"

"Unless I found and brought it away before the barn was destroyed," I suggested.

Her face flushed deeper. "Then you followed me?"

"Yes," said I. Then as I felt my own countenance redden, hastened to add: "But never mind all this now. The box is safe, and I am anxious to hear the rest of your story."

This seemed to compose her, and after a minute she continued: "On the eve of the day before she left, Mary came to my house to bid me good-bye. She had a present in her hand, the value of which I will not state, as I did not take it. But she said something that night that I have never been able to forget. It was this: I had been speaking of my hope that before two months had elapsed she would so win upon Mr. Leavenworth that she would be able to send for Mr. Clavering, when she suddenly interrupted me by saying:

"Uncle will never be won upon as you call it while he lives. If I was convinced of it before, I am sure of it now. Nothing but his death will ever make it possible for me to send for Mr. Clavering."

"But," said I, "your uncle is little past the prime of life, and appears to be in robust health; it will be years of waiting, Mary."

(To be continued.)

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

GOSSIP.

Mr. A. W. Smith, Maple Lodge, Ont., writes: "I recently sold a very nice, thick, red, Shorthorn bull to Mr. Jas. Skelley, Powassan, Ont. The young bull was sired by Sir Wilfred (imp.), and is very short legged and deep bodied. His dam is a grand milker. This is the second time Mr. Skelley has bought a bull from me, and he is well pleased with his purchases. Another handsome roan son of Sir Wilfred went to J. J. Washington, Auburn, Ont., for a syndicate of progressive farmers in that district. He is from the Fair Queen family, has lots of size, and excellent quality of flesh. Mr. D. W. Johnston, of Peterboro, got a good red son of Imp. Knuckle Duster, his dam being a daughter of the first-prize cow in the Dairy Test at Guelph a few years ago, and herself a prizewinner at same show."

Arrangements for the big live-stock show, to be held in connection with the Lewis and Clark Exposition at Portland, Oregon, are already being made by M. D. Wisdom, superintendent of the live-stock section. The exhibition of horses and mules will be held from August 28th to September 8th, and the cattle show, including the exhibits of sheep, swine and goats, will begin September 19th and close September 29th.

By the prize-list issued, it is shown that for horses in the Thoroughbred class there are five prizes given, ranging from \$35 down to \$5. Champion stallions and mares, \$40 and \$25. For German coach horses, special prizes are offered, ranging from \$100 down to \$25; Clydesdales, \$100 and \$50; Percherons, \$150 to \$20.

For the cattle classes, prizes ranging from \$50 down to \$5 are given for bulls, cows and heifers; \$50 and \$35 for champion bulls and cows; \$75 to \$10 for aged herds, and \$100 to \$20 for breeders' young herds. Special prizes are offered by the various breeders' associations, ranging from \$30 to \$5 on the different classes of bulls, cows and heifers.

Sheep and goat division prizes range from \$25 down to \$3, and in the swine division from \$25 to \$2, with specials of \$30 down to \$5.

The Clydesdales, Shorthorns and Cotswolds of Clayfield Stock Farm, property of Mr. J. C. Ross, of Jarvis, Ont., are very well known to most lovers of good stock in Canada and to many breeders in the U. S. Among the Clydesdale brood mares are Clayfield Lass 2524 and Bonnie Lass 2523, full sisters, sired by Lord Fife (imp.) [1436] 6962, dam Imp. Lady Kerr 2515. This pair have bred some excellent stock for Mr. Ross, among which are a two-year-old filly and a yearling colt from Clayfield Lass and by Alexander's Heir (imp.). Blossom 6173, rising three years, by Alexander's Heir (imp.), dam Bonnie Lass 2523, is a very promising mare, as is the two-year-old filly, Jessie Clayfield 6174. A four-year-old is by Sir Richard (imp.) [2548] 9818, dam Clayfield Lass. She also has a fine filly foal, by Alexander's Heir (imp.). The last named sire is considered by many to be the best sire of big, good ones that has ever struck that district; indeed, his worth as a sire is almost decided when such a good judge as Mr. Ross continues to use him year after year. He has certainly left some royal good ones at Clayfield. The Shorthorns receive no special care, although imported sires are generally used in the herd, thereby keeping the breeding of this herd on the advance. Cotswolds are next in order of attention to the Clydesdales. Mr. Ross is one of the oldest if not the oldest importer and breeder of Cotswolds in Canada that is still in the business. His flock consists of about 120 head that include several St. Louis World's Fair and Chicago International winners, as well as winners at leading Canadian shows, in competition with the best from England as well as America. About 25 ram lambs and about the same number of ewe lambs as well as a few yearling rams and ewes are for sale, mostly sired by Standard, the imported ram bred by Russell Swanwick, that won first in his class at St. Louis World's Fair. This lot of lambs proclaims Standard a No. 1 sire as well as a show ram. Parties wanting good stock in his line will do well to make their wants known to Mr. Ross, whose ad. appears in this paper.

Farm Machines for You

There are a hundred reasons—big and little—why the **International Line of Farm Implements and Machines**

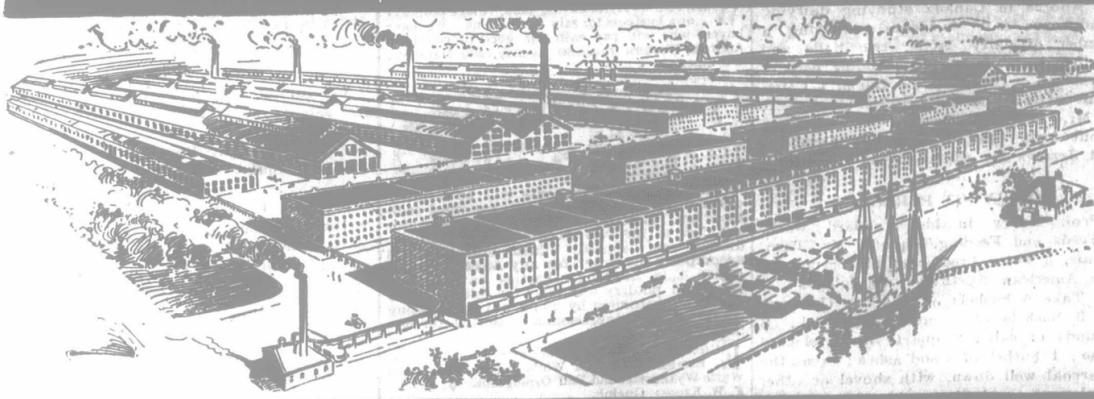
are the **machines for you**, but in its final analysis, the question of most importance to you as a careful buyer is:

Will they give you better service, longer use and greater satisfaction than similar machines of other makes?

That means dollars and cents—profit or loss—to you.

We say that the superior facilities of the International company—superior facilities for securing the world's best materials—superior facilities for manufacturing—enable the company to produce a line of implements and machines that, for general excellence, in every respect, in all that goes to make satisfaction for the buyer, is not equalled in the world.

It is a line built on the experience of a lifetime and backed by a world-wide reputation.



It is a line that gives you satisfactory service day by day and year after year, because it is built right for long life and durability. If you will call on any International dealer, he will be glad to show you the line he carries, and let you **see for yourself** its superior merits

It Will Pay You To Investigate.

The International lines are represented by different dealers. See them for Catalogues of

McCormick and Deering

Binders, Reapers, Mowers, Rakes, Tedders, Corn Binders, Huskers and Shredders, Gasoline Engines, Knife Grinders, Disc Harrows, Smoothing Harrows, Lever Harrows, Spring Tooth Harrows, Hoe Drills, Disc Drills, Cultivator and Seeder, Broadcast Seeder, Scufflers, Binder Twine. Also selling agents for Chatham and Petrolia Wagons.

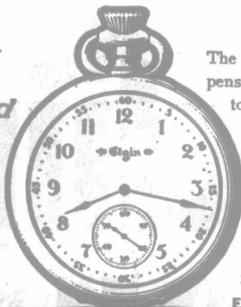
WORKS OF

International Harvester Co. of Canada, (Limited)

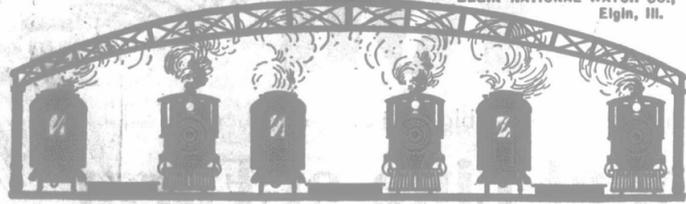
—AT—
Hamilton, Ontario.

In answering the advertisement on this page, kindly mention the *FARMER'S ADVOCATE*.

*Trains
arrive and
leave by*
ELGIN
TIME



The Elgin Watch is as indispensable to the traveler as it is to the great railroad systems. Every Elgin Watch is fully guaranteed. All jewelers have Elgin Watches. "Timemakers and Timekeepers," an illustrated history of the watch, sent free upon request to
ELGIN NATIONAL WATCH CO.,
Elgin, Ill.

**GOSSIP.**

At a sale of Belgian draft horses last week at Quebec, ten animals averaged \$767. Best price was \$1,450 for a stallion, bought by the Kamouraska Agricultural Society. Two mares brought \$1,200 each.

A great auction sale of Holstein-Friesian cattle was that held at Syracuse, N. Y., June 8th and 9th, when 140 head of all ages, contributed by a number of breeders, brought an average of \$180 each. The five-year-old cow, Pontias Netherland De Kol, sold for \$1,000 to H. S. Gordon, Kerhonkson, N. Y. Creamelle 2nd's Princess, nine years old, brought \$600; seven others brought \$400 to \$450 each, and 28 head sold for \$250 and upwards.

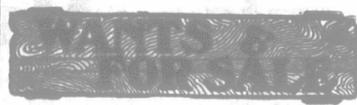
Mr. J. G. Clark, of Woodroffe Stock Farm, near Ottawa, last week sold to Mr. M. K. Koyu, a Japanese dairy farmer, who is in Canada studying dairying conditions and incidentally buying a number of dairy cattle, two bulls and ten females from his prizewinning herd of Ayrshires. These will be the first Canadian cattle to be shipped to Japan. It is Mr. Koyu's intention to purchase about forty head of Canadian Ayrshires and Jerseys for shipment to Japan.

CONDIMENT FOR HOGS.

Prof. Henry in his standard work, "Feeds and Feeding," quotes Mr. Theo. Louis, a swine breeder of high repute in the American Northwest, as follows: "Take 6 bushels of this cob charcoal, or 8 bushels of common charcoal; 8 pounds of salt; 2 quarts of air-slacked lime; 1 bushel of wood ashes; break the charcoal well down, with shovel or other implement, and thoroughly mix. Then take 1 1/2 pounds of sulphate of iron and dissolve in hot water, and with an ordinary watering pot sprinkle over the whole mass, and then again mix thoroughly. Put this mixture into self-feeding boxes or place where hogs of all ages can eat at pleasure."

SUCCESSFUL SHORTHORN SALES.

Some very successful auction sales of Shorthorn cattle have recently taken place in the U. S. At the sale of the show and breeding herd of C. D. Bellows, Maryville, Missouri, on June 14th, fifty-five head sold for an average of \$418 each. Hampton's Model, the splendid two-year-old Phyllis bull, sired by Hampton's Best, by Merry Hampton (Imp.), brought the magnificent price of \$3,910, being purchased together with several females, at \$1,000 to \$1,500, for export to Argentina. It is said that \$4,000 was later offered for the bull, but refused. The great feature of this sale was the encouraging one that the high prices were more the result of individual merit than of pedigree, many of the best being of good old-fashioned families. At the sale of the herd of M. E. Jones, Williamsville, Illinois, on June 8th, 38 head sold for an average of \$298, the 13 bulls averaging \$346; the highest price being \$750, for a yearling son of Imp. Lord Banff, whose progeny was in great demand. One cow sold for \$705, and another for \$675.



Advertisements will be inserted under this heading, such as Farm Properties, Help and situations Wanted, and miscellaneous advertising.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

CIDER PRESS—The undersigned offers for sale a double-acting press, shelling, pulleys and grinder, in good order. Will accept reasonable offer. Apply to Nelson Schatz, box 480, New Hamburg, Ont.

FOR SALE—503 acres rich black loam in the celebrated Pincher Creek district, Southern Alberta. Price, \$12 per acre. Four miles from C. P. R. Apply E. Blaquier, box 683, Brandon, Man.

FARM to rent on shares, 35 acres. Fields of grass, orchard, pasture. Apply to D. Dill, Windsor, N. S.

GINSENG—Canadian roots best. Write E. Beattie, Highgate.

WANTED—Parties having land, village property or a business for sale to write us. We have buyers who will pay cash for good propositions. Address, Western Business Agency, 505 Main St., Winnipeg.



Condensed advertisements will be inserted under this heading at two cents per word each insertion. Each initial counts for one word, and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good quality poultry and eggs for sale will find many of customers by using our advertising columns. No advertisement inserted for less than 50 cents.

EGGS for hatching from prizewinning stock. Barred and Silver White Rocks, Silver and White Wyandottes and Buff Orpingtons. \$1 per 15. F. W. Krouse, Guelph.

PURE-BRED Barred Rocks—Eggs, \$1 setting; 50, \$2.50; per 100 \$1. Safe delivery guaranteed. Miss Emily Spilbury, Colborne, Ont.

Barred Plymouth Rocks—Eggs from pen No. 1 of E. B. Thompson's pullets, \$1.50, and from No. 2, headed by cock whose sire was winner at New York, at \$1 per setting. These are from good laying strain. O. & J. GARRUTHERS, Cobourg, Ont.

THORNCLIFFE STOCK FARM**CLYDESDALES**

ROBERT DAVIES

Has two-year-olds, three-year-olds and aged mares for sale, in foal to "Right Forward," imp. Please write for prices. City address:

36 Toronto St. TORONTO, ONT.

Bickerdike & Co., Montreal, report the following export shipments of live stock from that port in the week ending June 11th, 1905: Cattle, 3,377; sheep, 540.

The third annual Open-air Horse Parade and Show is to be held in the Queen's Park, Toronto, on Saturday morning, July 1st, 1905, commencing at 9 a. m. sharp. This is an open-air event free to all, and it is earnestly hoped by the officers of this society that all pony owners will make entries in the different pony classes, and assist in every way to make the parade and show the success it deserves.

QUESTIONS AND ANSWERS.
Miscellaneous.**A DRAINAGE MATTER.**

A Reader, Harrow, Ont.: We could not usefully advise upon this matter without knowing very much more of the facts of the case than we are able to gather from the statement of same submitted. A solicitor should be employed in the regular way to get the whole matter straightened out.

TO PREVENT COW SUCKING HERSELF.

J. G. W. writes: "The contrivance we use to prevent a cow sucking herself is this: Take a common headpiece of a halter and put on head of cow, then put a rather wide strap around cow just back of the front legs, don't buckle tight enough to make cow's back sore. Then take a small, tough stick, about 2 1/2 feet long, put a ring in both ends, fasten one to halter, pass stick between front legs and fasten to surcingle. The cow has perfect ease, but cannot turn her head to her udder."

HAY CAPS.

Are hay caps a success or not? If they are, where could they be got, and what is the price? R. M. L.

Ans.—We are of the opinion that hay caps do not grow in favor, as we have heard nothing of them of late, and do not see them advertised for sale, nor do we know where they are made, or the price. If the weather continues as catchy as in the last few weeks hay caps may serve a good purpose. A well-known American agricultural writer advises the use of caps made of heavy cotton cloth six feet square, putting hay up in large high cocks, say 150 to 200 lbs. in each. String with a loop should be tied to corners of caps, and pins made of strips of shingles 1 1/2 inches wide used to stick through loops into bottom of cocks to hold caps down tightly. Another writer says they may be cheaply made of a square of cotton 40 inches wide, well oiled, and a stone tied to corners, or pegs used to stick into bottom of cock through the corners, to keep them in place.

GOSSIP.

Mr. Robert Davies, Toronto, advertises for sale Clydesdale two-year-old, three-year-old and aged mares in foal to imported sire, Right Forward (12310), by Prince Thomas.

Hon. W. C. Edwards, Rockland, Ont., writes: Please claim Wednesday, January 10th, 1906, for our second annual sale of Shorthorns.

The English Thoroughbred stallion, Cylene, sire of Cicero, Lord Rosebery's Derby winner of 1905, has recently been sold for 30,000 guineas (\$157,500). Cicero has won ten races worth \$40,000.

Messrs. W. G. Pettit & Sons, Freeman, Ont., write us that they have sold the imported bull, Scotland's Pride, to Mr. Geo. Laughlin, Caledon, Ont.; to Mr. John Miller, Brougham, Ont., 37 yearling Shropshire ewes and 9 yearling rams. "We are now offering an imported Princess Royal bull, Prime Favorite. He was got by the great sire, Bapton Favorite, a cut of whom appeared in the 'Farmer's Advocate,' June 15th. He was five year old when he sold for the long price of \$6,300. Prime Favorite was calved March 23rd, 1902, and is just in his prime, is now in good show form, well covered all over and good Shorthorn type and character. He has proved himself to be an extra good stock bull, and is very sure and active. We are also offering an extra good lot of young stock, which will be a favorable opportunity for parties wishing to strengthen their show herds." See advertisement in another column.

Recipes.

Eagle Cake: One cup sugar, 1 1/2 cup butter, 1 cup sour milk, 1 teaspoonful cinnamon, 1/2 teaspoonful cloves, 1/2 nutmeg, 1 teaspoonful soda, 1 cup chopped raisins, 2 cups "Five Roses" flour.
Corn Cake: One large cup corn meal, 1 small cup "Five Roses" flour, 1/2 cup sugar, 2 eggs, 2 teaspoonfuls baking powder, 3 tablespoonfuls butter, pinch of salt, milk to make a thin batter. Bake in a well-greased pan.



RUTH SELF FEEDERS for threshing machines not only cut the bands and carry the grain to the cylinder, but help the cylinder to do better threshing and the separating parts to do better separation.

RUTH FEEDERS deliver the grain to the threshing cylinder in a thin regular sheet, preventing "slugging" the cylinder and "bunching" in the separator, two of the most usual causes of grain wasting.

RUTH SELF FEEDERS save the expense of cutting bands and feeding by hand, and they do the work better as well as cheaper.

RUTH SELF FEEDERS are entirely rotary and perfectly balanced in action, without crank shafts and oscillating parts, hence do not shake themselves and the separator to pieces.

RUTH SELF FEEDERS have grain-tight bundle carriers, allowing no leakage to clean up after the job is done.

RUTH SELF FEEDERS have perfect acting "start and stop" governors.

RUTH SELF FEEDERS are shorter and more compact than others. They admit of threshing in narrow barns without pitching the grain outside.

RUTH SELF FEEDERS carry most of their weight directly over the front axle of the thresher. They are built heavy enough to be strong and durable. No part is slighted in weight to cheapen the cost of construction. They need no under-braces nor over-stays in attaching. Two bolts only fasten them firmly and permanently to the thresher.

RUTH SELF FEEDERS run light, last long, work perfectly, cause the thresher to work better, are easily attachable to all threshers, and they have not a single experimental feature about them.

All thresher manufacturers can supply and attach RUTH SELF FEEDERS.

RUTH SELF FEEDERS and repairs are kept in stock at London, Ont.

Six years of unqualified success in every trying kind and condition of grain have firmly established the reputation of the RUTH SELF FEEDER.

PARSONS BAND CUTTER & SELF FEEDER CO.

LONDON, ONTARIO.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

The Successful Dairyman



4 Sizes.
National style B.
National style No. 1.
National style No. 1A.
National style No. 5.

Is the one who is the happy possessor of
**The NATIONAL
CREAM
SEPARATOR**

WHY?

Because it makes money.

HOW?

- By saving cream.
- By saving time.
- By saving strength.
- By saving repairs.

The RAYMOND MFG. COMPANY OF GUELPH, Limited
GUELPH, ONTARIO.



LASTS A LIFE TIME

Applicable to Dwelling Houses, Stores, Factories, Warehouses—in fact, every kind of building. There is no limit to its use as an outside covering.

It very materially enhances the appearance of any structure at the minimum of cost.

Greater protection is afforded against the ravages of fire, hence less money need be squandered in fire risk premiums.

The Classic Kids will gladly furnish details.

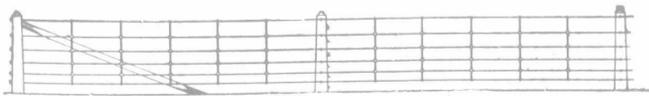
GALT ART METAL CO., Limited, GALT, ONT.

BRITISH COLUMBIA

KELOWNA

The largest Fruit-growing Valley in the FAR-FAMED OKANAGAN. Apply to us for all information regarding Fruit and Farm lands, town and residential lots with lake frontage. Land at \$10 per acre up. Choice fruit lots in and joining town, ample water for irrigation. All information possible willingly given. Write for prices.

CARRUTHERS & POOLEY,
Real Estate Agents. Kelowna, B. C.



THE ANCHOR WIRE FENCE

Is the strongest and best farm fence on the market. It is made throughout of No. 9 galvanized steel wire, either plain or coiled, but heavier uprights may be used if desired. Any intelligent person can construct the fence by following directions as given in our free catalogue. Agents wanted.

GATES AND FENCE WIRE FOR SALE.

ESPLEN, FRAME & COMPANY, STRATFORD, ONT.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

QUESTIONS AND ANSWERS Miscellaneous.

CURRENCY QUERIES.

1. What is the value of the Canadian dollar in English money?
 2. Where could one exchange Canadian money for English in this country?
 3. Do they charge anything? If so, how much? W. H.
- Ans.—1. 4s. 1d. 1f. (to within a fraction of a farthing).
2. Through the Canadian chartered banks.
3. No, there is no charge made.

BUFFALO MOTHS.

Mrs. J. D. Simcoe Co., Ont., asks how to get rid of Buffalo moths.
Ans.—If they have appeared in carpets, take the carpets up and beat them thoroughly, then pour benzine over any parts that give evidence of the moths' work. Before relaying the carpets, fill up the cracks with plaster of Paris mixed with water, or with putty. If the moths have got into trunks or chests of clothes, place a saucer on top of the clothes and pour into it a small quantity of carbon bisulphide; close the chest, and leave over night. The fumes will kill the moths. Clothing in which the pests have appeared may be placed in boxes and treated in the same way. As carbon bisulphide is both inflammable and explosive, great care must be exercised in using it. Do not use it, nor even open the bottle which contains it, in a room where there is a fire or light of any description. Use it in the open air, or in a room with open windows.

SLIMY OR ROPY MILK.

Can you give any reason for milk becoming stiff and rather stringy along the sides of the vessel in which it is placed, while it is yet sweet? It is always thoroughly chilled with ice immediately after it has been drawn. Is there any way to detect which cow is the one at fault, out of a herd of about twenty-four? Not a clot to be found in the strainer. T. H.

York Co., Ont.

Ans.—Stringy or slimy milk is caused by a large number of bacteria, which develop in the milk and change the milk sugar into a slimy or ropy mass. These bacteria grow on the surface of the milk, as they require oxygen. As a rule, these bacteria come from dust or from water, and get into the milk either at the time of milking or some time afterwards. If the cans are washed or rinsed with water containing any of these bacteria, the milk is liable to become ropy a short time afterwards. These bacteria grow at low temperatures; and hence the milk frequently becomes ropy or stringy long before turning sour. In order to get rid of this trouble, measures should be taken to thoroughly clean out the stable, brushing down all dust and whitewashing. Thoroughly scald all cans, strainers, dippers, etc. Should the trouble still continue, it would be advisable to wash the flanks and udders of the cow with a weak disinfecting solution, in order to kill any of these slime-producing bacteria which may have lodged in the hairs of the cow, and which are dislodged into the milk pail by the movements of milking. F. C. HARRISON.

TROUBLE WITH HATCHING EGGS.

We are having trouble, new to us, with our hatching eggs this year, principally with hen's eggs. The birds seem quite strong, and after coming out of the shell are unusually healthy and brisk, but so many die after being chipped. The outer shell comes off, leaving the white inner lining, which dries and hardens so that the bird cannot get rid of it, and dies, or is crushed in the nest. We have tried setting the eggs under different conditions with the same result. Can you offer any suggestions? C. S.

Ans.—While this is not a common occurrence with eggs set under hens, yet there are quite a number of cases reported. The exact cause is hard to locate. Personally I have found that where birds are set upon the ground, or where four or five inches of earth is used in the bottom of the nest boxes, the trouble usually does not occur. Apparently the shell becomes too dry and brittle. To overcome this, I would suggest either setting hens on damp earth, or it might be advisable during the last week of incubation to sprinkle the eggs with water. W. R. GRAHAM.

O. A. C., Guelph.

ECZEMA OR SALT RHEUM

THE MOST TORTURING OF ITCHING
SKIN DISEASES—POSITIVELY
CURED BY

Dr. Chase's Ointment

The skin becomes reddened and inflamed and pimples are formed that burst and discharge a watery, sticky fluid, which dries and becomes a sort of crust or scale.

In other cases there may be ulcers or sores. Suffering is always intense on account of the frightful stinging, burning and itching.

The surface of the body should be kept clean by frequent bathing with tepid water and castile soap; and Dr. Chase's Ointment applied night and morning.

The control which Dr. Chase's Ointment exerts over eczema and similar skin diseases is a wonder to all who have tested it. This most extraordinary healing power has made Dr. Chase's Ointment the standard ointment the world over.

There is no guesswork about Dr. Chase's Ointment. It is applied directly to the diseased part, and you can see exactly what it does.

By its cleansing, soothing, healing action it allays inflammation and irritation, heals the raw, sore flesh, and leaves the skin soft, smooth and natural.

Wherever there is itching of the skin or a sore that will not heal, Dr. Chase's Ointment can be used with positive assurance of relief and cure. 60 cents a box, at all dealers, or Edmanson, Bates & Co., Toronto. The portrait and signature of Dr. A. W. Chase, the famous recipe-book author, are on every box.

CIDER MAKING

Can be made profitable if the right kind of machinery is used.
WE MAKE THE RIGHT KIND.
Send for catalogue.
BOGNER & BOGNER PAPER CO.,
305 West Water St., Syracuse, N. Y.

Pat—"Sure, I'd lay down me loife for ye, Norah."
Norah—"But would ye lay down a carpet for me, Patrick?"

Man (in a hurry)—"I'll give you five dollars to get me to the station in three minutes."
Cabman (with provoking slowness)—"Well, sorr, you might bribe me, but you can't bribe that horse."

EVERY PLACE ON THE PRAIRIES

Has Its Cure Credited to Dodd's
Kidney Pills.

John White Could Get Nothing to Help His Rheumatism Till He Tried the Great Canadian Kidney Remedy.

Yellow Grass, Assa., N.-W. T., June 26th.—(Special).—No place on the prairies but can furnish some proof of the splendid work Dodd's Kidney Pills are doing in wiping out the Kidney ailments of the West. It was near here that little Edith Harris was so wonderfully cured of Dropsy by them, and now Mr. John White is giving an experience almost as remarkable.

"I think," Mr. White says, "I should let the public know of the benefit I got from Dodd's Kidney Pills. I had Rheumatism for years, and neither doctors nor medicines did me a bit of good till last spring I tried Dodd's Kidney Pills. They did me a great deal of good. I feel like recommending Dodd's Kidney Pills even stronger than I talk."

Dodd's Kidney Pills cure the Kidneys. Sound Kidneys strain all seeds of disease out of the blood. They tone up the body to its highest standard of health and energy.



Insurance with this company is a sane, profitable investment.

It protects your wife and children against possible want.

It lets you enjoy your savings when the endowment period expires.

Funds carefully invested, and policy-holders get all profits.

Lower expense rate than any other Canadian company.

Write us, giving age at next birthday, and we'll suggest a policy for you.

HEAD OFFICE: WATERLOO, CAN.



THOMAS HOG TROUGH
Built to last a life time

Impossible for hogs to spill food from this trough or to interfere with each other when feeding.

Much more sanitary than wooden troughs, which also leak and wear out quickly.

Made in five-foot lengths and up to any size required—light enough to be readily moved as desired.

If your dealer doesn't sell it, write

Thomas Brothers, Limited
ST. THOMAS, ONT.

TWO FARMS FOR SALE

In Guelph Township.

Containing 250 and 300 acres, respectively. These are first-class stock and grain farms, well fenced, good brick dwelling houses and first-class outbuildings. Seven miles from Guelph and the O. A. C.

G. D. HOOD, Guelph, Ont.

IMPORTED Clydesdale Stallions

For sale, reasonable. Come and see them or write to

Phillip Herold, V. S., Tavistock.

CLAYFIELD STOCK FARM

Clydesdales, Shorthorns and Cotswolds.

41 prizes won at World's Fair at St. Louis, 11 firsts, 5 champions. Will now offer my entire flock of rams and ewes at prices according to quality.

J. C. ROSS, Jarvis, Ont.

IMPORTED CLYDESDALE STALLIONS AND FILLIES.

Also HACKNEY STALLIONS FOR SALE at reasonable prices. Come and see them, or write to

ADAM DAWSON, Cannington, Ont.

Clydesdale Stallions and Fillies.

Imported and Canadian-bred. For sale: Three 2-year-old stallions and imported mares with foals at foot, from imp. sire and dams. Also SHORTHORN Cows and Heifers for sale. Reasonable prices. For particulars write to

JAS. W. INNES, Woodstock, Ont.

Cityview Farm, Woodstock, Ont. Clydesdales, Shorthorns and Leicester—Present offering: One choice mare, 4 years old, from imp. sire and dam. Two young bulls (sired by Golden Count 26440). Prices reasonable.

WM. MCINTOSH, Prop., Burgoyne P. O., Post Elgin Stn. and Telegraph.

Burdock BLOOD BITTERS CURES

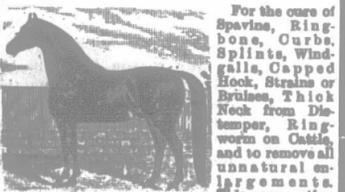
Dyspepsia, Boils, Pimples, Headaches, Constipation, Loss of Appetite, Salt Rheum, Erysipelas, Scrofula, and all troubles arising from the Stomach, Liver, Bowels or Blood.

Burdock BLOOD BITTERS

Mrs. A. Lethbridge, of Ballyduff, Ont., writes: "I believe I would have been in my grave long ago had it not been for Burdock Blood Bitters. I was run down to such an extent that I could scarcely move about the house. I was subject to severe headaches, backaches and dizziness; my appetite was gone and I was unable to do my housework. After using two bottles of B. B. B. I found my health fully restored. I warmly recommend it to all tired and worn-out women."

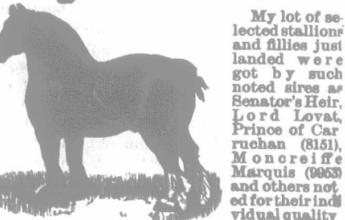
Burdock BLOOD BITTERS

Dr. Page's English Spavin Cure



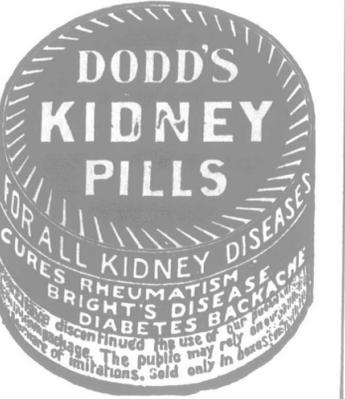
For the cure of Spavins, Ring-bones, Curbs, Splints, Wind-galls, Capped Hock, Strains or Bruises, High Neck from Distemper, Ring-worm on Cattle, and to remove all unnatural enlargements. This preparation (unlike others) acts by absorbing rather than blistering. This is the only preparation in the world guaranteed to kill a Ringbone or any Spavin, or money refunded, and will not kill the hair. Manufactured by DR. FREDRICK A. PAGE & SON, 7 and 9 YORKSTOWN ROAD, LONDON, E.C. Mailed to any address upon receipt of price, \$1.00. Canadian agents: J. A. JOHNSTON & CO., DRUGGISTS, 171 King Street East, Toronto, Ont.

IMPORTED Clydesdales



GEO. STEWART, Howick, P. Q.

My lot of selected stallions and fillies just landed were got by such noted sires as Senator's Heir, Lord Lovat, Prince of Carruchan (8151), Monroiffie Marquis (9063) and others noted for their individual quality. Whatever adds in even the smallest way to the world's brightness and cheer is worth while. One who says an encouraging word to a disheartened neighbor, gives a look of love to a lonely one, or speaks a sentence which may become strength, guidance and comfort to another, does something worth while. It is always worth while to live nobly, victoriously, struggling to do right, showing the world even the smallest fragments of divine beauty.—[Woman's Life.]



QUESTIONS AND ANSWERS. Miscellaneous.

FARMERS' INSTITUTE REPORT.

Being a subscriber to the "Farmer's Advocate," I take the liberty to ask if you would please have sent or inform me how I may procure a copy of the latest report of Farmers' Institutes. W. D. C.

Ans.—Write, mentioning the "Farmer's Advocate" to Geo. A. Putnam, Parliament Buildings, Toronto, and he will furnish you with a copy of the last report.

BLUE-EYED GRASS.

The plant sent us for identification by R. H. Scott, Vanneck, Ont., who found it growing in bunches in mixed-grass meadow, is the blue-eyed grass (Sisyrinchium Bermudiana), a pretty little plant, rather common in moist meadows among grass. It has a small blue flower on a two-edged stem. We do not think it is considered a troublesome weed.

MUSSEL MUD FOR LIGHT LOAM.

I have a field of light loam. It has not been plowed for fifteen or twenty years and is growing to spruce bushes about six inches high. I am going to plow it this fall, and I have no manure to put on it. I want to know if I hauled mussel mud next winter and gave it a good dressing of the mud would it give me a crop next summer, or do you consider mussel mud any good alone, or should it be composted with other manures before applying to the land? If the green mud will give you a crop, how heavy would I need to apply it? Pictou Co., N. S. J. W. M.

Ans.—These muds have been largely used in the Maritime Provinces as a fertilizer, and, as a rule, with very good results. I am inclined to think that an application, say, of 25 to 50 loads per acre, would prove very beneficial to the soil, increasing considerably its crop-producing power. Probably the best method of procedure is to allow it to remain in fairly large heaps during the winter and apply to the land in the spring. Such muds are usually rich in organic matter (derived largely from the bodies of shell fish), and, consequently, fermentation takes place in the heap, the resulting compost being in a better condition for the land than the original mud. The value of any particular sample of "mud" will depend chiefly on its organic matter, nitrogen and carbonate of lime, though the character of the soil to which it is applied has much to do with the results obtained. Thus, muds in which clay forms the basis give better returns on sandy than on heavy loams. FRANK T. SHUTT, Chemist, Dominion Experimental Farms.

Veterinary.

BURSAL ENLARGEMENT.

I have a horse very lame from wind-gall. B. J. M.

Ans.—Give rest, and blister. Take 2 drams each of biniodide of mercury and cantharides and mix with 2 ounces vaseline. Clip the hair off the joint all around, and rub the blister well in; tie so that he cannot bite the parts. In 24 hours rub well again with the blister, and in 24 hours longer wash off and apply sweet oil. Let his head down now, and oil every day. As soon as the scale comes off blister the same way again, and once every month as long as necessary after that. If the lameness does not become less after the second blister, you had better get it fired and blistered by your veterinarian. V.

LEUCORRHOEA—LAME SHEEP.

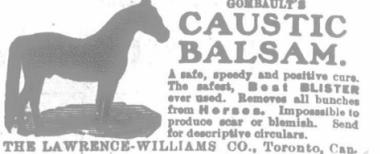
1. Mare has had whites for a year. The sight of one eye is failing.

2. Sheep got lame on fore feet. I can see nothing wrong. W. J. C.

Ans.—1. This is called leucorrhœa, and is very hard to treat. The womb should be flushed out every second day with 2 gallons of a two-per-cent. solution of Zenoleum or phenyle, and she should get 30 drops carbolic acid three times daily, in feed or drench, until all discharge ceases. The eye trouble is amaurosis, which sometimes results from the uterine trouble and disappears when the latter is checked.

2. Apply warm poultices of linseed meal, and keep the sheep quiet in a clean, dry building. V.

HORSE OWNERS! USE GOMBAULT'S CAUSTIC BALSAM.



Fistula and Poll Evil

Do yourself what horse doctors charge big prices for trying to do. Cure Fistula or Poll Evil in 15 to 30 days. Fleming's Fistula and Poll Evil Cure is a wonder—guaranteed to cure any case—money back if it fails. No cutting—no scarring. Leaves the horse sound and smooth. Free Book tells all about it—a good book for any horse owner to have. Write for it. FLEMING BROS., Chemists, 45 Front Street, West, Toronto, Can.

THICK, SWOLLEN GLANDS

that make a horse Wheeze, have Thick Wind or Choke-down, can be removed with

ABSORBINE

or any Bunch or Swelling caused by strain or inflammation. No blister. No hair gone and horse kept at work. \$2.00 per bottle, delivered. Book 3-B free. ABSORBINE, JR., for manking, \$1.00 delivered. Cures Gout, Tumors, Varicose Veins, Etc. Book free. Made only by W. F. Young, P. D. F., 73 Monmouth St., Springfield, Mass. Canadian Agents, Lyman, Sons & Co., Montreal.

"THE REPOSITORY"

Burns & Sheppard, Proprietors,



Cor. Simcoe and Nelson Sts., TORONTO.

Auction Sales of Horses, Carriages, Buggies, Harness, etc. every Tuesday and Friday at 11 o'clock.

Special Sales of Thoroughbred Stock condensed. Consignments solicited. Correspondence will receive prompt attention.

This is the best market in Canada for either buyer or seller. Nearly two hundred horses sold each week.

WM. D. DYER, COLUMBUS, ONT. BREEDER OF Shorthorns, Shropshires and Clydesdales

Correspondence solicited. Visitors welcome. Stations: Brooklin, G.T.R.; Myrtle, C. P. R.

Farnham Oxford Downs

We are offering 70 ranch rams, 20 flock headers, some of them imported, being St. Louis winners. Also 50 yearling ewes and 50 ram and ewe lambs.

HENRY ARKELL & SON, Arkell, Ont.

THE SUNNYSIDE HEREFORDS

Imp. Onward in service. Eight choice bulls of serviceable age; this includes 4 2 year-olds, all of the blocky, heavy type, at prices that will move them. We can yet spare some cows and heifers. O'NEIL BROS., Southgate, Ont.

Iderton Sta., L. H. & B.; Lucan Sta., G.T.R.

HURON CENTRAL STOCK FARM OF ABERDEEN-ANGUS

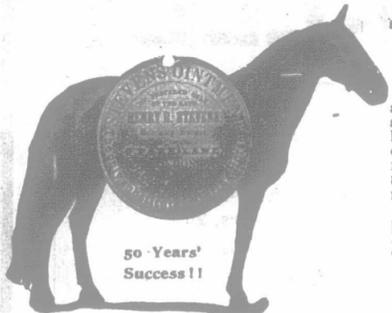
Our present offering is seven young bulls, 8 to 18 months old. All sired by the champion bull Goderich Chief 3743. All stock registered in the American Herdbook. Also offering the young coach stallion Godolier, winner of 1st at London this year.

E. BUTT & SONS, Clinton, Ont.

FOREST VIEW FARM HEREFORDS. 4 bulls from 8 to 12 months old; prizewinners and from prizewinning stock. Several heifers bred on the same lines; choice individual, for sale. JOHN A. GOVENLOCK, Forest Sta. and P. O.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

BRITAIN'S BEST BLISTER



It takes time, trouble, knowledge and special chemical apparatus to produce

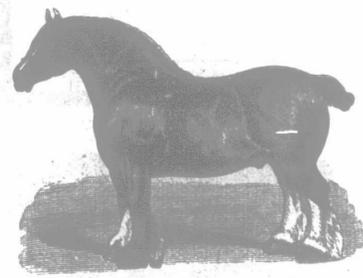
STEVENS' OINTMENT

as used in the Royal Stables. It is the result of a lifetime's knowledge among lame horses saved up and given to you in concentrated form for use on your lame or disfigured horse. It will surely cure Spillat, Spavin, Curb, Ringbone, and all enlargements in horses and cattle.

Price 75c. small, \$1.50 large box. A little goes a long way. Get a box now. If your local chemist cannot supply you, write direct to

Evans & Sons, Ltd., Montreal, Que. Agents for Canada.

JOHN CHAMBERS & SONS



Holdenby, Northampton, Eng.

Farm over 2,000 acres of land just in the centre of the Shires, and breed the very best and soundest of the

SHIRE HORSE

which from birth are kept in their natural condition, neither forcing nor overfeeding for showing purposes.

Canadian buyers visiting England are invited to call and see what we have to show them and obtain their stallions and mares direct from the men that breed them. No fancy prices, and all delivered free Liverpool landing stage. Correspondence invited.

Station-Althorp Park, L. & N.W. Ry

Mountain View Stock Farm—Red Polled Bull, ten months old, for sale.

BARGAINS for 30 days. Durham cow, 7 years, and bull calf, by a Watt bull, \$100; two dark red bulls, 9 months, \$50 each; Yorkshire boars and sows, 30 to 40 lbs., at \$6 each; our yearling stock boar, quiet and a good getter, \$15.

Elm Park Stock Farm joins Guelph City limits, just west of Guelph Junction Station, G. T. R., or can be reached by street railway on Waterloo Ave. car, last cross road before terminus. About 15 minutes' easy walk from either place. Call and see our Aberdeen-Angus, Clydesdales and Suffolk sheep during June excursion.

SHORTHORNS FOR SALE

A few young cows and heifers, either with calf or calves at foot. At a bargain if taken soon.

JOHN FORGIE, Proprietor, Claremont Stn. and P. O.

SHORTHORNS FOR SALE

Six young bulls, 20 cows and heifers, by that grand bull, sire of unbeaten Fair Queen and sister Queen Ideal, first-prize senior heifer calf at the International, 1904.

H. K. FAIRBAIRN, Thedford, Ont.

Shorthorns and Cotswolds

Six bulls ready for service, sired by Merry Hampton, imp., 36908, 156715, and from thick-fleshed, heavy-milking dams; also heifers by same sire. Prices reasonable for early delivery. For particulars, write to

JOHN SOCKETT, Rockwood Stn. & P. O.

SHORTHORNS and GLYDESDALES

Spicy Count (imp.), 5 thick, fleshy bulls, 12 months old; a few heifers and 6 splendid Clydesdales; 3 mares registered. All young.

JAS. McARTHUR, Pine Grove Stock Farm, GORE'S, ONT.

8 First-Class Young Bulls

And an excellent lot of cows and heifers. Scotch cattle, imp. and home-bred. Rich man's cattle at poor man's prices. Also high-class Yorkshire and Berkshire swine.

DAVID MILNE, Ethel, Ont., Huron Co.

ROWAN HILL STOCK FARM

SHORTHORNS

Greengill Archer (imp.) 45184, at head of herd. Present offering: Young cows and heifers at reasonable prices. Correspondence or inspection invited.

A. DUNCAN & SONS, Carleton Place, Ont.

WHEN WRITING TO ADVERTISERS

Please Mention "Advocate"

R. A. & J. A. WATT

Salem P. O., Elora Station, C.P.R. and G.T.R. Telephone in house.

Our herd of seventy-five head of Scotch-bred

SHORTHORNS

compares favorably with the best. Inspection and correspondence invited.

SHORTHORNS FOR SALE

Four young bulls, including 22-months son of Mayflower 3rd, champion female at Winnipeg and Toronto, 1904; also a few good heifers of same family. Primrose Day (imp.) at head of herd.

W. McDERMOTT, Living Springs, Ont., Vergus Station.

Forest Hill Stock Farm Shorthorns

3 choice bulls of serviceable age, and a few good heifer calves. For particulars apply

G. W. KEAYS, Hyde Park P. O., Ont.

SCOTCH SHORTHORNS FOR SALE

Two young bulls 12 and 16 months old, both royally bred; also fifteen heifers and cows, most of them in calf to a son of Lord Gloucester, No. 26905.

DR. T. S. SPENCER, Oedardale Farm, Markdale P.O. and Station

MAPLE LEAF STOCK FARM

4 Choice Young Bulls For Sale.

Also some cows and heifer and prizewinning Berkshire pigs. Terms reasonable.

ISRAEL GROSS, Alma P. O. & Sta., G.T.R.

SHORTHORNS and DORSETS

Write for what you want. Also a number of young Yorkshire sows for sale.

D. Bartlett & Sons, Smithville, Ont.

Scotch Shorthorns

Three young bulls. One by Scottish Beau, imp. dam Lady Ythan 5th, imp.; 2 others by invincible, second prize, Toronto, 1904; also heifers of like breeding and quality.

G. H. OKE, Aylinton, Ont.

SHORTHORNS FOR SALE

I am offering for sale my imp. bull, 13 months old, and two red bull calves (one of them is a Golden Drop) ready to wean. Also two good heifer calves.

Hugh Thomson, Box 556, St. Mary's, Ont.

Cedar Vale Stock Farm

is offering for sale a few Scotch-bred bulls of excellent breeding and quality at low prices for the next 60 days. For particulars, write to JOHN SCOTT, Dumbane P. O., Port Elgin Stn. and Telegraph.

River View Stock Farm

Present offering: A shorthorn Bulls; ready for service, of excellent breeding; price extremely low considering quality. For particulars, write to A. J. ROWAN, Dumbane P. O., Port Elgin Stn. and Telegraph.

J. WATT & SON

Some very superior Bulls and Heifers for sale. Apply for particulars.

Salem P. O., Elora station, G.T.R. & C.P.R.

Shorthorns

We have for sale several young bulls ready for service, sired by Royal Duke, he by Royal Sailor (imp.). Also a few heifers and cows, bred to Wandering Count, by Wanderer's Last (imp.).

J. R. McALLISTER & SONS, Toronto, Ont.

Shorthorn Bulls

I have for sale two good fit for service, sired by imported Scottish Peer = 4024 =. Come and see, or address,

JAMES SNELL, Gilmont, Ont.

QUESTIONS AND ANSWERS. Veterinary.

PUFFS ON KNEES.

Foal born May 14th has a puff half the size of a hen's egg on the outer and lower part of each knee. It is not lame or apparently inconvenienced by the puffs.

Ans.—Puffs of this kind are not uncommon in foals, and usually disappear before or about weaning time. Leave them alone, and if they have not disappeared before winter, blister them.

SORE SHOULDER AND TUMOR

1. Mare has a sore shoulder. It will not heal. I have applied butter of antimony, but when the scab comes off there is matter under it every time.

2. Horse has a hard lump, as large as a hen's egg, on the lower part of shoulder.

Ans.—1. Butter of antimony is a caustic and should not be used on sores unless proud flesh be present. Take 1 ounce each sulphate of zinc and acetate of lead; add a pint of water, and dress the sore with this lotion three times daily.

2. This is a tumor and must be carefully dissected out; the wound stitched up, except a small opening at the bottom for the escape of pus. Dress three times daily with a five-per-cent. solution of carbolic acid until healed. External applications will not remove this tumor; the operation is necessary.

INDIGESTION.

Mare foaled all right. I put her to work in a week. One afternoon, while working, she became sick. She threw herself down, rolled about, got up, threw herself down again, etc. She got all right again. In a couple of weeks she acted the same. I gave her ginger and nitre, and she got all right. Is she liable to further attacks, and what is the trouble?

Ans.—The mare had attacks of indigestion. If possible, allow her to go idle and raise her foal. If you are forced to work her, be very careful to not feed very large quantities of grain. Feed grain four times daily, water before feeding, and do not work for at least an hour after meals. Feed a tablespoonful of ginger in her food once or twice daily. If she has another attack, give 14 ounces laudanum, 4 drams fluid extract of belladonna, and 2 ounces nitrous ether in a pint of cold water as a drench. Repeat the dose in two hours, if necessary.

SIDEBONES, ETC.

1. Over a year ago I wrote you about sidebones on my stallion. You sent me a prescription, which I applied, but it did not remove them. The horse went lame this spring and I consulted my veterinarian. He advised firing and blistering. He fired with an instrument that is kept hot by forcing benzine through a tube with a rubber bulb, and then applied a blister, a sample of which I send you under separate cover. He told me to give six weeks rest in box stall and to grease the parts regularly in the meantime, and he said I might breed him to a few mares in the meantime.

2. How much meal, composed of oats, barley and huckwheat, should a three-year-old stallion, serving three mares a week and getting no exercise, be fed?

3. Are artichokes good feed for a stallion?

Ans.—1. The sample of blister is all right. Your veterinarian has treated the case in the most approved manner. You must not expect a removal of the sidebones, as they cannot be removed, and the most we can expect is the removal of the lameness. Leave the case in the hands of your veterinarian, as he evidently understands his business. I think it would be wise to castrate this horse, as it is a great mistake to breed a stallion with sidebone, ringbone, spavin, or any of these bone diseases, as there is such a probability of them transmitting the predisposition to their progeny. Of course, you think the trouble was caused in your horse by him getting the foot stuck in the manger, but accidents of this kind will not cause either sidebones or ringbones.

2. About 12 to 14 lbs., divided into three meals. It would be much better if you would give him regular exercise, both he and his progeny would be better.

3. I have had no experience with these for horses.

If you could only see the Easy Running

EMPIRE Cream Separator

and note how few parts it has, how perfectly simple it is, how easily it turns, how perfectly it skims, how easily it is kept clean, how strong and durable it is, you would at once decide that it is the separator for you. No separator ever made such rapid strides in popularity as has the Empire. The reason is because it satisfies every purchaser. Everyone who has it speaks a good word for it. We ask the privilege of showing it to you, and letting you prove for yourself what it will do. Don't buy a separator until you investigate the Empire.



Free For Asking. Write your name and address on a postal card and send for our Catalogue No. 11.

Empire Cream Separator Co. of Canada, Ltd. Toronto, Ontario.

Present Offering of SHORTHORNS AND SHROPSHIRE

(imp.) Scotland's Pride = 30008 =, (7007), 5 years old, a Cruickshank Clipper, by the great sire, Star of Morning. One junior yearling show bull in show form, a good one.

4 bulls from 14 to 16 months old, from imp. sires and imp. or pure Scotch dams. One senior yearling show heifer, a winner, from imp. sire and dam. Imp. and home-bred cows and heifers, all ages.

20 yearling Shropshire rams and 20 yearling ewes. Carloads of ranch bulls furnished on short notice. For catalogue and prices, write to G. PETTIT & SONS, Freeman, Ont. Burlington Job. Station, Telegraph, Telephone

12 SHORTHORN BULLS

20 Cows and Heifers

Good ones, Scotch-bred, at moderate prices. Catalogues on application.

H. SMITH, Exeter, Huron Co., Ont. Station adjoins farm. Long-distance telephones in residence.

Queenston Heights Shorthorns

Two bull calves, 6 and 8 months, by Derby (imp.) and from good milking dams. Bargains for quick sale. Also a few young cows and heifers.

HUDSON USHER, Queenston, Ont.

A. EDWARD MEYER

Box 378, Guelph, Ont.

SCOTCH SHORTHORNS

a specialty. Herd bulls: Scottish Hero (imp.), a Shethin Rosemary; Lovely Prince, a Cruickshank Lovely. Correspondence solicited. Visitors welcome. Long-distance phone in house.

Two Grand Scotch Bulls

One dark roan Miele, 11 months, by Aberdeen Hero. One light roan, 8 months, from imp. Mar Roan Lady cow and by imp. sire. Both bulls of choicest quality, at very reasonable prices.

A. D. MCGUGAN, Rodney, Ont.

BELMAR PARO SHORTHORNS

Bulls in service: Merryman, imp. (7283) = 32075 =; Pride of Windsor, imp. (Vol. 80) = 50071 =; Nonpareil Archer, imp. (31778) = 45202 =. Our females have been carefully selected and are of the best Scotch breeding, many of them imported. Address correspondence to

PETER WHITE, JR., PEMBROKE, ONT.

Shorthorn Bull

Provost = 37865 =, 4 years old, in prime condition, sure and active; a grand stock bull. Will sell or exchange for another. RICHARD WILKIN Springfield Stock Farm, Harriston, Ont.

SCOTCH-TOPPED SHORTHORNS

Young stock of both sexes for sale; sired by Scottish Baron 40421 (imp.). H. GOLDING & SONS, Thamesford Ont. Stations, Thamesford, C.P.R.; Ingersoll, G.T.R.

SHORTHORNS AND BERKSHIRES

Present offerings, young cows and heifers safely in calf to Prince of Bank (imp.); also a few Large English Berkshire pigs, either sex, nearly ready to wean.

DAVID HILL, Staffs, Ont.

Green Grove Shorthorns and Lincoln Sheep

Herd headed by Royal Prince (imp.) = 30024 =; W. G. MILSON, Goring P. O., Markdale Station.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

LAST MOUNTAIN VALLEY

Steamboat Service now in operation.

Railway Service to Strassburg by July.

Write for Free Books, Maps, etc.



"OPENING OUT NEW FARM."

The finest Wheat Land in North-east Assiniboia. "A section is a fortune." Average crops for five years, 25 bushels per acre.

WM. PEARSON & CO.
WINNIPEG, MAN.

TROUT CREEK SHORTHORNS

Bulls in service: Gold Cup (imp.), bred by W. Duthie, and Ardlethen Royal (imp.), a Marr Princess Royal

James Smith, Manager. W. D. FLATT, Hamilton, Ont.

SCOTCH SHORTHORNS

85 head in our herd.

The choice breeding bull, Imp. Green-gill Victor, a Princess Royal, bred by W. S. Marr, heads herd. We have for sale a dozen young bulls of the strong-back, deep-body and short-leg kind; some from our best imp. cows. Also 20 imp. females and 20 home-bred females, all of well-known Scotch families, either in calf or with calf at foot.

R. MITCHELL & SONS, Nelson P. O., Ont.; Burlington Junction Sta.

THREE IMPORTED Shorthorn Bulls

Four imported cows in calf, home-bred cows, heifers and young bulls, all of straight Scotch families. Four imported Shropshire rams, eight imported ewes and any number of Shropshire and Cotswold ram and ewe lambs of the highest class, in what I can show you now, and all will be priced at moderate prices.

Robert Miller, Stouffville, Ont. Representative in America of Alfred Mansell & Co., Sherwoodbury, England.

FLETCHER SHORTHORNS

Our herd of breeding cows, both imported and home-bred, are of the most fashionable Scotch families. Among the really good sires which have been used are Splay Robin 28250, winner of 3rd prize at Dominion Exhibition, Toronto, and Joy of Morning (imp.) 32070, winning 1st prize at same exhibition, 1901. Stock of either sires for sale. GEORGE D. FLETCHER, Binkham P. O., Ont. Erin shipping station, C. P. R.

1864 - HILLHURST FARM - 1905
Five registered

SHORTHORN BULLS

ready for service; also bull calves, Scotch-topped, from good milking families for sale at low prices. Write for catalogue and particulars. Inspection invited.

JAS. A. COCHRANE, Hillhurst Station, Compton Co., P. O.

Belvoir stock Farm

SHORTHORN BULLS, various ages; imported and home-bred, by imp. Gay Lothario, a Cruickshank Lavender.

CLYDE STALLION, 2 years old; sire imp., dam a winner, grandam 1st Highland Show.

YORKSHIRES—Sows and boars, various ages; not akin. Three imp. boars and 5 imp. sows to select from, and their progeny. Price right. Also honorable dealing.

RICHARD GIBSON, Delaware, Ont.

MOUNTAIN VIEW SHORTHORNS

Imported and home-bred, male and female, prize and sweepstakes winners, various ages. Anything for sale.

S. J. McKNIGHT, Epping P. O., Thornbury Station.

SPRING VALLEY SHORTHORNS

Good bulls at reasonable prices, out of good Scotch cows, and by such bulls as Bapton Chancellor (imp.), Scottish Beau (imp.), Nonpareil Archer (imp.), Clipper Hero, etc. For further particulars, apply to

KYLE BROS., Afr. Ont.

T. DOUGLAS & SONS, Strathroy, Ontario.

SHORTHORNS and CLYDESDALES

Present offerings: 19 young bulls of No. 1 quality, ready for immediate service; also cows and heifers of all ages. Also one imp. stallion and two brood mares. Prices reasonable. Visitors welcome. Farm one mile from town.

PINE GROVE STOCK FARM

HOOKLAND, ONTARIO, CANADA. Breeders of choice

SCOTCH SHORTHORNS and SHROPSHIRE.

W. C. EDWARDS & CO., Ltd., Props. JOSEPH W. BARNET, Manager.

Shorthorn Cattle and Lincoln Sheep

Shorthorn bulls, cows and heifers for sale at greatly reduced prices for the next 60 days.

J. T. GIBSON, Denfield, Ont.

Scotch Shorthorns

Herd headed by Imp. Royal Champion. Young stock for sale from imp. sires and dams. For particulars write to

ED. ROBINSON, Markham Sta. & P. O. Farm within town limits.

For Sale—Some Young Cows, with calves at choice foot, and heifers.

BELL BROS., The "Ocedars" Stock Farm, Bradford, Ont.

For Sale—Three extra good SHORTHORN BULLS, at special prices for one month. Ages range from 6 to 11 months; two are dark red and one dark roan. All are first-class individuals, and will sell at reduced prices if sold within one month.

JOHN McFARLANE, Dutton, Ont.

Shorthorns

Of choice quality and breeding. Young stock of either sex usually for sale. Inspection of herd invited.

N. S. ROBERTSON, Arnprior, Ont.

ELMHEDGE SCOTCH SHORTHORNS.

Stamfords, Minas, Nonpareils, Crimson Flowers, Marr Floras and Lavinias. Our herd will stand comparison with any. We reserve nothing: 45 head of both sexes, all ages, for sale.

James Bowes, Strathairn P. O., Meaford, Ont.

Wm. Grainger & Son, Hawthorn Herd of

HORNS, Aberdeen Hero (imp.) at head of herd. Two grand young bulls by Prince Misty = 37861. Also a few females.

Londesboro Sta. and P. O.

THOS. MERCER, 33, Markdale, Ont.

Breeder and importer of CLYDESDALE HORSES, SHORTHORN CATTLE and YORKSHIRE PIGS.

Car lots a specialty.

YOUNG SHORTHORNS for sale, either

sex, got by that grand Golden Drop show bull, Kinellar Stamp (imp.). Inquiries cheerfully answered.

SOLOMON SWANTZ, Hayville P. O., Plum Grove Stock Farm. Baden Sta.

WILLOW BANK STOCK FARM

Established 1855

Large and old-established herd of SHORTHORNS. Good milking qualities. Splendid offering of either sex. Scotch and Scotch-topped.

JAMES DOUGLAS, Caledonia, Ont.

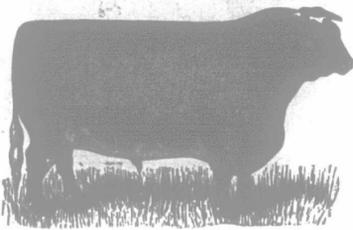
Mr. E. F. Park, Burgessville, Ont., writes: "I have for sale a grand lot of strong Cotswold ram and ewe lambs, a number of shearing ewes and some good rams, two-shear and yearlings, and a number of show sheep for early fairs. Sheep are in good demand."

The well-known champion Hackney stallion, Administrator, was sold at Peterborough, England, recently to Mr. W. Burnell Tubbs at the big price of 975 guineas (\$5,120). The champion brood mare, Rosadora, and her foal at foot, by Administrator, went to the same gentleman at 710 gs. Mr. C. E. Galbraith, who sold these animals along with about 17 others of various ages, and realized an average of over £136 a head, has no reason to complain of any slackness in the demand for high-class Hackneys.

The question of dealing with weeds is one that is pressing itself upon all who have any regard for either the appearance or productiveness of their farms. They are a great hindrance to a farmer's success, occupying space and using up plant food. They are vigorous feeders and thus deplete the land to no purpose. They also draw largely on soil moisture; a ton of weeds (dry matter) requiring from ten to twenty tons of moisture to produce it. The lack of moisture in our land lessens the power of the crops to make use of plant food in the soil. Weeds also require the expenditure of labor each year to keep them in check. This means money.—Fraser.

Mr. W. F. Stephen, Huntingdon, Que., writes: "My stock of Ayrshires came through the winter in fine condition, and, on our luxuriant pasturage, are giving us a heavy flow of milk. Have sold quite a number lately: a yearling bull to the Hon. J. C. McCorkell, Cowansville, Que.; another to Geo. Ewart, Cazaville, Que.; two females and one male to Dr. Geo. H. Punsmore, of St. Albans, Vt.; a bull calf to Peter Tulley, Athelstan, and one to Jas. Smilie, Huntingdon. I have a very fine yearling bull on hand yet. My bull, Lessnessock Rare Styk's Heir 16818, is developing into a splendid stock bull. I have some grand heifer calves, and one bull, dropped in January and February, from Pilot of Glenora 16743. I expect to spend the next six weeks at Institute work among the farmers of New Brunswick and P. E. I."

Colwill Bros., breeders of Shorthorn cattle and Tamworth hogs, Newcastle, Ont., write: "Business of late has been good in Tamworths, and although we have sold over 30 pigs for breeding purposes during the past three months, we still have a good lot on hand to fill orders with, and the most pleasant part of it all is our customers are invariably pleased with the stock we ship them. We never had a better lot of young spring pigs with which to supply our trade. Our spring litters have come especially strong and healthy. Our old stock hog, Colwill's Choice, is as active as he was at six months old, and his stock never appeared to greater advantage than at present. We are sending his stock from one end of this country to the other, and many of them to the United States."



Arthur Johnston GREENWOOD, ONT.

Offers the following:
5 imp. bulls, all registered in E. H. B.
7 high-class home-bred bulls, all by imp. sires, and from imp. or pure Scotch cows.
7 imp. cows and heifers.
7 very fine heifers of our own breeding, by imp. sires, and mostly from imp. dams.

SHORTHORNS

Still have a few good young bulls to offer. Also an exceptionally good lot of heifers, among which there are show animals. Prices easy.

CATALOGUE.
H. O'GILL & SON, O'GILL, ONT. JOHN OLANOX, Manager.

MAPLE SHADE SHORTHORNS

Three young bulls fit for service. Showing the finest Cruickshank breeding. Good Size, Quality, Flesh and Bone.

Inspection invited. Catalogues on application.

JOHN DRYDEN & SON, Brooklin P. O., Ont.

MAPLE LODGE STOCK FARM 1854.

15 Shorthorn heifers, sired by imp. bull, and in calf to imp. bull. Also two first-class young bulls. Cows are large milkers.

A. W. SMITH, Maple Lodge P. O., Ont.

JOHN GARDHOUSE & SONS Highfield P. O., Ont., Breeders of

Scotch and Scotch-topped Shorthorns, Shire Horses, Lincoln and Leicester Sheep.

A good selection of young stock of both sexes always on hand for sale. Scottish Prince (imp.), Vol. 48, at head of herd. Royal Albert (imp.) 20867, at head of stud. Farms 3 1/2 miles from Woodstock, C. T. R. and O. E. R., and electric cars from Toronto.

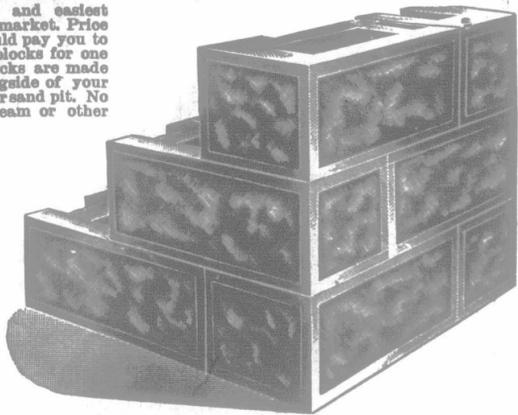
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Dunn's Hollow Concrete Block Machine

Most compact, portable and easiest operated machine in the market. Price so reasonable that it would pay you to buy one if only to make blocks for one fair-sized building. Blocks are made out in the open air, alongside of your building, or down by your sand pit. No firing or baking; no steam or other power required. Skilled labor not necessary. Full directions furnished with machine.

MAKES BLOCKS for houses, bank barns and buildings of every description. Cheaper than brick or stone and much handsomer. Warmer in winter; cooler in summer; and indestructible.

Write for particulars to Dept. O. om



The JAS. STEWART MFG. CO., Ltd., Woodstock, Ont.

CLEAR SPRING STOCK FARM HIGH-CLASS SHORTHORNS

Specialty. Present offerings young bulls and heifers from first-class stock. Correspondence or inspection of herd invited.

JAS. BROWN, Thorold Sta. & P. O.
Ridgewood Stock Farm
SCOTCH SHORTHORNS.

Present offerings: Blythesome Ruler = 52236 =, sire (imp) Chief Ruler = 45165 =, dam (imp.) Missie 159th = 34154 =; young stock, either sex. B. C. ATTRILL, GODERICH, ONTARIO.

Breeder of Shorthorns, Shire and Hackney Horses.

First-class Shorthorns—Young cows and heifers of fashionable breeding. Also Shropshires of different ages. Write for prices, etc., to T. J. T. COLE, Bowmanville Stn., G. T. R. o Tyrone P. O.

J. A. Lattimer, Box 16, Woodstock, Ont.

Breeder of High-class SCOTCH SHORTHORNS

Choice females for sale at all times. Inspection of our herd is invited.

PORTER'S GOLD & SILVER FAWN ST. Lambert Jersey Herd

I have a number of bulls, cows and heifers for sale. No better blood. No better cream-producers. No better lookers.

T. PORTER, - - Carleton West, Ont.

Brampton Jersey Herd—We have now for immediate sale ten B. L. 15, from 6 to 18 months old, descended from St. Lambert or imported stock; also females of all ages. In order to reduce our stock, we are making a special offer. For full particulars, address: B. H. BULL & SON, Brampton, Ont. Phone 68.

Jerseys—Bull calf for sale, from Dido of Pine Ridge, a granddaughter of One Hundred Per Cent, and sired by Ida's Sonny, a son of Canada's John Bull the 5th Junior. Also Barred Rock eggs for sale, \$1 per setting of 13. WILLIAM WILLIS, o Newmarket, Ont.

BARREN COW CURE makes any animal under 10 years old breed, or refund money. Given in feed twice a day. Particulars from L. F. BELLEOK, Morrisburg, Ont.

Springbrook Ayrshires are heavy milkers and high testers. For sale: Three bulls, 9 months old; 2 bull calves, dropped in January last; also females of all ages. W. F. STEPHEN, P. O. box 101, o Huntingdon, Que.

AYRSHIRES, 4 choice bull calves four to six months old; 1 bull fit for service. Females all ages, bred for size and production. DAVID LEITCH, Prices right. Cornwall, G. T. R. CORNWALL, ONT. Apple Hill, C. F. R.

AYRSHIRES FROM A PRIZEWINNING HERD Have some nice bull and heifer calves for sale at reasonable prices. For particulars, etc., write to WM. STEWART & SON, Campbellford Stn. o Menlo P. O., Ont.

SHANNON BANK STOCK FARM FOR AYRSHIRES AND YORKSHIRES Young stock of both sexes for sale from imported stock. W. H. TRAN, Cedar Grove, Ont.

MAPLE CLEFT DAIRY AND STOCK FARM Breeders of Clydesdale Horses, Ayrshire Cattle, Berkshire and Tamworth Pigs. Young stock for sale at all times. R. REID & CO., o Blenheim, Ont. Farm ed'ns Central Experimental Farm.

MEADOWSIDE FARM Ayrshire Cattle, Shropshire Sheep, Berkshire Pigs, R. P. Rocks and B. Orlingtons. Eggs for hatching \$1 per doz. Young stock for sale. A. R. YULE, Carleton Place, Ont.

AYRSHIRE BULLS

Two 13-months-old bulls, choice individuals, from grand milking cows, at very much reduced prices. Also an extra lot of last fall bull calves, away down in price if taken soon.

W. W. BALLANTYNE, Stratford, Ont

We want you to remember that HOLSTEIN COWS

owned by me (formerly at Brookbank Stock Farm, Currie's) won all sorts of honors in milk tests at Toronto, Ottawa and Guelph (5 years), and among many other prizes in the show-ring, including sweepstakes at Toronto and Pan-American in competition with the best in the world. Our herd is always improving. We have now 5 cows whose official test average 22.4 lbs. butter in 7 days, 10 cows whose official test average 24.4 lbs. butter in 7 days, 15 (3 yrs. and up) whose official test average 19.8 lbs. butter in 7 days, 10 (3 and 4 yrs.) whose official test average 17 lbs. butter in 7 days, 10 heifers (average age 28 mos.) whose official test average 11 lbs. butter in 7 days. That is our idea of a dairy herd, and the kind of stock I handle. A few good young bulls, 1 to 18 mos., for sale.

Geo. Rice, Rosedale Stock Farm, Tilsonburg, Ont.

WOODBINE HOLSTEINS

Herd headed by Sir Mechtild Poeh, absolutely the best official-backed sire in Canada. Dam Lantho Jewel Mechtild, 25.8 pounds butter in seven days. Champion cow of Canada over all breeds. Sire's dam, Aaltje Poeh 4th, holds the world's largest two-day public test record—8.6 pounds butter. Young bulls of the choicest quality for sale. Ayr, C. P. R. A. Kennedy, Ayr, Ont. Paris, G. T. R.

J. A. CASKEY

Madoc, Ontario.

BULL CALVES

FOR SALE, sired by Count Echo De Kol, a sire of Record of Merit cows, and out of excellent dams.

Lyndale Holsteins

Over 50 head to choose from. A number of young cows and heifers for sale. Six young bulls from 8 to 11 months old.

BROWN BROS., - - Lyn, Ont.

Maple Glen Holsteins—Present offering is of young bulls of great quality, from producers. A spring calf from the champion dairy test cow, Carmen Sylvia, another from her granddaughter, Juanita Sylvia 2nd; a richly-bred Nov. calf from imp. cow, sired by Jr. De Kol; also an Aug. calf from a first-prize Toronto winner. No females. O. J. GILROY & SON, Glen Buel, Ont.

IMPERIAL STOCK FARM HOLSTEINS. For Sale: Four bull calves, 5 months old, whose sire's three nearest dams average 21.75 lbs. of butter in 7 days. Also young bulls by the sire of first-prize herd in London. W. H. BISHOP, New Durham, Ont.

HOLSTEIN-FRIESIANS at MGDÉDALE FARM 6 bull calves for sale, from 8 to 9 months old, bred from rich milking strains. Special prices to quick buyers. Port Perry, G. T. R., and Myrtle, C. P. R. Shipping Stations, Ontario County. o R. W. Walker, Utica P. O., Ont.

HOLSTEINS and TAMWORTHS One choice yearling bull, excellent quality and breeding. Will be sold at a bargain to a quick buyer; also a few bull calves. One boar ready for service. Young pigs ready to wean. Write at once for bargains. A. C. HALLMAN, Waterloo Co. o Breslau, Ont.

GOSSET

BINDER TWINE.—The attention of farmers is directed to the advertisement in this issue of the Plymouth Binder Twine Agency, Toronto, Ont. It will be well to enquire into the merits of this twine, and call on their agents to see it for yourself and judge of its merits. Look up the advertisement, and enquire as to the quality of Plymouth binder twine.

In selecting a sire for breeding purposes the animal should be looked at all at once, and not merely point by point, so as to balance the whole animal: defect against strength and strength against weakness in the different parts. There is a kind of intuition developed by experience and observation which aids in the right conclusions, but which cannot be well described. It is no doubt true that a sire cannot be properly selected unless a knowledge already exists of the females with which he will be mated; and it is quite possible that two men standing at the ring-side may purchase two animals quite different in special characteristics, and yet both be abundantly satisfied.—Dryden.

The good store, being comparatively thin in flesh and temporarily lacking the have any regard for either the appearance of the finished animal, can never appeal to the eye as he will after a few months' feeding, but he should, nevertheless, present a blocky frame, stoutness of build, accompanied by short, straight legs, wide back and loin, prominent brisket, full neck vein, wide chest, and well-rounded barrel, together with a good, soft, mellow-handling skin and fine, silky hair, giving what is termed the thick, mossy coat, without coarseness, and with it all a good, strong, vigorous head, clear, full eye, and quiet temperament. Experience will teach the eye to recognize these qualities at a glance, a thing which must be learned, for in buying a large bunch of stores, it will be found impossible to study each one very minutely. The man who, by close observation, learns to recognize these qualities and to avoid culls, will very greatly increase his profits, and if in addition he selects a lot that in size, quality and general appearance are very uniform, his stalls will present such an appearance that he will get the highest market prices for his finished product.—Cumming.

Few pure-bred herds and flocks in Canada are more widely or more favorably known than those of the old breeding establishments of Jas. Douglas, of Caledonia, Ont. The herd of Shorthorns numbered about 65 head at the time of a recent visit, headed by that splendid imported roan bull, Rosicrucian of Dalmeny = 45220 = (82117), whose stock is coming thick and smooth and of the approved type. He was bred by Lord Rosebery, and sired by Villager (82177). This herd of females is made up of representatives of some of the leading families of the day, such as Nonpareils, Crimson Flowers, Strathallans, Miss Ramsdens, etc. Most of the young stock of breeding age are by the noted sire of good stock, Christopher (imp.), by Emancipator. Among the 21 heifers seen roaming leisurely in luxuriant alfalfa pasture, some choice things were found, such as, with reasonable fitting, would adorn any show-ring. Among these is an especially smooth, straight roan two-year-old, by Christopher, also a red yearling, by Rosicrucian of Dalmeny (imp.). Among the last crop of calves are several bulls about 10 months old, by imported sires, some from imported dams, and several good enough to head first-class herds.

While the Leicester flock is not large in numbers, it is up to the best standard in quality. Among the number for sale are several yearling ewes that are being put into show shape, and anyone wanting to get a few for showing would consult their own interests by inquiring about those. Sheep and lambs from this flock have won highest honors in the largest shows in America, and we think some likely winners could be selected from among the lambs as well as from the older ones in the flock. The two-shear ram that has sired such good stock for Mr. Douglas is now for sale owing to the fact that his progeny is of breeding age.

STRONG AND VIGOROUS. Every Organ of the Body Toned up and invigorated by



Mr. F. W. Meyer, King St. E., Berlin, Ont., says: "I suffered for five years with palpitation, shortness of breath, sleeplessness and pain in the heart, but one box of Milburn's Heart and Nerve Pills completely removed all these distressing symptoms. I have not suffered since taking them, and now sleep well and feel strong and vigorous."
Milburn's Heart and Nerve Pills cure all diseases arising from weak heart, worn out nerve tissues, or watery blood.

Maple Grove Holsteins—In official tests they stand 1st for cow, 1st for 3-year-old, 1st 3-year-old and 1st under 3 years old. Special inducements are offered in high-class bulls to quick purchasers. For particulars address: H. BOLLEST, Canal, Ont.

Lincolns are Booming

We have only a few more ewe and ram lambs and breeding ewes for sale. We have seven choice young bulls, Scotch topped, and a grand lot of heifers and young cows for sale at reasonable prices. Write or come and see us. F. H. NEIL & SONS, Telegraph & R. R. station. LUCAN, ONT.

Sheep Breeders' Associations.

American Shropshire Registry Association, the largest live stock organization in the world. Hon. John Dryden, President, Toronto. Address correspondence to HORTON LAYBURN, Secretary, Lafayette, Indiana, U.S.A.

WOOL

E. T. CARTER & CO., Toronto.

"BROAD LEA OXFORDS"

Present offerings are: Ram and ewe lambs out of imported ram. One imported three-year-old ram, which has proved to be an excellent sire, and which I have used myself for the last two seasons. Also a few choice Yorkshire pigs of good bacon type. W. H. ARKELL, o Teeswater, Ont. R. R. Stns—Mildmay, G. T. R.; Teeswater, C. P. R.

DORSET HORN SHEEP and SCOTCH SHORTHORNS

The latter representing the Nonpareil, Miss Ramsden, Miss and Glister families exclusively, and the former comprising more Royal winners and more St. Louis prizewinners than any other flock in the world. Stock for sale anywhere on hand. John A. McGillivray, North Toronto, Ont.

FAIRVIEW SHROPSHIRE

Have retired from showing at fall fair. But show sheep are up fitting. FOR SALE. For 23 years won more firsts than all competitors. At St. Louis won more than any three flocks. At last International won 9 of 14 firsts offered, including champion ram and reserve to same. All making the greatest winnings on record. Have now the best breeding stock ever offered. Who wants good ones to strengthen their flocks? JOHN CAMPBELL, Fairview Farm, o Woodville, Ontario

Champion Cotswolds

Silver medal ram, all first prizes except one at Toronto, 1894. A number of choice ewes, bred to imported ram, for sale. E. F. PARK, Burgessville, Ont. o

SHROPSHIRE

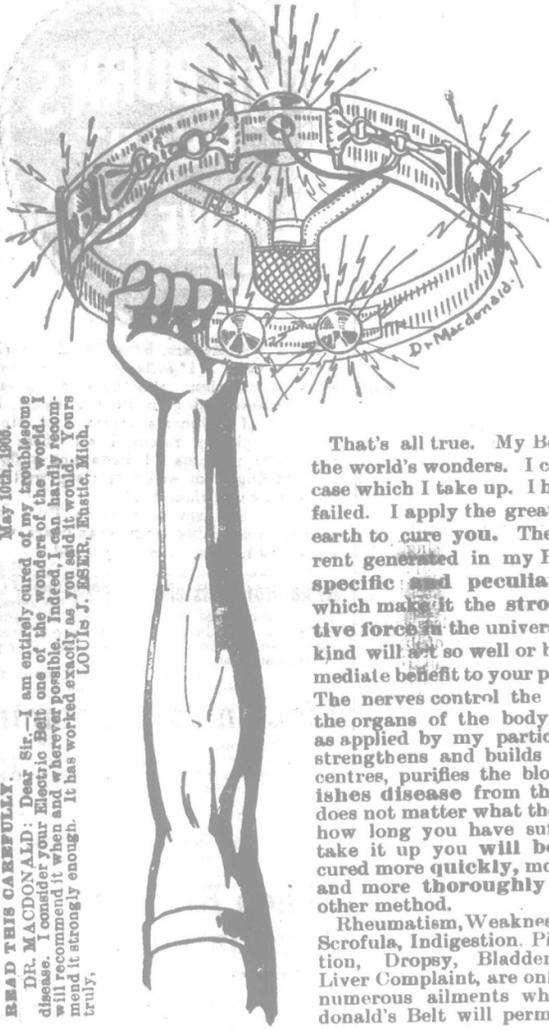
20 yearling ewes, 45 lambs, both sexes included, from imp. ram. For particulars write to GEO. HINDMARSH, Alton Craig P. O., Ont.

LINDEN OXFORDS

I have some good yearling rams; also a choice lot of ram and ewe lambs, sired by first-class imp. rams. Come and see them, or write. R. J. HINE, Button, Ont.

In answering any advertisement on this page, kindly mention the FARMER'S ADVOCATE.

"I AM ENTIRELY CURED



of my troublesome disease. I consider your Electric Belt one of the wonders of the world."

That's all true. My Belt is one of the world's wonders. I can cure every case which I take up. I have never yet failed. I apply the greatest power on earth to cure you. The Electric current generated in my Belt possesses specific and peculiar qualities, which make it the strongest curative force in the universe. No other kind will act so well or be of such immediate benefit to your particular case. The nerves control the health of all the organs of the body. Electricity, as applied by my particular method, strengthens and builds up the nerve centres, purifies the blood, and banishes disease from the system. It does not matter what the disease is, or how long you have suffered, once I take it up you will be cured, and cured more quickly, more certainly and more thoroughly than by any other method.

Rheumatism, Weakness, Lame Back, Scrofula, Indigestion, Piles, Constipation, Dropsy, Bladder Complaint, Liver Complaint, are only a few of the numerous ailments which Dr. Macdonald's Belt will permanently cure.

May 10th, 1908.
DR. MACDONALD: Dear Sir—I am entirely cured of my troublesome disease. I consider your Electric Belt one of the wonders of the world. I found it when and wherever possible. Indeed, I can hardly recommend it strongly enough. It has worked exactly as you said it would. Yours truly,
LOUIS J. ESER, Emetic, Mich.

DR. J. Q. MACDONALD, 8 Blouy Street, MONTREAL, QUE.

HILLOREST HERD OF ENGLISH BERKSHIRES

JOHN LAHMER, VINE P. O.

Now is the time to book your orders for young pigs for May and June delivery. A few good young boars on hand.

W. W. CHAPMAN,

Secretary of the National Sheep Breeders' Association.

Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.

Address: **MOWERAY HOUSE, NORFOLK ST. LONDON, W. C., ENGLAND.**
 Cables—Sheepco. London.

NEWCASTLE HERD OF Tamworth Swine and Shorthorn Cattle

We have for quick sale some 50 head of Tamworths, consisting of boars ready for service, young sows bred and ready to breed. A whole lot of beauties, from 6 weeks to 3 and 4 months old, both sexes. Pairs not akin. These are nearly all the direct get of Colwill's Choice, our sweepstakes boar at Toronto for several years. Also a beautiful red Shorthorn bull calf, ready for service. Several calves of both sexes, and others well forward in calf. All at moderate prices. Daily mail at our door. All correspondence answered promptly. Write for what you want—we can generally supply you.

COLWILL BROS., NEWCASTLE, ONT.

TAMWORTHS

2 fine boars fit for service; also a choice lot of both sexes from 2 to 4 months old, of good breeding stock. Prices reasonable.
Jas. Dickson, Orono, Ont.

Advertise in the Advocate AND GET BEST RESULTS

TAMWORTHS AND HOLSTEINS

We have for quick sale a choice lot of spring pigs from prizewinning sows. A few boars fit for service and one yearling boar. Also a choice lot of bull calves, from 1 to 6 months old.
Bertram Hoskin, The Gully P. O. Grafton Station.

WOODSTOCK YORKSHIRES

Summer offering: A choice lot of young pigs, from two to four months old, direct from imported stock of best strains. A number of imported young sows, bred to an imported show boar. Prices right. Write to
H. J. DAVIS, WOODSTOCK, ONT.

Large English Berkshires—Boars fit for service and ready to breed. Choice stock, both sexes, from 6 to 8 weeks old. Pairs and trios not akin. Express prepaid.
JOHN BOYES, Jr. Rosebank Stock Farm, Churchhill, Ont.

Bargains in **YORKSHIRES** during March and in **HOLSTEINS** calves of both sexes. For description, price, etc., write
R. HONEY, Minster Farm, Brickley, Ont.

CHESTER WHITES

Good bacon type, and **SHERPESHIRE SHEEP.** Write for prices.
W. E. WRIGHT, Glanworth, Ont.

English Berkshires

A fine lot of young pigs of the Sallie and Highclere families. Prices reasonable.
JOHN RACEY, Jr., Lennoxville, Que.

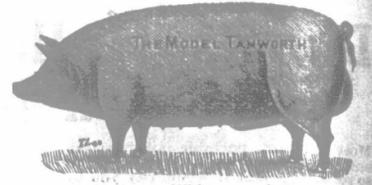
GOSSIP
 The root crop should be the cleaning crop of the whole rotation. Where cultivation of these crops is thorough and persistent, they are the very best way of cleaning the land, and the cultivation that kills the weeds benefits the crops.—Drury.

In improving our herds it is not advisable to buy many expensive cows. It may be the quickest way, but it is not the most economical way. But by using the best sires obtainable, and by raising calves from our best cows, and putting them into the herd as we weed out our poor cows, we can rapidly build up a good dairy herd.—Wagg.

It is well to breed the heifer so that she will drop her first calf at from two to two and a half years of age. Then do not breed her again for about four or five months. This will enable you to milk her for ten or eleven months and then dry her up and allow her three or four months in which to pick up in condition before dropping her next calf. If the heifer does not drop her first calf until she is three years of age she will have acquired the tendency to put on fat, and then whenever she is heavily fed will want to produce tallow fat on her back instead of butter-fat in the pail.—Wagg.

One of the most enthusiastic and up-to-date breeders of Scotch Shorthorns, Oxford sheep and Berkshire hogs is Chas. Rankin of Wyebridge, on the Allandale and Penetang branch of the G. T. R., in Simcoe Co., Ontario. The herd numbers about 40 head, and is headed by one of the best imported bulls in Canada, Pride of Scotland =45213=, a three-year-old roan that is well filled up, thick-fleshed and compact in form, weighing nearly 2,400 lbs. He was bred by Alex. Watson, Auchronie, Scotland, sire Chifton (71241), dam Roan Bessie, by Sittyton Sort. Roan Bessie was also the dam of Imp. Lord Banff, sold at Chicago for \$5,000. Mr. Rankin has been offered some tempting prices for Pride of Scotland, his half-brother, but was determined to have the benefit of his breeding and individuality in his own herd before letting him go. The time has now come that it is necessary to get another to use upon Pride of Scotland's heifers, and the number in the herd does not warrant the keeping of two high-priced sires, consequently Pride of Scotland can be bought. He has proved himself a desirable sire, getting stock full of quality. Among his get is a promising yearling heifer, Beryl 3rd, Vol. 21, from Imp. Beryl =38284=, Blanche, a red yearling, by the same sire, from Bloomer (imp.) =38285=, is also a thick, smooth heifer. There are several imported cows in this herd that are breeding regularly and well, among them is Lovely 36th (imp.), a four-year-old, by Cyprus (56894). A few weeks ago we saw a very sweet yearling heifer from this cow, and by Pride of Scotland, in the herd of Geo. Amos & Son, Moffat. She will likely be seen at Toronto Exhibition, Gold Bracelet, Vol. 21, a roan yearling, by Rosierman of Palmery (imp.) =45220= (82117), dam Diamond Bracelet (imp.), is a heifer that should have been fitted for show, as she would have stood some beating. Among the present crop of calves are a few bulls that can be bought right, considering breeding and quality.

In the sheep department the same attention to breeding is given as in the cattle, the foundation being laid with representative specimens from the leading flocks in Ontario. The crop of lambs is quite satisfactory, and will be for disposal as soon as they are old enough to wean. The Berkshire foundation in the herd is mostly imported, some of them from the Duchess of Devonshire's herd, and are typical of the breed. Anyone desiring to get Berkshires may rely upon getting just what is represented to them. Mr. Rankin recently added a new strain to his boy by purchasing a pair of Clydesdale milks at Mr. Elmer's last sale in Hamilton, two years ago, Vol. 19, No. 28, by Prince Alex. de Saxe, sire of Flashwood. These are the best of the seven-year-old pair of stock and are a great improvement on the old-fashioned feet of the breed, and will, it is believed, make a great pig.



Improved Chester Whites and Tamworths
 From this herd have been winners at leading exhibitions of Ontario and Quebec for a number of years. New importations, direct from England, will arrive in May. We have for sale choice lot of young sows, bred; also boars, 3 to 4 months old. Am booking orders for spring pigs. Pairs furnished not akin. Express charges prepaid. Pedigrees and safe arrival guaranteed.
H. GEORGE & SONS, Crampton, Ont.

LARGE ENGLISH YORKSHIRES



Pigs of the most approved type, of both sexes, all ages, for sale at all times. We have more imported animals in our herd than all other breeders in the large shows this year than all other breeders combined. We won every first but one and all Silver medals and Bacon prizes at Toronto and London and at St. Louis we furnished all the first-prize lots in the breeding classes except two; also supplied both champions and grand champions. Prices reasonable.
D. C. FLATT & SON, MILLGROVE, ONT.

ENGLISH BERKSHIRES

Her Grace the Duchess of Devonshire's Berkshire herd. Winners of 102 awards in 1904, including champion against all breeds in carcass competition, London Fat Stock Show. The breeding now are sired by the champion boar, Baron Kitchener 8403. Polegate Deoxy, Polegate Dams, Polegate Dawn—winners in England, Canada and United States—were exported from this herd. For prices and particulars apply to the Compton Estate Office, Eastbourne, or to **F. A. Walling, 7 Cavendish Cottages, Eastbourne, Sussex, England.**

ORCHARD HOME HERD (Registered)

Large English Yorkshires and Berkshires

Present offering: A number of good Berkshire sows, due to farrow in August; also choice young stock of both breeds, at reasonable prices. We ship, express paid. Take stock back if not satisfactory. We buy our breeders, therefore best not reeved. Our stock are of the large, smooth bacon type that respond to the feed.

S. D. GRANDA L & SONS, Cherry Valley, Ont.

LARGE ENGLISH BERKSHIRES

A number of nice young sows, bred to my imported boar, which are due to farrow in April and May. Also a few boars ready for service. Have some nice things three, four and five months old, of both sexes. My herd won all the champion prizes at Dominion Exhibition in 1904.
WILLIAM WILSON, Box 191, Brampton, Ont.

SNELGROVE BERKSHIRES

A number of large, good sows, to farrow in March and April, and expect to have some choice young pigs for sale. Now is a good time to order. Our herd has won more first prizes at leading shows in Ontario than any other. Pigs of different ages for sale. Write for prices.
SNELL & LYONS, Snelgrove, Ont.

Oakdale Berkshires

Of the largest strain. Imported fresh from England. The produce of these and other noted winners for sale reasonable. Let me book your order for a pair or trio not akin.
L. E. MORGAN, Milliken Stn. and P. O.

GLENBURN HERD OF YORKSHIRES

winners of gold medal three years in succession, offers for sale until New Year's a number of fine young sows and boars, from 3 to 6 months old, at \$12 each.

DAVID BARR, Jr., Box 3, Renfrew P. O.

For Sale—Ohio Improved Chester Whites, the 1st herd in Canada, oldest established registered herd in Canada; young sows in farrow; choice young pigs, six weeks to six months old; pairs not akin; express charges prepaid; pedigrees and safe delivery guaranteed. Address:
E. D. GEORGE, Putnam, Ont.

Owing to unforeseen circumstances, I have been unable to supply customers for

Poland Chinas
 Write me if you want any. For sale, cheap, pure-bred Berkshire boar, registered.
F. S. Wetherall, Rushton Farm, Cookshire, Que.

YORKSHIRE

for sale, all ages, from imported prizewinning stock, of both sexes. Pairs not akin.
GEO. M. SMITH, Haysville P. O., Ont.

POTASH

Potash as Necessary as Rain
The quality and quantity of the crops depend on a sufficiency of

Potash

in the soil. Fertilizers which are low in Potash will never produce satisfactory results.

Every farmer should be familiar with the proper proportions of ingredients that go to make the best fertilizers for every kind of crop. We have published a series of books, containing the latest researches on this all-important subject, which we will send free if you ask. Write now while you think of it to the

GERMAN KALI WORKS
95 Nassau Street, New York.

Bone Spavin

Know it by the lump and the limp—a hard, bony growth on the inner side of the hock joint, usually low down and a little forward of the center of the leg—a quick hitch with the sound leg, and a stiff movement of the lame leg, bearing the weight on the toe, most noticeable in starting.

New cases, old and bad cases, the very worst cases, cases where firing has failed, are cured by

Fleming's Spavin and Ringbone Paste

Guaranteed to cure the lameness for good—may or may not take off the lump. Easily used by anybody, and a single 45-minute application usually does the work—occasionally two required. Write for Free Horse Book before ordering. It gives all the particulars, and tells you what to do for other kinds of blemishes.

FLEMING BROS., Chemists,
45 Front Street, West, Toronto, Can.

WONDER OF THE AGE

Milne's Manure and Gravel Loader

To operate a platform is let down to the ground, gravel or dirt is hauled on to platform with large road shovel sufficient for a two-horse load, which is quickly lifted and automatically slipped into wagon. Time is saved, as team does not have to stand in pit. In handling manure a 2 horse fork is used instead of shovel. To use fork as litter carrier, strong horse is attached, and will wipe out the litter as fast as horse can walk, depositing wherever wanted.

PRICE of LOADER, \$100.00. PRICE of FORK, \$15.00

Write for particulars. Orders promptly attended to. Manufactured by

A. S. MILNE, - Leaskdale, Ont.

Asthma

Cured to Stay Cured

Attacks stopped permanently. Cause removed. Breathing organs and nervous system restored. Symptoms never return. No medicines needed afterwards. 21 years of success treating Asthma and Hay Fever. 25,000 patients. Book 57F Free. Very interesting. Write F. HAROLD HAYES, Buffalo, N.Y. c



ROCK SALT for horses and cattle, in ten and car lots. o Toronto Salt Works, Toronto.

STOP and THINK For a small cost you can have the desire for liquor or tobacco entirely removed. Call or write **PROF. J. H. DUNN, 563 Colborne St., London, Ont.** All communications strictly private. Consultations free. o

Pacific Coast Excursions.

During June, July, August and September the Chicago and North-Western Ry. will sell from Chicago, round-trip excursion tickets to San Francisco, Los Angeles, Portland, Ore. (Lewis & Clarke Exposition), Seattle, Victoria and Vancouver at very low rates. Correspondingly cheap rates from all points in Canada. Choice of routes; best of train service; favorable stopovers, and liberal return limits. Rates, folders and full information can be obtained from B. H. Bennett, General Agent, 2 East King St., Toronto, Ont.

How often we find that what we fought against was the best after all.

THE SPICE OF LIFE.

Denmark is a country of intensive farming. Every available foot of ground is under cultivation. Cattle are not allowed to roam at will and trample down the pasture, but are either tethered in the field or fed in the stables, and even sheep are to be seen tethered to stakes and disconsolately tugging at their ropes. As for the pigs, they are not tethered, but are kept closely confined, except the breeding sows, which are given a rather limited amount of exercise.—Day.

Sunlight is not only the cheapest, but also one of the most efficient agents known for the destruction of disease germs. It follows, then, that the windows should be of good size and numerous. In a wall twelve inches thick, with the rays of the sun striking it at an angle of forty degrees, a window sixty inches wide will admit nearly three times as wide a stream of sunlight as another that is only thirty inches wide; and if the wall be twenty inches thick, the one will admit, under the same conditions, more than four times as great a stream of sunshine as the other. Hence the economy of large windows and thin walls.—Ketchen.

An enterprising salesman from one of the large cities went to a certain rural community and endeavored to sell an incubator to a farmer. His arguments did not make any impression upon the agriculturist. Finally, as a clincher in favor of his up-to-date improvement, he exclaimed:

"Look at the time it will save!"

The farmer squirted a mouthful of tobacco juice on the ground before replying, and then said, with provoking calmness:

"Oh, what's time to a settin' hen?"

That settled the question. No incubator was sold.

Judge Poland, of Vermont, was a member of Congress, and in demand as a campaign speaker. He was not a strict temperance man, though by no means intemperate. He was to make a speech in Maine, where the temperance laws were stringent. The chief committeeman knew the Judge, so he placed two mugs, supposed to be filled with milk, on a table near where the Judge stood. Slyly the committeeman intimated to the Judge which mug he should drink from.

The Judge had not gotten far in his discourse before he became thirsty. He raised the mug, quaffed it to the bottom, then exclaimed: "Ye gods, what a cow."

When Davy Crockett sat in the National Legislature as a representative of the State of Texas he had many clashes with men of more education, but less-wit than himself. It is told of him that one day while standing in front of his hotel on Pennsylvania Avenue, a swarm of mules trotted by under the custody of an overseer from one of the stock farms in Virginia. A Congressman from Boston, who was standing near by, attracted Crockett's attention to the unusual sight, saying:

"Hello, there, Crockett! here's a lot of your constituents on parade. Where are they going?"

The celebrated hunter looked at the animals with a quizzical glance, and then turning to the other, said quietly, but with great emphasis, "They are going to Massachusetts to teach school."

A Mobile man tells the following story of an old character in that town who for many years has done a thriving business in hauling ashes. One day, says the Mobile man, he chanced to be in the rear of his house when the darky in question was preparing to depart with the customary load. "I've seen you haul many a load of ashes," said the owner of the house, "but, my good man, during all these years I've never had the least idea of your name. What is it?"

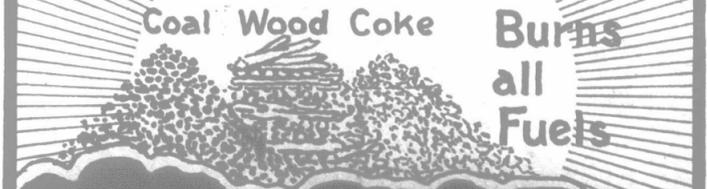
"Mah name is George Washin'ton, sah," replied the old man, with a duck of his head.

"George Washington, eh!" reiterated the questioner. "It seems to me," he added, with a smile, "that I've heard that name before."

"Reckon you have, sah," came the answer, in all seriousness, "'cause Ise been haulin' 'way ashes from yo' house for more'n ten years."

Sunshine Furnace

Coal Wood Coke Burns all Fuels



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WEAKNESS CAN BE CURED.



You can be made the most perfect specimen of physical manhood by wearing Dr. McLaughlin's Electric Belt. It is worn for six or eight hours daily, mostly during sleep. It pours a glowing stream of electric energy into the weakened nerves and organs, filling them with the vigor of youth. From the first day a new spirit of manhood is felt in the veins, and the joyous ambitions of youth spring forth, and you are another of "Dr. McLaughlin's men," a Man of Might.

Dr. McLaughlin's Electric Belt

Has made thousands of homes happy. It is as good for women as for men. Man and wife can use the same Belt. The regulator makes it strong or mild to suit the wearer. It is the only Electric Belt in the world that can be regulated while on the body. It also cures to stay cured Nervous Debility, Weakness of any kind, whether in Nerves, Stomach, Heart, Liver or Kidneys, Rheumatism, Pains in the back and shoulders, Sciatica, Lumbago, Indigestion, Neuralgia, Constipation, Dyspepsia and all troubles where new life can restore health.

A GRAND CURE FOR WEAK MEN.

Dr. McLaughlin, Newington, N.C.

Dear Sir: I have worn your Belt for a month and I am pleased to tell you that I am better and healthier than I have been for years. I am well pleased with my Belt, and can recommend it to all weak men. The pain in my back is all gone, I have no pain now of any kind. Wishing you much success in your work of healing, I remain, yours very truly, Richard Bell.

Dr. McLaughlin, Seaford, Ont., Feb. 14, 1904.

Dear Sir:—I have meant to write you for some time, but I have neglected being so, but I feel 100 per cent. better since I started to use it. My complaint was dyspepsia of the worst kind. I could scarcely eat anything. There was scarcely anything that agreed with my stomach, but I can eat all right now, and I am feeling good. I have told a good many about your Belt, and how much better I have been since I started to wear it. Yours truly, JOHN KALE.

To those who still doubt there is any cure, because they have been misled by false representations, and want evidence of cure in their own cases before paying, I am willing to take all the chances of curing any case of RHEUMATISM, LUMBAGO, LAME BACK, SCIATICA, VARIOUS KINDS OF NERVOUS DEBILITY, CONSTIPATION, LOST ENERGY, resulting from exposure and excesses in young or middle-aged men. Give me reasonable security and you can

PAY WHEN CURED.

FREE BOOK. I want you to read this book and learn the truth **CALL TO-DAY.** about my arguments. If you are not as vigorous as you would like to be, if you have rheumatic pains, weak kidneys, loss of vitality, nervous spells, varicocoele, or any ailment of that kind that unnerves you, it would assure your future happiness if you would look into this method of cure. Don't delay it; your best days are slipping by. If you want this book, I will send it, closely sealed, free, if you send this coupon:

DR. M. S. McLAUGHLIN, 189 Yonge Street, Toronto, Can.

Dear Sir—Please forward me one of your Books, as advertised.

Name.....

Address.....

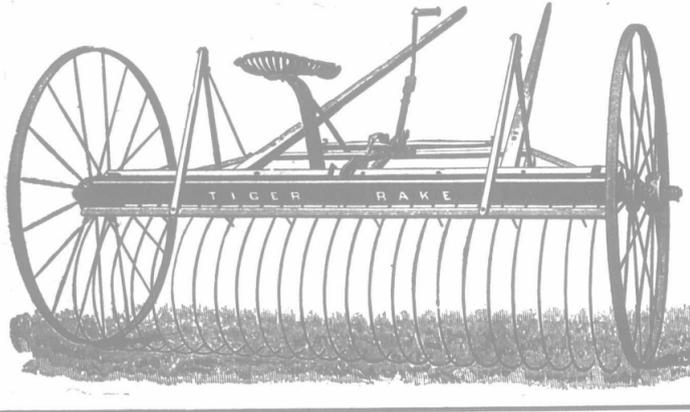
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You will find the best of steel and the greatest amount of service and satisfaction in a

Frost & Wood "Tiger" Rake.

A SOLID STEEL AXLE supports the frame. No danger of sagging or warping.
THE TEETH have the proper shape, and are all tested before leaving the factory.
THE FOOT TRIP is the simplest on the market, and never fails to give satisfaction.
UNDERLEANERS or **OVERLEANERS** supplied as desired.
 Our catalogue "F" describes it in detail. Your name on a post card will bring it and a copy of our new 1905 Vest-Pocket Memo Book.

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